

FEATURES

- High temperature operation up to 225°C
- Excellent stability over temperature
- Fast start-up
- High shock resistance
- CMOS/TTL compatible output
- Low EMI emission
- Hermetically sealed ceramic package

DESCRIPTION

For applications with high operating temperatures such as downhole instrumentation, rotary shaft sensors and underground boring tools. Designed and manufactured in USA by Statek Inc.

SPECIFICATION

Specifications are typical at 25°C unless otherwise indicated. Tighter specifications are available, contact Euroquartz technical sales.

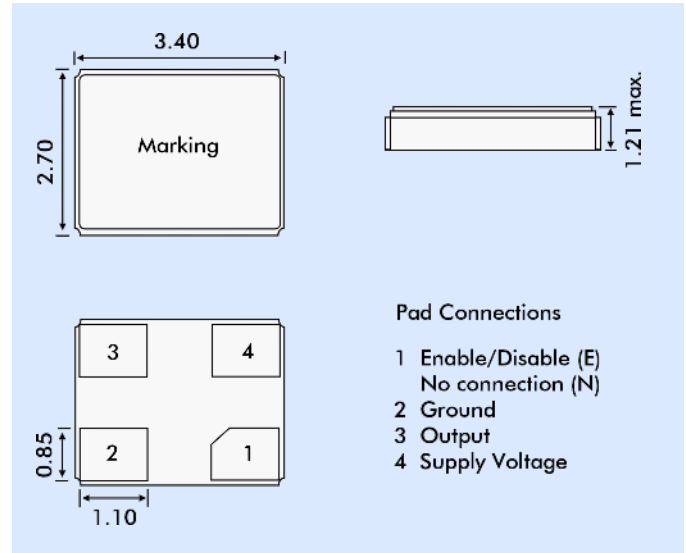
| | | |
|--------------------------|----------------------------|--------|
| Supply Voltage: | +3.3 or +5.0Volts ±10% | |
| Calibration Tolerance: | ±50ppm or tighter as reqd. | |
| Frequency Stability | | |
| 25° ~ +150°C: | ±100ppm | |
| 25° ~ +175°C: | ±150ppm | |
| 25° ~ +225°C: | ±175ppm | |
| Supply Current (Typical) | 3.3V | 5.0V |
| 24MHz: | 3.0mA | 8.0mA |
| 32MHz: | 5.0mA | 10.0mA |
| 50MHz: | 6.0mA | 14.0mA |
| Output Load (CMOS): | 15pF | |
| Start-up Time: | 5ms max. | |
| Rise/Fall Time: | 10ns typical | |
| Duty Cycle: | 60/40% | |
| Ageing first year: | ±5ppm max. at 25°C | |
| Ageing: | ±100ppm max. at 200°C | |
| Shock Survival | | |
| Standard: | 3,000g, 0.3ms, ½ sine | |
| HG version: | 10,000g, 0.3ms, ½ sine | |
| Vibration Survival: | 20g, 10~2000Hz swept sine | |
| Operating Temp. Range: | -55°C to 225°C | |

PACKAGING OPTIONS

CCXOXHT oscillators are available either tray packed <250pcs, or tape and reel >250 pieces.
16mm tape, 178mm or 330mm reels (EIA 418).



OUTLINE & DIMENSIONS



ENABLE/DISABLE OPTIONS (E/N)

CXOXHT oscillators have two enable/disable options, designated E & N. The E version has a tristate output and stops oscillating internally when the output is placed in a high Z state. The N version does not have the control pin, Pin1, connected internally so there is no enable/disable function with this option.

ENABLE/DISABLE OPTION E - FUNCTION TABLE

| | Enable (Pin1 High*) | Disable (Pin 1 Low) |
|------------|---------------------|---------------------|
| Output | Frequency Output | High Z state |
| Oscillator | Oscillates | Stops |
| Current | 500µA @25°C | 3.2µA @25°C |

*When Pin 1 is allowed to float it is held by an internal pull-up resistor

HOW TO ORDER CXOXHT OSCILLATORS

