

## RELIABILITY DATA

### LT1022 / OP16

### 4/30/2003

**• 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	80	9143	9143	82.43	0
PLASTIC DIP	1,140	9144	9504	1,174.99	0
SOIC/SOT/MSOP	50	9327	9327	221.76	0
	1,270			1,479.18	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICF HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	202	9144	9705	242.40	0
	202			242.40	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	1,235	9144	9923	30.00	0
SOIC/SOT/MSOP	100	9327	9609	2.40	0
	1,335			32.40	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
PLASTIC DIP	90	9144	9218	9.00	0
	90			9.00	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
PLASTIC DIP	138	9144	9424	13.80	0
	138			13.80	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.24 FITS

(3) Mean Time Between Failures in Years = 91,998

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

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