

RELIABILITY REPORT





NOW PART OF



Reliability Data Report

Product Family R567

LTC2933 / LTC2936 / LTC2937 /

LTC2943 / LTC2944 / LTC2945 /

LTC2947 / LTC2955 / LTC2960

Reliability Data Report

Report Number: R567

Report generated on: Mon Mar 05 11:04:09 PST 2018

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) ¹	No. of FAILURES _{2,3}
QFN/DFN	868	1146	1542	1022	0
SSOP/TSSOP	230	1136	1412	230	0
Totals	1,098	-	-	1,252	0

HIGHLY ACCELERATED STRESS TEST AT +130 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+85°C) ⁴	No. of FAILURES
QFN/DFN	231	1445	1521	887	0
Totals	231	-	-	887	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	817	1317	1637	151	0
SOIC/MSOP	199	1639	1710	4	0
SOT	897	1312	1649	21	0
Totals	1,913	-	-	176	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	724	1317	1637	418	0
SOIC/MSOP	198	1639	1710	19	0
SOT	897	1312	1649	89	0
Totals	1,819	-	-	526	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	579	1317	1637	354	0
SSOP/TSSOP	226	0924	1044	150	0
SOIC/MSOP	200	1639	1710	20	0
SOT	893	1312	1649	89	0
Totals	1,898	-	-	613	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =9.46 FITS

(3) Mean Time Between Failure in Years = 12061.92

(4) Assumes 20X Acceleration from 85 °C to +130 °C

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

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

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HIGH TEMPERATURE BAKE AT 125 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	50	1615	1615	2	0
Totals	50	-	-	2	0
HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	503	1236	1615	428	0
Totals	503	-	-	428	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
QFN/DFN	143	1236	1542	93	0
SOIC/MSOP	100	1640	1710	50	0
SOT	50	1515	1515	25	0
Totals	293	-	-	168	0