



Reliability Data Report

Product Family R007

LT1001 / 1002 / 1007 / 1037

OP05 / 07 / 27 / 37 LT227 / 237

RH07 RH27 / RH37

Reliability Data Report

Report Number: R007

Report generated on: Wed Sep 19 09:47:30 PDT 2012

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (125°C) ¹	No. of FAILURES ^{2,3}
HERMETIC	3591	8301	0942	12719	6
CERDIP	2123	8301	0002	5541	1
PLASTIC DIP	4834	8301	9811	21301	2
SOIC/SOT/MSOP	2772	8501	9823	10553	0
FLATPACK	623	9506	0942	647	0
Totals	13,943	-	-	50,761	9

HIGHLY ACCELERATED STRESS TEST AT +131 DEG C / 85% RH					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS (+85°C) ⁴	No. of FAILURES
PLASTIC DIP	1260	9015	9930	1750	0
SOIC/SOT/MSOP	4287	8951	1116	5638	0
Totals	5,547	-	-	7,388	0

PRESSURE COOKER TEST AT 15 PSIG , +121 DEG C					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	No. of FAILURES
PLASTIC DIP	13196	9501	0337	334	0
SOIC/SOT/MSOP	7006	9501	0951	2258	0
Totals	20,202	-	-	2,592	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
HERMETIC	1355	8310	0834	251	0
CERDIP	1724	8324	0833	371	0
PLASTIC DIP	3436	8600	1103	1480	0
SOIC/SOT/MSOP	3378	8508	0951	1256	0
FLATPACK	176	9318	0417	17	0
Totals	10,069	-	-	3,375	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
HERMETIC	446	8310	0215	80	0
CERDIP	813	8324	0146	139	0
PLASTIC DIP	2506	8624	9908	1443	0
SOIC/SOT/MSOP	2192	8401	0951	1173	0
FLATPACK	17	9632	9632	0	0
Totals	5,974	-	-	2,835	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =0.41 FITS

(3) Mean Time Between Failure in Years = 278247.47

(4) Assumes 20X Acceleration from 85 °C to +131 °C

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

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