

RELIABILITY DATA

LT1006

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	289	8701	9735	989.23	0
HERMETIC	45	9115	9115	60.48	0
PLASTIC DIP	438	8701	9903	966.29	0
SOIC/SOT/MSOP	350	8815	9816	252.00	0
	1,122			2,268.00	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
PLASTIC DIP	287	9207	9948	300.76	0
SOIC/SOT/MSOP	746	9945	0537	716.16	0
	1,033			1,016.92	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	4,334	9216	9931	368.88	0
SOIC/SOT/MSOP	1,230	9215	9927	53.52	0
	5,564			422.40	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
CERDIP	32	9418	9731	3.20	0
HERMETIC	45	9115	9115	4.50	0
PLASTIC DIP	390	9207	9908	39.00	0
SOIC/SOT/MSOP	223	8815	9919	42.30	0
	690			89.00	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
CERDIP	15	9418	9418	0.23	0
HERMETIC	45	9115	9115	4.50	0
PLASTIC DIP	150	9250	9807	15.00	0
SOIC/SOT/MSOP	145	8815	9435	34.50	0
	355			54.23	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.81 FITS

(3) Mean Time Between Failures in Years = 140,836

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

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