

RELIABILITY DATA

LT1019 / LT1029 REF01 / REF02 LT580 / LT581

4/30/2003

• 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	49	8701	8701	334.22	0
HERMETIC	849	8502	9842	2,766.86	0
PLASTIC DIP	3,292	8519	0211	7,687.50	0
TO-92	1,351	9102	9606	4,217.14	0
	5,541			15,005.72	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
SOIC/SOT/MSOP	324	9433	9730	367.92	0
TO-92	1,288	9044	9650	2,031.58	0
	1,612			2,399.50	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	30,793	8519	0133	739.20	0
SOIC/SOT/MSOP	5,286	9122	0140	121.20	0
TO-92	2,277	8839	0105	56.40	0
	38,356			916.80	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
CERDIP	315	9410	9626	31.50	0
HERMETIC	684	8502	0125	172.90	0
PLASTIC DIP	2,407	9127	0138	499.80	0
SOIC/SOT/MSOP	1,171	9125	0012	195.64	0
TO-92	1,129	8912	0105	715.58	0
	5,706			1,615.42	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
CERDIP	253	9341	9447	24.03	0
HERMETIC	627	8534	0125	231.86	0
PLASTIC DIP	1,698	9127	9713	367.90	0
SOIC/SOT/MSOP	818	9122	0140	219.50	0
TO-92	274	9115	0105	27.40	0
	3,670			870.69	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.12 FITS

(3) Mean Time Between Failures in Years = 950,643

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

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