

RELIABILITY DATA
LT1241 / 42 / 43 / 44 / 45 / 46 / 47 / 48 / 49 / LT1950
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⁾ |
|---------------|-------------|------------------|------------------|--|-----------------------------------|
| CERDIP | 127 | 9219 | 0045 | 499.05 | 0 |
| SIDEBRAZE | 50 | 9101 | 9101 | 42.00 | 0 |
| PLASTIC DIP | 440 | 9101 | 0014 | 1,129.09 | 0 |
| SOIC/SOT/MSOP | 276 | 9244 | 0145 | 537.91 | 0 |
| | 893 | | | 2,208.05 | 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 |
|---------------|-------------|------------------|------------------|---|--------------------|
| SOIC/SOT/MSOP | 100 | 9428 | 9428 | 48.00 | 0 |
| | 100 | | | 48.00 | 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 | 4,343 | 9134 | 0117 | 218.24 | 0 |
| SOIC/SOT/MSOP | 5,346 | 9213 | 0048 | 189.74 | 0 |
| | 9,689 | | | 407.98 | 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 | 1,589 | 9134 | 0117 | 202.17 | 0 |
| SOIC/SOT/MSOP | 1,091 | 9244 | 0030 | 109.10 | 0 |
| | 2,680 | | | 311.27 | 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 | 920 | 9151 | 9906 | 112.50 | 0 |
| SOIC/SOT/MSOP | 774 | 9213 | 0030 | 77.40 | 0 |
| | 1,694 | | | 189.90 | 0 |

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.83 FITS

(3) Mean Time Between Failures in Years = 137,442

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

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