

RELIABILITY REPORT



RELIABILITY DATA
LT1580 / 1581 / 1584 / 1585 / 1587

8/21/2006

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
DD PACK	15	9542	9542	19.15	0
TO-220	915	9426	0014	1,136.92	0
	930			1,156.07	0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
DD PACK	30	9708	9722	100.80	0
TO-220	380	9533	9723	669.80	0
	410			770.60	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
DD PACK	6,939	9441	0617	174.34	0
TO-220	11,210	9443	0521	346.30	0
	18,149			520.63	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
DD PACK	17,973	9441	0617	1,783.30	0
TO-220	15,997	9504	0521	1,609.70	0
	33,970			3,393.00	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
DD PACK	3,900	9533	0617	390.00	0
TO-220	5,686	9443	0521	568.60	0
	9,586			958.60	0

(1) Assumes Activation Energy = 1.0 Electron Volts
(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.59 FITS
(3) Mean Time Between Failures in Years = 71,747
(4) Assumes 20X Acceleration from 85°C to +131°C
Note: 1 FIT = 1 Failure in One Billion Hours.