

# RELIABILITY REPORT



**RELIABILITY DATA**  
**LT1490/1491/1494/1495/1496**  
**LT1635/1636/1637/1638/1639/1672/1673/1674/1677/1787/1789**  
**6/23/2011**

**• OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF FAILURES <sup>(2)</sup>
SIDBRAZE	90	9601	9640	90.11	0
PLASTIC DIP	2,683	9640	0635	2,130.93	2
SOIC/SOT/MSOP	1,113	9640	0825	975.92	0
	3,886			3,196.96	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	4,827	9607	0703	193.18	0
SOIC/SOT/MSOP	16,036	9614	1014	1,516.74	0
QFN/DFN	548	0231	0642	81.93	0
	21,411			1,791.86	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	2,728	9610	0822	436.94	0
SOIC/SOT/MSOP	15,348	9619	1014	3,950.80	0
QFN/DFN	850	0231	0841	402.11	0
	18,926			4,789.85	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	1,071	9639	0314	309.65	0
SOIC/SOT/MSOP	5,912	9619	1014	1,780.37	0
QFN/DFN	495	0234	0841	114.50	0
	7,478			2,204.52	0

- (1) Assumes Activation Energy = 1 Electron Volts  
(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.93 FITS  
(3) Mean Time Between Failures in Years = 59,116  
(4) Assumes 20X Acceleration from 85°C to +131°C  
Note: 1 FIT = 1 Failure in One Billion Hours.