

RELIABILITY DATA

LT1004 / LM185/285/385

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	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	6,118	9220	0601	6,043.42	0
TO-92	2,754	9050	9630	4,336.56	0
	8,872			10,379.98	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	0335	1,048.64	0
TO-92	5,117	9219	0625	305.12	0
	25,935			1,354.96	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	733	8313	0138	69.85	0
SOIC/SOT/MSOP	5,478	8610	0335	996.29	0
TO-92	2,778	8446	0549	767.52	0
	8,989			1,833.66	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	618	8313	0138	9.27	0
SOIC/SOT/MSOP	2,265	8610	0335	441.85	0
TO-92	2,224	8441	0549	625.01	0
	5,107			1,076.13	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.