

RELIABILITY REPORT





Reliability Data Report

Product Family R414

LTC2050 / LTC2051 / LTC2052 /
LTC2053

Reliability Data Report

Report Number: R414

Report generated on: Mon Feb 01 11:45:54 PST 2016

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES _{2, 3}
SOIC/MSOP	850	9927	1333	580	0
SOT	2052	1118	1451	386	0
Totals	2,902	-	-	966	0

PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	226	0231	0521	35	0
SSOP/TSSOP	50	0025	0025	21	0
SOIC/MSOP	4191	9946	1407	488	0
SOT	9032	0110	1416	217	0
Totals	13,499	-	-	761	0

TEMP CYCLE FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
QFN/DFN	227	0231	0521	92	0
SSOP/TSSOP	50	0025	0025	52	0
SOIC/MSOP	6759	9946	1407	1555	0
SOT	8827	0110	1416	882	0
Totals	15,863	-	-	2,581	0

THERMAL SHOCK FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
QFN/DFN	175	0231	0521	90	0
SSOP/TSSOP	50	0025	0025	51	0
SOIC/MSOP	2970	9948	1407	1046	0
SOT	9218	0110	1416	921	0
Totals	12,413	-	-	2,108	0

HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/MSOP	417	0951	1335	417	0
Totals	417	-	-	417	0

- (1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =12.27 FITS
 (3) Mean Time Between Failure in Years = 9306.56

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

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