ELECTROSTATIC DISCHARGE SUSCEPTIBILITY DATA

Volume II

RAC

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ELECTROSTATIC DISCHARGE SUSCEPTIBILITY DATA OF DISCRETE/PASSIVE DEVICES

Volume II

1989

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Under contract to:

Rome Air Development Center
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19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This publictaion contains Electrostatic Discharge (ESD) susceptibility data of electronic devices and is an update to the VZAP-1, the 1983 RAC ESD data compendium. Detailed susceptibility data is presented along with the ESD classification in accordance with MIL-HDBK-263 and MIL-STD-1686A for approximately 4,300 devices. This data is useful in the establishment of an ESD control program. The data contained in this publication is a product of the Reliability Analysis Center's VZAP data base, which is intended to be a central repository of ESD Susceptibility Data. Keywords:

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RAC ESD DATABASE

Table 3 - MANUFACTURER LISTING

CODE	MANUFACTURER NAME
ALP	Alpha Industries
AM	American Microcircuits
AMD	Advanced Micro Devices
AMP	Amperex Electronics
ANA	Analog Devices
ANZ	Anzac Electronics
ATM	ATMEL
BEC	Beckman Instruments
BEN	Bendix
CCL	Croven Crystal Ltd.
CEN	Centralab
CMP	Component Device Inc.
COD	Codi Semiconductor
CSI	Continental Semi. Inc.
CYP	Cypress Semiconductor
DAL	Dale Electronics
DCC	Dynamic Control Corp
DEL	Delco Electronics
DIC	Dickson Elec. Corp.
ETC	Elec. Transistor Corp.
FSC	Fairchild
GE	General Electric
GEN	General Semiconductor
GI	General Instruments
GTL	Gilway Technical Lamp
HAR	Harris
HAU	Haufman
HEW	Hewlett Packard
HIT	Hitachi
HON	Honeywell
HYB	Hybrid Systems
HYC	Hycomp Inc.
IDT	International Device Technologies
IIT	ITT Semiconductor
INM	INMOS
INS	Inselek
INT	Intel
IRC	Intl. Rectifier Corp.
ISL	Intersil
ITE	Intech
KSC	KSC Semiconductor Corp.
LEA	Lear Siegler
LTC	Linear Technology Corp.
MAC	MACOM
MAS	Microwave Associates
MCC	McCoy Electronics
MIT	Micro Power Systems
MON	Monolithic Memories
MOS	Mostek
MOT	Motorola Semi
MPI	Micropac Industries
MSC	Microwave Semi Corp
MSI	Microsystems International
N/R	Not Reported
NCR	National Cash Register
NEC	Nippon Electric Company (NEC)
NIT	Nitron
NSC	National Semi
NUC	Nucleonic Prod
PLE	Plessey
PPC	PPC Products
PPI	Precision Products Inc.
PRE	Precision Monolithics
RAY	Raytheon
RCA	RCA
RI	Rockwell Intl (Includes Collins)
SCN	Semicon
SEM	Semtech Corp.
SEN	Sensitron Semi.
SEQ	SEEQ
SGS	SGS ATES
SIE	Siemans
SIG	Signetics
SIL	Silicon General
SIX	Siliconix
SOL	Solitron Devices
SPR	Sprague Electric
SSD	Solid State Devices
SSS	Solid State Scientific
SUP	Supertex
SYN	Syntron
TEC	Teledyne Crystalonics
TEK	Tektronix
TEL	Teledyne
TEX	Texas Instruments
THC	Thermometrics
TRC	Transition Elec. Corp.
TRW	TRW
UDT	United Detector Technology
ULT	Ultronix Inc.
UNI	Unitrode
VAR	Various
VIS	Vishay
WES	Westinghouse
XIC	Xicor
ZIL	Zilog

Table 4 - FAILURE CRITERIA LISTING

CODE	FAILURE CRITERIA
1	1 UA LEAKAGE AT 10V.
2	1 UA LEAKAGE AT 20V.
3	10 UA INPUT LEAKAGE PREVIOUSLY MEASURED TO BE 1 UA.
4	10% CHANGE IN ELECTRICAL PARAMETERS.
5	10% CHANGE IN LEAKAGE CURRENT.
6	10% PARAMETER CHANGE.
7	110= 4 UA.
8	2 MA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
9	2 UA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
10	2% CHANGE OF VOUT AT IL= 50UA.
11	20 UA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
12	200 NA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
13	25% LEAKAGE, 1uA LEAKAGE, FUNCTION FAILS.
14	50% DROP IN REVERSE VOLTAGE AT IR= 5UA.
15	50% DROP IN V(BR) CBO AT IB= 5UA.
16	50% DROP IN V(BR) GSS AT IG= 5UA.
17	50% INCREASE IN GATE LEAKAGE CURRENT.
18	A 10% CHANGE IN INPUT OFFSET VOLTAGE AND INPUT BIAS CURRENT.
19	A 10% OR > CHANGE IN ANY MEASURED ELECTRICAL PARAMETER WAS CONSIDERED A FAILURE.
20	A 10% OR > INC. IN MEAS. LEAKAGE CURRENT @OR < A VOLT 10% < THE INITIAL BRKDWN VOLT.
21	A CHANGE OF 0.5% OR GREATER TOLERANCE.
22	A SHIFT OF 10% OF INPUT OFFSET VOLTAGE AND INPUT BIAS CURRENT.
23	ANY MEASURABLE CHANGE IN AN ELECTRICAL PARAMETER.
24	BVBE AT IR= 100NA.
25	CATASTROPHIC FAILURE (INPUT CURRENT).
26	CATASTROPHIC.
27	CHANGE IN IGSS.
28	CHANGE IN IIH OF 10%.
29	CHANGE IN IIH OF 20NA AT VCC= 5.5V AND VIN= 2.4V.
30	CHANGE IN IIH OF 500% AT VIN= 2.7V.
31	CHANGE IN IIL OF +500% AT VIN= .45V.
32	CHANGE IN IIL OF 500% AT VIN= 5V.
33	CHANGE IN IIO OF 500%.
34	CHANGE IN IL OF +500% AT VIN= 1V.
35	CHANGE IN IR OF +500% AT VBR= 30V.
36	CHANGE IN IR OF +500% AT VR= 50V.
37	CHANGE IN IR OF 500% AT VBR= 10V.
38	CHANGE IN IR OF 500% AT VR= 35V.
39	CHANGE IN IS OF 500% AT VS= -10V.
40	CHANGE IN RESISTANCE OF .1%.
41	CHANGE IN RESISTANCE OF 2%.
42	CHANGE IN VOL OF .050V AT VCC= 4.5V,IOL= 2MA AND VIN= 2.0V.
43	CHANGE OF 0.5% OR GREATER TOLERANCE.
44	CHANGED IN IV CHARACTERISTICS WITH INPUTS HIGH.
45	CHECK FOR ANY CHANGE IN FORWARD VOLTAGE AND REVERSE LEAKAGE CURRENT.
46	CUMULATIVE LEAKAGE CURRENT.
47	D.C. PARAMETER OUT OF SPEC.
48	DAMAGE TO INPUT DIODE.
49	DEGRADATION OF V-I CURVE OR FUNCTIONAL FAILURE.
50	DEVICE CONSIDERED ESD SENSITIVE WHEN A 10%CHANGE IN ELECT. CHAR. WAS OBSERVED.
51	ELECTRICAL PARAMETERS OUT OF SPEC.
52	EXCESSIVE LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
53	FAILED THE DC ELECTRICAL PARAMETERS TEST LIMITS.

Table 4 - FAILURE CRITERIA LISTING (Cont'd)

CODE	FAILURE CRITERIA
54	FAILED VOLTAGE IS THE AVERAGE OF PARTS SAMPLED.
55	FAILS TO MEET ELECTRICAL SPECIFICATION.
56	FUNCTION FAILURE OR D.C. PARAMETER OUT OF SPEC.
57	FUNCTIONAL FAILURE.
58	GATE CURRENT GREATER THAN 5UA AT A GATE/SOURCE VOLTAGE OF 22 VOLTS.
59	GREATER THAN .5UA INPUT AT 10V.
60	GREATER THAN 1uA LEAKAGE CURRENT AT 1.5 VOLTS.
61	GREATER THAN 5uA LEAKAGE CURRENT AT 0.5 VOLTS.
62	ID= SHORT.
63	IDSS OUT OF SPEC.
64	IEB AT VEB= +6V +1000% CHANGE.
65	IEBO AT VEB= -6V +1000% CHANGE.
66	IEBO AT VEB= 2.5V +1000% CHANGE.
67	IEBO AT VEB= 3.5V 1000% CHANGE.
68	IF AC,DC,OR FUNCTIONAL PARAMETERS FAILS THE MIN. OR MAX. LIMITS.
69	IGSS AND V(BR)GSS OUT OF SPEC.
70	IGSS AT VGS= -20V +1000% CHANGE.
71	IGSS OUT OF SPEC.
72	IGSSR >25PA AT VGS= 8V AND VDS= 0V.
73	IGSSR AND IDSS OUT OF SPEC.
74	IGSSR AND VGS(TH) OUT OF SPEC.
75	IGSSR OUT OF SPEC.
76	IGSSR,VGS(TH) OR IDSS OUT OF SPEC.
77	IIH AND VR OUT OF SPEC.
78	IIH AND/OR VOL OUT OF SPEC.
79	IIH AND/OR VR OUT OF SPEC.
80	IIH OUT OF SPEC.
81	IIH, IIL, OR ISS OUT OF SPEC AT VDD=15V.
82	IIH,IIL,ISS OUT OF SPEC.
83	IIH,IIL,OR ISS OUT OF SPEC.
84	IIH,VF,OR VR OUT OF SPEC.
85	IIH= 10MA.
86	IIH= 16MA.
87	IIH= 97UA.
88	IIL OUT OF SPEC.
89	IL AT VR= .5V +300%.
90	IL AT VR= 50V +1000% CHANGE.
91	INPUT BREAKDOWN OF 5MV.
92	INPUT SHORTED TO VCC.
93	INPUTS SHORTED TO GROUND.
94	IR AND VB OUT OF SPEC.
95	IR GREATER THAN 100% CHANGE.
96	IR OUT OF SPEC.
97	IR= 300UA AT 50 VOLTS.
98	IZ AT VR= 5V +1000% CHANGE.
99	IZ AT VR= 6.5V +1000% CHANGE.
100	LEAKAGE CURRENT.
101	LIGHT OUTPUT DEGRADATION AT CONSTANT CURRENT.
102	N/R.
103	PARAMETER CHANGE OF GREATER THAN 10%.
104	PARAMETER SHIFT OF GREATER THAN 10%.
105	PASSED FUNCTIONALLY OR DC ELECTRICAL PARAMETERS.
106	RESISTANCE CHANGE OF 1%.

Table 4 - FAILURE CRITERIA LISTING (Cont'd)

CODE	FAILURE CRITERIA
107	RESISTANCE OUT OF SPEC.
108	SIGNIFICANT AMOUNT OF DEGRADATION TO V-I CURVE.
109	SIGNIFICANT CHANGE IN THE +INPUT -GROUND V-I CURVE.
110	STUDY OF BREAKDOWN CHARACTERISTIC OF INPUT AND OUTPUT PINS.
111	TEST LEAKAGE CURRENT.
112	TESTED TO 2000 VOLTS PER METHOD 3015.2 OF MIL-STD-883.
113	V(BR)GSS OUT OF SPEC.
114	VB OUT OF SPEC.
115	VEBO= IV. TYPICALLY 5 VOLTS.
116	VGS(OFF) OUT OF SPEC AND IGSSR >25PA AT VGS= 8V AND VDS= 0V.
117	VGS(OFF) OUT OF SPEC AND/OR IGSSR >25PA AT VGS= 8V AND VDS= 0V.
118	VGS(OFF) OUT OF SPEC AT VDS= 15V AND ID= 50UA.
119	VGS(TH) AND IDSS OUT OF SPEC.
120	VGS(TH) OUT OF SPEC.
121	VR OUT OF SPEC.
122	WHEN ONE PULSE RESULTED IN DECREASE REV. LEAKAGE OR DECREASE IN JUNC. BRKDWN. VOLT.
123	WHEN ONE PULSE RESULTED IN INCREASE REV. LEAKAGE OR DECREASE IN JUNC. BRKDWN. VOLT.

Table 5 - TEST REMARKS LISTING

CODE	TEST REMARKS
1	1-DEV. IR SHORT, 3-100% CHANGE, 1-25% CHANGE, 5- NO CHANGE. 5 PULSES FWD & REV.
2	1.13M OHM MODEL.
3	1.1M OHM MODEL.
4	1.21M OHM MODEL.
5	1.58M OHM MODEL.
6	1.69M OHM MODEL.
7	1.78M OHM MODEL.
8	10 MHZ CRYSTAL OSCILLATOR.
9	10 OHM MODEL.
10	10000 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
11	107 OHM MODEL.
12	11.8 OHM MODEL.
13	12 MHZ CRYSTAL OSCILLATOR.
14	133K OHM MODEL.
15	1400 VOLTS IS AN AVERAGE OF 3 DEVICES.
16	140K OHM MODEL.
17	15 MHZ CRYSTAL OSCILLATOR.
18	150K OHM MODEL.
19	16 MHZ CRYSTAL OSCILLATOR.
20	1625 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
21	16300 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
22	1900 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
23	1M OHM MODEL.
24	2 DEVICES INCREASED IR FROM .09, .095 TO .85, .65uA. 5 PULSES FWD & REVERSE.
25	2 OUT OF 9 DEVICES TESTED FAILED.
26	2.1M OHM MODEL.
27	2.49M OHM MODEL.
28	2.6% OF TOTAL NUMBER OF PINS FAILED.
29	2.94M OHM MODEL.
30	20.5 OHM MODEL.
31	220 OHM MODEL.
32	232K OHM MODEL.
33	24.9 OHM MODEL.
34	240K OHM MODEL.
35	250 OHM MODEL.
36	250K OHM MODEL.
37	27.2% OF TOTAL NUMBER OF PINS FAILED.
38	270K OHM MODEL.
39	294K OHM MODEL.
40	297K OHM MODEL.
41	3.01M OHM MODEL.
42	301 OHM MODEL.
43	3200 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
44	330 OHM MODEL.
45	360.1K OHM MODEL.
46	38/PIN DEVICE CMOS, GATE ARRAY, SEMICUSTOM, MONOLITHIC.
47	383 OHM MODEL.
48	392K OHM MODEL.
49	4.37 OHM MODEL.
50	4.7% OF TOTAL NUMBER OF PINS FAILED.
51	400K OHM MODEL.
52	450 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
53	47.5 OHM MODEL.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
54	475 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
55	475K OHM MODEL.
56	49.9 OHM MODEL.
57	499 OHM MODEL.
58	5 PULSES APPLIED AT BOTH FORWARD AND REVERSE POLARITIES.
59	5 PULSES FORWARD, 5 PULSES REVERSE.
60	5 PULSES PER POLARITY. DEVICES HAD METAL LID.
61	50 OHM MODEL.
62	50% FAILURE RATE WITH ARCING BETWEEN LEADS.
63	5000 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
64	511K OHM RESISTOR.
65	5500 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
66	57.6 OHM MODEL.
67	590 OHM MODEL.
68	600 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
69	604K OHM MODEL.
70	665K OHM MODEL.
71	7 OUT OF 10 DEVICES FAILED COLLECTOR TO BASE.
72	768K OHM MODEL.
73	7800 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
74	850 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
75	ALL 10 INPUTS FAILED TO VSS AT 800 VOLTS.
76	ALL UNUSED INPUTS AT 5.5 VOLTS.
77	ALL UNUSED INPUTS AT GROUND.
78	ALSO DEGRADATION FROM COMMON TO OUTPUT OF 4000 VOLTS.
79	ALSO FAILED 4,5,7-13 TO VDD AT 500 VOLTS.
80	ALSO FAILED FROM 5,6 & 7 TO VSS AT 800 VOLTS.
81	ALSO FAILED FROM ALL OTHER INPUTS TO VSS AT 800 VOLTS.
82	ALSO FAILED FROM INPUT PINS 5,6,8-13 TO VSS AT 800 VOLTS.
83	ALSO FAILED FROM PIN 7 TO OUTPUT AT 1000 VOLTS.
84	ALSO FAILED FROM PINS 4-8 AND 11-13 TO VSS AT 800 VOLTS.
85	ALSO FAILED FROM PINS 5,6,7,11 TO VDD AT 1000 VOLTS.
86	ALSO FAILED FROM PINS 5-13 TO VSS AT 800 VOLTS.
87	ALSO FAILED FROM PINS 8-13 TO VSS AT 800 VOLTS.
88	ALSO FAILED PIN 12 TO VDD AT 500 VOLTS.
89	ALSO FAILED PIN 4 TO VDD, 5-7,9-13 TO OUTPUT AT 500 VOLTS
90	ALSO FAILED PIN 9 TO OUTPUT AT 800 VOLTS.
91	ALSO FAILED PIN 9 TO VDD AND 8 TO OUTPUT AT 1000 VOLTS.
92	ALSO FAILED PIN 9 TO VSS AT 800 VOLTS.
93	ALSO FAILED PINS 4,5 & 9 TO VSS AT 800 VOLTS.
94	ALSO FAILED PINS 5 AND 10 TO VDD AT 800 VOLTS.
95	ALSO FAILED PINS 5-13 TO OUTPUT AT 500 VOLTS
96	ALSO FAILED PINS 5-13 TO VSS AT 800 VOLTS
97	ALSO INPUT TO GND DEGRADED AT 1800 VOLTS.
98	ALSO SHOWED DEGRADATION ON INPUT TO INPUT AT 2000 VOLTS.
99	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1000V.
100	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1020V.
101	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1025V.
102	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1060V.
103	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1070V.
104	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1080V.
105	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1100V.
106	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1125V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
107	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1170V.
108	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1200V.
109	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1310V.
110	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1325V.
111	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1350V.
112	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1360V.
113	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1600V.
114	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1675V.
115	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1700V.
116	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1750V.
117	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2300V.
118	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2400V.
119	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2450V.
120	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2500V.
121	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2600V.
122	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2700V.
123	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2900V.
124	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3000V.
125	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3200V.
126	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3444V.
127	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3500V.
128	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3550V.
129	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3700V.
130	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3760V.
131	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3800V.
132	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3900V.
133	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 4550V.
134	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 5200V.
135	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 550V.
136	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 600V.
137	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 700V.
138	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 725V.
139	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 750V.
140	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 800V.
141	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 850V.
142	AVG OF ALL INPUTS 940V, PINS 1,2,15 MOST SUSCEPTIBLE.
143	AVG OF ALL INPUTS 960V, PIN 15 MOST SUSCEPTIBLE.
144	AVG OF ALL INPUTS 960V, PINS 11,14 MOST SUSCEPTIBLE.
145	BOTH POLARITIES WERE TESTED.
146	BREAKDOWN VOLTAGE CHARACTERISTICS WERE DEGRADED.
147	CARRY LOOK AHEAD GENERATOR.
148	CATASTROPHIC FAILURES OBSERVED ARE DUE TO EMIT. CONTACT PENETRATING THE SILICON.
149	CHARGED DEVICE MODEL.
150	COLLECTOR TO BASE FOUND TO BE MOST SENSITIVE (BOTH POLARITIES).
151	COMMON TO OUTPUT SHOWED DEGRADATION AT 4000 VOLTS.
152	CRYSTAL (4 Mhz).
153	DAMAGE OBSERVED AT -700 VOLTS, FAILED AT 1100 VOLTS.
154	DAMAGE OBSERVED AT 1000 VOLTS, ALL PINS FAILED AT OR BEFORE 3500 VOLTS.
155	DAMAGE OBSERVED AT 1050 VOLTS, ALL INPUT PINS FAILED AT OR BEFORE 2000 VOLTS.
156	DAMAGE OBSERVED AT 150 VOLTS, ALL DEVICES FAILED AT OR BEFORE 400 VOLTS.
157	DATE CODE TESTED WERE BETWEEN 8134 TO 8715.
158	DEGRADATION OCCURRED AT 1000V.
159	DEGRADATION OCCURRED AT 1500V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
160	DEGRADATION OCCURRED AT 2000V.
161	DEGRADATION OCCURRED AT 3000V.
162	DEGRADATION OCCURRED AT 3500V.
163	DEGRADATION OCCURRED AT 4500V.
164	DEGRADATION OCCURRED AT THE APPLIED VOLTAGE.
165	DELAY LINE, PULSE, ELECTROMAGNETIC, LUMPED CONSTANT, 16 PIN DIP.
166	DEVICE PASSED THE REVERSE V-I CURVE AFTER TESTING.
167	DIFFERENT PIN COMB. TESTED AT EACH VOLTAGE STEP.
168	DRIVER / RECEIVER.
169	DUAL PNP TRANSISTOR.
170	EACH PIN STRESSED WITH ALL OTHER PINS CONNECTED TO GROUND.
171	EACH PIN TESTED TO ALL OTHERS TIED TOGETHER.
172	EMITTER TO BASE FAILED AT 3500 VOLTS.
173	FAILED FROM PINS 4,8,13 TO VDD AND 10 TO OUTPUT AT 500 V.
174	FAILED INPUTS TO GND. VOLT IS AVG. OF 4 DEV. MEAN ENGY=16UJ.
175	FAILED PIN 13 TO VDD AT 500 V, 8 TO VSS, 6 TO VDD AT 800 V.
176	FAILED PIN 16 TO VDD AT 500 V & PIN 5 TO VSS AT 800 V.
177	FAILED PINS 13 TO VDD AND PIN 4 TO OUTPUT AT 800 VOLTS.
178	FAILED PINS 5-6,11-13 TO VSS 7 TO VDD & 8-10 TO OUTPUT 500V.
179	FAILED PINS 5-7,9,11 TO VSS 8,10,12 TO VDD AT 500 VOLTS.
180	FAILED PINS 5-8 & 10-13 TO VSS & PIN 9 TO VDD AT 500 VOLTS.
181	FAILED PINS 5-8 & 10-13 TO VSS AT 500V & 9 TO VSS AT 800 V.
182	FAILED PINS 8,13 TO VSS, 15 TO VSS AND 6 TO VDD, ALL AT 800V.
183	FAILED PINS 8-13 TO VSS AT 300V & PINS 4,6 TO OUTPUT AT 500V
184	FAILURE VOLTAGE FROM EMP DATA & WUNSCH MODEL. (SUPERSAP 2).
185	FAILURE VOLTAGE GIVEN IS APPROXIMATE VALUE ONLY.
186	FAILURE VOLTAGE IS AN AVERAGE OF 15 DEVICES.
187	FAILURE VOLTAGE IS AN AVERAGE.
188	FAILURE VOLTAGE OBTAINED FROM EMP DATA AND EXPONENTIAL MODEL.
189	FAILURE VOLTAGE OBTAINED FROM EMP DATA AND WUNSCH MODEL.
190	FAILURE VOLTAGE OBTAINED FROM EMP DATA.
191	FAILURES WERE DUE TO INCREASED CONTACT RESISTANCE.
192	FIVE PULSES BOTH POLARITY ACROSS EACH PIN COMBINATION.
193	FREQUENCY SYNTHESIZER.
194	HEX SCHMIDTT TRIGGER.
195	HYBRID, OSCILLATOR.
196	IMCS TO >17.5KV, PAL TESTER TO >43KV. PAL IS A MOTOROLA IN HOUSE BUILT TESTER.
197	IN MOST FAILURES, Vos STARTS FAILING FIRST. THEN, Ios,IB,AND Icc.
198	INITIAL IGSS IS 0.1uA AND FINAL IGSS IS 10uA.
199	INITIAL IGSS IS 3.8uA AND FINAL IGSS IS 10uA.
200	INITIAL IGSS WAS 0.1uA AND FINAL IGSS WAS 1.0uA.
201	INITIAL IGSS WAS 0.1uA AND THE FINAL IGSS WAS 0.7uA.
202	INITIAL IGSS WAS 1.0uA AND FINAL IGSS WAS 3.4uA.
203	INITIAL IGSS WAS 1uA AND FINAL IGSS WAS 10uA.
204	INPUT AND CLAMPING DIODES WERE TYPICAL FAILURES.
205	INPUT FAILED AT 2500 AND 3000 VOLTS, OUTPUT DID NOT FAIL.
206	INPUT PIN 1 FAILED AT 200V AND INPUT PIN 8 FAILED AT 300V.
207	INPUT PIN 1 FAILED AT 200V AND INPUT PIN 8 FAILED AT 400V.
208	INPUT PIN 1 FAILED AT 200V.
209	INPUT PIN 1 FAILED AT 300V.
210	INPUT PIN 1 FAILED AT 400V AND INPUT PIN 8 FAILED AT 500V.
211	INPUT PIN 1 FAILED AT 500V.
212	INPUT PIN 10 FAILED AT 300V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
213	INPUT PIN 2 FAILED AT 200V.
214	INPUT PIN 2 FAILED AT 300V.
215	INPUT PIN 2 FAILED AT 400V.
216	INPUT PIN 2 FAILED AT 500V.
217	INPUT PIN 7 FAILED AT 200V.
218	INPUT PIN 8 FAILED AT 400V.
219	INPUT PIN 9 FAILED AT 400V.
220	INPUT PINS 1 AND 8 FAILED AT 300V.
221	INPUT PINS 1 AND 8 FAILED AT 400V.
222	INPUT PINS 1 AND 8 FAILED AT 500V.
223	INPUT PINS 1 AND 9 FAILED AT 200V.
224	INPUT PINS 11 AND 15 FAILED AT 200V.
225	INPUT PINS 2 AND 10 FAILED AT 200V.
226	INPUT PINS 2 AND 6 FAILED AT 200V.
227	INPUT PINS 2 AND 6 FAILED AT 300V.
228	INPUT PINS 7 AND 15 FAILED AT 300V.
229	INPUT TO COM. 3000 V, OUTPUT TO COMMON FAIL AT 1600 VOLTS.
230	INPUT TO OUTPUT DEGRADATED AT 600 VOLTS.
231	INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 290PF.
232	INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 3.5PF.
233	INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 37PF.
234	INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 3PF.
235	INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 6.5PF.
236	INTEL METHOD.
237	INTEL MODEL.
238	IR CHANGED FROM .045uA TO 22.JuA ON ONE DEVICE. 5 PULSES FORWARD AND REVERSE.
239	IR CHANGED FROM .103uA, 200V TO .4uA, 80 VOLTS. 5 PULSES FORWARD & REVERSE.
240	IR DOUBLED AFTER 400 VOLTS, SHORTED AFTER 500 VOLTS.
241	IR INCREASED FROM .05uA TO 148uA. 5 PULSES FORWARD, 5 PULSES REVERSE.
242	IR INCREASED FROM .19MA TO .23MA. 5 PULSES FORWARD, 5 PULSES REVERSE.
243	IR INCREASED ON 3 DEVICES; 5.4 TO 6.2uA, 3.7 TO 4.1uA, AND 4.6 TO 5.6uA.
244	JUNCTION IS DAMAGED BEFORE DEVICE FAILS ELECTRICALLY.
245	LED DEVICES WHICH HAVE REV BRKDWN DAMAGE CAUSED BY ESD MAY FUNC NORM IN FWD DIR.
246	MICROCONTROLLER.
247	MIL-STD-883B METHOD 3015 (CAT B), DEVICE PASSED 2000V TEST.
248	MIMIMUM OBSERVED DAMAGE WAS 200 VOLTS ALL DEVICES FAILED AT OR BELOW 300 VOLTS.
249	MIMIMUM OBSERVED DAMAGE WAS 500 VOLTS ALL INPUT PINS FAILED AT OR BEFORE 700 V.
250	MINIMUM OBSERVED WAS 2600 VOLTS, ALL DEVICES FAILED AT OR BEFORE 3000 VOLTS.
251	MODULATOR.
252	N/R.
253	NO DEGRADATION TO OUTPUT AT 4000 VOLTS.
254	NO DEGRADATION TO OUTPUT PINS.
255	NO FAILURES OBSERVED GATE TO CATHODE.
256	OF 4 DEVICES FAILURE VOLTAGE WAS FROM 1400V TO 6000 VOLTS.
257	OF THE FOUR DEVICES TESTED TWO DEVICE DATE CODES WERE GIVEN AS 8615 AND 8501.
258	ONE DEVICE IR SHORTED. 5 PULSES FORWARD, 5 PULSES REVERSE.
259	OTHER PINS OPEN.
260	OTHER PINS TIED TO GND.
261	PAL TESTER IS A MOTOROLA IN HOUSE BUILT IMCS TO >17.5KV, PAL TO >43KV.
262	PIN UNDER TEST STRESSED WITH ALL OTHERS TIED TOGETHER FLOATING.
263	PINS 1 AND 2 FAILED AT 1100 VOLTS.
264	PINS 11-14 TO VSS,15 TO VDD AT 800V,8,13 TO OUTPUT AT 1000V.
265	PINS 13 TO VSS, 9 TO VSS AT 1000V, 8 TO VDD AT 1000 VOLTS.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
266	PINS 3,4,5, AND 22 FAILED AT 1200 VOLTS.
267	PINS 8-15 TO VSS AT 500V, 11 TO OUTPUT AT 500 VOLTS.
268	PINS THAT FAILED 3,6-8,11,14,15,17-21, AND 23.
269	PRECISION MOTION CONTROLLER.
270	PROGRAMMABLE BAND PASS FILTER.
271	PROGRAMMABLE INTERVAL TIMER.
272	QUAD DEVICE, ONE DIODE PER DEVICE TESTED.
273	SEMI-CUSTOM GATE ARRAY.
274	SERIAL INPUT PLL FREQUENCY SYNTHESIZER.
275	TEST PREPARED AT 25 DEGREES C.
276	THE MOST SENSITIVE PIN TESTED IS B.
277	THE MOST SENSITIVE PIN TESTED IS G.
278	THE MOST SENSITIVE PINS TESTED ARE C TO B.
279	THE MOST SENSITIVE PINS TESTED ARE C TO E.
280	THE MOST SENSITIVE PINS TESTED ARE E TO B.
281	THE MOST SENSITIVE PINS TESTED ARE G AND D TO S.
282	THE MOST SENSITIVE PINS TESTED ARE S AND D TO G.
283	THE MOST SENSITIVE PINS TESTED ARE S AND G TO D.
284	VOLTAGE IS AN AVERAGE OF 12 RESISTORS. MEAN ENERGY OF 48UJ.
285	VOLTAGE IS AN AVERAGE OF 4 DEVICES.
286	VOLTAGE IS AN AVERAGE OF ALL INPUTS.
287	WORST CASE PINS (+) 1-4,9,10,20,23-27(-)1,10.LOT # (413,410-1).
288	WORST CASE PINS (+) 4-6,22,23,25-27 (-) 20,21. LOT # (284/006,285/008,416-3).
289	ZERO OHMS MODEL.

