

# RELIABILITY DATA

## LT1124 / 1125 / 1126 / 1127 / OP270 / OP470

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
CERDIP	89	9101	0210	147.90	0
FLATPAK/LCC	80	9318	9318	80.19	0
PLASTIC DIP	1,969	9207	0305	7,367.49	0
SOIC/SOT/MSOP	459	9505	0234	1,873.41	0
	2,597			9,469.00	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	150	9603	9943	274.00	0
SOIC/SOT/MSOP	99	9334	9334	47.52	0
	249			321.52	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	9,806	9140	0321	333.52	0
SOIC/SOT/MSOP	7,310	9140	0623	463.78	0
	17,116			797.30	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
CERDIP	65	9152	9701	6.50	0
PLASTIC DIP	677	9140	9803	193.95	0
SOIC/SOT/MSOP	2,019	9207	0326	917.68	0
	2,761			1,118.13	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	15	9152	9152	0.23	0
PLASTIC DIP	185	9140	0305	17.15	0
SOIC/SOT/MSOP	1,312	9140	0326	735.90	0
	1,512			753.28	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.19 FITS

(3) Mean Time Between Failures in Years = 600,406

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

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