





# **RELIABILITY DATA** LT1025 8/21/2006

### • OPERATING LIFE TEST

| PACKAGE<br>TYPE                           | SAMPLE<br>SIZE | OLDEST<br>DATE CODE | NEWEST<br>DATE CODE | K DEVICE<br>HOURS <sup>(1)</sup><br>AT +125°C | NUMBER<br>OF <sup>(2)</sup><br>FAILURES |
|---|----------------|---------------------|---------------------|---|---|
| CERDIP                                    | 55             | 8701                | 8701                | 192.50  | 0                                       |
| PLASTIC DIP                               | 50             | 8701                | 8701                | 175.00  | 0                                       |
|   | 105            |                     |                     | 367.50  | 0                                       |
| • PRESSURE COOKER TEST AT 15 PSIG, +121°C |                |                     |                     |   |   |

| PACKAGE<br>TYPE | SAMPLE<br>SIZE | OLDEST<br>DATE CODE | NEWEST<br>DATE CODE | K DEVICE<br>HOURS | NUMBER<br>OF<br>FAILURES |
|-----------------|----------------|---------------------|---------------------|-------------------|--------------------------|
| PLASTIC DIP     | 3,870          | 9214                | 9946                | 150.92            | 0                        |
|                 | 3,870          |                     |                     | 150.92            | 0                        |

## • TEMP CYCLE FROM -65°C to +150°C

| PACKAGE<br>TYPE | SAMPLE<br>SIZE | OLDEST<br>DATE CODE | NEWEST<br>DATE CODE | K DEVICE<br>CYCLES | NUMBER<br>OF<br>FAILURES |
|-----------------|----------------|---------------------|---------------------|--------------------|--------------------------|
| PLASTIC DIP     | 780<br>780     | 9202                | 9647                | 79.35              | 0                        |
| THERMAL OLIGO   | 700            |                     |                     | 79.35              | U                        |

### • THERMAL SHOCK FROM -65°C to +150°C

| PACKAGE<br>TYPE | SAMPLE<br>SIZE | OLDEST<br>DATE CODE | NEWEST<br>DATE CODE | K DEVICE<br>CYCLES | NUMBER<br>OF<br>FAILURES |
|-----------------|----------------|---------------------|---------------------|--------------------|--------------------------|
| PLASTIC DIP     | 145            | 9202                | 9616                | 14.50              | 0                        |
|                 | 145            |                     |                     | 14.50              | 0                        |

<sup>(1)</sup> Assumes Activation Energy = 1.0 Electron Volts

Form: 00-03-6209B. R161

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<sup>(2)</sup> Failure Rate Equivalent to +55°C, 60% Confidence Level = 5.01 FITS

<sup>(3)</sup> Mean Time Between Failures in Years = 22,770

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