

# RELIABILITY REPORT



**RELIABILITY DATA**  
**LT1010**  
**8/21/2006**

**• OPERATING LIFE TEST**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(1)</sup> AT +125°C	NUMBER OF <sup>(2)</sup> FAILURES
HERMETIC	45	8433	8433	66.53	0
PLASTIC DIP	189	9115	9351	260.14	0
TO-220	100	0033	0037	16.80	0
	334			343.47	0

**• PRESSURE COOKER TEST AT 15 PSIG, +121°C**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
PLASTIC DIP	890	9115	0233	51.56	0
TO-220	3,193	9114	0617	88.39	0
	4,083			139.95	0

**• TEMP CYCLE FROM -65°C to +150°C**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
HERMETIC	247	8433	0123	23.35	0
TO-3	47	8825	0147	4.70	0
PLASTIC DIP	467	9115	0233	156.55	0
TO-220	2,748	9212	0617	322.99	0
	3,509			507.59	0

**• THERMAL SHOCK FROM -65°C to +150°C**

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
HERMETIC	232	8433	0123	3.48	0
TO-3	62	8825	0147	0.93	0
PLASTIC DIP	322	9115	0132	104.07	0
TO-220	2,944	9444	0617	433.00	0
	3,560			541.48	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 5.36 FITS

(3) Mean Time Between Failures in Years = 21,283

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