

RELIABILITY REPORT





NOW PART OF



Reliability Data Report Product Family R531

LT1965 / LT3007 / LT3008 / LT3009 /
LT3015 / LT3022 / LT3029 / LT3030 /
LT3042 / LT3045 / LT3048 / LT3050 /
LT3055 / LT3060 / LT3061 / LT3062 /
LT3063 / LT3065 / LT3066 / LT3080 /
LT3081 / LT3082 / LT3083 / LT3085 /
LT3086 / LT3088 / LT3089 / LT3090 /
LT3091 / LT3092 / LT3095

Reliability Data Report

Report Number: R531

Report generated on: Mon Mar 05 11:00:42 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	1136	0713	1630	1886	0
SSOP/TSSOP	230	0941	1428	579	0
TO-3	231	1034	1034	622	0
SOIC/MSOP	728	0813	1518	2836	0
SOT	154	0908	1421	862	0
Totals	2,479	-	-	6,785	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
SOT	662	1332	1503	1278	0
Totals	662	-	-	1,278	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
DD PAK	4991	0811	1709	773	0
QFN/DFN	9850	0552	1715	1083	0
SSOP/TSSOP	2300	0550	1704	267	0
SOIC/MSOP	6030	0739	1715	407	0
TO-220	2554	0813	1713	482	0
SOT	10374	0730	1712	659	0
Totals	36,099	-	-	3,671	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
DD PAK	4620	1045	1709	1676	0
QFN/DFN	9034	0552	1715	3004	0
SSOP/TSSOP	2080	0550	1704	690	0
SOIC/MSOP	6537	0739	1715	1777	0
TO-220	2046	1045	1713	1025	0
SOT	6967	0740	1712	1601	0
Totals	31,284	-	-	9,773	0

(1) Assumes Activation Energy = 1.0 Electron Volts
(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.27 FITS
(3) Mean Time Between Failure in Years = 422509.41
(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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THERMAL SHOCK FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
DD PAK	3782	0811	1709	1263	0
QFN/DFN	9187	0552	1715	3028	0
SSOP/TSSOP	2124	0550	1704	733	0
SOIC/MSOP	6496	0739	1715	1702	0
TO-220	1440	0813	1713	573	0
SOT	6987	0740	1712	1462	0
Totals	30,016	-	-	8,761	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	1915	0739	1626	1775	0
SOIC/MSOP	685	0739	1522	685	0
SOT	154	0811	0811	77	0
Totals	2,754	-	-	2,537	0
HIGH TEMPERATURE BAKE AT 175 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
DD PAK	938	1223	1615	938	0
QFN/DFN	1062	0552	1444	1706	0
SSOP/TSSOP	354	1227	1649	355	0
SOIC/MSOP	685	0739	1703	610	0
TO-220	553	1247	1615	553	0
SOT	840	0836	1648	808	0
Totals	4,432	-	-	4,970	0