

RELIABILITY DATA

LTC1318/20/21/22/23/24/27/34/35/37/38/40/43/44/45/46/47/48/49
LTC1350/80/82/83/84/85/86/87 LTC1543/44/45/46 LTC2844/45/46/47

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 ⁽²⁾ FAILURES
CERDIP	77	9513	9513	61.64	0
PLASTIC DIP	478	9312	9513	366.31	0
SOIC/SOT/MSOP	2,050	9401	0526	1,434.36	0
SSOP/TSSOP	967	9513	0213	783.80	0
	3,572			2,646.11	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	4,175	9332	0531	151.32	0
SOIC/SOT/MSOP	19,405	9303	0545	1,492.30	0
SSOP/TSSOP	16,640	9404	0616	1,029.03	0
QFN/DFN	1,091	0313	0615	123.14	0
	41,311			2,795.79	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	2,799	9413	0620	300.56	0
SOIC/SOT/MSOP	13,055	9329	0545	2,915.74	0
SSOP/TSSOP	11,286	9426	0616	2,095.98	0
QFN/DFN	846	0313	0615	163.80	0
	27,986			5,476.07	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	675	9514	0209	68.50	0
SOIC/SOT/MSOP	7,871	9415	0545	1,861.70	0
SSOP/TSSOP	7,917	9426	0616	1,866.44	0
QFN/DFN	845	0313	0615	164.50	0
	17,308			3,961.14	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 4.47 FITS

(3) Mean Time Between Failures in Years = 25,521

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