

RELIABILITY DATA

LT1020 / LT1120 / LT1121 / LT1129

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
CERDIP	540	8601	9407	1,669.74	0
PLASTIC DIP	1,114	8601	0502	1,430.89	0
SOIC/SOT/MSOP	386	9201	9404	1,632.16	0
SSOP/TSSOP	162	9901	9903	199.59	0
DD PACK	50	0038	0038	8.40	0
TO-92	199	9325	9433	613.49	0
	2,451			5,554.27	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	277	9221	0312	243.00	0
TO-92	139	9225	9439	106.32	0
	416			349.32	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	3,516	9119	0117	120.01	0
SOIC/SOT/MSOP	21,500	9119	0613	1,195.26	0
SSOP/TSSOP	1,391	9841	9944	231.91	0
DD PACK	1,750	9305	0621	51.60	0
TO-220	870	9228	0333	45.82	0
TO-92	1,086	9225	0346	37.22	0
	30,113			1,681.81	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	30	9130	9418	3.00	0
PLASTIC DIP	1,045	9207	0117	104.50	0
SOIC/SOT/MSOP	15,498	9226	0613	3,115.21	0
SSOP/TSSOP	1,101	9841	0003	518.31	0
DD PACK	8,699	9531	0537	865.20	0
TO-220	2,550	9306	0333	265.50	0
TO-92	898	9225	0433	97.80	0
	29,821			4,969.52	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	30	9130	9418	0.45	0
PLASTIC DIP	1,062	9207	0117	106.20	0
SOIC/SOT/MSOP	9,414	9239	0613	1,796.08	0
SSOP/TSSOP	910	9841	0003	505.15	0
DD PACK	1,632	9350	0537	173.20	0
TO-220	850	9546	0333	85.00	0
TO-92	499	9539	0346	49.90	0
	14,397			2,715.98	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.33 FITS

(3) Mean Time Between Failures in Years = 345,688

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

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