

# RELIABILITY DATA

LT1034

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
HERMETIC	104	8601	8644	745.92	0
SOIC/SOT/MSOP	230	9513	9513	2,928.91	0
TO-92	5,604	8841	9912	13,727.71	0
	5,938			17,402.54	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
SOIC/SOT/MSOP	2,536	9214	0603	2,991.12	0
TO-92	3,445	9048	0238	5,991.86	0
	5,981			8,982.98	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	49	9227	9227	2.35	0
SOIC/SOT/MSOP	2,507	9214	0215	908.22	0
TO-92	23,829	8841	0617	3,015.71	0
	26,385			3,926.28	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
HERMETIC	1,178	9206	9447	152.54	0
SOIC/SOT/MSOP	810	9214	0215	788.54	0
TO-92	10,057	8841	0617	2,884.47	0
	12,045			3,825.55	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	20	9206	9206	0.30	0
SOIC/SOT/MSOP	418	9448	0215	272.80	0
TO-92	2,330	8841	0617	1,817.89	0
	2,768			2,090.99	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.11 FITS

(3) Mean Time Between Failures in Years = 1,037,065

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

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