





RELIABILITY DATA LT1112 / LT1114

8/21/2006

| • (| OP | ER | ΑT | ΊN | G | LI | FΕ | TEST |
|-----|----|----|----|----|---|----|----|-------------|
|-----|----|----|----|----|---|----|----|-------------|

| • OPERATING LIFE TEST | | | | | | | | | |
|-----------------------------------|--|---------------------|---------------------|---|---|--|--|--|--|
| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HOURS ⁽¹⁾ AT +125°C | NUMBER OF ⁽²⁾ FAILURES | | | | |
| PLASTIC DIP SOIC/SOT/MSOP | 627 278 905 | 9422 9736 | 9819 0527 | 622.14 151.80 773.94 | 0 0 0 | | | | |
| HIGHLY ACCELE | 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 | | | | |
| PLASTIC DIP | 137 | 9410 | 9705 | 186.62 | 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 | 4,194 | 9245 | 0321 | 229.25 | 0 |
| SOIC/SOT/MSOP | 6,719 | 9248 | 0503 | 419.56 | 0 |
| | 10,913 | | | 648.81 | 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 | 746 | 9245 | 0321 | 223.56 | 0 |
| SOIC/SOT/MSOP | 1,944 2,690 | 9248 | 0503 | 748.00 | 0 |
| | 2,690 | | | 971.56 | 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 | 204 | 9420 | 9545 | 118.19 | 0 |
| SOIC/SOT/MSOP | 1,284 1,488 | 9402 | 0402 | 343.17 | 0 |
| | 1,488 | | | 461.36 | 0 |

- (1) Assumes Activation Energy = 1.0 Electron Volts
- (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 2.38 FITS
- (3) Mean Time Between Failures in Years = 47,932
- (4) Assumes 20X Acceleration from 85°C to +131°C

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

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