

RELIABILITY DATA
LT1070/71/72/73/1082/1170/71/72/73/1268/69/70/71 LT1572
LT1676/84/1776/77

9/8/2000

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF ⁽²⁾ FAILURES
CERDIP	50	9013	9013	51.52	0
SIDEBRAZE	119	9013	9201	255.34	0
TO-3	302	8601	9339	1,660.97	0
PLASTIC DIP	1,654	8820	9934	8,040.22	0
SOIC/SOT/MSOP	258	9107	9901	283.71	0
DD PACK	1,100	9138	9549	6,059.88	0
TO-220	5,014	8601	9647	19,239.51	0
	8,497			35,591.15	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICF HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	589	9044	9544	1,614.84	0
SOIC/SOT/MSOP	403	9107	9338	1,012.22	0
DD PACK	475	9147	9549	952.46	0
TO-220	1,030	9050	9619	2,154.84	0
	2,497			5,734.36	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	7,210	8820	2017	1,486.03	0
SOIC/SOT/MSOP	17,364	9030	2013	844.72	0
DD PACK	11,871	9147	2020	1,067.28	0
TO-220	16,399	8636	2021	1,973.61	1
TO-3P	50	9247	9247	2.40	0
	52,894			5,374.04	1

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
TO-3	160	8626	9339	71.07	0
PLASTIC DIP	2,454	8820	2017	1,365.16	0
SOIC/SOT/MSOP	3,477	9030	2013	669.54	0
DD PACK	7,737	9147	2020	1,437.85	0
TO-220	10,551	8636	2021	2,600.52	1
	24,379			6,144.15	1

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
CERDIP	38	9444	9444	3.80	0
TO-3	144	8626	9339	10.15	1
PLASTIC DIP	1,938	8820	9906	1,056.45	0
SOIC/SOT/MSOP	3,899	9030	9917	541.55	0
DD PACK	3,789	9147	2002	1,470.60	0
TO-220	6,179	8636	2010	2,256.10	0
	15,987			5,338.65	1

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.05 FITS

(3) Mean Time Between Failures in Years = 2,281,542

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

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