

RELIABILITY REPORT





NOW PART OF



Reliability Data Report

Product Family R572

LT4275 / LT4276 / LT4293 / LT4294 /
LT4295 / LT4320 / LT4321

Reliability Data Report

Report Number: R572

Report generated on: Fri Apr 10 16:08:07 PDT 2020

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	662	1304	1552	4981	0
SOIC/MSOP	80	1304	1304	159	0
Totals	742	-	-	5,140	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	696	1408	1441	1632	0
SOIC/MSOP	240	1635	1648	460	0
Totals	936	-	-	2,092	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) ⁵	No. of FAILURES
QFN/DFN	696	1408	1441	1632	0
SOIC/MSOP	240	1635	1648	460	0
Totals	936	-	-	2,092	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
SOIC/MSOP	1196	1320	1648	28	0
QFN/DFN	608	1410	1506	78	0
Totals	1,804	-	-	106	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
SOIC/MSOP	1200	1320	1648	120	0
QFN/DFN	606	1410	1506	417	0
Totals	1,806	-	-	537	0

(1) Assumes Activation Energy = 1.0 Electron Volts
 (2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.36 FITS
 (3) Mean Time Between Failure in Years = 320073.44
 (4) Assumes 20X Acceleration from 85 °C to +130 °C
 (5) 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

Reliability Data Report

Report Number: R572

Report generated on: Fri Apr 10 16:08:07 PDT 2020

THERMAL SHOCK FROM -65 TO 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	No. of FAILURES
SOIC/MSOP	800	1320	1617	80	0
QFN/DFN	100	1506	1506	10	0
Totals	900	-	-	90	0
HIGH TEMPERATURE BAKE AT 150 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS	No. of FAILURES
SOIC/MSOP	400	1635	1648	400	0
QFN/DFN	200	1410	1410	0	0
Totals	600	-	-	400	0