

RELIABILITY DATA

LTC4271

1/10/2013

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
QFN/DFN	154	1034	1052	89.94	0
	154			89.94	0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C⁽⁵⁾

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
QFN/DFN	305	0823	0846	102.48	0
	305			102.48	0

• TEMP CYCLE FROM -65°C to +150°C⁽⁵⁾

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
QFN/DFN	297	0823	0846	297.00	0
	297			297.00	0

• THERMAL SHOCK FROM -65°C to +150°C⁽⁵⁾

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
QFN/DFN	275	0823	0937	194.50	0
	275			194.50	0

(1) Sample size is too small too calculate meaningful FIT rate. FIT rate given by Process Technology.

(2) Assumes Activation Energy = 0.7 Electron Volts

(3) Failure Rate Equivalent to +55°C, 60% Confidence Level = 18.68 FITS

(4) Mean Time Between Failures in Years = 6,112

(5) Mechanical data given by Process / Package family similarity

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