

RELIABILITY DATA

LT1004 / LM185/285/385

6/27/2002

• 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	890	8317	0048	3,313.82	0
SOIC/SOT/MSOP	212	8601	9535	717.19	0
TO-92	4,456	8416	9643	17,370.72	0
	5,558			21,401.73	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
SOIC/SOT/MSOP	5,173	9220	0144	5,136.22	0
TO-92	2,754	9050	9630	4,336.56	0
	7,927			9,472.78	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	9631	9631	1.20	0
SOIC/SOT/MSOP	20,768	9238	0119	1,048.64	0
TO-92	4,167	9219	0150	282.32	0
	24,985			1,332.16	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
HERMETIC	750	8313	0138	71.55	0
SOIC/SOT/MSOP	5,428	8610	0023	991.29	0
TO-92	2,028	8446	0150	692.52	0
	8,206			1,755.36	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
HERMETIC	635	8313	0138	9.53	0
SOIC/SOT/MSOP	2,215	8610	0138	436.85	0
TO-92	1,474	8441	0137	550.01	0
	4,324			996.39	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.09 FITS

(3) Mean Time Between Failures in Years = 1,267,524

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

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