

RELIABILITY DATA

**LT1500/1501/1506/1507/1533/1534 LT1611/1613/1761/1762/1763/1764/1765
LT1959/62/63/64 LT3012/13/14/21/27/28/32/3150**

11/3/2009

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +125°C ⁽¹⁾	NUMBER OF FAILURES ⁽²⁾
SIDEBRAZE	30	9601	9601	30.00	0
SOIC/SOT/MSOP	1,403	9601	0533	1,240.99	0
SSOP/TSSOP	231	0502	0650	585.20	0
DD PACK	50	0037	0037	8.40	0
TO-220	145	9940	0213	84.80	0
QFN/DFN	77	0502	0502	73.15	0
	1,936			2,022.53	0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +85°C ⁽⁴⁾	NUMBER OF FAILURES
SOIC/SOT/MSOP	437	9943	0620	2,543.04	0
	437			2,543.04	0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
PLASTIC DIP	50	9607	9607	1.33	0
SOIC/SOT/MSOP	32,262	9610	0915	2,678.19	0
SSOP/TSSOP	4,217	9740	0906	383.30	0
DD PACK	5,846	9934	0913	283.98	0
TO-220	2,150	0121	0821	60.00	0
TO-92	50	0808	0808	1.20	0
QFN/DFN	3,528	0000	0913	493.18	0
	48,103			3,901.17	0

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
PLASTIC DIP	50	9607	9607	5.00	0
SOIC/SOT/MSOP	33,352	9605	0914	7,989.11	0
SSOP/TSSOP	4,367	9740	0906	1,152.91	0
DD PACK	19,969	9838	0912	2,672.99	0
TO-220	4,200	0121	0752	485.00	0
TO-92	50	0808	0808	5.00	0
QFN/DFN	4,663	0509	0852	1,568.22	0
	66,651			13,878.23	0

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
PLASTIC DIP	50	9607	9607	5.00	0
SOIC/SOT/MSOP	26,280	9605	0914	5,830.53	0
SSOP/TSSOP	4,460	0210	0906	1,018.80	0
DD PACK	5,095	9934	0912	970.02	0
TO-220	1,900	0121	0813	210.00	0
TO-92	49	0808	0808	4.90	0
QFN/DFN	5,305	0509	0852	1,637.69	0
	43,139			9,676.93	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.91 FITS

(3) Mean Time Between Failures in Years = 125,359

(4) Assumes 20X Acceleration from 85°C to +131°C

Note: 1 FIT = 1 Failure in One Billion Hours.