Table 6 - GENERAL REMARKS LISTING

CODE	GENERAL REMARKS
1	5 PULSES +/-.
2	ALL PINS BUT PIN UNDER TEST CONNECTED TO GND VIA RESISTOR. VDD AND VSS GROUNDED.
3	BEGIN WITH 200V, INCR. 100V TO 1000V, INCR. 200V TO 2000V, INCR 500V TO 4000V.
4	CHARGED DEVICE MODEL.
5	DATA OBTAINED FROM WEIBULL PLOTS. STEPS WERE 20% OF AN UNKNOWN STARTING VOLTAGE.
6	DEVICE PASSED REVERSE V-I CURVE. FORWARD AND REVERSE POLARITY TESTED.
7	FAILED VOLTAGE IS THE AVERAGE OF PARTS SAMPLED.
8	FAILURE VOLTAGE OBTAINED FROM EMP DATA AND EXPONENTIAL MODEL.
9	FAILURE VOLTAGES GIVEN ARE VOLTAGE TO CAUSE 30% FAILURE. DETAILS UNKNOWN.
10	IMCS TESTER TO >17.5KV, PAL TESTER TO >43KV. ONE PULSE PER VOLTAGE INCREMENT.
11	IN ACCORDANCE WITH MIL-STD-883B METHOD 3015 (CAT B), DEVICE PASSED 2000V TESTING.
12	MODEL 900.
13	N/R.
14	PIN COMBINATIONS AND POLARITY DIFFER FOR EACH OF THE FOUR PULSES.
15	PIN UNDER TEST STRESSED WITH ALL OTHER PINS TIED TOGETHER GROUNDED.
16	PIN UNDER TEST STRESSED WITH ALL OTHER PINS.
17	START 100V WITH INCREMENTS OF 100V TO 1000V. THEN INCREMENTS OF 250V TO FAILURE.
18	STEP STRESS TEST WAS PERFORMED HOWEVER ACTUAL VOLTAGE STEPS WERE UNKNOWN.
19	STEPPED FROM 1800 VOLTS TO FAILURE IN 25 VOLT INCREMENTS.
20	STEPPED IN 100 VOLT INCREMENTS STARTING AT 400 VOLTS.
21	STEPPED IN 2.5 VOLT INCREMENTS.
22	STEPPED IN 25 VOLT INCREMENTS.
23	STRESSED IN INCREMENTS OF 20% STARTING AT 16V FOR MOS DEVICES AND 70V FOR OTHERS.
24	TEST VOLTAGE WAS INCREMENTED FROM 100V TO 5500V IN 100V STEPS.
25	TESTED TO 2000 VOLTS PER METHOD 3015.2 OF MIL-STD-883.
26	TESTER IS A MARTIN MARIETTA IN HOUSE BUILT.
27	THERE WERE ALSO 100V INCREMENTS STEPPED FROM 100V TO 800V.
28	VOLT INCREMENTS AS FOLLOWS:100V TO 1KV,250V TO 3KV,500V TO 6KV,AND 1KV TO 16KV.
29	VOLTAGE STEP LEVELS 100 VOLT INCREMENTS UP TO 4000 VOLTS.

SECTION 3.2

DISCRETE SEMICONDUCTOR SUSCEPTIBILITY TEST DATA

Part Number	Part Mfr	ESD Class	Part Description	Technology
04-92	NSC	2	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
06-92	NSC	2	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
10070019-106	UDT	3	Diode, Rectifier, High Voltage	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	4	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
13-92	NSC	2	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N1095	TEX	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12868	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N1124A	SYN	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	31200	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N1126A	SYN	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	93741	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N1202A	N/R	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	55813	N/R	102	188	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N1202A	N/R	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10000	N/R	103	252	13
1N1202A	BEN	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	90397	N/R	102	189	13
1N1204A	N/R	N	Diode, Rectifier, High Power								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	108139	N/R	102	184	13
1N1206	SYN	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	92874	N/R	102	189	13
1N1614	N/R	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	70874	N/R	102	188	13
1N1615	SYN	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	88705	N/R	102	189	13
1N1733A	TRW	N	Diode, Rectifier, High Voltage								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	32958	N/R	102	189	13
1N2158	SYN	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	146346	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21B	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1193	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21C	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1550	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21E	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1579	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21F	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1334	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21WE	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1266	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N21WE	MAC	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	400	N/R	95	240	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23B	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1193	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23D	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1033	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23E	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1550	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23F	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	943	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23G	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	870	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23RF	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	915	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23WE	ALP	1	Diode, Microwave, Point Contact	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	508	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N23WE	N/R	1	Diode, Microwave, Point Contact	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	56	C(+) A(-)	89	285	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N25	ALP	3	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4812	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N251	ALP	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2233	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N253	TRC	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	23347	N/R	102	189	13
1N25A	ALP	2	Diode, Microwave								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3402	N/R	102	189	13
1N2701	IIT	2	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2624	N/R	102	189	13
1N277	N/R	1	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1792	N/R	102	189	13
1N2804B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N2813B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N2816B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N2818	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2831	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2837	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2846	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2892	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2929A	CEN	3	Diode, Microwave, Tunnel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8063	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2970B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/P	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	144367	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2984B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	211692	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2985B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Data Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	120865	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N2985RB	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	152760	N/R	102	189	13
1N2988B	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	155728	N/R	102	189	13
1N2989B	N/R	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	161151	N/R	102	189	13
1N2991B	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	176527	N/R	102	189	13
1N3015B	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	191984	N/R	102	188	13
1N3017B	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	96791	N/R	102	189	13
1N3019B	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	154045	N/R	102	189	13
1N3020	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3022	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3022B	N/R	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	110268	N/R	102	189	13
1N3023	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3024	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
1N3025	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
1N3025B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N3026	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3027	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3028	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3030	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3031B	N/R	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	156428	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3032	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3034	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3035B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	194957	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3037	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3037B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	202154	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3040B	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	247209	N/R	102	189	13
1N3044	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3047B	IRC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	71606	N/R	102	189	13
1N3048	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3049	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3064	N/R	3	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8812	N/R	102	188	13
1N3064	RAY	N	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	23216	N/R	102	189	13
1N3154	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3155	N/R	3	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3157	DIC	N	Diode, Rectifier, High Voltage	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	185703	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3157	MOT	N	Diode, Rectifier, High Voltage	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3189	GE	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	71986	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3191	N/R	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26595	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3323B	N/R	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	22943	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N34A	N/R	1	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1672	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3504	MSC	3	Diode, Zener	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0588	SS	1500 Ohms	100E-12 F	18	8790	6	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3595	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14356	N/R	102	188	13
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	13	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3595	N/R	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	4440	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3600	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9476	N/R	102	189	13
							1	FAILED	7312	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3600	N/R	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9558	N/R	102	188	13
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2787	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3600	VAR	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	10000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3677	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3684	MOT	N	Diode, Zener	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3821	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3821A	DIC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	103218	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3822	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	196	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3823	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3824	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3826	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3826A	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N3827	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3828	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3828A	N/R	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	92159	N/R	102	189	13
1N3891	MOT	N	Diode, Rectifier, Fast Recovery								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N3891	SCN	3	Diode, Rectifier, Fast Recovery								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
1N3893	SCN	3	Diode, Rectifier, Fast Recovery								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
1N3910	N/R	3	Diode, Rectifier, Fast Recovery								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4003	MOT	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	35426	N/R	102	189	13
1N4004	N/R	3	Diode, Rectifier, High Power								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7000	N/R	103	252	13
1N4005	MOT	2	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3697	N/R	102	188	13
1N4006	MOT	3	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5369	N/R	102	188	13
1N4007	MOT	N	Diode, Rectifier, High Power								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4099	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7871	N/R	102	184	13
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	6000	C(+) A(-)	99	285	13
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	10000	N/R	68	252	13
1N4100	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7854	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4101	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7838	N/R	102	184	13
1N4103		N/R	3	Diode, Zener, Voltage Regulator							Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7590	N/R	102	184	13
1N4103		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N4104		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N4105		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4108		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4109		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4111	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4112	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7608	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4113	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4114	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7562	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4116	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7471	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4116	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4118	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4120	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N4120	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7337	N/R	102	184	13
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	10000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4121	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7271	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4122	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4123	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7142	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4124	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7057	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4125	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6973	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4126	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6891	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4127	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6790	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4128	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4128	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6671	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4129	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6671	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4130	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6555	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4131	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6423	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4131	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4132	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6294	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4134	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6135	N/R	102	184	13
1N4148	FSC	1	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1189	N/R	102	188	13
1N4148	MSC	3	Diode, Small Signal, General Purpose								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	48	PASSED	4000	N/R	5	252	3
1N4148	N/R	3	Diode, Small Signal, General Purpose								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4500	N/R	103	252	13
1N4148-1	N/R	3	Diode, Small Signal, General Purpose								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N4148-1	FSC	3	Diode, Small Signal, General Purpose								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	252	29
1N4148-1	MSC	2	Diode, Small Signal, General Purpose								Not Applicable		
436	1136	SS	1500 Ohms	100E-12 F	16	N/R	65	FAILED	3000	CATHODE TO ANODE	5	252	3
1N4150	N/R	2	Diode, Small Signal, General Purpose								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2787	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N4150	UNI	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0688	SS	1500 Ohms	100E-12 F	18	N/R	5	FAILED	4000	CATHODE TO ANODE	5	252	3
436	0488	SS	1500 Ohms	100E-12 F	18	N/R	19	FAILED	4000	CATHODE TO ANODE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	19	PASSED	4000	N/R	5	252	3

1N4150	MSC	3	Diode, Small Signal, General Purpose	Not Applicable

436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

1N4150-1	GE	N	Diode, Small Signal, Switching	Not Applicable

026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	3875	C(+) A(-)	90	285	13

1N4150-1	UNI	3	Diode, Small Signal, Switching	Not Applicable

436	0588	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

1N4150-1	MSC	3	Diode, Small Signal, Switching	Not Applicable

436	1186	SS	1500 Ohms	100E-12 F	18	N/R	13	PASSED	4000	N/R	5	252	3

1N4150-1	N/R	3	Diode, Small Signal, Switching	Not Applicable

030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4500	N/R	103	252	13

1N4151	N/R	N	Diode, Small Signal, General Purpose	Not Applicable

048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	PASSED	3000	N/R	14	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4152	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4077	N/R	102	188	13
1N4153-1	N/R	2	Diode, Small Signal, General Purpose								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2625	N/R	102	184	13
1N4153-1	UNI	1	Diode, Small Signal, General Purpose								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	14	N/R	5	FAILED	2000	CATHODE TO ANODE	5	252	3
1N4154	FSC	2	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3293	N/R	102	188	13
1N416G	N/R	1	Diode, Microwave								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1910	N/R	102	189	13
1N4244	FSC	1	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1418	N/R	102	188	13
1N429	CEN	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22809	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4370	TRC	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	107626	N/R	102	188	13
1N4370	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4385	IIT	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16674	N/R	102	188	13
1N4450	FSC	3	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5889	N/R	102	188	13
1N4454	N/R	2	Diode, Small Signal, General Purpose								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2625	N/R	102	184	13
1N4465	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N4467	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N4469	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4471	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4474	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4476	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4554	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4561	FSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	13624	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4565	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4565A	MSC	3	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4566	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N457	FSC	3	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7437	N/R	102	189	13
1N4570	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4573	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4574A	MSC	3	Diode, Zener, Voltage Reference								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
1N4574A	SIE	3	Diode, Zener, Voltage Reference								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
1N459	TEX	3	Diode, Rectifier, Low Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15090	N/R	102	189	13
1N459	N/R	3	Diode, Rectifier, Low Power								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12000	N/R	103	252	13
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	PASSED	3000	N/R	14	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N459A	TRW	N	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	20969	N/R	102	189	13
1N4614	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N4615	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	196	10
1N4616	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4619	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N4622	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4624	N/R	3	Diode, Zener, Voltage Reference								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N4624	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	196	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4625	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4626	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4627	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4627	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4679	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4683	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4686	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4689	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4691	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4693	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4696	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4697	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4727	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6399	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4732	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4821	FSC	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11155	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N482A	TRC	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	27498	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4838	TRC	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	28562	N/R	102	188	13
1N484A	TRC	3	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14589	N/R	102	189	13
1N486	TRC	3	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7374	N/R	102	188	13
1N4968	N/R	2	Diode, Zener, Voltage Reference								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	3224	N/R	102	184	13
1N4905A	N/R	3	Diode, Zener, Voltage Reference								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N4937	MOT	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10054	N/R	102	189	13
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N4938	N/R	3	Diode, Small Signal, General Purpose								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	5827	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4942	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	23868	N/R	102	184	13
1N4942	UNI	3	Diode, Rectifier, Fast Recovery								Not Applicable		
395	0886	SS	1500 Ohms	100E-12 F	5	N/R	1	PASSED	5000	N/R	102	166	6
1N4944	N/R	N	Diode, Rectifier, Fast Recovery								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	24771	N/R	102	184	13
1N4946	N/R	N	Diode, Rectifier, Fast Recovery								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	21703	N/R	102	184	13
1N4947	GI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	10	FAILED	4000	N/R	95	1	29
1N4948	N/R	3	Diode, Rectifier, Fast Recovery								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	15873	N/R	102	184	13
1N4954	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N4955	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4956	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4957	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4958	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4960	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4961	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4962	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4964	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4967	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4969	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4971	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4972	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4974	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4976	N/R	1	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	U	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4976	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N4979	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5139	MOT	3	Diode, Microwave, Var. Cap. (Varactor)	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	6000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5139A	N/R	3	Diode, Microwave, Var. Cap. (Varactor)	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	5600	N/R	102	184	13
1N5139A	MOT	2	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	513	C(+) A(-)	90	285	13
1N5140	MOT	3	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	9	FAILED	9000	N/R	68	252	13
							4	FAILED	9000	N/R	68	252	13
1N5140A	N/R	3	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7010	N/R	102	184	13
1N5144A	N/R	3	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	11090	N/R	102	184	13
1N5146	TEC	3	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	10	FAILED	5000	N/R	68	252	13
1N5148	N/R	1	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	8615	4	FAILED	2000	N/R	68	257	13
1N5148A	N/R	N	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	16758	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5187	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	68381	N/R	102	184	13

