

RELIABILITY DATA

LT1112 / LT1114

4/30/2003

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF FAILURES ⁽²⁾
PLASTIC DIP	627	9422	9819	622.14	0
SOIC/SOT/MSOP	201	9736	9830	138.87	0
	828			761.01	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVI CF HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	137	9410	9705	186.62	0
	137			186.62	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	4,144	9245	9942	96.00	0
SOIC/SOT/MSOP	6,669	9248	0216	153.60	0
	10,813			249.60	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	696	9245	0033	218.56	0
SOIC/SOT/MSOP	1,845	9248	0216	697.51	0
	2,541			916.07	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	204	9420	9545	118.19	0
SOIC/SOT/MSOP	1,234	9402	0148	338.17	0
	1,438			456.36	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.42 FITS

(3) Mean Time Between Failures in Years = 47,139

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

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