

RADIATION TEST REPORT

PRODUCT: OP16AZQMLR

MASK:

FILE:

DATE CODE:

GAMMA: 0, 100K

GAMMA SOURCE: Co60

DOSE RATE: 47.53 rad/sec

FACILITIES: National Semiconductor
Sunnyvale, Ca.

TESTED: July 23, 2003

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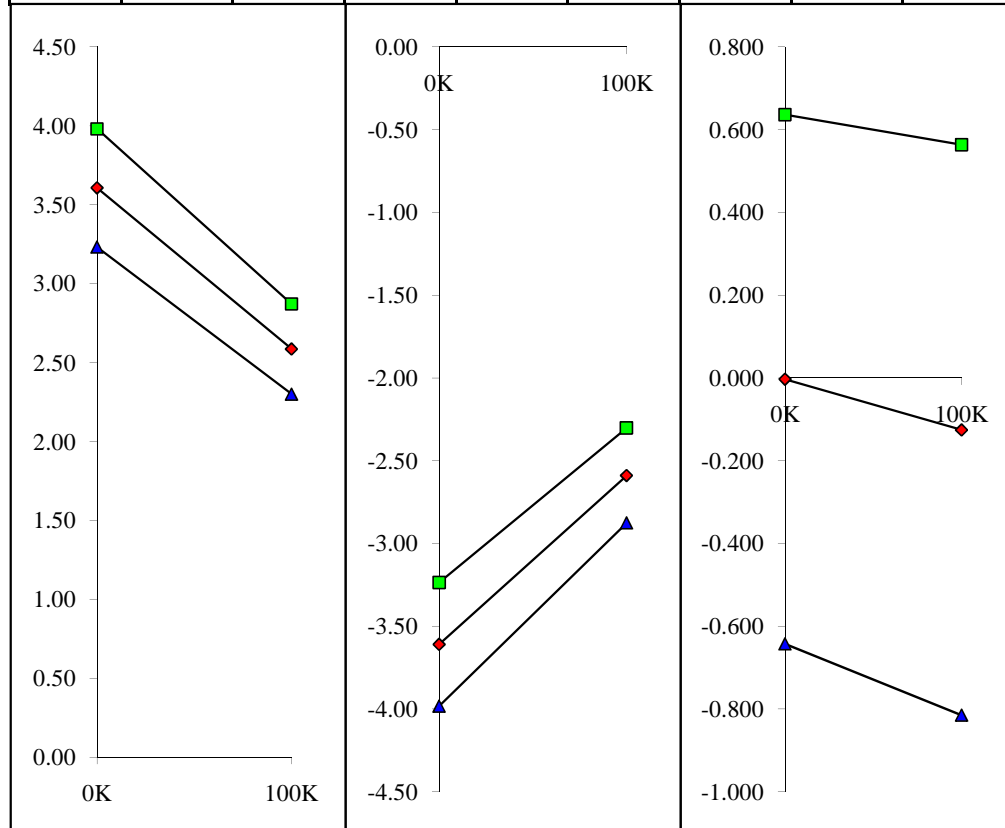
It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

WARNING:

