

RELIABILITY DATA

LM137 / 337 LT137 / 337 RH137

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⁾
HERMETIC	2,240	8344	0330	4,290.02	0
TO-3	906	8410	0332	1,705.06	0
TO-220	133	8344	8612	816.97	0
	3,279			6,812.05	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
TO-220	66	9211	0029	211.20	0
	66			211.20	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
TO-220	1,362	9116	0325	98.89	0
	1,362			98.89	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
HERMETIC	733	8344	0330	67.00	0
TO-3	544	8410	0608	125.05	0
TO-220	1,147	8612	0325	125.30	1
	2,424			317.35	1

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
HERMETIC	475	8344	0235	8.37	0
TO-3	297	8410	0608	36.28	0
TO-220	669	8612	0325	138.60	0
	1,441			183.25	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.27 FITS

(3) Mean Time Between Failures in Years = 422,508

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

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