

RELIABILITY REPORT





Reliability Data Report

Product Family R565

LTC6945 / LTC6946 / LTC6947 /
LTC6948 / LTC6950 / LTC6954 /
LTC6957

Reliability Data Report

Report Number: R565

Report generated on: Wed Feb 10 17:21:00 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	77	1133	1133	77	0
QFN/DFN	233	1002	1352	598	0
Totals	310	-	-	675	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	306	1238	1302	77	0
Totals	306	-	-	77	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	230	1249	1302	153	0
Totals	230	-	-	153	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	230	1249	1302	115	0
Totals	230	-	-	115	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	127	1238	1249	88	0
Totals	127	-	-	88	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	154	1250	1302	77	0
Totals	154	-	-	77	0

(1) Assumes Activation Energy = 0.7 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level = 17.55 FITS
 (3) Mean Time Between Failure in Years = 6503.03
 Note: 1 FIT = 1 Failure in One Billion Hours.
 Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL1 Preconditioning