

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

6/17/04

• OPERATING LIFE TEST

PACKAGE	SIZE	DATE CODE	DATE CODE	HOURS ⁽¹⁾ AT +125°C	OF ⁽²⁾ 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	1,503	8827	9901	4,205.04	0
	6,127			23,854.58	0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
PLASTIC DIP	1,209	9038	9606	2,421.24	0
SOIC/SOT/MSOP	8,206	9001	0321	8,679.54	0
	9,415			11,100.78	0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

TYPE	SIZE	DATE CODE	DATE CODE		OF FAILURES
PLASTIC DIP	15,678	8711	0405	1,768.79	1
SOIC/SOT/MSOP	25,590	8827	0321	3,116.58	0
TO-220	50	0321	0321	1.20	0
	41,318			4,886.57	1

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE	SIZE	DATE CODE	DATE CODE		OF FAILURES
CERDIP	79	8730	0026	5.20	0
PLASTIC DIP	8,089	8820	0405	2,632.67	0
SOIC/SOT/MSOP	14,142	8827	0321	4,486.91	0
TO-220	100	0321	0321	5.50	0
	22,410			7,130.28	0

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE	SIZE	DATE CODE	DATE CODE		OF FAILURES
CERDIP	49	8752	0026	0.74	0
PLASTIC DIP	4,265	8727	0243	1,699.84	0
SOIC/SOT/MSOP	7,842	8827	0317	3,215.33	0
TO-220	50	0321	0321	5.00	0
	12,206			4,920.90	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.