1N5188	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	75226	N/R	102	184	13

1N5190	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	74897	N/R	102	184	13

1N5221	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10

1N5230	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

1N5233	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	84112	N/R	102	189	13
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10

1N5250	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5250	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5255		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5260		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	196	10
1N5264		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5267		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
1N5270		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	122	0	10
1N5285		MOT	3	Diode, Current Regulator							Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	1950	A(+) C(-)	90	285	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5287	MOT	N	Diode, Current Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	104875	N/R	102	188	13
1N5288	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5290	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5291	N/R	3	Diode, Current Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N5291	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5292	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5297	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5299	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5301	MOT	N	Diode, Current Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5306	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5308	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5310	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5311	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5312	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5313	MOT	N	Diode, Current Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5330	MOT	N	Diode, Rectifier, High Power								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5356	MOT	N	Diode, Zener	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	156131	N/R	102	189	13
1N537	TEX	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16914	N/R	102	189	13
1N5378	MOT	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17904	N/R	102	189	13
1N5388	GI	N	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	78542	N/R	102	188	13
1N5391	TEX	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17121	N/R	102	189	13
1N540	TEX	3	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14985	N/R	102	189	13
1N5406	MOT	N	Diode, Rectifier, High Voltage								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N5416	N/R	N	Diode, Rectifier, Fast Recovery								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	64333	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5417	N/R	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	62028	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5417	GI	1	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	3	FAILED	2000	N/R	95	238	29
							1	FAILED	1100	N/R	95	241	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5417	MSC	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5417A	UNI	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	2	PASSED	4000	N/R	95	59	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5418	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	62087	N/R	102	184	13
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	6000	C(+) A(-)	90	285	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5420	N/R	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
							1	FAILED	9000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5463B	N/R	3	Diode, Microwave, Var. Cap. (Varactor)	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	5465	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5467B	N/R	3	Diode, Microwave, Var. Cap. (Varactor)	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	8126	N/R	102	184	13
1N547	TEX	N	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	76707	N/R	102	189	13
1N5476B	N/R	N	Diode, Microwave, Var. Cap. (Varactor)								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	18736	N/R	102	184	13
1N5523B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N5525	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	N/R	123	0	10
1N5525B	MSC	3	Diode, Zener, Voltage Regulator								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
1N553	N/R	N	Diode, Rectifier, Low Power								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	68061	N/R	102	184	13
1N5530	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5538	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	20	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5546	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5550	N/R	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	47043	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5550	MSC	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	10	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5550	UNI	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5552	SEM	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	34778	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5552	N/R	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	53765	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5554	N/R	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	54348	N/R	102	184	13
1N5555	N/R	3	Diode, Suppressor, Transient								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N5556	GEN	N	Diode, Suppressor, Transient								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	188033	N/R	102	189	13
1N5558	N/R	3	Diode, Suppressor, Transient								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N5614	SEM	3	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11990	N/R	102	188	13
1N5614	N/R	3	Diode, Rectifier, High Power								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	23868	N/R	102	184	13
1N5615	GI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	3	FAILED	4000	N/R	95	24	29

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5615	N/R	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	23868	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5615	SEN	2	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	FAILED	4000	N/R	95	239	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5616	SEM	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11403	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5616	N/R	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	24771	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5617	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	24771	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5617	SEN	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	5	N/R	3	PASSED	4000	N/R	95	59	29
							11	PASSED	4000	N/R	95	59	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5618	N/R	N	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	21703	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5619	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	21703	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5622	N/R	3	Diode, Rectifier, High Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	15868	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5623	N/R	N	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	17775	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5635A	GEN	3	Diode, Suppressor, Transient	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5647A	GEN	3	Diode, Suppressor, Transient	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5656A	GEN	3	Diode, Suppressor, Transient	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5711	N/R	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2500	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2452	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5711	N/R	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
028	N/R	SS	1500 Ohms	117E-12 F	30	N/R	5	FAILED	300	N/R	97	252	13
1N5711	HEW	1	Diode, Small Signal, General Purpose								Not Applicable		
277	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	275	C(+) A(-)	94	252	13
278	N/R	GN	1500 Ohms	100E-12 F	65	N/R	1	PASSED	300	C(+) A(-)	94	252	13
278	N/R	GN	1500 Ohms	100E-12 F	500	N/R	1	PASSED	300	C(+) A(-)	94	252	13
							8	PASSED	300	C(+) A(-)	94	252	13
278	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	300	C(+) A(-)	94	252	13
278	N/R	GN	1500 Ohms	100E-12 F	500	N/R	1	FAILED	300	C(+) A(-)	94	252	13
279	N/R	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	325	C(+) A(-)	94	252	13
279	N/R	GN	1500 Ohms	100E-12 F	50	N/R	1	FAILED	325	C(+) A(-)	94	252	13
280	N/R	GN	1500 Ohms	100E-12 F	37	N/R	1	FAILED	350	C(+) A(-)	94	252	13
280	N/R	GN	1500 Ohms	100E-12 F	75	N/R	1	FAILED	350	C(+) A(-)	94	252	13
281	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	375	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	7	N/R	1	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	8	N/R	1	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	400	C(+) A(-)	94	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5711	HEW	1	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
282	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	400	C(+) A(-)	114	252	13
282	N/R	GN	1500 Ohms	100E-12 F	25	N/R	2	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	60	N/R	1	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	125	N/R	1	FAILED	400	C(+) A(-)	94	252	13
282	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	400	C(+) A(-)	94	252	13
283	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	450	C(+) A(-)	94	252	13
283	N/R	GN	1500 Ohms	100E-12 F	10	N/R	2	FAILED	450	C(+) A(-)	94	252	13
283	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	450	C(+) A(-)	94	252	13
283	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	450	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	500	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	500	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	1	N/R	4	FAILED	500	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	500	C(+) A(-)	96	252	13
							1	FAILED	500	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	5	N/R	3	FAILED	500	C(+) A(-)	94	252	13
284	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	500	C(+) A(-)	94	252	13
285	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	550	C(+) A(-)	94	252	13
285	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	550	C(+) A(-)	94	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5711	HEW	1	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
285	N/R	GN	1500 Ohms	100E-12 F	8	N/R	1	FAILED	550	C(+) A(-)	94	252	13
286	N/R	GN	1500 Ohms	100E-12 F	1	N/R	5	PASSED	560	C(+) A(-)	94	252	13
							5	FAILED	560	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	600	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	2	N/R	2	FAILED	600	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	1	N/R	6	FAILED	600	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	3	N/R	2	FAILED	600	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	600	C(+) A(-)	94	252	13
287	N/R	GN	1500 Ohms	100E-12 F	8	N/R	1	FAILED	600	C(+) A(-)	94	252	13
289	N/R	GN	1500 Ohms	100E-12 F	1	N/R	7	FAILED	630	C(+) A(-)	94	252	13
							3	PASSED	630	C(+) A(-)	94	252	13
290	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	650	C(+) A(-)	94	252	13
290	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	650	C(+) A(-)	94	252	13
290	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	650	C(+) A(-)	94	252	13
290	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	650	C(+) A(-)	94	252	13
290	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	650	C(+) A(-)	94	252	13
291	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	675	C(+) A(-)	94	252	13
291	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	675	C(+) A(-)	94	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N5711	HEW	1	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
292	N/R	GN	1500 Ohms	100E-12 F	1	N/R	3	FAILED	700	C(+) A(-)	94	252	13
							2	FAILED	700	C(+) A(-)	94	252	13
							1	FAILED	700	C(+) A(-)	96	252	13
292	N/R	GN	1500 Ohms	100E-12 F	2	N/R	4	FAILED	700	C(+) A(-)	94	252	13
292	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	700	C(+) A(-)	96	252	13
							1	FAILED	700	C(+) A(-)	94	252	13
292	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	700	C(+) A(-)	94	252	13
026	0281	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	100	C(+) A(-)	36	285	13
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	1500	N/R	68	252	13
1N5712	N/R	1	Diode, Small Signal, General Purpose								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	1293	N/R	102	184	13
1N5802	UNI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	4000	N/R	95	59	29
1N5804	UNI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
[illegible]5	SS		1500 Ohms	100E-12 F	5	N/R	11	FAILED	4000	N/R	95	258	29
1N5806	MSI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
392	0986	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	A-C (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5807	SSS	2	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	5	N/R	11	FAILED	4000	N/R	95	258	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5809	UNI	2	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	A-C (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5811	MSC	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0488	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5814	UNI	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5814	SCN	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	10	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5814	SSD	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0788	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5818	MOT	2	Diode, Rectifier, Power Schottky	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	30	N/R	10	FAILED	3000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5819	SCN	1	Diode, Rectifier, Power Schottky	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
404	1181	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	1000	N/R	45	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N5822	SCN	1	Diode, Rectifier, Power Schottky	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
404	1181	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	1000	N/R	45	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6096	TRW	1	Diode, Rectifier, Power Schottky	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
404	1181	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	1000	N/R	45	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6101	FSC	2	Diode, Special Function, Diode Array	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	1	FAILED	3500	ANODE TO CATHODE	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6103A	MSC	3	Diode, Suppressor, Transient	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6173	MSC	3	Diode, Suppressor, Transient	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6305	UNI	3	Diode, Rectifier, Fast Recovery	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6324	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N6324	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N6391	IRC	3	Diode, Microwave, Schottky Barrier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	10000	N/R	68	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N6392	IRC	3	Diode, Microwave, Schottky Barrier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	10000	N/R	68	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N6392	UNI	3	Diode, Microwave, Schottky Barrier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N64	AMP	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4829	N/R	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N643A	TRW	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3823	N/R	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N645	IIT	N	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16543	N/R	102	188	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N645	TEX	3	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	13591	N/R	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N645	N/R	2	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3800	N/R	103	252	13
1N645-1	N/R	2	Diode, Rectifier, Low Power								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3800	N/R	103	252	13
1N646	TEX	N	Diode, Rectifier, Low Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	32048	N/R	102	189	13
1N647	TEX	N	Diode, Rectifier, Low Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	41545	N/R	102	189	13
1N647	N/R	N	Diode, Rectifier, Low Power								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	21384	N/R	102	184	13
1N647-1	TRW	N	Diode, Rectifier, Low Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	41067	N/R	102	189	13
1N647-1	MSC	3	Diode, Rectifier, Low Power								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	31	PASSED	4000	N/R	5	252	3
1N647-1	N/R	2	Diode, Rectifier, Low Power								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3800	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N649	N/R	3	Diode, Rectifier, Low Power	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7187	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N658	FSC	N	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22818	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6601	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7597	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N661	TEX	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12421	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N6621	FSC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10893	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N702A	TEX	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	29131	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N711A	CEN	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	42034	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N746	VAR	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402		SS	1500 Ohms	100E-12 F	5	8523	3	FAILED	8000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N746A	NUC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	35564	N/R	102	188	13
1N747A-1	MSC	3	Diode, Zener, Voltage Regulator								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
1N749	VAR	3	Diode, Zener, Voltage Regulator								Not Applicable		
402	0825	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	8000	N/R	68	252	13
1N750	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N750A	TEX	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	50167	N/R	102	188	13
1N750A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N750A-1	MOT	3	Diode, Zener, Voltage Regulator								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	59	29
1N751A	TEX	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	318002	N/R	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N751A	TEX	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	73190	N/R	102	189	13
1N751A	MSC	3	Diode, Zener, Voltage Regulator								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
1N751A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N751A-1	MSC	3	Diode, Zener, Voltage Regulator								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
1N752A	TRC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	110477	N/R	102	188	13
1N752A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N753	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N753A	TRC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	111218	N/R	102	188	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N753A	MSC	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
1N753A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N753A-1	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N753A-1	MSC	3	Diode, Zener, Voltage Regulator								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
1N754	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N754A	NUC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	31542	N/R	102	188	13
1N754A	MOT	3	Diode, Zener, Voltage Regulator								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	242	29
1N754A-1	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N755	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N755A	TRC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	131406	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N755A-1	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N756	TRW	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	154666	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N756	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N756A	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N756A-1	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N757	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N757A	TRC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	77547	N/R	102	188	13
1N757A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	150C Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N757A-1	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N758	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N758A	TRC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	76779	N/R	102	188	13
1N758A	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N758A-1	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N758A-1	MOT	3	Diode, Zener, Voltage Regulator								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	252	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N759	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N759A	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N759A-1	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N759A-1	MOT	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	252	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N763-2	DIC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	51343	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N781	MAS	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1033	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N788	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	828	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N78CR	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1334	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N780	ALP	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1266	N/R	102	189	13
1N816	TRC	N	Diode, Small Signal, Switching								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	36252	N/R	102	189	13
1N8161	IIT	N	Diode, Small Signal, General Purpose								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	67756	N/R	102	189	13
1N821	N/R	3	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	165166	N/R	102	188	13
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N821	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	N/R	123	0	10
1N823	TRC	N	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	39731	N/R	102	189	13
1N823	N/R	3	Diode, Zener, Voltage Reference								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N823	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	N/R	123	0	10
1N823	VAR	3	Diode, Zener, Voltage Reference								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	10000	N/R	68	252	13
1N825	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	N/R	123	0	10
1N827	N/R	N	Diode, Zener, Voltage Reference								Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	6000	C(+) A(-)	98	285	13
1N827	MOT	N	Diode, Zener, Voltage Reference								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N827	VAR	3	Diode, Zener, Voltage Reference								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	10000	N/R	68	252	13
1N829	N/R	3	Diode, Zener, Voltage Reference								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	1530U	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9080	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N829	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N829-1		MSC	3	Diode, Zener, Voltage Reference							Not Applicable		
436	0488	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
1N829-1		NSC	3	Diode, Zener, Voltage Reference							Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
1N82A		NUC	1	Diode, Microwave, Point Contact							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	579	N/R	102	189	13
1N82A		ALP	1	Diode, Microwave, Point Contact							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1200	N/R	102	189	13
1N914		TEX	3	Diode, Small Signal, General Purpose							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6256	N/R	102	189	13
1N914		N/R	3	Diode, Small Signal, General Purpose							Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N914	FSC	2	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3653	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N916	N/R	N	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	3000	N/R	14	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N933J	TRC	3	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5727	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N938B	N/R	3	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	5827	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N938B	MSI	3	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	243	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N941	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N943B	N/R	3	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N943	MOT	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
401	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part ESD	Mil	Class	Part Description	Technology
1N936		N/R	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	26556	N/R	102	184	13
1N936-1		CMP	3	Diode, Zener, Voltage Reference							Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
1N944B		N/R	N	Diode, Zener, Voltage Reference							Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	24770	N/R	102	184	13
1N956B		N/R	N	Diode, Zener, Voltage Reference							Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	17762	N/R	102	184	13
1N958B		TRW	N	Diode, Microwave, Var. Cap. (Varactor)							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	36551	N/R	102	189	13
1N963		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	N/R	123	0	10
1N963B		DIC	N	Diode, Zener, Voltage Regulator							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	84847	N/R	102	188	13
1N964		MOT	N	Diode, Zener, Voltage Regulator							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N965B	FSC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	32725	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N965	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0138	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	^NODE TO CATHODE	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N965B	DIC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	18131	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N965B	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	39297	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N965B-1	N/R	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N966	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N966A-1	MOT	3	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	252	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N967	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	24615	N/R	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
1N967	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N967B-1	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
1N968	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N968B	N/R	3	Diode, Zener, Voltage Regulator								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
1N969	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N970B	DIC	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	84360	N/R	102	188	13
1N971	MCT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N971B-1	MOT	3	Diode, Zener, Voltage Regulator								Not Applicable		
394	0485	SS	1500 Ohms	100E-12 F	10	N/R	11	PASSED	4000	N/R	95	252	29

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N972B	DIC	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	120865	N/R	102	188	13
1N973	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N973B	HAU	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	730704	N/R	102	188	13
1N974	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
1N974B	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	76205	N/R	102	188	13
1N976	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N981	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N981B	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	32082	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
1N985	MOT	N	Diode, Zener, Voltage Regulator	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10

1N987	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N988	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	ANODE TO CATHODE	123	0	10
1N992B	MOT	N	Diode, Zener, Voltage Regulator								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	ANODE TO CATHODE	122	0	10
2023-10	MAS	1	Transistor, Microwave/RF								Not Applicable		
410	1181	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	1000	N/R	102	252	13
2N1016B	WES	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3744[illegible]	E(+) B(-)	102	189	13
2N1039	TEX	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	34323	B(+) E(-)	102	189	13
2N1099	DEL	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	27917	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1115	ETC	N	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17911	B(+) E(-)	102	189	13
2N1116A	TRC	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	92846	E(+) B(-)	102	189	13
2N1118	SPR	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	13005	B(+) E(-)	102	189	13
2N1132	FSC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14066	B(+) E(-)	102	189	13
2N1132	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	288	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N1132A	FSC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9185	B(+) E(-)	102	189	13
2N1132A	RAY	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17906	B(+) E(-)	102	189	13
2N1132A	MOT	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	13423	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1204	MOT	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2787	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1303	TEX	1	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1892	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1308	GI	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8272	E(+) B(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1469	SOL	N	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	23857	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1485	SEN	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	41077	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1486	SEN	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	36839	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1486	PPC	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
							3	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1596	TEX	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	24381	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1602	N/R	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	18880	B(+) E(-)	102	189	13
2N1613		MOT	N	Transistor, Low Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	29490	E(+) B(-)	102	189	13
400	1287	SS	1500 Ohms	100E-12 F	350	N/R	10	FAILED	35060	REV. BIAS E TO B	122	0	10
2N1642		TEC	3	Transistor							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10756	B(+) E(-)	102	189	13
2N1711		FSC	3	Transistor, Low Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10411	E(+) B(-)	102	189	13
2N1711		MOT	3	Transistor, Low Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10411	E(+) B(-)	102	189	13
2N1711		N/R	3	Transistor, Low Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10337	E(+) B(-)	102	188	13
2N176		MOT	N	Transistor, High Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	31013	B(+) E(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N1774A	N/R	3	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13
2N1777A	GE	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	59685	B(+) E(-)	102	189	13
2N1893	FSC	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	18535	E(+) B(-)	102	189	13
2N1893	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	127	N/R	10	FAILED	12700	REV. BIAS E TO B	122	0	10
2N190	ETC	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22735	B(+) E(-)	102	189	13
2N2060	N/R	3	Transistor, Multiple, Differ. Amplifier								Not Applicable		
232	N/R	N/R	N/R		1	N/R	1	FAILED		N/R			13
2N2060	MOT	N	Transistor, Multiple, Diff. Amplifier								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	1	N/R	10	PASSED		REV. BIAS E TO B	123	0	10
2N2102	NSC	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	19499	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2105	NSC	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	11	N/R	1	FAILED	2200	N/R	102	252	13
2N2151	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	50408	N/R	102	184	13
2N2198	ETC	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	21886	E(+) B(-)	102	189	13
2N2219	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	89	N/R	10	FAILED	8900	REV. BIAS E TO B	122	0	10
2N2219A	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7891	N/R	102	184	13
2N2219A	MOT	2	Transistor, Low Power, NPN								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	5	FAILED	3000	COLLECTOR TO BASE	5	172	3
2N2222	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22863	E(+) B(-)	102	189	13
							1	FAILED	8298	E(+) B(-)	102	189	13
2N2222	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	96	N/R	10	FAILED	9600	REV. BIAS E TO B	122	0	10

