

RELIABILITY REPORT



RELIABILITY DATA LT1004 / LM185/285/385

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 |
|---------------|-------------|------------------|------------------|---|-----------------------------------|
| HERMETIC | 890 | 8317 | 0048 | 3,313.82 | 0 |
| SOIC/SOT/MSOP | 212 | 8601 | 9535 | 717.19 | 0 |
| TO-92 | 4,456 | 8416 | 9643 | 17,370.72 | 0 |
| | 5,558 | | | 21,401.73 | 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 | 6,118 | 9220 | 0601 | 6,043.42 | 0 |
| TO-92 | 2,754 | 9050 | 9630 | 4,336.56 | 0 |
| | 8,872 | | | 10,379.98 | 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 | 50 | 9631 | 9631 | 1.20 | 0 |
| SOIC/SOT/MSOP | 20,768 | 9238 | 0335 | 1,048.64 | 0 |
| TO-92 | 5,117 | 9219 | 0625 | 305.12 | 0 |
| | 25,935 | | | 1,354.96 | 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 |
|---------------|-------------|------------------|------------------|-----------------|--------------------|
| HERMETIC | 733 | 8313 | 0138 | 69.85 | 0 |
| SOIC/SOT/MSOP | 5,478 | 8610 | 0335 | 996.29 | 0 |
| TO-92 | 2,778 | 8446 | 0549 | 767.52 | 0 |
| | 8,989 | | | 1,833.66 | 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 |
|---------------|-------------|------------------|------------------|-----------------|--------------------|
| HERMETIC | 618 | 8313 | 0138 | 9.27 | 0 |
| SOIC/SOT/MSOP | 2,265 | 8610 | 0335 | 441.85 | 0 |
| TO-92 | 2,224 | 8441 | 0549 | 625.01 | 0 |
| | 5,107 | | | 1,076.13 | 0 |

(1) Assumes Activation Energy = 1.0 Electron Volts
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.09 FITS
 (3) Mean Time Between Failures in Years = 1,267,524
 (4) Assumes 20X Acceleration from 85°C to +131°C
 Note: 1 FIT = 1 Failure in One Billion Hours.