

# RELIABILITY DATA

## LT1167 / 1168 / LT1920

8/21/2006

### • 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
PLASTIC DIP	413	9813	0014	477.08	0
SOIC/SOT/MSOP	421	9903	0213	1,209.36	0
	834			1,686.44	0

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

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS <sup>(4)</sup> AT +85°C	NUMBER OF FAILURES
SOIC/SOT/MSOP	611	9905	9935	1,483.22	0
	611			1,483.22	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	1,176	9835	0325	39.97	0
SOIC/SOT/MSOP	3,593	9740	0334	399.81	0
	4,769			439.79	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	249	9920	0133	27.98	0
SOIC/SOT/MSOP	1,656	9740	0334	764.50	0
	1,905			792.48	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	150	9920	9930	15.00	0
SOIC/SOT/MSOP	1,405	9740	0334	555.95	0
	1,555			570.95	0

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.09 FITS

(3) Mean Time Between Failures in Years = 104,658

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

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