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2222	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1000	N/R	15	252	23
2N2222A	IIT	3	Transistor, Low Power, NPN								Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	1600	E(+) B(-)	64	285	13
2N2222A	MOT	1	Transistor, Low Power, NPN								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	24	FAILED	4000	N/R	68	279	13
436	1186	SS	1500 Ohms	100E-12 F	13	N/R	3	FAILED	1800	BASE TO COLLECTOR	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	1	FAILED	3000	EMITTER TO BASE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	31	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	5	N/R	1	FAILED	600	BASE TO COLLECTOR	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	25	FAILED	2500	COLLECTOR TO BASE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	5	FAILED	3500	EMITTER TO BASE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	16	FAILED	3000	E TO B AND C TO B	5	252	3
2N2222A	RAY	2	Transistor, Low Power, NPN								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	5	FAILED	3000	EMITTER TO BASE	5	252	3
2N2222A	N/R	3	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10000	N/R	103	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2222A	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
051	N/R	SS	1500 Ohms	100E-12 F	1	N/R	10	PASSED	.000	N/R	102	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7914	N/R	102	184	13
2N2297	FSC	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	20754	E(+) B(-)	102	189	13
2N2297	RAY	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	20754	E(+) B(-)	102	189	13
							1	FAILED	24490	E(+) B(-)	102	189	13
2N2323	GE	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16543	E(+) B(-)	102	189	13
2N2323	UNI	3	Thyristor, SCR								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
2N2323A	TEL	1	Thyristor, SCR								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	600	COLLECTOR TO BASE	5	252	3
2N2326	UNI	2	Thyristor, SCR								Not Applicable		
392	0986	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	3000	A-C (+ -)	19	255	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2346	GE	N	Thyristor, SCR	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	58170	E(+) B(-)	102	189	13
2N2369	MOT	2	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	22	N/R	10	FAILED	2200	REV. BIAS E TO B	122	0	10
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	1	FAILED	6000	N/R	68	280	13
2N2369A	N/R	2	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4000	N/R	103	252	13
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	460	N/R	15	252	23
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	4293	N/R	102	184	13
2N2405	N/R	3	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15646	E(+) B(-)	102	188	13
2N2432	TEX	3	Transistor, Special Function, Chopper, Dual Emitter								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7764	E(+) B(-)	102	188	13
2N2432A	N/R	2	Transistor, Special Function, Chopper, Dual Emitter								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/P	1	FAILED	620	N/R	15	252	23
2N2453	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8100	E(+) B(-)	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2453	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6968	E(+) B(-)	102	189	13
2N2481	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4214	E(+) B(-)	102	188	13
2N2483	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5499	E(+) B(-)	102	188	13
2N2484	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7047	E(+) B(-)	102	188	13
2N2484	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	44	N/R	10	FAILED	4400	REV. BIAS E TO B	122	0	10
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	9	FAILED	9000	N/R	68	276	13
2N2484	N/R	3	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5000	N/R	103	252	13
2N2540	N/R	3	Transistor, Low Power, NPN								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1450	N/R	15	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2608	N/R	1	Transistor, Field Effect, Junction, P-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	320	N/R	16	252	23
2N2608	MOT	1	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	5	N/R	10	FAILED	460	REV. BIAS E TO B	122	0	10
2N2609	N/R	2	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3000	N/R	103	252	13
2N2609	MOT	1	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	8	N/R	10	FAILED	770	REV. BIAS E TO B	122	0	10
2N2708	ETC	2	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2216	E(+) B(-)	102	188	13
2N2801	FSC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9644	B(+) E(-)	102	189	13
2N2801	MOT	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	13744	B(+) E(-)	102	189	13
2N2857	N/R	1	Transistor, Microwave/RF, Bipolar								Not Applicable		
028	N/R	SS	1500 Ohms	117E-12 F	30	N/R	5	FAILED	1500	N/R	115	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2857	MOT	1	Transistor, Microwave/RF, Bipolar	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2741	E(+) B(-)	102	188	13
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	290	E(+) B(-)	66	285	13
400	1287	SS	1500 Ohms	100E-12 F	9	N/R	10	FAILED	900	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2857	VAR	2	Transistor, Microwave/RF, Bipolar	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	2250	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2894	RAY	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5405	B(+) E(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2894	MOT	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	3000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2896	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	130	N/R	10	FAILED	13000	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2904A	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7189	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2905	N/R	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11000	N/R	103	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2905	N/R	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7189	N/R	102	184	13
2N2905	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	250	N/R	10	FAILED	24140	REV. BIAS E TO B	122	0	10
2N2905A	N/R	3	Transistor, Low Power, PNP								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11300	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7189	N/R	102	184	13
2N2905A	RAY	3	Transistor, Low Power, PNP								Not Applicable		
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N2905A	MOT	3	Transistor, Low Power, PNP								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N2906	MOT	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6018	B(+) E(-)	102	189	13
2N2907	MOT	2	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10914	B(+) E(-)	102	189	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N2907	MOT	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	171	N/R	10	FAILED	17100	REV. BIAS E TO B	122	0	10
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	4000	N/R	68	278	13
2N2907	N/R	3	Transistor, Low Power, PNP								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1200	N/R	15	252	23
2N2907A	MOT	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9185	B(+) E(-)	102	189	13
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
2N2907A	NSC	3	Transistor, Low Power, PNP								Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	2250	B(+) E(-)	65	285	13
2N2907A	RAY	3	Transistor, Low Power, PNP								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
2N2907A	N/R	3	Transistor, Low Power, PNP								Not Applicable		
051	N/R	SS	1500 Ohms	100E-12 F	1	N/R	9	PASSED	4000	N/R	102	252	13
							1	FAILED	10000	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N2919	MOT	N	Transistor, Multiple, Differ. Amplifier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	51	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N2920		FSC	3	Transistor, Multiple, Differ. Amplifier							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5682	E(+) B(-)	102	189	13
2N2920		MOT	3	Transistor, Multiple, Differ. Amplifier							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	68	N/R	10	FAILED	6800	REV. BIAS E TO B	122	0	10
2N2945		MOT	2	Transistor, Special Function, Chopper							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2450	B(+) E(-)	102	188	13
2N2946A		N/R	3	Transistor, Special Function, Chopper							Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6093	N/R	102	184	13
2N297A		BEN	N	Transistor, High Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	32094	B(+) E(-)	102	189	13
2N297A		MOT	N	Transistor, High Power, NPN							Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26387	B(+) E(-)	102	189	13
2N3013		MOT	3	Transistor, Low Power, NPN							Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	123	N/R	10	FAILED	12300	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3019	RAY	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	18706	E(+) B(-)	102	188	13
2N3019	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	159	N/R	10	FAILED	15900	REV. BIAS E TO B	122	0	10
2N3019	N/R	3	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12492	N/R	102	184	13
2N3019	VAR	3	Transistor, Low Power, NPN								Not Applicable		
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	10	FAILED	6000	N/R	68	252	13
2N3030	N/R	3	Thyristor, SCR								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1000	N/R	17	252	23
2N3055	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	66396	N/R	102	184	13
2N3057	MSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10840	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3112	N/R	2	Transistor, Field Effect, Junction, P-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	530	N/R	16	252	23
2N3114	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10564	E(+) B(-)	102	188	13
2N3117	N/R	3	Transistor, Low Power, NPN								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1000	N/R	15	252	23
2N3227	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	72	N/R	10	FAILED	7200	REV. BIAS E TO B	122	0	10
2N3250A	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	6205	N/R	102	184	13
2N3251	RAY	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6064	B(+) E(-)	102	188	13
2N3251	MOT	3	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	115	N/R	10	FAILED	11500	REV. BIAS E TO B	122	0	10
400	0188	SS	1500 Ohms	100E-12 F	41	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3251A	N/R	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	3655	N/R	102	184	13
2N3253	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12363	N/R	102	184	13
2N3253	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	300	N/R	10	FAILED	29710	REV. BIAS E TO B	122	0	10
2N329	RAY	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14000	B(+) E(-)	102	189	13
2N335	TEX	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22140	E(+) B(-)	102	189	13
							1	FAILED	21681	E(+) B(-)	102	189	13
2N336	TEX	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22079	E(+) B(-)	102	189	13
2N336A	ETC	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17201	E(+) B(-)	102	189	13
2N3375	N/R	N	Transistor, Microwave/RF, Field Effect								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	25313	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3375	MOT	N	Transistor, Microwave/RF, Field Effect	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N338	TRC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6488	E(+) B(-)	102	188	13
2N3421	UNI	2	Transistor, Low Power, NPN								Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	C & E TO BASE (+ -)	19	252	13
2N3421	SOL	3	Transistor, Low Power, NPN								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
2N343	TEX	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6427	E(+) B(-)	102	189	13
2N3439	N/R	3	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10000	N/R	103	252	13
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12308	N/R	102	184	13
2N3439	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	171	N/R	10	FAILED	17100	REV. BIAS E TO B	122	0	10

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3439	MOT	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
							10	PASSED	4000	N/R	5	252	3
2N3440	RCA	N	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1.00 Ohms	100E-12 F	1	N/R	1	FAILED	30959	E(+) B(-)	102	189	13
2N3440	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	390	N/R	10	FAILED	38740	REV. BIAS E TO B	122	0	10
2N3440	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12308	N/R	102	184	13
2N3444	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N3467	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N3468	RAY	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	19178	B(+) E(-)	102	188	13
2N3486A	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7189	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3498	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9752	N/R	102	184	13
2N3499	MOT	N	Transistor, Low Power NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	165	N/R	10	FAILED	16500	REV. BIAS E TO B	122	0	10
2N3500	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9752	N/R	102	184	13
2N3501	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9752	N/R	102	184	13
2N3501	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	173	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
2N3503	N/R	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16547	B(+) E(-)	102	188	13
2N3507	N/R	N	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	18753	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3507	MOT	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	122	0	10
2N3553	N/R	N	Transistor, Microwave/RF, Bipolar								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	16916	N/R	102	184	13
2N3553	MOT	N	Transistor, Microwave/RF, Bipolar								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N3570	N/R	2	Transistor, Low Power, NPN								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	380	N/R	15	252	23
2N3584	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	34200	N/R	102	184	13
2N3585	MOT	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	53877	E(+) B(-)	102	188	13
2N3631	N/R	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
028	N/R	SS	1500 Ohms	117E-12 F	30	N/R	5	FAILED	100	N/R	62	252	13
2N3635	N/R	3	Transistor, Low Power, PNP								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11000	N/R	103	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3635	N/R	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12363	N/R	102	184	13
2N3635	MOT	1	Transistor, Low Power, PNP								Not Applicable		
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	1100	N/R	68	278	13
400	0188	SS	1500 Ohms	100E-12 F	321	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N3636	MOT	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	29595	B(+) E(-)	102	189	13
2N3637	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12363	N/R	102	184	13
2N3637	MOT	3	Transistor, Low Power, PNP								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
							1	PASSED	4000	N/R	5	252	3
							1	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
2N3677	N/R	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6158	B(+) E(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3700	FSC	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16661	E(+) B(`	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3700	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	102	N/R	10	FAILED	10200	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3715	N/R	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	75917	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3715	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3716	N/R	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	75917	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3716	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3724	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	102	N/R	10	FAILED	10200	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3735	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9999	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3735	MOT	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	350	N/R	10	FAILED	34990	REV. BIAS E TO B	122	0	10
2N3737	N/R	3	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	8451	N/R	102	184	13
2N3737	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	320	N/R	10	FAILED	31790	REV. BIAS E TO B	122	0	10
2N3739	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	27363	N/R	102	184	13
2N3739	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	390	N/R	10	FAILED	39000	REV. BIAS E TO B	122	0	10
2N3741	N/R	N	Transistor, High Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	28191	N/R	102	184	13
2N3741	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3741	MOT	N	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
2N3741	SOL	3	Transistor, High Power, PNP								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
2N3743	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
2N375	MOT	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	28201	B(+) C(-)	102	189	13
2N3763	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9999	N/R	102	184	13
2N3763	VAR	3	Transistor, Low Power, PNP								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
2N3765	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9999	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3767	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N3772	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	76645	N/R	102	184	13
2N3791	N/R	N	Transistor, High Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	76500	N/R	102	184	13
2N3791	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N3792	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	122	0	10
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
2N3799	N/R	3	Transistor, Low Power, PNP								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7000	N/R	103	252	13
2N3810	N/R	3	Transistor, Multiple, Differ. Amplifier								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	5048	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3810	MOT	3	Transistor, Multiple, Differ. Amplifier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	64	N/R	10	FAILED	6350	REV. BIAS E TO B	123	0	10
2N3811	N/R	3	Transistor, Multiple, Differ. Amplifier								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6000	N/R	103	252	13
2N3811	MOT	3	Transistor, Multiple, Differ. Amplifier								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	73	N/R	10	FAILED	7720	REV. BIAS E TO B	123	0	10
2N3821	N/R	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	4879	N/R	102	184	13
2N3821	MOT	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	29	N/R	10	FAILED	2900	REV. BIAS E TO B	122	0	10
2N3822	N/R	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7879	N/R	102	184	13
2N3822	MOT	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	35	N/R	10	FAILED	3500	REV. BIAS E TO B	122	0	10
2N3823	N/R	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	4045	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3823	TEX	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	208	SOURCE(+) GATE(-)	70	285	13
2N3823	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	10	N/R	10	FAILED	1000	REV. BIAS E TO B	122	0	10
2N3866	RCA	N	Transistor, Microwave/RF, Bipolar								Not Applicable		
026	0178	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	3525	E(+) B(-)	67	285	13
2N3866	MOT	3	Transistor, Microwave/RF, Bipolar								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	105	N/R	10	FAILED	10500	REV. BIAS E TO B	122	0	10
2N3866	N/R	3	Transistor, Microwave/RF, Bipolar								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	11659	N/R	102	184	13
2N3866A	N/R	3	Transistor, Microwave/RF, Bipolar								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	11659	N/R	102	184	13
2N3868	N/R	N	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	22533	N/R	102	184	13
2N3868	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	417	N/R	10	FAILED	41700	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N389	TEX	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	43161	E(+) B(-)	102	189	13
2N3902	N/R	3	Transistor, High Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
2N3906	MOT	1	Transistor, High Power, PNP								Not Applicable		
392	0187	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	1500	C-B (+ -)	19	150	13
400	0188	SS	1500 Ohms	100E-12 F	96	N/R	10	FAILED	9600	REV. BIAS E TO B	123	0	10
2N3959	MOT	1	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	11	N/R	10	FAILED	1100	REV. BIAS E TO B	122	0	10
2N3960	N/R	2	Transistor, Low Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	3921	N/R	102	184	13
2N3964	N/R	3	Transistor, Low Power, PNP								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5500	N/R	103	252	13
2N3971	N/R	1	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	160	N/R	16	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N3997	N/R	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	4538	N/R	102	184	13
2N4029	VAR	3	Transistor, Low Power, PNP								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
2N4033	N/R	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	16190	B(+) E(-)	102	188	13
2N4033	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N4036	N/R	3	Transistor, High Power, PNP								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5000	N/R	103	252	13
2N4091	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	850	D & S TO GATE (+ -)	19	252	13
2N4118A	N/R	1	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	140	N/R	1o	252	23
2N4134	N/R	1	Transistor, Low Power, NPN								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N4150	N/R	2	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	2951	N/R	102	184	13
2N4209	MOT	1	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	17	N/R	10	FAILED	1700	REV. BIAS E TO B	122	0	10
2N4236	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N4251	N/R	2	Transistor, Low Power, NPN								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	460	N/R	15	252	23
2N4261	MOT	1	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	15	N/R	10	FAILED	1500	REV. BIAS E TO B	122	0	10
2N4303	N/R	2	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
014	N/R	SS	100 Ohms	100E-12 F	1	N/R	1	FAILED	850	SOURCE DRAIN	102	74	13
015	N/R	SS	1000 Ohms	100E-12 F	1	N/R	1	FAILED	10000	SOURCE DRAIN	102	10	13
016	N/R	SS	10K Ohms	100E-12 F	1	N/R	1	FAILED	16300	SOURCE DRAIN	102	21	13
2N4351	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
393	0385	SS	1500 Ohms	100E-12 F	1	N/R	2	FAILED	150	GATE(+) DRAIN(-)	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N4392	SIX	1	Transistor, Field Effect, Junction, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	6	FAILED	1000	N/R	68	283	13
2N4392	NSC	2	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	2500	N/R	68	282	13
2N4393	SOL	3	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5691	DRAIN SOURCE	102	188	13
2N4399	N/R	N	Transistor, High Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	88158	N/R	102	184	13
2N4399	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N4405	N/R	3	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12362	N/R	102	184	13
2N4405	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N4407	MOT	2	Transistor, Low Power, PNP								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	2500	N/R	68	278	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N4416	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
249	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	100	G(+) S(-)	71	252	13
253	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	130	G(+) S(-)	69	252	13
254	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	140	G(+) S(-)	113	252	13
256	N/R	GN	1500 Ohms	100E-12 F	18	N/R	1	FAILED	150	G(+) S(-)	69	252	13
259	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	165	G(+) S(-)	69	252	13
262	N/R	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	175	G(+) S(-)	69	252	13
263	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	180	G(+) S(-)	69	252	13
263	N/R	GN	1500 Ohms	100E-12 F	500	N/R	2	PASSED	180	G(+) S(-)	69	252	13
							1	PASSED	180	G(+) S(-)	69	252	13
263	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	180	G(+) S(-)	69	252	13
264	N/R	GN	1500 Ohms	100E-12 F	45	N/R	1	FAILED	185	G(+) S(-)	69	252	13
264	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	185	G(+) S(-)	69	252	13
							1	FAILED	185	G(+) S(-)	113	252	13
265	N/R	GN	1500 Ohms	100E-12 F	6	N/R	1	FAILED	190	G(+) S(-)	69	252	13
266	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	192	G(+) S(-)	69	252	13
							4	PASSED	192	G(+) S(-)	69	252	13
							1	FAILED	192	G(+) S(-)	113	252	13
267	N/R	GN	1500 Ohms	100E-12 F	500	N/R	1	FAILED	195	G(+) S(-)	113	252	13
267	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	195	G(+) S(-)	69	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4416	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
267	N/R	GN	1500 Ohms	100E-12 F	500	N/R	2	FAILED	195	G(+) S(-)	113	252	13
267	N/R	GN	1500 Ohms	100E-12 F	15	N/R	1	FAILED	195	G(+) S(-)	69	252	13
268	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	200	G(+) S(-)	69	252	13
268	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	200	G(+) S(-)	69	252	13
269	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	205	G(+) S(-)	113	252	13
270	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	30	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	25	N/R	1	FAILED	210	G(+) S(-)	71	252	13
272	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	216	G(+) S(-)	69	252	13
							5	PASSED	216	G(+) S(-)	69	252	13
273	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	220	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	225	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	225	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	200	N/R	2	PASSED	225	G(+) S(-)	69	252	13
							1	FAILED	225	G(+) S(-)	113	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4416	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
275	N/R	GN	1500 Ohms	100E-12 F	200	N/R	2	PASSED	230	G(+) S(-)	69	252	13
276	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	240	G(+) S(-)	69	252	13
							1	FAILED	240	G(+) S(-)	69	252	13
276	N/R	GN	1500 Ohms	100E-12 F	25	N/R	1	FAILED	240	G(+) S(-)	113	252	13
276	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	240	G(+) S(-)	113	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N4416	TEX	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
263	N/R	GN	1500 Ohms	100E-12 F	500	N/R	2	FAILED	180	G(+) S(-)	113	252	13
							1	PASSED	180	G(+) S(-)	69	252	13
263	N/R	GN	1500 Ohms	100E-12 F	15	N/R	1	FAILED	180	G(+) S(-)	69	252	13
263	N/R	GN	1500 Ohms	100E-12 F	125	N/R	1	FAILED	180	G(+) S(-)	69	252	13
264	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	185	G(+) S(-)	69	252	13
265	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	190	G(+) S(-)	69	252	13
265	N/R	GN	1500 Ohms	100E-12 F	200	N/R	2	FAILED	190	G(+) S(-)	113	252	13
265	N/R	GN	1500 Ohms	100E-12 F	100	N/R	1	FAILED	190	G(+) S(-)	69	252	13
266	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	PASSED	192	G(+) S(-)	69	252	13
							2	FAILED	192	G(+) S(-)	69	252	13
267	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	195	G(+) S(-)	69	252	13
267	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	195	G(+) S(-)	69	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4416	TEX	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
267	N/R	GN	1500 Ohms	100E-12 F	500	N/R	2	PASSED	195	G(+) S(-)	69	252	13
268	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	200	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	90	N/R	1	FAILED	210	G(+) S(-)	71	252	13
270	N/R	GN	1500 Ohms	100E-12 F	15	N/R	1	FAILED	210	G(+) S(-)	69	252	13
270	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	210	G(+) S(-)	69	252	13
271	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	215	G(+) S(-)	69	252	13
272	N/R	GN	1500 Ohms	100E-12 F	1	N/R	4	PASSED	216	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	225	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	225	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	225	G(+) S(-)	69	252	13
274	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	225	G(+) S(-)	113	252	13
							1	PASSED	225	G(+) S(-)	69	252	13
275	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	230	G(+) S(-)	69	252	13
275	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	230	G(+) S(-)	69	252	13
276	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	240	G(+) S(-)	69	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4416	TEX	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
276	N/R	GN	1500 Ohms	100E-12 F	25	N/R	1	FAILED	240	G(+) S(-)	71	252	13
276	N/R	GN	1500 Ohms	100E-12 F	35	N/R	1	FAILED	240	G(+) S(-)	71	252	13
276	N/R	GN	1500 Ohms	100E-12 F	90	N/R	1	FAILED	240	G(+) S(-)	69	252	13
2N4416	SIX	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	3700	N/R	68	281	13
2N4416	NSC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	1400	N/R	68	281	13
2N4416A	N/R	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	3259	N/R	102	184	13
2N4416A	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	9	N/R	10	FAILED	900	REV. BIAS E TO B	122	0	10
2N463	KSC	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	68798	B(+) E(-)	102	189	13
2N4856	N/R	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	8395	N/R	102	184	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4856	MOT	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0588	SS	1500 Ohms	100E-12 F	12	N/R	2	FAILED	1500	SOURCE TO GATE	5	252	3
400	1287	SS	1500 Ohms	100E-12 F	11	N/R	10	FAILED	1100	REV. BIAS E TO B	122	0	10
2N4856	SOL	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	0688	SS	1500 Ohms	100E-12 F	15	N/R	4	FAILED	2500	+ GATE TO - SOURCE	5	252	3
2N4856	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	9	N/R	1	FAILED	1000	GATE TO SOURCE	5	252	3
2N4857	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	8	FAILED	1500	N/R	68	277	13
2N4857	ISL	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	0788	SS	1500 Ohms	100E-12 F	12	N/R	5	FAILED	1500	- GATE TO + SOURCE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N4857	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	600	SOURCE TO GATE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	12	N/R	5	FAILED	1500	SOURCE TO GATE	5	252	3
2N4858	N/R	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6000	N/R	103	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N4858	N/R	3	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	8395	N/R	102	184	13
2N4858	MOT	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	41	N/R	10	FAILED	4100	REV. BIAS E TO B	122	0	10
2N4858	ISL	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	3	N/R	3	FAILED	400	SOURCE TO GATE	5	252	3
							5	FAILED	400	SOURCE TO GATE	5	252	3
2N4858	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	7	N/R	2	FAILED	800	SOURCE TO GATE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	12	N/R	2	FAILED	1600	SOURCE TO GATE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	11	N/R	2	FAILED	1400	SOURCE TO GATE	5	252	3
2N4872	N/R	3	Transistor, Low Power, PNP								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	1200	N/R	15	252	23
2N491	GE	N	Transistor, Unijunction								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	83934	E(+) B(-)	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N4931	N/R	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	12387	N/R	102	184	13
2N4948	MOT	N	Transistor, Unijunction								Not Applicable		
026	0281	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	742	B(+) E(-)	24	285	13
400	1287	SS	1500 Ohms	100E-12 F	179	N/R	10	FAILED	17900	REV. BIAS E TO B	122	0	10
2N4949	MOT	N	Transistor, Unijunction								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	175	N/R	10	FAILED	17500	REV. BIAS E TO B	122	0	10
2N4957	N/R	1	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	1563	N/R	102	184	13
2N4957	MOT	1	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	12	N/R	10	FAILED	1200	REV. BIAS E TO B	122	0	10
2N4959	MOT	1	Transistor, Low Power, PNP								Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	650	C & E TO BASE (+ -)	19	252	13
2N495A	CSI	1	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	790	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N498	TEX	N	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26297	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5019	SIX	3	Transistor, Field Effect, Junction, P-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	10000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5036	N/R	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5038	N/R	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	20283	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5038	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5038	RCA	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							2	PASSED	4000	N/R	5	252	3
							2	PASSED	4000	N/R	5	252	3
							3	PASSED	4000	N/R	5	252	3
							2	PASSED	4000	N/R	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N3038	RCA	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
							2	PASSED	4000	N/R	5	252	3
2N5109	N/R	3	Transistor, Microwave/RF, Bipolar								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	9246	N/R	102	184	13
2N5109	MOT	N	Transistor, Microwave/RF, Bipolar								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N5114	N/R	3	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	7000	N/R	103	252	13
2N5114	ISL	2	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	5	FAILED	3500	GATE TO SOURCE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	1	FAILED	2500	GATE TO SOURCE	5	252	3
2N5116	ISL	1	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	1	FAILED	2500	SOURCE TO GATE	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N5116	ISL	1	Transistor, Field Effect, Junction, P-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	12	N/R	1	FAILED	1600	GATE TO SOURCE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	14	N/R	5	FAILED	2000	GATE TO SOURCE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	9	N/R	1	FAILED	1000	GATE TO SOURCE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	3	N/R	1	FAILED	400	GATE TO SOURCE	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5154	N/R	N	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	PASSED	3000	N/R	15	252	23

