

**RELIABILITY DATA**  
**LT1012 / LT1024 / LT1097 / KA00 / KA01 / OP97**

**10/26/2003**

**• OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF FAILURES <sup>(2)</sup>
HERMETIC	490	8501	0318	2,062.05	0
SIDEBRAZE	227	8601	9221	1,575.81	0
PLASTIC DIP	4,747	9120	0249	13,650.57	0
SOIC/SOT/MSOP	819	8501	0234	949.57	0
	6,283			18,238.00	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	807	9121	0105	1,133.52	0
SOIC/SOT/MSOP	1,604	9447	0248	1,711.20	0
	2,411			2,844.72	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	10,921	9143	0309	962.04	0
SOIC/SOT/MSOP	4,079	8531	0248	299.32	0
	15,000			1,261.36	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
CERDIP	32	9419	0142	3.20	0
HERMETIC	109	8642	0216	45.05	0
SIDEBRAZE	204	8425	0114	166.70	0
PLASTIC DIP	2,847	9121	0249	649.27	0
SOIC/SOT/MSOP	1,275	9231	0248	703.70	0
	4,467			1,567.92	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
CERDIP	32	9419	0142	0.48	0
HERMETIC	94	9041	0216	51.04	0
SIDEBRAZE	204	8425	0114	82.76	0
PLASTIC DIP	1,323	9120	9850	357.91	0
SOIC/SOT/MSOP	1,168	9245	0248	581.20	0
	2,821			1,073.38	0

(1) Assumes Activation Energy = 1.0 Electron Volts  
(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.10 FITS  
(3) Mean Time Between Failures in Years = 1,140,771  
(4) Assumes 20X Acceleration from 85°C to +131°C  
Note: 1 FIT = 1 Failure in One Billion Hours.