

# RELIABILITY REPORT



## RELIABILITY DATA

**LT1351/52/53/54/55/56/57/58/59**

**LT1360/61/62/63/64/65/66/67/68/69**

**LT1630/31/32/33 LT1995**

**8/21/2006**

**• OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF <sup>(2)</sup> FAILURES
CERDIP	500	9513	9640	1,750.00	0
PLASTIC DIP	1,430	9312	9801	2,590.41	0
SOIC/SOT/MSOP	2,633	9313	0533	2,458.54	0
	4,563			6,798.95	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	196	9542	0032	457.88	0
SOIC/SOT/MSOP	1,472	9527	0505	2,131.08	0
	1,668			2,588.96	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	4,690	9338	0331	369.85	0
SOIC/SOT/MSOP	23,097	9335	0626	1,626.78	0
	27,787			1,996.64	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	17	0002	0002	1.70	0
PLASTIC DIP	1,775	9405	0331	375.47	0
SOIC/SOT/MSOP	4,695	9417	0626	1,592.67	0
	6,487			1,969.83	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	17	0002	0002	0.26	0
PLASTIC DIP	900	9405	9930	289.54	0
SOIC/SOT/MSOP	3,346	9403	0626	811.01	0
	4,263			1,100.81	0

(1) Assumes Activation Energy = 1.0 Electron Volts  
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.27 FITS  
 (3) Mean Time Between Failures in Years = 422,508  
 (4) Assumes 20X Acceleration from 85°C to +131°C  
 Note: 1 FIT = 1 Failure in One Billion Hours.