

RELIABILITY REPORT



RELIABILITY DATA

LT1128

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 | 44 | 9213 | 9213 | 44.11 | 0 |
| PLASTIC DIP | 44 | 9213 | 9213 | 21.93 | 0 |
| SOIC/SOT/MSOP | 47 | 9524 | 9524 | 44.22 | 0 |
| | 135 | | | 110.25 | 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 | 0038 | 0217 | 96.00 | 0 |
| | 100 | | | 96.00 | 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 | 48 | 9450 | 9450 | 1.15 | 0 |
| SOIC/SOT/MSOP | 8,671 | 9337 | 0044 | 439.49 | 0 |
| DD PACK | 2,150 | 9404 | 9801 | 51.60 | 0 |
| TO-220 | 650 | 9448 | 9636 | 15.60 | 0 |
| | 11,519 | | | 507.84 | 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 | 100 | 9450 | 0045 | 10.00 | 0 |
| SOIC/SOT/MSOP | 225 | 9437 | 0044 | 22.50 | 0 |
| | 325 | | | 32.50 | 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 | 100 | 9437 | 0044 | 10.00 | 0 |
| | 100 | | | 10.00 | 0 |

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 16.68 FITS

(3) Mean Time Between Failures in Years = 6,839

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

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