

# RELIABILITY DATA

LT1103 / 1105 / 1106 / 1107 / 1108 / 1109 / 1110 / 1111

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
FLATPAK/LCC	50	9320	9320	50.12	0
SIDEBRAZE	44	9213	9213	293.46	0
PLASTIC DIP	306	9130	9644	210.39	0
SSOP/TSSOP	306	9326	9403	724.83	0
TO-92	201	9501	9512	835.03	0
	907			2,113.83	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	9434	9440	112.00	0
SSOP/TSSOP	385	9326	9403	729.92	0
TO-92	185	9501	9602	239.64	0
	720			1,081.56	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	3,338	9228	0133	157.79	0
SOIC/SOT/MSOP	12,636	9124	0344	628.01	0
SSOP/TSSOP	230	9403	9403	234.26	0
TO-220	350	9236	0101	12.00	0
TO-92	477	9150	0601	88.11	0
	17,031			1,120.16	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	1,087	9228	0117	117.20	0
SOIC/SOT/MSOP	2,216	9124	0344	421.46	0
SSOP/TSSOP	585	9328	9403	587.28	0
TO-220	300	9625	0223	30.00	0
TO-92	127	9150	0601	39.65	0
	4,315			1,195.59	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	900	9239	9813	156.79	0
SOIC/SOT/MSOP	1,812	9124	0344	244.00	0
SSOP/TSSOP	433	9333	9403	306.99	0
TO-220	100	9624	0101	10.00	0
TO-92	127	9150	0601	159.00	0
	3,372			876.78	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.87 FITS

(3) Mean Time Between Failures in Years = 131,123

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

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