

RELIABILITY REPORT



RELIABILITY DATA

LT1505/1510/1511/1512/1513/1571 LT1768/1769 LT3420/3484/85

8/21/2006

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF FAILURES ⁽²⁾
SOIC/SOT/MSOP	585	9601	0537	842.90	0
SSOP/TSSOP	178	9901	0027	180.10	0
	763			1,023.00	0

• 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
SSOP/TSSOP	241	9724	0026	841.32	0
	241			841.32	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	50	9606	9606	1.20	0
SOIC/SOT/MSOP	4,863	9535	0341	348.43	0
SSOP/TSSOP	6,157	9724	0617	569.64	0
DD PACK	2,025	9607	0202	100.34	0
TO-220	15	9635	9635	0.36	0
QFN/DFN	439	0452	0619	70.44	0
	13,549			1,090.42	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	100	9606	0511	10.00	0
SOIC/SOT/MSOP	5,336	9540	0341	1,127.30	0
SSOP/TSSOP	18,676	9641	0617	2,800.31	0
DD PACK	3,720	9607	0239	377.00	0
TO-220	100	0148	0210	10.00	0
QFN/DFN	439	0452	0619	198.50	0
	28,371			4,523.11	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	50	9606	9606	5.00	0
SOIC/SOT/MSOP	2,448	9605	0341	587.70	0
SSOP/TSSOP	3,777	9724	0617	1,090.38	0
DD PACK	1,074	9607	0203	107.40	0
QFN/DFN	438	0452	0619	198.00	0
	7,787			1,988.48	0

(1) Assumes Activation Energy = 1.0 Electron Volts
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.80 FITS
 (3) Mean Time Between Failures in Years = 63,376
 (4) Assumes 20X Acceleration from 85°C to +131°C
 Note: 1 FIT = 1 Failure in One Billion Hours.