

RELIABILITY DATA

LT1055/56/57/58 LT1457/62/63/64/65 LF156/356 LF412 OP15/16/215

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	1,588	8607	0206	4,364.66	2
FLATPAK/LCC	237	9825	0226	247.26	0
HERMETIC	4,869	8427	0213	8,396.24	3
PLASTIC DIP	3,489	8428	0613	11,416.23	1
SOIC/SOT/MSOP	2,132	9210	0438	5,643.85	0
	12,315			30,068.24	6

• 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	1,037	9410	9926	2,547.34	0
SOIC/SOT/MSOP	2,231	9314	0321	3,010.46	0
	3,268			5,557.80	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	33,364	8434	0613	1,921.08	0
SOIC/SOT/MSOP	13,387	9032	0444	1,446.91	0
TO-92	91	9121	9244	4.73	0
	46,842			3,372.72	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	923	8607	0319	462.60	0
FLATPAK/LCC	173	8845	0226	17.30	0
HERMETIC	1,108	8427	0143	74.35	0
PLASTIC DIP	2,646	8443	0229	1,021.55	0
SOIC/SOT/MSOP	4,257	9032	0444	2,271.17	0
	9,107			3,846.97	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	675	8720	0319	317.14	0
FLATPAK/LCC	99	8845	9351	1.49	0
HERMETIC	517	8444	9845	207.70	0
PLASTIC DIP	1,693	8443	0205	1,165.46	0
SOIC/SOT/MSOP	2,413	9032	0444	1,439.02	0
	5,397			3,130.80	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.49 FITS

(3) Mean Time Between Failures in Years = 232,810

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

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