





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 ⁽²⁾ FAILURES |
|-----------------|----------------|---------------------|---------------------|---|---|
| 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 DEVICF 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 | | OF I | |
|----|-----------------|-------------------------|---------------------|--|---------------------|-------------------|------------|-------|--|
| PI | LASTIC DIP | 4,343 | 9134 | | 0117 | 218.2 | 24 | 0 | |
| S | OIC/SOT/MSOP | 4,343 5,346 9,689 | 9213 | | 0048 | 189.7 | ' 4 | 0 | |
| | | 9,689 | | | | 407.9 | 8 | 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.

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