

RELIABILITY REPORT



RELIABILITY DATA

LT1460 / LT1790 / LT6653 / LT6660 / LT6703

6/8/2012

• OPERATING LIFE TEST

| PACKAGE TYPE | SAMPLE SIZE | OLDEST DATE CODE | NEWEST DATE CODE | K DEVICE HOURS ⁽¹⁾ AT +125°C | NUMBER OF FAILURES ⁽²⁾ |
|---------------|-------------|------------------|------------------|---|-----------------------------------|
| PLASTIC DIP | 438 | 9640 | 9914 | 464.31 | 0 |
| SOIC/SOT/MSOP | 897 | 9633 | 0721 | 824.03 | 0 |
| | 1,335 | | | 1,288.34 | 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 | 522 | 9644 | 0935 | 1,289.72 | 0 |
| | 522 | | | 1,289.72 | 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 | 1,210 | 9641 | 0738 | 63.39 | 0 |
| SOIC/SOT/MSOP | 37,585 | 9631 | 1121 | 2,444.76 | 0 |
| TO-92 | 1,975 | 9723 | 1050 | 262.12 | 0 |
| QFN/DFN | 880 | 0619 | 1045 | 108.48 | 0 |
| | 41,650 | | | 2,878.75 | 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 | 458 | 9714 | 0738 | 188.00 | 0 |
| SOIC/SOT/MSOP | 24,964 | 9631 | 1121 | 6,941.32 | 0 |
| TO-92 | 1,634 | 9740 | 1108 | 937.60 | 0 |
| QFN/DFN | 744 | 0619 | 1045 | 74.40 | 0 |
| | 27,800 | | | 8,141.32 | 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 | 273 | 9735 | 0738 | 183.00 | 0 |
| SOIC/SOT/MSOP | 23,264 | 9536 | 1121 | 5,271.14 | 0 |
| TO-92 | 1,865 | 9735 | 1050 | 1,036.70 | 0 |
| QFN/DFN | 739 | 0619 | 1045 | 73.90 | 0 |
| | 26,141 | | | 6,564.74 | 0 |

(1) Assumes Activation Energy = 1.0 Electron Volts

(2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 1.43 FITS

(3) Mean Time Between Failures in Years = 79,774

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

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