

# RELIABILITY DATA

LT1028 / LT1115

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	139	8615	9213	571.00	0
HERMETIC	433	8601	9405	1,426.13	0
PLASTIC DIP	209	8601	9213	259.36	0
	781			2,256.49	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	173	9108	0007	345.76	0
SOIC/SOT/MSOP	755	9414	0526	724.80	0
	928			1,070.56	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	1,306	9108	9629	156.98	0
SOIC/SOT/MSOP	3,143	9131	0444	161.30	0
	4,449			318.28	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	15	8615	8615	0.15	0
PLASTIC DIP	463	9108	9743	49.24	0
SOIC/SOT/MSOP	843	9131	0444	432.15	0
	1,321			481.54	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
PLASTIC DIP	280	9130	9452	28.00	0
SOIC/SOT/MSOP	582	9131	0444	261.10	0
	862			289.10	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.82 FITS

(3) Mean Time Between Failures in Years = 139,118

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

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