

# RELIABILITY DATA

LTC1045

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	343	8701	9749	524.69	0
PLASTIC DIP	998	8701	0007	1,556.65	1
	1,341			2,081.34	1

## • 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	1,481	8905	0017	266.70	0
SOIC/SOT/MSOP	861	9316	0133	150.26	0
SSOP/TSSOP	449	9523	9523	110.18	0
	2,791			527.14	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
PLASTIC DIP	540	8905	0549	71.35	0
SOIC/SOT/MSOP	300	9513	0038	123.10	0
SSOP/TSSOP	230	9523	9523	230.00	0
	1,070			424.45	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	335	8905	9207	54.30	0
SOIC/SOT/MSOP	200	9846	0133	166.70	0
SSOP/TSSOP	228	9523	9523	237.12	0
	763			458.12	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 12.55 FITS

(3) Mean Time Between Failures in Years = 9,090

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