

RELIABILITY DATA

LTC1695 / LTC1757/58 / LTC1840/44 / LTC1923/1957/1981/82
LTC3701/36/37/3803 LTC4053/54/56/57/58/59/64/68 / LTC4100 / LTC4300
LTC4400/01/02/03 LTC4555

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
SOIC/SOT/MSOP	1,644	0001	0337	1,644.00	0
SSOP/TSSOP	465	0040	0421	465.00	0
QFN/DFN	385	0213	0421	500.75	0
	2,494			2,609.75	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
SOIC/SOT/MSOP	2,106	0031	0409	380.73	0
SSOP/TSSOP	747	0032	0352	157.59	0
QFN/DFN	1,291	0233	0405	314.70	0
	4,144			853.01	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	8,245	0031	0409	1,493.63	0
SSOP/TSSOP	548	0032	0352	203.75	0
QFN/DFN	1,133	0233	0405	798.59	0
	9,926			2,495.96	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	1,217	0032	0409	348.09	0
SSOP/TSSOP	550	0127	0352	206.50	0
QFN/DFN	715	0308	0405	431.20	0
	2,482			985.79	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 4.54 FITS

(3) Mean Time Between Failures in Years = 25,127

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