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5157	N/R	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	96560	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5196	SIX	1	Transistor, Field Effect, Junction, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402		SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	700	N/R	68	281	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5241	N/R	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	7439	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5245	N/R	2	Transistor, Field Effect, Junction, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
014	N/R	SS	100 Ohms	100E-12 F	1	N/R	1	FAILED	600	GATE DRAIN	102	68	13
015	N/R	SS	1000 Ohms	100E-12 F	1	N/R	1	FAILED	3200	GATE DRAIN	102	43	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N5245	N/R	2	Transistor, Field Effect, Junction, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
016	N/R	SS	10K Ohms	100E-12 F	1	N/R	1	FAILED	5500	GATE DRAIN	102	65	13
2N526	GE	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17903	B(+) E(-)	102	189	13
2N526	MOT	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	30560	B(+) E(-)	102	189	13
2N5302	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	88158	N/R	102	184	13
2N5302	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N5303	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N5344	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	122	0	10
2N5415	N/R	N	Transistor, Low Power, PNP								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	22529	N/R	102	184	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5416	N/R	3	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10000	N/R	103	252	13
2N5416	MOT	N	Transistor, Low Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N5524	N/R	2	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
028	N/R	SS	1500 Ohms	117E-12 F	30	N/R	5	PASSED	2500	N/R	102	252	13
2N5582	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N5663	N/R	N	Transistor, High Power, NPN								Not Applicable		
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	28942	N/R	102	184	13
2N5664	UNI	3	Transistor, High Power, NPN								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N5664	PPI	3	Transistor, High Power, NPN								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5665	PPI	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
							5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5665	UNI	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5665	SOL	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5666	VAR	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	10000	N/R	68	280	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5672	PPI	3	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5682	N/R	3	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5685	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5686	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5745	N/R	N	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
232	N/R	N/R	N/R Ohms	100E-12 F	1	N/R	1	FAILED	88158	N/R	102	184	13
2N5745	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N576A	ETC	2	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3840	E(+) B(-)	102	189	13
2N5794	RAY	2	Transistor, Multiple, Differ. Amplifier								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	5	FAILED	3500	EMITTER TO BASE	5	252	3
2N5794	MOT	2	Transistor, Multiple, Differ. Amplifier								Not Applicable		
436	0488	SS	1500 Ohms	100E-12 F	16	N/R	5	FAILED	3000	COLLECTOR TO BASE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	5	FAILED	3500	EMITTER TO BASE	5	252	3
2N5796	MOT	3	Transistor, Multiple, Differ. Amplifier								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
2N5874	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N5877	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N598	GI	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	19658	B(+) E(-)	102	189	13
2N6040	MOT	N	Transistor, Multiple, Darlington								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	297	N/R	10	FAILED	29700	REV. BIAS E TO B	122	0	10
2N6052	N/R	3	Transistor, Multiple, Darlington								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
2N6055	MOT	N	Transistor, Multiple, Darlington								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	263	N/R	10	FAILED	26300	REV. BIAS E TO B	122	0	10
2N6059	N/R	3	Transistor, Multiple, Darlington								Not Applicable		
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	PASSED	15300	N/R	103	252	13
2N6129	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	383	N/R	10	FAILED	38300	REV. BIAS E TO B	122	0	10
2N618	MOT	N	Transistor, High Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26070	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6191	SOL	3	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1286	SS	1500 Ohms	100E-12 F	1	N/R	2	FAILED	9000	C-E TO BASE (+ -)	19	25	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6212	N/R	3	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
060	N/R	GN	1500 Ohms	100E-12 F	5	N/R	6	PASSED	4000	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6277	MOT	N	Transistor, High Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6284	MOT	N	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6287	MOT	N	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6298	MOT	N	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	347	N/R	10	FAILED	34700	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6299	MOT	N	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	344	N/R	10	FAILED	34400	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6301	MOT	N	Transistor, Multiple, Darlington	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	224	N/R	10	FAILED	22400	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6379	MOT	N	Transistor, High Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N6385	MOT	2	Transistor, Multiple, Darlington								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	31	N/R	10	FAILED	3017	REV. BIAS E TO B	123	0	10
2N6437	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N6438	MOT	N	Transistor, High Power, PNP								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	400	N/R	10	FAILED	40000	REV. BIAS E TO B	122	0	10
2N6547	MOT	N	Transistor, High Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N656	TEX	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	12953	E(+) B(-)	102	189	13
2N657	TEX	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	23103	E(+) B(-)	102	189	13
2N657A	GE	N	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26290	E(+) B(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6603	MOT	3	Transistor, Microwave/RF, Bipolar	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	48	N/R	10	FAILED	4760	REV. BIAS E TO B	122	0	10
2N6604	MOT	3	Transistor, Microwave/RF, Bipolar								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	65	N/R	10	FAILED	6500	REV. BIAS E TO B	123	0	10
2N6649	MOT	N	Transistor, Multiple, Darlington								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	377	N/R	10	FAILED	37700	REV. BIAS E TO B	122	0	10
2N6650	MOT	N	Transistor, Multiple, Darlington								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	400	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N6660	IRC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
393	0483	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	300	N/R	102	252	13
2N6661	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
396	1081	SS	1500 Ohms	150E-12 F	1	N/R	2	FAILED	1500	G-S AND G-D (+ -)	102	252	13
2N6756	IRC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	6	FAILED	450	D TO G & S (+ -)	19	252	17
2N6758	IRC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	450	D TO G & S (+ -)	19	252	

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6762	MOT	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
400	1287	SS	1500 Ohms	100E-12 F	15	N/R	10	FAILED	1500	REV. BIAS E TO B	122	261	10
2N6764	IRC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
396	1181	SS	1500 Ohms	150E-12 F	1	N/R	1	FAILED	100	G-S AND G-D (+ -)	102	252	13
436	1186	SS	1500 Ohms	100E-12 F	9	N/R	1	FAILED	1000	SOURCE TO GATE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	17	N/R	1	FAILED	3500	SOURCE TO GATE	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
							1	PASSED	4000	N/R	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	5	FAILED	3000	SOURCE TO GATE	5	252	3
2N6764	SIX	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	5	FAILED	2500	SOURCE TO GATE	5	252	3
2N6764	RCA	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	4	N/R	1	FAILED	500	GATE TO DRAIN	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
							1	PASSED	4000	N/R	5	252	3
2N6764	SIL	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	12	N/R	5	FAILED	1500	SOURCE TO GATE	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N6764-2	SIL	3	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	20	PASSED	4000	N/R	5	252	3
2N6766	RCA	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	4	N/R	1	FAILED	500	SOURCE TO GATE	5	252	3
2N6768	IRC	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
396	1081	SS	1500 Ohms	150E-12 F	1	N/R	3	FAILED	500	G-S AND G-D (+ -)	102	252	13
2N6782	RCA	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	9	N/R	1	FAILED	1000	GATE TO SOURCE	5	252	3
2N6796	IRC	3	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
2N6796	RCA	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	16	N/R	1	FAILED	3000	GATE TO SOURCE	5	252	3
2N685	GE	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	26756	B(+) E(-)	102	189	13
2N687	GE	N	Thyristor, SCR								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	88223	B(+) E(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N697	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	10153	E(+) B(-)	102	188	13
2N699	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14674	E(+) B(-)	102	189	13
2N706	TEX	2	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2439	E(+) B(-)	102	189	13
2N706	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	42	N/R	10	FAILED	4200	REV. BIAS E TO B	122	0	10
2N708	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4925	E(+) B(-)	102	189	13
2N718	MOT	N	Transistor, Low Power, NPN								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	315	N/R	10	PASSED	43000	REV. BIAS E TO B	123	0	10
2N718A	MOT	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	14863	E(+) B(-)	102	188	13
2N736	MOT	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9191	E(+) B(-)	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
2N760	MOT	3	Transistor, Low Power, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	5118	E(+) B(-)	102	189	13
2N834	RAY	2	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3434	E(+) B(-)	102	188	13
2N859	TEC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	11476	B(+) E(-)	102	189	13
2N869A	FSC	2	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3823	E(+) B(-)	102	188	13
2N886A	N/R	2	Thyristor, SCR								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	680	N/R	17	252	23
2N916	RAY	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6502	E(+) B(-)	102	188	13
2N918	TEC	2	Transistor, Microwave/RF, Bipolar								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2085	E(+) B(-)	102	188	13
2N918	MOT	1	Transistor, Microwave/RF, Bipolar								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	19	N/R	10	FAILED	1900	REV. BIAS E TO B	122	0	10

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
2N918	VAR	1	Transistor, Microwave/RF, Bipolar	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0787	SS	1500 Ohms	100E-12 F	5	N/R	4	FAILED	1600	N/R	68	278	13
2N927	TEC	3	Transistor, Low Power, PNP								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6412	B(+) E(-)	102	189	13
2N930	FSC	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	6156	E(+) B(-)	102	189	13
2N930	MOT	3	Transistor, Low Power, NPN								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	83	N/R	10	FAILED	8300	REV. BIAS E TO B	122	0	10
2N930A	SOL	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	4221	E(+) B(-)	102	189	13
2N956	MOT	3	Transistor, Low Power, NPN								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	8806	E(+) B(-)	102	189	13
30FQ045	IRC	1	Diode, Rectifier, Power Schottky								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	6	FAILED	10	N/R	68	252	13
3133-02-237-001	ALP	1	Diode, Microwave, Pin								Not Applicable		
392	0886	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	150	A-C (+ -)	19	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3133-02-237-001	ALP	1	Diode, Microwave, Pin	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	0886	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	150	C-A THEN A-C	19	156	13
34058472-001	**MOT**	**3**	**Transistor, Multiple, Matched Pair**								**Not Applicable**		
436	0588	SS	1500 Ohms	100E-12 F	18	8728	3	PASSED	4000	N/R	5	169	3
3N128	**RCA**	**1**	**Transistor, Field Effect, MOS, N-Channel**								**Not Applicable**		
348	N/R	GN	1500 Ohms	100E-12 F	50	N/R	1	FAILED	50	GATE(+) SOURCE(-)	72	252	13
348	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	50	GATE(+) SOURCE(-)	117	252	13
349	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	60	GATE(+) SOURCE(-)	117	252	13
350	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	75	GATE(+) SOURCE(-)	117	252	13
351	N/R	GN	1500 Ohms	100E-12 F	1	N/R	5	FAILED	92	GATE(+) SOURCE(-)	72	252	13
							15	PASSED	92	GATE(+) SOURCE(-)	117	252	13
352	N/R	GN	1500 Ohms	100E-12 F	1	N/R	6	FAILED	95	GATE(+) SOURCE(-)	72	252	13
352	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	95	GATE(+) SOURCE(-)	116	252	13
352	N/R	GN	1500 Ohms	100E-12 F	15	N/R	3	FAILED	95	GATE(+) SOURCE(-)	118	252	13
							1	FAILED	95	GATE(+) SOURCE(-)	72	252	13
352	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	95	GATE(+) SOURCE(-)	118	252	13
352	N/R	GN	1500 Ohms	100E-12 F	75	N/R	2	FAILED	95	GATE(+) SOURCE(-)	118	252	13
352	N/R	GN	1500 Ohms	100E-12 F	100	N/R	1	FAILED	95	GATE(+) SOURCE(-)	118	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N128	RCA	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
352	N/R	GN	1500 Ohms	100E-12 F	150	N/R	1	FAILED	95	GATE(+) SOURCE(-)	72	252	13
352	N/R	GN	1500 Ohms	100E-12 F	200	N/R	4	PASSED	95	GATE(+) SOURCE(-)	117	252	13
353	N/R	GN	1500 Ohms	100E-12 F	1	N/R	7	FAILED	100	GATE(+) SOURCE(-)	72	252	13
353	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	100	GATE(+) SOURCE(-)	72	252	13
353	N/R	GN	1500 Ohms	100E-12 F	8	N/R	1	FAILED	100	GATE(+) SOURCE(-)	118	252	13
353	N/R	GN	1500 Ohms	100E-12 F	10	N/R	4	FAILED	100	GATE(+) SOURCE(-)	118	252	13
353	N/R	GN	1500 Ohms	100E-12 F	15	N/R	4	FAILED	100	GATE(+) SOURCE(-)	118	252	13
353	N/R	GN	1500 Ohms	100E-12 F	30	N/R	1	FAILED	100	GATE(+) SOURCE(-)	72	252	13
							1	FAILED	100	GATE(+) SOURCE(-)	118	252	13
353	N/R	GN	1500 Ohms	100E-12 F	100	N/R	1	FAILED	100	GATE(+) SOURCE(-)	118	252	13
353	N/R	GN	1500 Ohms	100E-12 F	175	N/R	2	FAILED	100	GATE(+) SOURCE(-)	72	252	13
354	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	103	GATE(+) SOURCE(-)	116	252	13
							9	FAILED	103	GATE(+) SOURCE(-)	72	252	13
							9	PASSED	103	GATE(+) SOURCE(-)	117	252	13
355	N/R	GN	1500 Ohms	100E-12 F	1	N/R	6	FAILED	105	GATE(+) SOURCE(-)	72	252	13
355	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	6	N/R	3	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	7	N/R	1	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	8	N/R	2	FAILED	105	GATE(+) SOURCE(-)	118	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N128	RCA	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
355	N/R	GN	1500 Ohms	100E-12 F	9	N/R	1	FAILED	105	GATE(+) SOURCE(-)	72	252	13
355	N/R	GN	1500 Ohms	100E-12 F	20	N/R	2	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	30	N/R	1	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	50	N/R	1	FAILED	105	GATE(+) SOURCE(-)	118	252	13
355	N/R	GN	1500 Ohms	100E-12 F	75	N/R	1	FAILED	105	GATE(+) SOURCE(-)	72	252	13
355	N/R	GN	1500 Ohms	100E-12 F	100	N/R	1	FAILED	105	GATE(+) SOURCE(-)	116	252	13
355	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	105	GATE(+) SOURCE(-)	117	252	13
356	N/R	GN	1500 Ohms	100E-12 F	1	N/R	11	FAILED	110	GATE(+) SOURCE(-)	72	252	13
							1	FAILED	110	GATE(+) SOURCE(-)	116	252	13
356	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	110	GATE(+) SOURCE(-)	116	252	13
356	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	110	GATE(+) SOURCE(-)	118	252	13
356	N/R	GN	1500 Ohms	100E-12 F	6	N/R	3	FAILED	110	GATE(+) SOURCE(-)	118	252	13
356	N/R	GN	1500 Ohms	100E-12 F	15	N/R	1	FAILED	110	GATE(+) SOURCE(-)	118	252	13
356	N/R	GN	1500 Ohms	100E-12 F	20	N/R	1	FAILED	110	GATE(+) SOURCE(-)	118	252	13
356	N/R	GN	1500 Ohms	100E-12 F	50	N/R	1	FAILED	110	GATE(+) SOURCE(-)	118	252	13
356	N/R	GN	1500 Ohms	100E-12 F	2(	N/R	1	PASSED	110	GATE(+) SOURCE(-)	117	252	13
357	N/R	GN	1500 Ohms	100E-12 F	1	N/R	12	FAILED	115	GATE(+) SOURCE(-)	72	252	13
							1	FAILED	115	GATE(+) SOURCE(-)	116	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N128	RCA	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
357	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	115	GATE(+) SOURCE(-)	72	252	13
357	N/R	GN	1500 Ohms	100E-12 F	4	N/R	3	FAILED	115	GATE(+) SOURCE(-)	118	252	13
357	N/R	GN	1500 Ohms	100E-12 F	5	N/R	2	FAILED	115	GATE(+) SOURCE(-)	118	252	13
357	N/R	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	115	GATE(+) SOURCE(-)	72	252	13
357	N/R	GN	1500 Ohms	100E-12 F	25	N/R	1	FAILED	115	GATE(+) SOURCE(-)	118	252	13
358	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	125	GATE(+) SOURCE(-)	72	252	13
359	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	150	GATE(+) SOURCE(-)	72	252	13
360	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	200	GATE(+) SOURCE(-)	72	252	13

3N169	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	1287	SS	1500 Ohms	100E-12 F	8	N/R	10	FAILED	800	REV. BIAS E TO B	122	0	10

