

RELIABILITY DATA
LT1012 / LT1024 / LT1097 / KA00 / KA01 / OP97
8/21/2006

• **OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
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 ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	807	9121	0105	1,133.52	0
SOIC/SOT/MSOP	1,949	9447	0550	2,042.40	0
	2,756			3,175.92	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	10,971	9143	0401	963.24	0
SOIC/SOT/MSOP	4,537	8531	0503	398.54	0
	15,508			1,361.77	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	2,897	9121	0401	654.27	0
SOIC/SOT/MSOP	1,732	9231	0503	932.10	0
	4,974			1,801.32	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	1,525	9245	0503	799.60	0
	3,178			1,291.78	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.