

RELIABILITY DATA

LM10

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 FAILURES ⁽²⁾
CERDIP	200	9717	9717	107.52	0
HERMETIC	90	8812	9331	109.09	0
PLASTIC DIP	349	9341	9821	685.31	0
	639			901.91	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	248	9633	9747	206.40	0
	248			206.40	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	548	9221	9823	26.30	0
	548			26.30	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	20	9718	9718	2.00	0
HERMETIC	47	8749	9834	4.70	0
PLASTIC DIP	450	9236	9823	45.00	0
	517			51.70	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	68	9433	9718	5.10	0
HERMETIC	47	8749	9834	0.71	0
PLASTIC DIP	199	9239	9447	19.90	0
	314			25.71	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.04 FITS

(3) Mean Time Between Failures in Years = 55,920

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

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