



T1500

CLOCK OSCILLATORS

T1500 Clock Oscillator, Stratum III Compatible



Features:

- ◆ Tight Stability (± 10 ppm)
- ◆ Hermetically sealed welded package
- ◆ Case ground minimizes EMI
- ◆ HCMOS/ TTL compatible

Model: T1500 Series Specifications

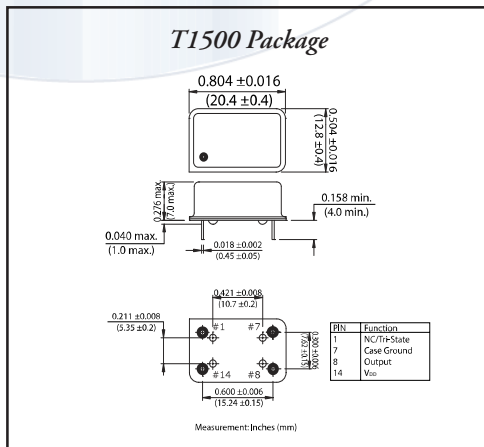
| Parameter | Unit | Min. | | Typ. | | Max. | |
|--------------------------------|------|---|------|------------------------------|------|-----------|-------|
| | | 5.0V | 3.3V | 5.0V | 3.3V | 5.0V | 3.3V |
| Frequency Range | MHz | 1.00 | 1.00 | - | - | 70.00 | 70.00 |
| Operating Temperature Range | °C | See Table | | | | | |
| Frequency Stability (1) | ppm | See Table | | | | | |
| Supply Voltage | VDC | 4.5 | 3.0 | 5.0 | 3.3 | 5.5 | 3.6 |
| Supply Current | | | | | | | |
| 1MHz to 20MHz | mA | 15 | 10 | - | - | 20 | 15 |
| 20MHz to 50MHz | mA | 40 | 30 | - | - | 30 | 25 |
| 50MHz to 70MHz | mA | 50 | 40 | - | - | 40 | 35 |
| Load | | - | - | 10TTL/ 50TTL: 15pF/50pF CMOS | | | |
| Output Levels | | | | | | | |
| Output High (TTL) | V | 2.4 | | - | - | - | - |
| Output High (CMOS) | V | 90% | | - | - | - | - |
| Output Low (TTL) | V | - | - | - | - | 0.4 | |
| Output Low (CMOS) | V | - | - | - | - | 10% | |
| Transition Times (Rise/Fall) | | | | | | | |
| 1MHz to 20MHz | ns | - | - | 8 | 10 | - | - |
| 20MHz to 70MHz | ns | - | - | 5 | 6 | - | - |
| Duty Cycle | % | 50 \pm 10% standard; 50 \pm 5% optional | | | | | |
| Aging | ppm | ± 5.0 ppm/ per year | | | | | |
| Storage Temperature | °C | -55 to +125 | | | | | |
| Tri-State | | Pin 1 | | | | | |
| Output Active | V | 4.0 | 2.0 | - | - | - | - |
| Output in High Impedance State | V | - | - | - | - | 0.8 | 0.5 |
| Period Jitter: Absolute | ps | - | - | - | - | ± 100 | |
| Period Jitter: One Sigma | ps | - | - | - | - | ± 25 | |

(1) Inclusive of calibration @ 25°C, operating temperature, Input voltage change, load change, shock, and vibration. Tighter stabilities available- contact Factory.

CLOCK OSCILLATOR: T1500 Series Thru-Hole

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| Temperature | Stability (ppm) |
|-------------|----------------------------------|
| -20 to 70°C | $\pm 10, \pm 20, \pm 25, \pm 50$ |
| -40 to 85°C | $\pm 20, \pm 25, \pm 50$ |



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