

# RELIABILITY DATA

LT1027

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	77	9113	9113	33.20	0
HERMETIC	59	9208	9224	226.69	0
PLASTIC DIP	218	9113	9740	623.75	0
	354			883.64	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	5,691	9145	9950	185.75	0
SOIC/SOT/MSOP	2,468	9329	0047	82.79	0
	8,159			268.55	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	55	9224	9224	110.00	0
PLASTIC DIP	1,462	9152	9950	158.80	0
SOIC/SOT/MSOP	591	9524	0047	61.60	0
	2,108			330.40	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	56	9224	9224	72.80	0
PLASTIC DIP	645	9152	9804	75.05	0
SOIC/SOT/MSOP	398	9506	0047	39.80	0
	1,099			187.65	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.08 FITS

(3) Mean Time Between Failures in Years = 54,845

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