

RELIABILITY DATA

LTC1402/05/06/11/12/14/17/20 / LTC1606/08/09/63/66/67/68 / LTC1710/40
 LTC1850/51/52/53/60/61/63/64/65/67 /
 LTC2401/02/04/08/11/20/21/22/24/28/33/35 LTC3801

6/17/04

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
PLASTIC DIP	154	0040	0040	154.00	2
SOIC/SOT/MSOP	683	9813	0318	645.05	0
SSOP/TSSOP	1,204	9813	0421	1,493.37	5
QFN/DFN	135	0047	0206	61.51	0
	2,176			2,353.93	7

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
SOIC/SOT/MSOP	1,692	9812	0337	419.83	0
SSOP/TSSOP	2,923	9745	0336	865.62	0
	4,615			1,285.46	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
SOIC/SOT/MSOP	1,014	9812	0337	649.90	0
SSOP/TSSOP	1,557	9745	0327	1,333.91	0
	2,571			1,983.81	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
SOIC/SOT/MSOP	602	9923	0337	429.98	0
SSOP/TSSOP	1,061	9745	0336	978.45	0
	1,663			1,408.43	0

(1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 46.03 FITS
 (3) Mean Time Between Failures in Years = 2,478
 Note: 1 FIT = 1 Failure in One Billion Hours.