3N170	ISL	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
246	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	80	G(+) S(-)	63	252	13
247	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	PASSED	87	G(+) S(-)	76	252	13
248	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	PASSED	90	G(+) S(-)	76	252	13
248	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	90	G(+) S(-)	63	252	13
248	N/R	GN	1500 Ohms	100E-12 F	200	N/R	7	PASSED	90	G(+) S(-)	76	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N170	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
248	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	90	G(+) S(-)	75	252	13
248	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	90	G(+) S(-)	75	252	13
250	N/R	GN	1500 Ohms	100E-12 F	70	N/R	1	FAILED	105	G(+) S(-)	75	252	13
251	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	115	G(+) S(-)	75	252	13
251	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	PASSED	115	G(+) S(-)	76	252	13
							1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	25	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	43	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	50	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	75	N/R	1	FAILED	115	G(+) S(-)	74	252	13
251	N/R	GN	1500 Ohms	100E-12 F	125	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	135	N/R	1	FAILED	115	G(+) S(-)	120	252	13
251	N/R	GN	1500 Ohms	100E-12 F	40	N/R	1	FAILED	115	S(+) G(-)	119	252	13
252	N/R	GN	1500 Ohms	100E-12 F	90	N/R	1	FAILED	125	G(+) S(-)	120	252	13
254	N/R	GN	1500 Ohms	100E-12 F	1	N/R	2	FAILED	140	G(+) S(-)	120	252	13
254	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	140	G(+) S(-)	73	252	13
254	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	140	G(+) S(-)	120	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N170	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
254	N/R	GN	1500 Ohms	100E-12 F	4	N/R	1	FAILED	140	G(+) S(-)	120	252	13
254	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	140	G(+) S(-)	120	252	13
254	N/R	GN	1500 Ohms	100E-12 F	6	N/R	1	FAILED	140	G +) S(-)	75	252	13
254	N/R	GN	1500 Ohms	100E-12 F	8	N/R	1	FAILED	140	G.+) S(-)	75	252	13
254	N/R	GN	1500 Ohms	100E-12 F	200	N/R	2	PASSED	140	G(+) S(-)	76	252	13
254	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	140	S(+) G(-)	120	252	13
254	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	140	S(+) G(-)	119	252	13
255	N/R	GN	1500 Ohms	100E-12 F	19	N/R	1	FAILED	145	G(+) S(-)	119	252	13
256	N/R	GN	1500 Ohms	100E-12 F	45	N/R	1	FAILED	150	G(+) S(-)	120	252	13
256	N/R	GN	1500 Ohms	100E-12 F	21	N/R	1	FAILED	150	G(+) S(-)	74	252	13
256	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	150	S(+) G(-)	119	252	13
256	N/R	GN	1500 Ohms	100E-12 F	200	N/R	1	FAILED	150	G(+) S(-)	120	252	13
257	N/R	GN	1500 Ohms	100E-12 F	1	N/R	9	PASSED	152	G(+) S(-)	76	252	13
							1	FAILED	152	G(+) S(-)	75	252	13
258	N/R	GN	1500 Ohms	100E-12 F	3	N/R	1	FAILED	160	G(+) S(-)	120	252	13
259	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	165	G(+) S(-)	74	252	13
							5	FAILED	165	G(+) S(-)	120	252	13
259	N/R	GN	1500 Ohms	100E-12 F	2	N/R	2	FAILED	165	G(+) S(-)	120	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
3N170	ISL	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
259	N/R	GN	1500 Ohms	100E-12 F	5	N/R	1	FAILED	165	G(+) S(-)	120	252	13
259	N/R	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	165	G(+) S(-)	120	252	13
259	N/R	GN	1500 Ohms	100E-12 F	35	N/R	1	FAILED	165	G(+) S(-)	119	252	13
259	N/R	GN	1500 Ohms	100E-12 F	19	N/R	1	FAILED	165	G(+) S(-)	119	252	13
259	N/R	GN	1500 Ohms	100E-12 F	59	N/R	1	FAILED	165	G(+) S(-)	119	252	13
260	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	170	G(+) S(-)	120	252	13
261	N/R	GN	1500 Ohms	100E-12 F	1	N/R	6	FAILED	171	G(+) S(-)	119	252	13
							3	FAILED	171	G(+) S(-)	120	252	13
							1	PASSED	171	G(+) S(-)	76	252	13
263	N/R	GN	1500 Ohms	100E-12 F	2	N/R	1	FAILED	180	G(+) S(-)	76	252	13
265	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	190	G(+) S(-)	76	252	13
							9	FAILED	190	G(+) S(-)	119	252	13
							1	FAILED	190	G(+) S(-)	120	252	13
268	N/R	GN	1500 Ohms	100E-12 F	1	N/R	1	FAILED	200	G(+) S(-)	76	252	13
							2	FAILED	200	G(+) S(-)	119	252	13

3N187	RCA	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

393	0683	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1500	N/R	102	252	13

3N201	MOT	3	Transistor, Field Effect, MOS, N-Channel	Not Applicable

400	1287	SS	1500 Ohms	100E-12 F	78	N/R	10	FAILED	7800	REV. BIAS E TO B	122	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
3N204	MOT	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
393	0385	SS	1500 Ohms	100E-12 F	1	N/R	2	FAILED	2000	GATE(+) SOURCE(-)	102	252	13
47-92	NSC	1	Transistor, Microwave/RF, Bipolar								Not Applicable		
421	0184	SS	1500 Ohms	100E-12 F	9	N/R	1	FAILED	1800	N/R	102	252	13
479-1464-100	UNI	3	Diode, Small Signal, General Purpose								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	13	PASSED	4000	N/R	5	252	3
4E413-2	MAS	1	Diode, Microwave, Schottky Barrier								Not Applicable		
392	1086	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	400	A-C (+ -)	19	272	13
4N22A	TRW	2	Optoelectronic Dev., Photocoupler								Unknown		
392	1086	SS	1500 Ohms	100E-12 F	1	N/R	7	FAILED	3500	A-C, C-B & B-E (+ -)	19	71	13
4N24	MPI	2	Optoelectronic Dev., Photocoupler								Unknown		
398	0285	GN	1500 Ohms	100E-12 F	5	N/R	3	PASSED	2000	SEE REMARKS	112	192	25
4N49	TEX	2	Optoelectronic Dev., Photocoupler								Unknown		
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	1	FAILED	4000	BASE TO COLLECTOR	5	252	3
							1	FAILED	4000	EMITTER TO BASE	5	252	3
436	0588	SS	1500 Ohms	100E-12 F	16	N/R	1	FAILED	3000	BASE TO COLLECTOR	5	252	3

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
4N49	TEX	2	Optoelectronic Dev., Photocoupler	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	1	FAILED	4000	EMITTER TO BASE	5	252	3
							1	FAILED	4000	BASE TO COLLECTOR	5	252	3
436	0588	SS	1500 Ohms	100E-12 F	15	N/R	1	FAILED	2500	EMITTER TO BASE	5	252	3
436	0588	SS	1500 Ohms	100E-12 F	18	N/R	1	FAILED	4000	BASE TO COLLECTOR	5	252	3
							1	FAILED	4000	EMITTER TO BASE	5	252	3
436	0588	SS	1500 Ohms	100E-12 F	15	N/R	1	FAILED	2500	BASE TO COLLECTOR	5	252	3
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	5	FAILED	2500	EMITTER TO BASE	5	252	3

5082-2785	HEW	1	Diode, Microwave, Schottky Barrier	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	0886	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	300	A-C (+ -)	19	252	13
							5	FAILED	200	C-A THEN A-C	19	248	13

5082-4885	IIT	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	22340	A(+) C(-)	101	190	13
							1	FAILED	5770	C(+) A(-)	101	190	13

62-92	NSC	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	102	252	13

63-92	NSC	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
421	0184	SS	1500 Ohms	100E-12 F	11	N/R	1	FAILED	2200	N/R	102	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
72515	MAS	1	Transistor, Microwave/RF	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
410	1181	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	1000	N/R	102	252	13
80354	MAS	1	Transistor, Microwave/RF								Not Applicable		
410	1181	GN	1500 Ohms	100E-12 F	20	N/R	1	PASSED	1000	N/R	102	252	13
411	1181	GN	1M Ohms	100E-12 F	20	N/R	1	PASSED	1000	N/R	102	252	13
85HQ045	IRC	3	Diode, Rectifier, Power Schottky								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	3	FAILED	10000	N/R	68	252	13
88000	MAS	1	Transistor, Field Effect								Not Applicable		
409	1181	SS	1500 Ohms	100E-12 F	10	N/R	1	FAILED	600	N/R	102	203	13
88001	MAS	1	Transistor, Field Effect								Not Applicable		
409	1181	SS	1500 Ohms	100E-12 F	10	N/R	1	FAILED	600	N/R	102	202	13
88XXX	MAS	1	Transistor, Field Effect								Not Applicable		
405	0781	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1200	GATE-SOURCE	27	199	13
406	0781	SS	1M Ohms	100E-12 F	1	N/R	2	FAILED	1200	GATE-SOURCE	27	201	13
407	0781	SS	10M Ohms	100E-12 F	1	N/R	1	FAILED	400	GATE-SOURCE	27	200	13
408	0781	SS	1M Ohms	100E-12 F	1	N/R	1	FAILED	1000	GATE-SOURCE	27	198	18

Part Number	Part Mfr	ESD Class	Part Description	Technology
AM9519A	AMD	2	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	15	N/R	1	FAILED	2500	INPUT TO GND	5	252	3
CLA3130-99	ALP	1	Diode, Microwave, Pin								Not Applicable		
392	0986	SS	1500 Ohms	100E-12 F	1	N/R	10	FAILED	400	A-C (+ -)	19	252	13
DN-50003-00	SEQ	1	Diode, Microwave, Pin								Not Applicable		
392	0986	SS	1500 Ohms	100E-12 F	1	N/R	10	FAILED	1100	A-C (+ -)	19	252	13
ENI10A	MOT	3	Transistor, Microwave/RF								Not Applicable		
413	1087	SS	1500 Ohms	100E-12 F	15	N/R	5	FAILED	16000	BASE TO EMITTER	23	148	13
413	1087	SS	1500 Ohms	100E-12 F	5	N/R	5	FAILED	10000	BASE TO EMITTER	23	148	13
							5	FAILED	16000	BASE TO EMITTER	23	148	13
413	1087	SS	1500 Ohms	100E-12 F	70	N/R	5	PASSED	16000	BASE TO EMITTER	23	148	13
							5	PASSED	16000	BASE TO EMITTER	23	148	13
ENI14B	MOT	N	Transistor, Microwave/RF								Not Applicable		
413	1087	SS	1500 Ohms	100E-12 F	40	N/R	4	PASSED	16000	BASE TO EMITTER	23	148	13
413	1087	SS	1500 Ohms	100E-12 F	30	N/R	4	PASSED	16000	BASE TO EMITTER	23	148	13
413	1087	SS	1500 Ohms	100E-12 F	15	N/R	4	PASSED	16000	BASE TO EMITTER	23	148	13
413	1087	SS	1500 Ohms	100E-12 F	20	N/R	4	PASSED	16000	BASE TO EMITTER	23	148	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
EN12240	MOT	3	Transistor, Microwave/RF	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
413	1087	SS	1500 Ohms	100E-12 F	2	N/R	3	FAILED	16000	BASE TO EMITTER	23	191	13
413	1087	SS	1500 Ohms	100E-12 F	30	N/R	3	FAILED	16000	BASE TO EMITTER	23	191	13
413	1087	SS	1500 Ohms	100E-12 F	50	N/R	3	FAILED	16000	BASE TO EMITTER	23	191	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
FD777F	FSC	1	Diode, Small Signal, General Purpose	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1017	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
FLV104	IIT	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	17160	A(+) C(-)	101	190	13
							1	FAILED	4400	C(+) A(-)	101	190	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
FLV152	IIT	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	20580	A(+) C(-)	101	190	13
							1	FAILED	5310	C(+) A(-)	101	190	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
GC4117-85	GTL	1	Diode, Microwave	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1086	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	2000	A-C (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-1700	HEW	1	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	FAILED	1200	FWD. AND REV. BIAS	50	245	13
							20	FAILED	100	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-1719	HEW	1	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	FAILED	100	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-3001	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	PASSED	15000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-3301	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	20	N/R	20	FAILED	5000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-3401	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	FAILED	5000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-3507	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	PASSED	15000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-D400	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	20	N/R	20	FAILED	5000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-D600	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	PASSED	15000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HLMP-K100	HEW	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
403	0985	SS	1500 Ohms	100E-12 F	5	N/R	20	PASSED	15000	REV. BIAS	50	245	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
HPWR-6503	HEW	1	Transistor, Field Effect, MOS, N-Channel	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
396	1081	SS	1500 Ohms	150E-12 F	1	N/R	3	FAILED	100	G-S AND G-D (+ -)	102	252	13
IRF322	RCA	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
393	0384	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1200	N/R	102	252	13
IRF350	IRC	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
393	0284	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	3500	N/R	102	252	13
IRL60	IIT	3	Optoelectronic Dev., Emitter, Single LED, Infrared								Unknown		
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15870	A(+) C(-)	101	190	13
							1	FAILED	4060	C(+) A(-)	101	190	13
IVN5201TNF	ISL	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
396	0582	SS	1500 Ohms	150E-12 F	1	N/R	5	FAILED	100	G-S AND G-D (+ -)	102	252	13
LNA351	COD	N	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	126405	N/R	102	189	13
LVA356	N/R	N	Diode, Zener, Voltage Reference								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	PASSED	3000	N/R	14	252	23
LVA51A	TRW	N	Diode, Zener, Voltage Reference								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	124453	N/R	102	188	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
LVA91A	TRW	N	Diode, Zener, Voltage Reference	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	93922	N/R	102	189	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MCT2	N/R	3	Optoelectronic Dev., Photocoupler, Phototrans. Output	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
030	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9000	N/R	103	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MD-1151	ANZ	1	Diode, Special Function	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	3	FAILED	2000	PIN 1 & 3 TO PIN 4 (+ -)	19	252	13
							3	FAILED	2750	PINS 1 & 3 TO PIN 4 (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
ME60	IIT	3	Optoelectronic Dev., Emitter, Single LED, Infrared	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	15680	A(+) C(-)	101	190	13
							1	FAILED	4010	C(+) A(-)	101	190	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MJEC340	MOT	2	Transistor, Bipolar, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1086	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	B-E (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MLED900	IIT	3	Optoelectronic Dev., Emitter, Single LED, Infrared	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	19850	A(+) C(-)	101	190	13
							1	FAILED	5120	C(+) A(-)	101	190	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MMCM918	MOT	2	Transisto~, Bipolar, NPN	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	2750	C & E TO BASE (+ -)	19	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
MMF-2402	HAR	1	Transistor, Microwave/RF	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	0187	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	850	D & S TO G (+ -)	19	252	13
MR501	MOT	3	Diode, Rectifier, High Power								Not Applicable		
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	9962	N/R	102	188	13
MRF571	MOT	2	Transistor, Microwave/RF, Bipolar								Not Applicable		
392	1086	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	B-E (+ -)	19	252	13
MTM1224	MOT	1	Transistor, Field Effect, Junction, N-Channel								Not Applicable		
396	1081	SS	1500 Ohms	150E-12 F	1	N/R	4	FAILED	500	G-S AND G-D (+ -)	102	252	13
MTM15N05	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	68	N/R	10	FAILED	680	N/R	123	0	10
MTM6N60	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	14	N/R	10	FAILED	1350	N/R	123	0	10
MTP15N06	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	54	N/R	10	FAILED	540	N/R	123	0	10
MTP5N05	MOT	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
400	0188	SS	1500 Ohms	100E-12 F	6	N/R	10	FAILED	520	N/R	123	0	10

Part Number	Part Mfr	ESD Class	Part Description	Technology
MV-108	IIT	3	Optoelectronic Dev., Emitter, Single LED	Unknown

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
386	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	31950	A(+) C(-)	101	190	13
							1	FAILED	8320	C(+) A(-)	101	190	13
NE64587		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	4500	N/R	68	252	13
NEC327		NEC	1	Transistor, Bipolar, NPN							Not Applicable		
392	1186	SS	1500 Ohms	100E-12 F	1	N/R	5	FAILED	2000	C-E TO BASE (+ -)	19	252	13
NEL230120		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	1087	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
NEL230153		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	1087	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
NEL230154		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	1087	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
NEL230163		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	1087	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13
NEL230197		NEC	3	Transistor, Microwave/RF							Not Applicable		
402	1087	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	10000	N/R	68	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
PT97018	TRW	1	Transistor, Microwave/RF	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	2	FAILED	1000	N/R	68	252	13
QXTR-5916	HEW	2	Transistor, Microwave/RF								Not Applicable		
392	0986	SS	1500 Ohms	100E-12 F	1	N/R	3	FAILED	2600	B-E (+ -)	19	252	13
							3	FAILED	2600	BASE TO EMITTER (+ -)	19	250	13
SD241	TRW	3	Diode, Rectifier, Power Schottky								Not Applicable		
026	0281	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	1400	C(+) A(-)	38	256	13
SKA4504	TEK	1	Transistor								Not Applicable		
014	N/R	SS	100 Ohms	100E-12 F	1	N/R	1	FAILED	475	B C	102	54	13
015	N/R	SS	1000 Ohms	100E-12 F	1	N/R	1	FAILED	1900	B C	102	22	13
SKA4504	N/R	N	Transistor								Not Applicable		
016	N/R	SS	10K Ohms	100E-12 F	1	N/R	1	FAILED	5000	B C	102	63	13
SKA6516	TEK	1	Transistor								Not Applicable		
014	N/R	SS	100 Ohms	100E-12 F	1	N/R	1	FAILED	450	B C	102	52	13
015	N/R	SS	1000 Ohms	100E-12 F	1	N/R	1	FAILED	1625	B C	102	20	13
SKA6516	N/R	N	Transistor								Not Applicable		
016	N/R	SS	10K Ohms	100E-12 F	1	N/R	1	FAILED	7800	B C	102	73	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
SM692-1	MOT	1	Transistor, Low Power, PNP	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
029	N/R	N/R	1500 Ohms	100E-12 F	1	N/R	1	FAILED	1871	B(+) E(-)	102	189	13
SP10962	TEX	3	Transistor, High Power, PNP								Not Applicable		
402	0887	SS	1500 Ohms	100E-12 F	5	N/R	6	FAILED	6000	N/R	68	252	13
SPF1303	MOT	2	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
393	1183	SS	1500 Ohms	100E-12 F	1	N/R	1	FAILED	2500	N/R	102	252	13
TI551	N/R	2	Diode, Small Signal, General Purpose								Not Applicable		
048	N/R	SS	100 Ohms	218E-12 F	1	N/R	1	FAILED	450	N/R	14	252	23
UTR541UR	UNI	2	Diode, Rectifier, Fast Recovery								Not Applicable		
392	0886	SS	1500 Ohms	100E-12 F	1	N/R	2	PASSED	2750	A-C (+ -)	19	252	13
							2	PASSED	2750	C-A THEN A-C	19	252	13
VN4000A	SIX	1	Transistor, Field Effect, MOS, N-Channel								Not Applicable		
396	0582	SS	1500 Ohms	150E-12 F	1	N/R	3	FAILED	500	G-S AND G-D (+ -)	102	252	13
VP0109N2	SUP	1	Transistor, Field Effect, Junction, P-Channel								Not Applicable		
396	0282	SS	1500 Ohms	150E-12 F	1	N/R	3	FAILED	100	G-S AND G-D (+ -)	102	252	13

SECTION 3.3

PASSIVE COMPONENT SUSCEPTIBILITY TEST DATA

Part Number	Part Mfr	ESD Class	Part Description	Technology
0181A00361	BEC	1	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
071	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
072	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	41	252	13
							1	FAILED	2000	N/R	41	252	13
							1	FAILED	2000	N/R	41	252	13
073	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
0181A00363	BEC	1	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
071	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
072	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	41	252	13
							1	FAILED	2000	N/R	41	252	13
							1	FAILED	2000	N/R	41	252	13
073	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
0181A00371	BEC	3	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
071	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
0181A00371	BEC	3	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
072	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	41	252	13
							1	PASSED	2000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
073	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
0181A00373	BEC	3	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
071	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	252	13
							1	FAILED	15000	N/R	41	62	13
072	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	2000	N/R	41	252	13
							1	PASSED	2000	N/R	41	252	13
073	0779	GN	1500 Ohms	100E-12 F	10	N/R	1	PASSED	170	N/R	41	252	13
							1	PASSED	170	N/R	41	252	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
899-1-R	BEC	2	Passive, Resistor, Film, Metal	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
026	0281	SS	100 Ohms	200E-12 F	1	N/R	12	FAILED	665	N/R	106	284	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
A377DJJ-00	CCL	2	Passive, Resistor, Wirewound	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
392	1286	SS	1500 Ohms	100E-12 F	1	N/R	5	PASSED	2750	EACH PIN TO CASE (+ -)	19	152	13

Part Number	Part Mfr	ESD Class	Part Description	Technology
CMF-50	DAL	3	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	32	28

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
CMF-50	DAL	3	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	33	28
CMF-55		DAL	3	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	11	28
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	64	28
CMF-60		DAL	3	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	35	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	70	28
CMF-65		DAL	N	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	42	28
							5	PASSED	16000	ACROSS THE RESISTOR	102	51	28
EMF-50-100		DAL	3	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	56	28
							5	FAILED	4500	ACROSS THE RESISTOR	102	48	28
							5	FAILED	4500	ACROSS THE RESISTOR	102	55	28
EMF-55-100		DAL	1	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	9	28

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
EMF-55-100	DAL	1	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	21	69	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	21	23	28
EMF-60-100	DAL	3	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	12	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	21	3	28
							5	FAILED	4500	ACROSS THE RESISTOR	21	29	28
EMF-65-1	DAL	1	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	61	28
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	21	6	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	21	41	28
ERC-50	DAL	1	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	9	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	102	48	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	72	28
ERC-55	DAL	3	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	30	28

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
ERC-55	DAL	3	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	69	28
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	4	28
ERL-05	**DAL**	**3**	**Passive, Resistor, Film, Thick**								**Not Applicable**		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	9	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	21	18	28
							5	FAILED	4500	ACROSS THE RESISTOR	21	39	28
ERL-07	**DAL**	**1**	**Passive, Resistor, Film, Thick**								**Not Applicable**		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	9	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	21	5	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	21	27	28
ERL-20	**DAL**	**3**	**Passive, Resistor, Film, Thick**								**Not Applicable**		
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	43	49	28
							5	FAILED	10000	ACROSS THE RESISTOR	21	2	28
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	21	26	28
HC210S-2R	**HYC**	**N**	**Passive, Resistor, Film, Metal**								**Not Applicable**		
387	0182	GN	1000 Ohms	200E-12 F	10	N/R	3	PASSED	1000	INPUT(+) TO COMMON	107	58	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
HC210S-2	HYC	N	Passive, Resistor, Film, Metal	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
387	0182	GN	1000 Ohms	200E-12 F	10	N/R	3	PASSED	1000	INPUT TO INPUT	107	58	13
							3	PASSED	1000	OUTPUT(-) TO COMMON	107	58	13
							3	PASSED	1000	V(+) TO COMMON	107	58	13
							3	PASSED	1000	V(-) TO COMMON	107	58	13
388	N/R	GN	1000 Ohms	200E-12 F	10	N/R	3	FAILED	10000	INPUT(+) TO COMMON	107	58	13
							3	FAILED	10000	INPUT TO INPUT	107	58	13
							3	FAILED	10000	OUTPUT(-) TO COMMON	107	58	13
							3	FAILED	10000	V(+) TO COMMON	107	58	13
							3	FAILED	10000	V(-) TO COMMON	107	58	13
MF-1		DAL	N	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	31	28
							5	PASSED	16000	ACROSS THE RESISTOR	102	40	28
MF-1/10		DAL	3	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	44	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	57	28
MF-1/2		DAL	3	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	55	28
							5	FAILED	10000	ACROSS THE RESISTOR	102	44	28
MF-1/4		DAL	N	Passive, Resistor, Film, Thick							Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	7	28

