

## RELIABILITY DATA

LT1080/1081/1180/1181/1280/1281/1381 LT1780/81/85/91/96

8/18/2006

### • 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
CERDIP	919	8642	0113	4,135.62	0
SIDEBRAZE	98	9313	9401	122.38	0
PLASTIC DIP	3,607	8701	0201	15,391.53	0
SOIC/SOT/MSOP	1,581	8827	0545	4,218.15	0
	6,205			23,867.68	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	1,209	9038	9606	2,421.24	0
SOIC/SOT/MSOP	8,639	9001	0606	9,124.02	0
	9,848			11,545.26	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	15,678	8711	0405	1,768.79	1
SOIC/SOT/MSOP	25,890	8827	0621	3,123.78	0
TO-220	50	0321	0321	1.20	0
	41,618			4,893.77	1

### • 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	79	8730	0026	5.20	0
PLASTIC DIP	8,689	8820	0623	2,692.67	0
SOIC/SOT/MSOP	14,442	8827	0621	4,516.91	0
TO-220	100	0321	0321	5.50	0
	23,310			7,220.28	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	49	8752	0026	0.74	0
PLASTIC DIP	4,265	8727	0243	1,699.84	0
SOIC/SOT/MSOP	8,242	8827	0621	3,353.08	0
TO-220	50	0321	0321	5.00	0
	12,606			5,058.65	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.08 FITS

(3) Mean Time Between Failures in Years = 1,425,964

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

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