





# RELIABILITY DATA LT1117

# 8/21/2006

## • OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF <sup>(2)</sup> FAILURES
SOIC/SOT/MSOP	3,698	9115	9816	12,132.08	0
	3,698			12,132.08	0
• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH					
				K DEVICE	NUMBED

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICF HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
SOIC/SOT/MSOP	1,680	9115	9727	4,080.80	0
	1,680			4,080.80	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
SOIC/SOT/MSOP	24,187	9115	0623	2,926.26	0
DD PACK	1,050 25,237	9303	0502	28.80	0
	25,237			2,955.06	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
SOIC/SOT/MSOP	18,843	8904	0623	4,578.50 170.00	0
DD PACK	1,700 20,543	9622	0235	170.00	0
	20,543			4,748.50	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
SOIC/SOT/MSOP	11,099	9115	0623	4,064.04	0
DD PACK	500	9627	0118	50.00	0
	11,599			4,114.04	0

- (1) Assumes Activation Energy = 1.0 Electron Volts
- (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.15 FITS
- (3) Mean Time Between Failures in Years = 760,514
- (4) Assumes 20X Acceleration from 85°C to +131°C

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

Form: 00-03-6209B. R162