

# RELIABILITY REPORT





# Reliability Data Report

## Product Family R163

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LTC690 \ LTC691 \ LTC692 \ LTC693 \  
LTC694 \ LTC695 \ LTC698 \ LTC699 \  
LTC1232 \ LTC1235

# Reliability Data Report

## Report Number: R163

Report generated on: Fri Apr 01 17:16:02 PDT 2016

OPERATING LIFE TEST					
PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HRS (+125°C) <sup>1</sup>	No. of FAILURES <sub>2, 3</sub>
SIDEBRAZE	61	9726	9726	61	0
CERDIP	155	9101	9101	100	0
PLASTIC DIP	360	9101	9652	277	0
SOIC/MSOP	31	9325	9325	16	0
Totals	607	-	-	454	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
SSOP/TSSOP	50	9932	9932	1	0
PLASTIC DIP	2850	9502	0250	74	0
SOIC/MSOP	6540	9502	1351	237	0
SOT	50	9929	9929	1	0
Totals	9,490	-	-	313	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
SSOP/TSSOP	50	9932	9932	5	0
PLASTIC DIP	2741	9120	0250	277	0
SOIC/MSOP	3474	9133	1351	347	0
SOT	50	9929	9929	5	0
Totals	6,315	-	-	634	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
PLASTIC DIP	1745	9120	0250	174	0
SOIC/MSOP	2638	9133	1351	265	0
Totals	4,383	-	-	439	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55 °C, 60% Confidence Level =26.1 FITS

(3) Mean Time Between Failure in Years = 4373.89

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

Note 2: HAST, Temp Cycle & Thermal Shock are subjected to J-STD-020 MSL1 Preconditioning