

# RELIABILITY REPORT





NOW PART OF



# Reliability Data Report

## Product Family R577

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LTC4000 / LTC4013 / LTC4020 / LTC4079 /  
LTC4120 / LTC4121 / LTC4123

# Reliability Data Report

## Report Number: R577

Report generated on: Fri Aug 04 13:47:30 PDT 2017

<b>OPERATING LIFE TEST</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS (+125°C)<sup>1</sup></b>	<b>No. of FAILURES <sup>2, 3</sup></b>
QFN/DFN	458	1302	1546	809	0
Totals	458	-	-	809	0
<b>PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
QFN/DFN	100	1537	1649	2	0
Totals	100	-	-	2	0
<b>TEMP CYCLE FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
QFN/DFN	99	1537	1649	9	0
Totals	99	-	-	9	0
<b>THERMAL SHOCK FROM -65 TO 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE CYCLES</b>	<b>No. of FAILURES</b>
QFN/DFN	100	1537	1649	10	0
Totals	100	-	-	10	0
<b>HIGH TEMPERATURE BAKE AT 150 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
QFN/DFN	50	1537	1537	50	0
Totals	50	-	-	50	0
<b>HIGH TEMPERATURE BAKE AT 175 DEG C</b>					
<b>PACKAGE TYPE</b>	<b>SAMPLE SIZE</b>	<b>OLDEST DATE CODE</b>	<b>NEWEST DATE CODE</b>	<b>K DEVICE HRS</b>	<b>No. of FAILURES</b>
QFN/DFN	50	1537	1537	25	0
Totals	50	-	-	25	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =14.65 FITS

(3) Mean Time Between Failure in Years = 7794

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

Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL1 Preconditioning