

# RELIABILITY DATA

LT1003

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 <sup>(2)</sup> FAILURES |
|--------------|-------------|------------------|------------------|---|-----------------------------------|
| TO-3         | 167         | 8704             | 9040             | 656.19                                  | 0                                 |
| TO-3P        | 50          | 9337             | 9337             | 47.04                                   | 0                                 |
|              | 217         |                  |                  | 703.23                                  | 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 |
|--------------|-------------|------------------|------------------|----------------|--------------------|
| TO-3P        | 150         | 9337             | 0020             | 6.00           | 0                  |
|              | 150         |                  |                  | 6.00           | 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 |
|--------------|-------------|------------------|------------------|-----------------|--------------------|
| TO-3         | 155         | 8704             | 9246             | 21.80           | 0                  |
| TO-3P        | 99          | 9337             | 9929             | 14.90           | 0                  |
|              | 254         |                  |                  | 36.70           | 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 |
|--------------|-------------|------------------|------------------|-----------------|--------------------|
| TO-3         | 110         | 8704             | 9246             | 25.28           | 0                  |
| TO-3P        | 50          | 0020             | 0020             | 5.00            | 0                  |
|              | 160         |                  |                  | 30.28           | 0                  |

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.62 FITS

(3) Mean Time Between Failures in Years = 43,541

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