

RELIABILITY REPORT



RELIABILITY DATA

LTC1329/1426/27/28/46/48 LTC1454/56/58/59 LTC1659/1660/61/62/64/65

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⁾
SIDEBRAZE	188	9640	9740	194.56	0
PLASTIC DIP	705	9613	9940	597.84	1
SOIC/SOT/MSOP	1,562	9640	0320	1,204.10	0
SSOP/TSSOP	103	9601	9837	103.07	0
	2,558			2,099.57	1

• 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
SOIC/SOT/MSOP	150	0205	0205	1,008.00	0
	150			1,008.00	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	700	9514	0607	18.90	0
SOIC/SOT/MSOP	4,073	9504	0529	897.78	0
SSOP/TSSOP	858	9627	0525	225.48	0
	5,631			1,142.16	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	498	9514	0522	49.85	0
SOIC/SOT/MSOP	1,329	9517	0529	513.25	0
SSOP/TSSOP	690	9627	0525	351.12	0
	2,517			914.22	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	349	9517	0522	34.90	0
SOIC/SOT/MSOP	1,472	9517	0529	913.53	0
SSOP/TSSOP	388	9627	0525	133.64	0
	2,209			1,082.07	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 12.44 FITS

(3) Mean Time Between Failures in Years = 9,170

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

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