

RELIABILITY DATA
LT1167 / 1168 / LT1920
9/8/2000

• 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	413	9813	2014	437.98	0
SOIC/SOT/MSOP	302	9919	2003	672.55	0
	715			1,110.53	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICF HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
SOIC/SOT/MSOP	661	9905	9935	1,618.22	0
	661			1,618.22	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	950	9835	2024	34.55	0
SOIC/SOT/MSOP	2,832	9740	2025	166.02	0
	3,782			200.57	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	199	9920	2024	22.98	0
SOIC/SOT/MSOP	1,000	9740	2012	123.75	0
	1,199			146.73	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	150	9920	9930	15.00	0
SOIC/SOT/MSOP	949	9740	2006	160.75	0
	1,099			175.75	0

(1) Assumes Activation Energy = 1.0 Electron Volts
(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.66 FITS
(3) Mean Time Between Failures in Years = 68,721
(4) Assumes 20X Acceleration from 85C to +131C
Note: 1 FIT = 1 Failure in One Billion Hours.