

RELIABILITY DATA LT1013 / LT1014

3/5/2008

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
CERDIP	1,785	8601	0548	4,889.37	0
FLATPAK/LCC	1,785	9334	0302	2,684.27	2
HERMETIC	717	8506	0512	3,556.18	1
SIDEBRAZE	224	9304	0023	184.04	0
PLASTIC DIP	8,574	8401	9940	20,196.66	0
SOIC/SOT/MSOP	12,980	9013	0715	30,447.84	0
	26,065			61,958.36	3

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	1,201	9226	9926	2,055.38	0
SOIC/SOT/MSOP	1,624	9225	9933	3,483.80	0
	2,825			5,539.18	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	35,917	9501	0521	1,173.37	0
SOIC/SOT/MSOP	19,818	9502	0613	2,123.48	0
	55,735			3,296.84	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	1,565	8516	0641	719.13	0
FLATPAK/LCC	731	9334	0627	73.10	0
HERMETIC	69	8506	0125	5.55	0
PLASTIC DIP	7,056	8518	0345	5,116.04	0
SOIC/SOT/MSOP	11,833	8725	0613	9,617.00	0
	21,254			15,530.82	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
CERDIP	946	8516	0641	395.93	0
FLATPAK/LCC	336	9334	0627	10.82	0
HERMETIC	51	9939	0140	0.77	0
PLASTIC DIP	4,660	8642	0345	4,334.76	0
SOIC/SOT/MSOP	10,412	8703	0613	7,176.74	0
	16,405			11,919.00	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.14 FITS

(3) Mean Time Between Failures in Years = 814,837

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

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