

RELIABILITY DATA

LTC201 / LTC202 / LTC203 / LTC221 / LTC222

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	302	9016	0119	493.26	0
SIDEBRAZE	79	9016	9016	289.84	0
PLASTIC DIP	310	9101	9510	300.23	1
SOIC/SOT/MSOP	77	9304	9304	13.10	0
	768			1,096.42	1

• 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
SOIC/SOT/MSOP	458	9236	9520	1,232.06	0
	458			1,232.06	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	590	9211	9625	23.97	0
SOIC/SOT/MSOP	2,971	9109	0505	409.24	0
	3,561			433.21	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	225	9211	9625	22.20	0
SOIC/SOT/MSOP	1,447	9127	0505	883.54	0
	1,672			905.74	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
SOIC/SOT/MSOP	1,050	9109	0505	587.87	0
	1,050			587.87	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 23.83 FITS

(3) Mean Time Between Failures in Years = 4,787

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

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