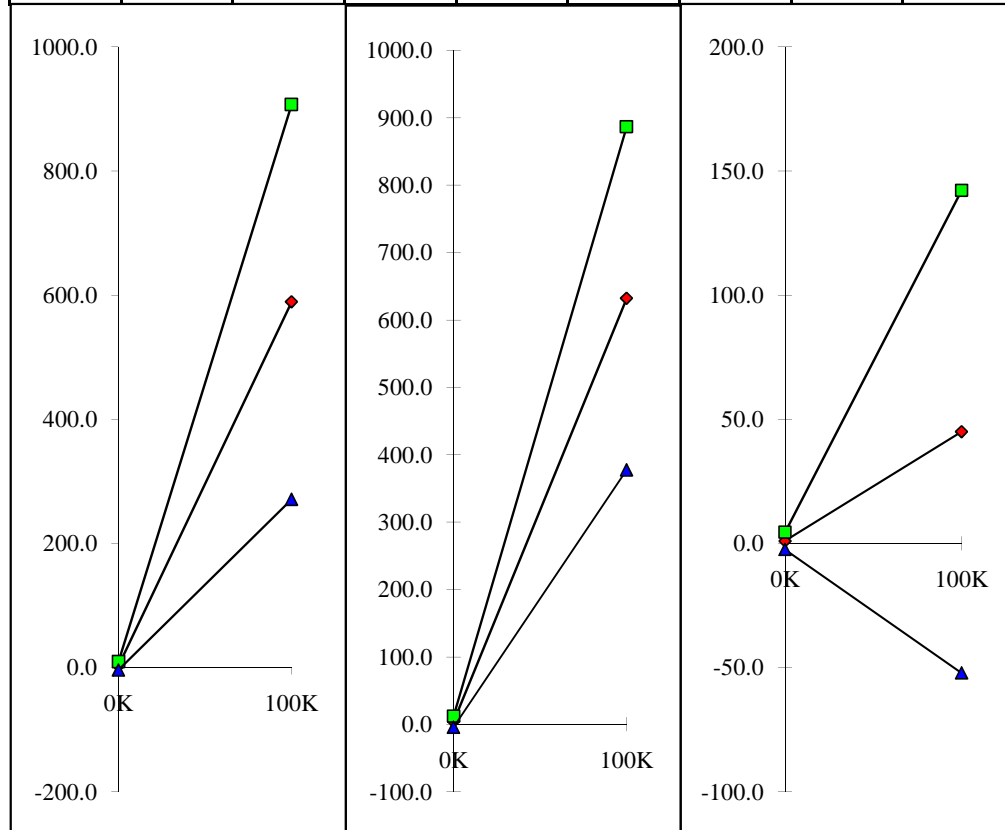
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T# 1.0	ICC+	mA	T#2.0	ICC-	mA	T# 3.0	VOS	mV
SN	0K	100K	SN	0K	100K	SN	0K	100K
1	3.63	3.62	1	-3.63	-3.62	1	0.012	0.019
2	3.61	2.52	2	-3.62	-2.52	2	-0.326	-0.483
3	3.66	2.63	3	-3.67	-2.63	3	-0.350	-0.484
4	3.80	2.68	4	-3.80	-2.68	4	0.193	0.024
5	3.74	2.64	5	-3.75	-2.64	5	0.113	-0.071
22	3.54	2.53	22	-3.55	-2.53	22	-0.299	-0.480
23	3.55	2.56	23	-3.55	-2.57	23	-0.019	-0.134
24	3.52	2.55	24	-3.53	-2.55	24	0.064	-0.030
25	3.43	2.47	25	-3.43	-2.47	25	-0.007	-0.141
40	3.70	2.64	40	-3.71	-2.64	40	0.065	-0.053
41	3.63	2.59	41	-3.63	-2.60	41	-0.444	-0.584
42	3.87	2.84	42	-3.87	-2.85	42	0.260	0.160
43	3.68	2.64	43	-3.68	-2.64	43	0.237	0.125
61	3.65	2.63	61	-3.65	-2.63	61	0.224	0.114
62	3.64	2.62	62	-3.64	-2.62	62	0.004	-0.075
63	3.40	2.42	63	-3.41	-2.42	63	0.203	0.110
64	3.43	2.44	64	-3.43	-2.45	64	0.123	0.011
76	3.52	2.60	76	-3.52	-2.61	76	0.142	0.106
77	3.47	2.48	77	-3.47	-2.49	77	-0.088	-0.195
78	3.67	2.60	78	-3.67	-2.61	78	0.016	-0.126
79	3.62	2.63	79	-3.62	-2.64	79	-0.177	-0.311
min	3.40	2.42	min	-3.87	-2.85	min	-0.444	-0.584
max	3.87	2.84	max	-3.41	-2.42	max	0.260	0.160
stdev	0.12	0.10	stdev	0.12	0.10	stdev	0.213	0.230
average	3.61	2.59	average	-3.61	-2.59	average	-0.003	-0.126
+3S	3.98	2.87	+3S	-3.24	-2.30	+3S	0.636	0.564
-3S	3.23	2.30	-3S	-3.98	-2.88	-3S	-0.643	-0.815



T# 4.0	IIB+	pA	T# 5.0	IIB-	pA	T# 6.0	IOS	pA
SN	OK	100K	SN	OK	100K	SN	OK	100K
1	1.4	-0.9	1	1.8	2.1	1	0.7	2.9
2	3.4	601.2	2	3.0	688.1	2	0.4	87.4
3	2.6	479.3	3	3.8	568.6	3	1.0	89.3
4	1.3	542.9	4	7.5	639.1	4	5.1	97.2
5	0.6	512.2	5	1.7	596.9	5	1.6	84.9
22	5.8	789.5	22	6.0	772.4	22	1.0	16.1
23	3.9	499.6	23	3.6	540.4	23	0.7	41.1
24	3.7	505.1	24	2.6	535.6	24	0.3	31.3
25	-2.8	500.0	25	-1.1	525.1	25	1.5	25.5
40	6.7	708.7	40	10.2	726.4	40	3.0	18.1
41	3.2	573.2	41	3.1	657.7	41	0.0	85.4
42	2.3	623.8	42	8.0	645.7	42	0.9	22.8
43	1.1	685.7	43	1.8	702.4	43	0.0	17.8
61	7.6	707.0	61	7.9	721.5	61	1.1	15.2
62	1.9	651.8	62	2.7	666.3	62	0.8	15.2
63	2.2	660.9	63	3.2	679.2	63	0.6	18.1
64	2.4	651.4	64	3.1	667.7	64	0.8	16.3
76	4.7	392.5	76	3.8	453.9	76	0.6	62.3
77	3.6	503.5	77	3.0	579.8	77	0.2	77.0
78	2.2	725.0	78	1.7	731.3	78	0.2	6.8
79	2.8	471.4	79	1.9	543.1	79	0.6	72.6
min	-2.8	392.5	min	-1.1	453.9	min	0.0	6.8
max	7.6	789.5	max	10.2	772.4	max	5.1	97.2
stdev	2.3	106.0	stdev	2.7	84.9	stdev	1.2	32.4
average	3.0	589.2	average	3.9	632.1	average	1.0	45.0
+3S	9.7	907.4	+3S	12.0	886.7	+3S	4.5	142.2
-3S	-3.8	271.1	-3S	-4.3	377.4	-3S	-2.5	-52.2



T# 7.0	AVO	V/mV
SN	0K	100K
1	264	285
2	292	199
3	254	183
4	260	193
5	256	195
22	307	220
23	298	211
24	290	216
25	299	216
40	285	199
41	285	205
42	290	207
43	288	213
61	259	191
62	264	195
63	283	206
64	268	210
76	237	189
77	243	177
78	252	183
79	236	184
min	236	177
max	307	220
stdev	22	13
average	272	200
+3S	338	238
-3S	207	161

