

RELIABILITY DATA

LT1370/71/72/73/74/75/76/77 LT1576/78 LT1767 LT1933 LT3436/37
LT3724

9/11/2009

• 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	309	9439	9708	420.13	0
SOIC/SOT/MSOP	1,262	9439	0502	1,231.83	0
SSOP/TSSOP	308	0533	0710	1,016.40	0
DD PACK	186	9526	0041	346.56	0
TO-220	95	9613	9740	134.07	0
QFN/DFN	77	0630	0630	77.00	0
	2,237			3,225.98	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	448	9504	0313	10.75	0
SOIC/SOT/MSOP	18,351	9508	0910	1,125.88	0
SSOP/TSSOP	1,647	9642	0843	243.94	0
DD PACK	3,064	9530	0709	115.70	0
TO-220	200	9949	0513	6.00	0
QFN/DFN	274	0532	0552	51.77	0
	23,984			1,554.05	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	497	9504	0832	49.70	0
SOIC/SOT/MSOP	21,562	9508	0909	3,464.78	0
SSOP/TSSOP	1,282	9642	0845	690.03	0
DD PACK	12,478	9603	0832	1,385.70	0
TO-220	1,433	9644	0830	142.80	0
QFN/DFN	273	0541	0734	57.48	0
	37,525			5,790.49	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	200	9504	0313	20.00	0
SOIC/SOT/MSOP	12,851	9508	0909	2,137.90	0
SSOP/TSSOP	1,288	9706	0845	318.80	0
DD PACK	2,524	9627	0824	272.40	0
TO-220	618	9749	0724	263.40	0
QFN/DFN	224	0541	0734	53.20	0
	17,705			3,065.70	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.57 FITS

(3) Mean Time Between Failures in Years = 200,135

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