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
MF-1/4	DAL	N	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	67	28
MF-1/8	DAL	3	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	36	28
							5	FAILED	4500	ACROSS THE RESISTOR	102	47	28
MF-50	DAL	3	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	14	28
							5	FAILED	10000	ACROSS THE RESISTOR	102	53	28
PTF-55	DAL	1	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	61	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	16	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	102	61	28
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	61	28
415	0781	SS	1500 Ohms	100E-12 F	23	N/R	5	FAILED	4500	ACROSS THE RESISTOR	102	16	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	102	34	28
PTF-60	DAL	1	Passive, Resistor, Film, Thick								Not Applicable		
415	0781	SS	1500 Ohms	100E-12 F	80	N/R	5	PASSED	16000	ACROSS THE RESISTOR	102	66	28

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
PTF-60	DAL	1	Passive, Resistor, Film, Thick	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
415	0781	SS	1500 Ohms	100E-12 F	50	N/R	5	FAILED	10000	ACROSS THE RESISTOR	102	38	28
415	0781	SS	1500 Ohms	100E-12 F	8	N/R	5	FAILED	1500	ACROSS THE RESISTOR	102	45	28
RBR56L27400	ULT	3	Passive, Resistor, Film, Thin								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	1	PASSED	4000	N/R	5	252	3
RBR56L32401	ULT	3	Passive, Resistor, Film, Thin								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
RLR07C1003FS	TRW	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	36	PASSED	4000	N/R	5	252	3
RN50H1692	N/R	1	Passive, Resistor								Not Applicable		
074	N/R	SS	0 Ohms	200E-12 F	1	N/R	1	FAILED	200	N/R	40	252	13
075	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	1000	N/R	40	252	13
							1	PASSED	1000	N/R	40	252	13
078	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	1000	N/R	40	252	13
							1	FAILED	1000	N/R	40	252	13
							2	FAILED	1000	N/R	40	252	13
081	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	FAILED	2000	N/R	40	252	13
082	N/R	GN	1000 Ohms	200E-12 F	1	N/R	1	FAILED	4000	N/R	40	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
RN50H1692	N/R	1	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
085	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	FAILED	1100	N/R	40	252	13
RN50H4532	**N/R**	**1**	**Passive, Resistor**								**Not Applicable**		
076	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	2000	N/R	40	252	13
077	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	2500	N/R	40	252	13
078	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	FAILED	1000	N/R	40	252	13
079	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	2000	N/R	40	252	13
080	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	FAILED	1500	N/R	40	252	13
083	N/R	SS	0 Ohms	200E-12 F	1	N/R	1	FAILED	2000	N/R	40	252	13
RNC55H	**DAL**	**N**	**Passive, Resistor**								**Not Applicable**		
026	0281	SS	100 Ohms	200E-12 F	1	N/R	4	FAILED	3000	N/R	106	285	13
RNC55H1183FS	**TRW**	**3**	**Passive, Resistor**								**Not Applicable**		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3
RNC55H3322	**N/R**	**1**	**Passive, Resistor**								**Not Applicable**		
079	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	2000	N/R	40	252	13
084	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	FAILED	3500	N/R	40	252	13

Part Number (Cont'd)	Part Mfr	ESD Class	Part Description	Technology
RNC55H3322	N/R	1	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
084	N/R	SS	1000 Ohms	200E-12 F	1	N/R	1	PASSED	4000	N/R	40	252	13
							2	FAILED	1000	N/R	40	252	13
							1	FAILED	3000	N/R	40	252	13
RNC55H68	N/R	N	Passive, Resistor								Not Applicable		
086	N/R	SS	1000 Ohms	200E-12 F	1	N/R	3	FAILED	15000	N/R	40	252	13
RNC90Y178R00	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y187R00	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y196R00	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y205R00	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y20R000BR	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	3	PASSED	4000	N/R	5	252	3

Part Number	Part Mfr	ESD Class	Part Description	Technology
RNC90Y215R00	ULT	3	Passive, Resistor	Not Applicable

Test Source	Test Date	Test Type	Test Resistance	Test Capacitance	Number Pulses	Date Code	Number Devices	Test Result	Test Voltage	Pin Combination	Failure Criteria	Test Remarks	General Remarks
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y22600	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y226R000	ULT	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	5	PASSED	4000	N/R	5	252	3
RNC90Y3K0100	VIS	3	Passive, Resistor								Not Applicable		
436	1186	SS	1500 Ohms	100E-12 F	18	N/R	2	PASSED	4000	N/R	5	252	3
							2	PASSED	4000	N/R	5	252	3

SECTION 4.0

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SECTION 5.0

DATA SOURCES

5.0 DATA SOURCES

The following section contains brief descriptions of the various data sources used in this publication. They are presented in numerical order by source code which is found in field No. 6 in the detailed data of Section 3.0. Note that there may be a range of source codes associated with one data source if different test methods were used by that source.

001 Three Fairchild 2102LI ICs were tested using the standard human body model. The voltage was applied to each input with the positive voltage on the input and the negative on V_{SS} or V_{DD}. Pulsing started at 200 volts and incremented in 100-volt steps until failure occurred. Three pulses were given at each voltage. Out of a total of 39 inputs tested, 7 were damaged at 300 volts, 22 at 400 volts, 9 at 500 volts and 1 at 600 volts.

002 Type 6514 Static RAMs from RCA and Monolithic Memories were the devices tested. The inputs were step-stressed until failure in both polarities. A positive potential at the input was found to be the more destructive condition.

003 Devices of various technologies were stressed using a 100 pF and 0 ohm model. The inputs were step-stressed with one supply lead grounded. The voltage was increased in 100-volt steps until failure.

004 MOS, STTL, and TTL devices were stressed using 125 pF capacitance and 0 resistance. The inputs were stressed with no other pins grounded (i.e., floating device model). In this situation, it is the capacitance of the device itself which allows energy to be dissipated causing device damage.

005 A sampling of digital to analog converters from 6 different manufacturers were tested. Step-stress comparative testing was done using the standard human body model. A change in any electrical parameter of 10% or more was considered a failure. The following devices were tested:

005 (Cont'd)

Analog Devices	AD 7533
Micro Power Systems	AD 7520
Analog Devices	AD 7520
Intersil	AD 7520
Hybrid Systems	DAC 331
Raytheon	AD 7521
National	AD 7521

006 Various CMOS devices were tested using the standard human body model. A sample of four devices were step-stressed on a different pin combination for every voltage. The pin combinations used were:

(+)	(-)
V_{DD}	Input
Input	V_{SS}
Input	Associated Output
Associated Output	Input

The voltage stepping increments were 200 volts starting at 400 volts. An out-of-spec current leakage was used as the failure criterion.

007-013 Various CMOS devices from two different manufacturers were tested in accordance with the applicable MIL-M-38510 slash sheet. This requires the device to withstand a stressing voltage of 400 volts. To obtain comparative data on the devices, a sample of 5 devices were also tested at 200, 400, and 600 volts with each device subjected to only one voltage.

014-025 (Published paper, Ref. 10)

Various technologies (CMOS, TTL, STTL, LSTTL, ECL, transistors, diodes) were tested to determine the relative failure voltages. Each technology was tested using the human body model with various resistances and capacitances (100 to 10K ohm and 100 to 500 pF, respectively). Specific part numbers are not known.

026 These tests were performed with an "in-house"-built VZAP tester utilizing a 200 pF capacitor and a 100 ohm resistor. Average failure voltages for a sampling of 4 devices was given using step-stressing.

027 Tests were conducted on various bipolar devices, both digital and linear, using an Electro-tech Systems (ETS)-900 ESD tester (100 pF, 1500 ohm). A sample of 15 of each device type was tested at 1000 volts. The failure criterion was an out-of-spec DC parameter.

028 (Publisher paper, Ref. 8)

Various semiconductor devices were step-stressed with a circuit similar to the MIL-M-38510 slash sheet spec (117 pF, 1500 ohm). Step voltages of 250, 500, 1000, 1500 and 2500 volts were used with 30 pulses applied at each voltage. A DC parameter change of 10% or more was used as the failure criterion. Devices were also stressed at 75% of the threshold and then burned in to detect possible ESD-induced latent failures. (The 75% pulsing data is not included in the detailed data section of this book).

029 (Published report, Ref. 11)

The data in the detailed data section under the 029 source code was theoretically derived from data contained in the SUPERSAP2 database, which contains parametric data on many electronic devices including diodes, transistors, and microcircuits. The parameters are derived theoretically and empirically from EMP test data.

030 This document contains worst-case failure voltages for many different microcircuits, diodes and transistors referenced to the 100 pF, 1500 ohm human body model. Details of the test procedure was not known.

031-047 This document contains a study to evaluate various NMOS and CMOS devices from various manufacturers for their ESD susceptibility. Various resistances and capacitances were used in the discharge circuit. Devices which were step-stressed (source codes 042-045) were stepped from 400 volts in 100-volt increments. Multiple pulsing was also carried out. For devices that were step-stressed (source code 045) four pulses were applied at each voltage. Multiple pulsing was also carried out at discrete voltages of 1000 volts (source code 046) or 500 volts (source code 047) until failure occurred. One input of the devices was stressed to V_{SS}, V_{PP} or V_{DD} in both polarities.

048 (Published paper, Ref. 15)

In this paper, several bipolar transistors, diodes, and JFETs were stressed with a 218 pF, 100 ohm discharge model. All devices were step-stressed with the stressing voltage increasing by 20% with every pulse. The starting voltages for MOS devices was 16 volts and for all others 70 volts. The maximum stressing voltage was 3000 volts.

049-060 ESD susceptibility testing was conducted on various transistors and ICs. Comparative data is given on the 741 op amp from three different manufacturers. Two advanced Schottky parts were also tested (the 74F00 and 74F04). For devices which were step-stressed the source code and associated step levels are as follows:

051	4000, 10000
052	50, 100, 200, 300, 400, 500, 600
053	500, 1000, 1500
054	1000, 2000

061-066 Tests were carried out on the following NMOS 16K dynamic RAMs:

TI	4116
NEC	416
Mostek	4116
Intel	(Part number not reported)

061-066 (Cont'd)

The source codes and associated voltage step levels for devices which were step-stressed are as follows:

061	500, 1000
063	200, 400, 600, 800, 1000

Two different resistances were used and multiple pulse testing was conducted.

067-070 This document presents data on an STTL device (74S00) and a TTL device (7437). The voltages given are those required to cause 30% of the devices to fail. The inputs of the devices were tested using four different capacitances and no resistance. Findings indicate, on the average, the energy required to cause failure in the Schottky device is 25% that of the standard TTL device.

071-073 Resistance networks were tested for resistance change after stressing a sample of devices at either 170, 2000 or 15,000 volts using the standard human body model. A change in resistance of 2% was used as the failure criterion. Various resistance values were stressed with up to 10 pulses or until failure.

074-086 RNC 50 type 0.1% resistors in various resistance values were tested for their ESD susceptibility. Devices were stressed with a 200 pF, 1000 ohm human body model (except for devices with source code 074 and 083 which used no resistance in the test circuit). For devices which were step-stressed, the source code and associated stressing voltages are as follows:

074	50, 100, 200
075	300, 400, 500, 600, 700, 800, 900, 1000
076	1000, 1500, 2000
077	500, 800, 1000, 1200, 1500, 2000, 2500
078	500, 1000
079	500, 1000, 1500, 2000
080	500, 1000, 1500

074-086 (Cont'd)

081	2000, 3000, 4000, 5000
083	500, 1000, 1500, 2000, 2500, 3000, 3500, 4000
085	100, 200, 325, 400, 500, 1100
086	1000, 1500, 2000, 2500, 3000, 4000, 4500, 5000, 6000, 8000, 10000, 15000

A change in resistance of 0.1% was used as the failure criterion.

087-126 (Published paper, Ref. 4)

This report documents an extensive study by Hewlett Packard on the effects of ESD on various CMOS devices and investigates the possibility of ESD-induced latent failures. The data associated with these source codes were obtained primarily from Weibull plots, i.e., the voltages which would cause 10%, 50% and 90% of the devices to fail are given as cumulative failures. Since the sample size was known (25 for each device), the approximate number failing at each specified voltage can be calculated via the following formula:

$$\frac{i - .3}{N + .4} = \%\ \text{failed}\ (\div 100)$$

where

i = number failed
N = sample size

Therefore, at the 10% voltage approximately 3 devices failed, at 50% 10 more devices failed and at 90% 10 more, with approximately 2 devices passing the test at the 90% voltage.

Multiple pulsing was also carried out at a single test voltage (indicated by a GN under test type) on the Motorola 14049. The voltages chosen were 700, 900, 1100, 4500, 6000 and 7000, and the number of pulses were incremented until device failure (source codes 098-103).

127 Three LSTTL devices (74LS09, 74LS175 and 74LS240) from various manufacturers were tested for their ESD susceptibility. The inputs were step-stressed in 200-volt increments starting at 400 volts with one pulse at each voltage. The procedure was repeated with 10 pulses at each voltage on another sampling of devices. It was noted that 90% of the failures exhibited input diode short circuits.

128 Two low-power Schottky devices (the 54LS151 from two different manufacturers and the 54LS153) and one Schottky TTL device (54S157) were tested. All inputs on all devices were step-stressed to failure with five pulses at each voltage. The voltage increments were 100 volts starting at 400 volts. The failure voltage specified is an average of all inputs of that device (with the most susceptible given in the Remarks section).

129-139 Various MOS microprocessors were tested, the Mostek 3870 and 4116, the NEC D416C, and the Hitachi 4716AP. For the Mostek 3870, a sample of 5 devices were tested at 1000 and 2000 volts and 4 devices were tested at 3500V. For the other parts tested, a sample of 5 were tested at 500, 700, 800, 1000, and 1500 volts until all 5 parts failed.

140 A sample of 40 MK3873s was tested at 300 volts with up to 3 pulses, and the survivor (only 1) was tested at 1000 volts.

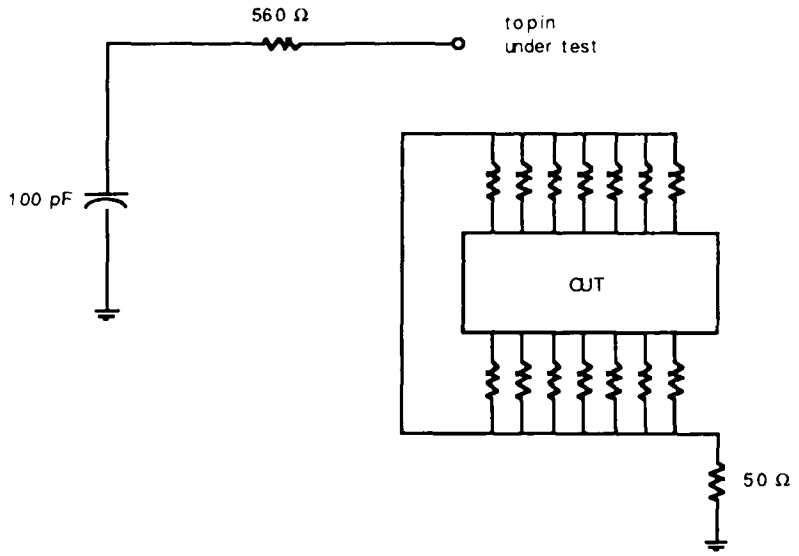
141-155 (Published paper, Ref. 17)

This extensive study evaluates the input protection on CMOS devices using various resistances and capacitances on the 4001A (source codes 143-154).

Also, the 4011 from four different manufacturers was step-stressed on twelve different pin combinations. The failure voltage is given for each manufacturer and each pin combination.

156-164 (Published paper, Ref. 18)

Testing was performed on various CMOS devices, the 4021A, 4021B, 4081B, 4011A and 4013A. To more closely approximate typical resistances seen by the device under test in actual circuit operation, the tests were carried out with a resistance (20K to 5M ohms) to ground. The schematic for the discharge circuit is as follows:



The pin under test was connected directly to the 560 ohm resistor. The supply pins were connected directly to the 50 ohm resistor to ground.

For each pin and polarity of the 4021A, two devices were stressed at 500, 1000, and 1500 volts (source codes 156-159).

After pulsing, the 4021A devices were put on life test at 150°C for 308 hours. Subsequent step-stress testing was performed up to 5500 volts (4021A data with source code 160).

The 4021B was step-stressed to 4000 volts to compare with the 4021A data.

The 4081B was step-stressed to 4500 volts and the 4011A and 4013A were stepped to 4000 volts.

165 Several CMOS ICs were subjected to ESD pulses and latch-up tests. The devices were stressed at 400 volts (in accordance with the MIL-M-38510 slash sheet specification) in the following sequence:

Input (-)	V_{DD} (+)
Input (+)	V_{SS} (-)
Input (+)	Output (-)
Input (-)	Output (+)

166-169 A 40-pin LSI PMOS device was subjected to discharges of 4000, 7000 and 10,000 volts using the standard human body model. The device was stressed in the following four pulse sequence:

Inputs (-)	V_{DD} (+)
Inputs (+)	V_{SS} (-)
Inputs (+)	Outputs (-)
Inputs (-)	Outputs (+)

The device had previously passed testing to 3000 volts.

170-230 (Published paper, Ref. 26)

This report documents extensive testing on the 74F04 and the 74F175 advanced Schottky TTL devices. The testing was done in three basic parts:

(1) Classification testing in accordance with MIL-STD-1686A, Appendix B
(2) Step-stress testing
(3) Multiple pulse testing

All parts of these tests were performed with the standard human body model (100 pF, 1500 ohm) and carried out by three independent test labs.

170-230 (Cont'd)

The step-stress testing was carried out in 100-volt increments from 100 to 1000 volts and 400-volt increments from 1000 to 5000 volts. One device was step-stressed on one pin (by each test lab) with all other pins tied together (APTT). This test was done in two conditions: (1) with all pins tied together grounded and (2) with all pins tied together floating (this condition is noted as such in Remarks).

Multiple pulse testing was also done in the two conditions mentioned above where a device was stressed at only one voltage by applying numerous pulses until failure. The devices were checked after 10, 30, 100, and 300 pulses.

231 A custom LSI phone converter IC was tested for its ESD susceptibility. The inputs of the device were tested by bringing a probe 1.5 feet long up to the pin for discharge. No resistance was used in the circuit.

232 (Published paper, Ref. 34)

This document contains the damage constant (K_1) and breakdown voltage V_D for many diodes and transistors. The Wunsch model was used ($P = Kt^{-.5}$) and the failure voltage calculated as in source code 029. A bulk resistance of 30 ohm was assumed for the calculations.

233 (See source codes 156-164)

234-243 (Published paper, Ref. 19)

TTL devices 74H106, 74163, 74LS163, and 74173 were tested for their ESD susceptibility. The inputs of the devices were step-stressed with various capacitances (and no series resistance). The stepping increments were 100 volts starting at 100 volts. The charged capacitor was touched to the input of the device so that an arc discharge occurred. A curve tracer was used to detect failure.

244-245 (Published report, Ref. 20)

This document contains two types of test data: (1) ESD susceptibility using a 100 pF, 1500 ohm model (source code 244), and (2) system transient data using a 0.1 pF, 100 ohm model (source code 245). For the ESD susceptibility data, the devices were step-stressed to a maximum of 1000 volts. For the system transient data, the devices were step-stressed to a maximum of 300 volts and the failure voltage given is the average from 15 devices.

246-379 (Published paper, Ref. 13)

This report documents an extensive program undertaken by Westinghouse to study ESD-induced latent failures of various types of semiconductor devices. The study was conducted in two parts: (1) Latent Failure Study I, which studied the 2N4416, 3N170, 1N5711, CD4001A, 5404 and the 54S04, and (2) Latent Failure Study II, which studied in more detail the 3N128 and the 54L04. Both studies provided very detailed ESD susceptibility data on the parts, giving both single pulse and multiple pulse data. All testing was done with the standard human body model (100 pF, 1500 ohm).

380-382 (Published paper, Ref. 21)

This paper documents a study in which 16K NMOS EPROMs manufactured in both the United States and Japan were tested for their ESD susceptibility to various discharge models. Two human body models were used, the 100 pF, 1500 ohm model and a 200 pF, 0 ohm model. For each of the human body models used, a separate device from each vendor was step-stressed from 200 to 3000 volts in twelve steps. 1, 5, and 10 pulses were applied to each pin in both polarities.

Testing was also done on some parts using the charged device model. The devices tested using this model are noted in the Remarks section. The generic part number of these devices were not reported.

383 (Published paper, Ref. 22)

Various ICs of several technologies were tested using a square wave step-stress test (EMP test) at pulse widths of 100 ns, 1 μs, and 10 μs. From these tests, the damage constants K_1 and K_2 and the breakdown voltage V_D and bulk resistance R_B were calculated. Knowing these parameters, a theoretical ESD failure voltage was calculated.

384-385 (Published paper, Ref. 35)

Various ICs of several technologies (LSTTL, TTL, STTL, CMOS (B series), CMOS LSI, NMOS) were step-stressed using a 200 pF, 1000 ohm human body model. Steps were in increments of 100 volts from 100 to 5500 volts until failure. One pulse per pin was applied at each voltage.

