

# RELIABILITY REPORT



**RELIABILITY DATA**  
**LTC1560 / LTC1561 / LTC1562 / LTC1563 / LTC1569**  
**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 FAILURES <sup>(2)</sup>
SIDEBRAZE	27	9940	9940	27.00	0
SOIC/SOT/MSOP	220	9640	0318	193.35	0
SSOP/TSSOP	228	9813	9940	184.73	0
	475			405.08	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	99	9837	0116	15.31	0
SOIC/SOT/MSOP	550	9918	0230	165.85	0
SSOP/TSSOP	1,249	9831	0607	180.58	0
	1,898			361.74	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	50	0116	0116	5.05	0
SOIC/SOT/MSOP	399	9623	0230	365.24	0
SSOP/TSSOP	1,048	9831	0607	193.13	0
DD PACK	50	9837	9837	5.00	0
	1,547			568.41	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	50	9837	9837	50.00	0
SOIC/SOT/MSOP	249	9623	0229	179.50	0
SSOP/TSSOP	1,153	0006	0607	168.88	0
	1,452			398.38	0

(1) Assumes Activation Energy = 0.7 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 29.22 FITS

(3) Mean Time Between Failures in Years = 3,904

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