386 (Published report, Ref. 23)

Various LEDs were tested with various pulse widths ranging from a few hundred nanoseconds to 100 μs. The damage constants were calculated and converted to an ESD level. A degraded light output was observed to be the most sensitive parameter and was used as the failure criterion along with a change in the I-V characteristics. This study was based on work outlined in Ref. 24.

387-388 A resistor network device was tested using 1000 and 10000 volt levels. Three devices were subjected to each voltage level using a 1000 ohm resistance and 200 pF capacitance. Five pulses were given per each polarity. An in-house built tester was used during this go/no go test. The failure criterion was a resistor network out-of-specification.

390 (Published paper, Ref. 38)

This version of the QPL added an Electrostatic Discharge Sensitivity Classification in accordance with MIL-STD-883C, Method 3015.2. Devices that pass the 2000V testing are given a (B) classification. Devices that did not pass are given an (A) classification. 1500 ohms and 100 pF are used for testing.

391 During August, 1986, ESD Susceptibility Testing using an ETS-910 tester, accordance with the DoD-STD-1686 Human Body test method (1500 ohm and 100 pF). Of the commercial high speed CMOS tested using the average failed voltage of 30 devices was 2700 volts. The testing started at 1800 volt and increasing in 25 volt increments.

392 An in-house test was performed with an IMCS-3000 tester in accordance with MIL-STD-883 method 3015.2, and using a 1500 ohm 100 pF human body model. The voltage levels were step stressed at 50, 200, 750, 1000 and 2750 volts. Samples of integrated circuits and discrete semiconductors from various manufacturers were stressed. The failure criterion was a 10% or greater change measured on any electrical parameter.

393 An IMCS-2400B model tester using 1500 ohm resistance and 100 pF capacitance was used to step stress devices starting at 500 volts, with 500 volt increments to 5000 volts or failure. A variety of technologies were tested including CMOS, NMOS, ASTTL, and bipolar transistors from a variety of manufacturers.

394 An IMCS-3000 model tester using 1500 ohm resistance and 100 pF capacitance was used to step stress devices starting at 100 volts, with 100 volt increments to 4000 volts or failure. A group of diodes from various manufacturers was tested.

395 (Published report, Ref. 39)

A Government Industrial Data Exchange Program (GIDEP) report No. F9-A-86-04 was released August 1986, in which a power rectifier from Unitrode Corporation was tested using an ETS-910 susceptibility tester. The Human Body (1500 ohm and 100 pF) model was used to step stress in increments of 100, 200, 500, 750, 1000, 2000 and 5000 volt levels.

396 (Published report, Ref. 40)

This data was published in a Rome Air Development Center (RADC), Technical Report, No. RADC-TR-84-129. Various manufacturers' VMOS Power Field Effect Transistors were subjected to an ESD susceptibility test using an in-house 1500 ohm 150 pF tester. 6 lots of 5 components each were tested in 100 volt increments starting at 500 volts until 3 out of 5 devices failed.

397 Military high speed CMOS devices from 4 manufacturers were tested using the MIL-STD-883 Method 3015, 1500 ohm and 100 pF model. The voltage levels used in the step stress started at 500 volts, with 500 volt increments to 9000 volts or failure. Reported failure voltages were based on an average sample size of 10 per pin combinations.

398 An in-house test was performed using the MIL-STD-883 Method 3015.2, 1500 ohms resistance and 100 pF capacitance test method. The voltage test was a go/no go 2000 volt test with 5 pulses per polarity. Neither the manufacturer nor model no. of the tester were reported. Optoelectronic coupler JANTXV 4N24 was tested using 3 samples to determine that it was not susceptible to static discharge.

399 Commercial high speed CMOS devices from various manufacturers were tested, sample of sizes up to 15 devices were tested using a human body model (1500 ohm 100 pF model), go/no go, 2000 volt 5 pulses per polarity. The failure criteria was an increase in leakage current.

400 An IMCS-2500 model tester using MIL-STD-883C Method 3015.4, 1500 ohm, 100 pF step stress testing started from 100V, in 100 volt increments to failure or 17,500 volts. If the device passed, it was then stressed in an in-house-built tester to 43,000 volts or failure. One pulse was applied per voltage increment. The failure criteria was determined by a change in leakage current.

401 The model number of the IMCS tester was not reported. Testing of the EPROM's was per MIL-STD-883, Method 3015.4. The resistance was 1500 ohms and capacitance was 100 pF, voltage step stress levels were of 200 volt increments until failure with five pulses applied per voltage increments. The components tested were from different wafers and assembly lots.

402 An IMCS-3000 model tester using MIL-STD-883C Method 3015.4, 1500 ohm, 100 pF model was used for step stressing at 500, 1000, 2000, 4000, 8000 and 16000 volt increments with five pulses per polarity. All untested pins were tied together.

A variety of diodes, transistors and integrated circuits from various manufacturers were tested.

403 (Published paper, Ref. 41)

An IMCS-2500 model tester using MIL-STD-883 Method 3015.1 with 1500 ohms and 100 pF, step stressed test samples starting at 1000 volts to failure. Five pulses were applied per polarity per increment. The failure criteria was 10% change in electrical characteristics. Twenty (20) LED samples of nine (9) die types were tested. The results of the test showed that failure mechanisms of the LED's were similar to those of semiconductor devices: dielectric breakdown, junction punch-thru, and metallization melt. The degree of sensitivity depended on the construction of the LED's. Some of the LED's which showed significant early reverse breakdown voltage, will function properly in the forward direction.

404-411 During a DoD-STD-1686 in-house test, several discrete semiconductors from various manufacturers were tested using a 1500 ohm resistance and a 100 pF capacitance. Starting with a go/no go 1000 volt stress, if the component showed degradation after 10 pulses, additional components were then step stressed in 100 volt increments until failure. Information pertaining to the test apparatus manufacturer or model number was not supplied.

412 A MIL-STD-883 Method 3015.4 test was performed on transient surge suppressors using an IMCS-3000 1500 ohm, 100 pF model. The components were step stressed in 1000 volt increments to 15000 volts or failure. One pulse per polarity was applied during each increment of the step stress. Each pin was tested with respect to pin 1 with the failure criterion of a 10% change in leakage current.

413 (Published paper, Ref. 42)

An IMCS-2400 tester using a MIL-STD-883 Method 3015, 1500 ohm, 100 pF capacitance model, step stressed at 50, 500, 2000, 6000, and 16000 voltage increments, five pulses per polarity per increment was applied to three types of microwave/RF transistors from one manufacturer.

414 CMOS components from four manufacturers were tested using the DoD-STD-1686 test method. A sample size of ten components each were subjected to a 1500 ohm 100 pF, 100 volt step stress starting at 500V until failure, five pulses per increment. The test results compared testing with all other pins open vs. all other pins grounded. All pins grounded showed a slightly lower failure voltage.

415 Several metal film resistors from one manufacturer were tested to DoD-STD-1686 using an in-house built 1500 ohm 100 pF model tester. A step stress was performed beginning at 500 volts with 100 volt increments up to 1000 volts, then 250 volts increments to 3000 volts, 500 volt increments up to 6000 volts, and finally 1000 volt increments to 16000 volts or until failure. The failure criterion was a change in resistor tolerance of 0.5%.

416 An in-house tester was used to test CMOS technology from various manufacturers in accordance with MIL-STD-883C Method 3015.2. A 1500 ohm, 100 pF model was used. Step stress voltages starting at 100 volts were increased in increments of 100 volts until failure occurred.

417 The same source as 416 above except the resistance was 0 and the capacitance was 200 pF. A catastrophic failure was the failure criterion.

418 (Published paper, Ref. 43)

An in-house tester was used to test op amps. This was done per MIL-STD-883 Method 3015 using a 1500 ohm, 125 pF step stress. 500, 750, 1000, 1250 and 5000 volt one pulse increments, were applied per polarity.

419 (Published paper, Ref. 43)

Same source as 418 above except the voltage steps were changed to 1250, 1500, 2000 and 3000 volts. Five pulses were applied per increment per polarity.

420 (Published paper, Ref. 43)

Same source as 418 above but resistance was changed to zero ohms, while the capacitance stayed at 125 pF. The voltage step stress started at 100 volts and increased in increments of 100 volts until failure.

421-422 Several types of technologies were tested using both the human body model and the zero ohm model. The HBM testing was in accordance with MIL-STD-883 Method 3015.2 using a 1500 ohm resistance and a 100 pF capacitance, and applying 200 volt increments to 5000 volts or failure. This test was performed on an ETS-910 tester. For the zero ohm model; the capacitance was set at 200 pF. The same step stress voltage increment were applied. Both tests applied one pulse per voltage increment per polarity.

423-424 (Published paper, Ref. 44)

Several VLSI devices were tested using a in-house built tester. This test compared the human body model (HBM) with charge device model (CDM). The HBM used 1500 ohm resistance and 100 pF capacitance per MIL-STD-883 Method 3015.1. The step stress voltages were in 250 volt increments until failure with one pulse applied per polarity per stress increment. The failure criterion was a 10% change in leakage current.

425 A Hartley Autozap 200 RD model tester using 1500 ohm resistance and 100 pF capacitance per MIL-STD-883 Method 3015.3 was used. Step stressing started at 100 volts increasing in increments of 100 volts to 1000 volts, then increasing in increments of 250 volts until failure. Five pulses were applied per increment per polarity. The testing involved CMOS and NMOS components with the reported failure voltages listed for each pin tested.

426-427 An IMCS-2400B model tester using 1500 ohm resistance, 100 pF capacitance MIL-STD-883 Method 3015.3 test method was used to evaluate fast TTL, LSTTL, STTL and TTL technologies. The step stress voltage increments were 500, 1000, 2000, 4000, 8000 and 16000 volts with five pulses applied per increment per polarity. The failure criterion was a change of greater than 5 μ amp in leakage current at 0.5 volts. The failure mechanisms were listed as input and clamping diode failures.

428 HMOS components were tested with an IMCS-2400 model tester using MIL-STD-883 Method 3015.3 (1500 ohm 100 pF capacitance). A go/no go 1200 volt pulse, 5 pulses per polarity was applied with all unused pins open.

429 The same as 428 above, but using a in-house standard of zero ohms, 50 pF capacitance, go/no go 600 volt pulse, 3 pulses per polarity, with all unused pins grounded.

430 The same source as 428. This time using a charge device model 10m ohms resistance, go/no go 1500 volt pulse, 3 pulses per polarity test with all unused pins open. The failure criterion for all three tests (428, 429, 430) were listed as a 25% change in leakage current or failed functionally.

431-435, and 437 An IMCS-2400 model tester using the MIL-STD-883 Method 3015.1 human body model 1500 ohm resistance, 100 pF capacitance with 5 pulses applied per polarity per voltage increment, was used to test several types of technologies. For PROM devices the step stress was started at 800 volts increasing in 100 volt increments until failure. For linear comparators and op amps there were two types of tests: (1) was a go/no go 2000 volt and (2) a step from 500 volts increasing in 250 volts increments to failure. For bipolar devices the step stress started at 750 volts and increased in 250 volt increments until failure. For linear and digital components a go/no go 2000 volt test was performed.

436 An IMCS 2400 model tester using the DoD-STD-1686 human body model 1500 ohm resistance, 100 pF capacitance was used to step stress devices starting at 200 volts, increasing in 100 volt increments to 1000 volts, then increasing in 200 volt increments to 2000 volts, followed by 500 volt increments to 4000 volts or failure. Three pulses were applied per voltage increment per polarity. Both discrete semiconductors and integrated circuits from various manufacturers were tested.

438 Bipolar and CMOS device were tested by an IMCS-2400 model tester using MIL-STD-883 Method 3015.3 human body model with 1500 ohm resistance and 100 pF capacitance. Go/no go 2000 volts pulses were applied, 5 pulses per polarity. The failure criterion was out-of-electrical specification.

SECTION 6.0

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APPENDIX A

DERIVATION OF DATA CONVERSION FORMULAE

DERIVATION OF DATA CONVERSION FORMULAE

The derivation of two data conversion methodologies are presented here:

Part I Conversion of failure voltages using a nonstandard human body model to a theoretical failure voltage consistent with the standard model (100 pF, 1500 ohm).

This is only used for calculating a failure voltage consistent with the 100 pF, 1500 ohm model so that a classification can be derived in accordance with MIL-STD-1686A and MIL-HDBK-263.

Part II Conversion of empirical EMP overstress data to a theoretical ESD failure voltage.

Part I: Derivation of Nonstandard Human Body Model Test Data Conversion Formula

Since there is much data on parts using a discharge model other than the standard 100 pF, 1500 ohm, a method to convert the failure voltage to a level consistent with the 100 pF, 1500 ohm model for classification purposes is necessary. One way this can be accomplished is via a method similar to the EMP-to-ESD conversion method described in Part II of this appendix. However, for this method to work, one must know certain parameters of the device, namely the bulk resistance and breakdown voltage. Unfortunately, these parameters are seldom available, especially given the fact that for ICs the failure site is often not known.

A more direct conversion technique was therefore needed which could convert data without knowing these device parameters. Since the failure voltage of a device (the voltage on the capacitor) is proportional to the series resistance in the stressing circuits and inversely proportional to the capacitance in the circuit, the failure voltage, resistance, and capacitance can be approximately related as follows:

$$V = A\sqrt{\frac{R}{C}}$$

Here A is a constant dependent on the device parameters. Therefore, the ratio of failure voltages for two different RC models is in the general form:

$$\frac{V_1}{V_2} = \frac{A\sqrt{\frac{R_1}{C_1}}}{A\sqrt{\frac{R_2}{C_2}}} = \sqrt{\frac{R_1 C_2}{C_1 R_2}}$$

where:

V_2 = observed failure voltage using C_2 and R_2
C_2 = capacitance used in nonstandard model (in pF)
R_2 = resistance used in nonstandard model (ohms)
V_1 = converted failure voltage
C_1 = capacitance of model failure voltage is to be converted to (in pF)
R_1 = resistance of model failure voltage is to be converted to (ohms)

Therefore, when using 100 pF and 1500 ohm for C_1 and R_1 respectively, the following conversion equation is obtained:

$$V_1 = V_2 (3.87) \sqrt{\frac{C_2}{R_2}}$$

The relationship of V, C, and R was obtained through empirical methods (regression analysis) by reviewing data in which a device was tested with different C, R models and threshold voltages obtained for each model (Ref. 10, 14, 16, 17, 19, 25).

It must also be stressed that this relationship of V, C and R indicates an energy-dependent failure mechanism. This may not be an adequate assumption, if the failure mechanisms does not follow the Wunsch Bell Model (Ref. 28). Since the failure mechanism for a particular device is rarely known, this data conversion methodology is necessarily very approximate. Adding to this uncertainty is the fact that the failure mechanism characteristics can change with various RC values. For this reason this conversion was used to classify devices only in those cases where failure data from the 100pF, 1500 ohm model was not available.

This method is necessarily approximate and was used in the classification of devices only if data using the standard human body model was not available.

Part II: Derivation of EMP-to-ESD Conversion Formula

By knowing certain parameters of a device, a theoretical ESD failure voltage can be calculated. The parameters needed for conversion of EMP overstress failure to a theoretical ESD failure voltage are (Reference 25):

R_B = Bulk resistance of the device
V_D = Breakdown voltage of device
K_1 = Failure constant 1
K_2 = Failure constant 2

The basic equation used for this conversion is:

$$P_{AV} = K_1 t^{-K_2}$$

where:

P_{AV} = average power required for failure
t = pulse width
p = $V_D i + R_B i^2$ (time dependent power)
where i = time dependent current
p = $V_D I_P e^{\frac{t}{\tau}} + R_B I_P^2 e^{\frac{t}{\tau}}$
where t = RC time constant of discharge

Integrating and averaging the power over 5 time constants yields:

$$P_{AV} = \frac{1}{5\tau} \int_0^{5\tau} V_D I_P \, e^{\frac{-t}{\tau}} dt + \frac{1}{5\tau} \int_0^{5\tau} R_B I_P^2 \, e^{\frac{-2t}{\tau}} dt$$

$$= \frac{V_D I_P}{5}(1 - e^{-5}) + \frac{R_B I_P^2}{10}(1 - e^{-10})$$

$(e^{-5}$ and $e^{-10} << 1)$

therefore:

$$P_{AV} = \frac{V_D I_P}{5} + \frac{R_B I_P^2}{10}$$

$$K_1 t^{-K2} = \frac{V_D I_P}{5} + \frac{R_B I_P^2}{10}$$

Using the quadratic equation solution to solve for I_P:

$$I_P = \frac{-2V_D + \sqrt{4 V_D^2 + 40 R_B (K_1 t^{-K2})}}{2 R_B}$$

$$I_P = \frac{V - V_D}{R + R_B}$$ (general equation for I_P)

$V = I_P (R + R_B) + V_D$ (V = voltage on capacitor)
(R = source resistance of model)

Assuming $t = 5\tau - 5RC - 7.675 \times 10^{-7}$ for conversion to voltage level consistent with a 100 pF, 1500 ohm model and a nominal value of 30 ohms for R_B yields:

$$V = \left[\frac{-2V_D^2 + \sqrt{4V_D^2 + 1200 K_1 (7.675 \times 10^{-7})^{-K2}}}{60}\right] 1530 + V_D$$

APPENDIX B

REPORTING SENSITIVITY DATA

TABLE 7: DATA ITEM DESRIPTION - 80670

DATA ITEM DESCRIPTION	*Form Approved OMB No. 0704-0188*
2. TITLE	1. IDENTIFICATION NUMBER
REPORTING RESULTS OF ELECTROSTATIC DISCHARGE SENSITIVITY TESTS OF ELECTRICAL AND ELECTRONIC PARTS	DI-RELI-80670

3. DESCRIPTION/PURPOSE

3.1 This report documents the sensitivity of electrical and electronic parts to electronic parts to electrostatic discharge (ESD) specified by the test of MIL-STD-1686A Appendix A, or MIL-STD-883 Test Method 3015.

4. APPROVAL DATA (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPL.	6b. GIDEP APPL.
880808	S H		

7. APPLICATION/INTERRELATIONSHIP

7.1 This DID contains the format and content preparation instructions for that data generated under the work task described by 5.2.1.1.(d) of MIL-STD-1686A which requires the identification and classification of electrostatic discharge (ESD) sensitive parts.
7.2 This DID will be used to input ESD sensitivity data into the Reliability Analysis Center (RAC) ESD Sensitive Items List (ESDSIL).
7.3 This DID applies to all contracts which require ESD testing and classification of electrical and electronic parts.
7.4 This DID supersedes DI-T-7132.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		N4517

10. PREPARATION INSTRUCTIONS

10.1 Content requirements. The report shall include the following data:

a. Complete part number
b. National stock number
c. Manufacturer
d. Part description and function
e. Date code (as it appears on the part)
f. Number tested
g. Test date (month and year)
h. Test agency
i. Description of test setup
j. Number of parts failed
k. ESD voltage level at which damage occurred
l. Highest ESD voltage passed by all pin combinations
m. Failure criteria
    1. Description of criteria used to detect post stress failure

10.2 Report format. Contractor's format is acceptable fo the above data.

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A Approved for public release; distribution unlimited

DD Form 1665, Jun 86 Previous Editions are Obsolete Page 1 of 1 Pages

DEFINITION OF VZAP TEST PARAMETERS

Field	Description
SOURCE	
Name	Information pertaining to the company and person responsible for performing/compiling the results of ESD simulation
Address, Phone Number	
TESTER	
Manufacturer	Manufacturer of the ESD simulator being used
Model Number	Model number and any revision information about the ESD simulator being used
TEST SPEC. METHOD	The test method by which ESD simulation was performed
Resistance	Resistance used in ESD simulation (in Ohms)
Capacitance	Capacitance used in ESD simulation (In Farads)
Voltage Step Levels	For step stress testing, the voltage step levels used, for go/no-go testing, the voltage applied
# of Pulses Per Level	For step stress enter the total number of pulses applied at the maximum failed voltage applied
Test Date	Date testing was performed
DEVICE	
Part Number	Full device part number, prefix and suffix. In situtations of drawing or in-house part numbers, the generic number when available
Description	Full device description of component
Manufacturer	Manufacturer of device being tested
Date Code	Date code as found on device
TEST RESULTS	
Pass or Fail	Results of the ESD simulation for each device tested
# of Devices Tested	Number of devices tested
Failure Voltage	The voltage at which the device met failure criterion
Voltage Polarity	The polarity of the failed voltage reported
Fail Pin Combination	The pin combination for which each test was performed and note which combination yielded a failure
Failure Criterion	Explanation of what criterion was used to determine a failure

TABLE 8: VZAP TEST PARAMETERS

VZAP TEST PARAMETERS

SOURCE
- Name _____
- Address, Phone Number _____

TESTER
- Manufacturer _____
- Model Number _____

TEST SPEC. METHOD
- Resistance _____
- Capacitance _____
- Voltage Step Levels _____
- # of Pulses Per Level _____
- Test Date _____

DEVICE
- Part Number _____
- Description _____
- Manufacturer _____
- Date Code _____

TEST RESULTS
- Pass or Fail _____
- # of Devices Tested _____
- Failure Voltage _____
- Voltage Polarity _____ _____
- Fail Pin Combination _____
- Failure Criteria _____

The Reliability Analysis Center is a DoD Information Analysis Center operated by IIT Research Institute, Rome, New York

APPENDIX C

ADDITIONAL RAC SERVICES

PRODUCT FEE SCHEDULE

		Price Per Copy U.S.	Non-U.S.
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