



CXOQ/CXOQHG OSCILLATORS

Ultra-Miniature Precision Oscillator

400kHz to 100MHz

FEATURES

- **High shock survivability**
- **High frequency stability**
- Low acceleration sensitivity (HG version)
- **CMOS** and TTL compatible
- Low power consumption
- Full military testing per MIL PRF 55310 available
- Optional enable/disable
- Low EMI emission
- Hermetically sealed ceramic package

DESCRIPTION

CXOQ oscillators are ultra-miniature, surface mount units packaged in a 2.50 x 2.00 x 0.89mm package. The oscillators are capable of withstanding high shock environments. The design and build standard including availability of full 'MIL' testing ensures great reliability. 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.

Frequency Range: 400kHz to 100.0MHz Supply Voltage: 1.8V to +3.3 Volts ±10% Calibration Tolerance: ±100ppm to ±30ppm

Frequency Stability

Vibration Survival:

over Operating Temperature Range

Commercial (0° \sim +70°C): ±50ppm ±100ppm Industrial(- $40^{\circ} \sim +85^{\circ}$ C): Military (-55° $\sim +125$ °C): ±100ppm

Typical Current Consumption +1.8V+3.3V

24MHz: 1.5mA 3.0mA 32MHz: 2.0mA 5.0mA 50MHz: 3.0mA 6.0mA

20g, 10~2000Hz swept sine

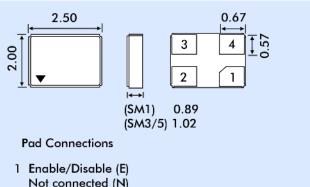
Output Load: 15pF Start-up Time: 5ms max. Rise and Fall Time: 10ns maximum Duty Cycle: 45/55%

Ageing First Year: ±5ppm maximum.

Shock, Survival: Standard: 5000g, 0.3ms, 1/2 sine HG: 20,000g, 0.3ms, 1/2 sine

Maximum Process Temperature: 260°C for 20 seconds

OUTLINE & DIMENSIONS



Not connected (N)

- 2 Ground
- 3 Output
- 4 Supply Voltage

ENABLE/DISABLE OPTIONS

There are two Enable/Disable options available, 'E' and 'N'. The 'E' option stops oscillating when the output is put into the High Z state. the 'N' version does not have Pad 1 connected internally, the table below describes the 'E' Enable/Disable option.

		Enable (Pad 1 High)	Disable (Pad 1 Low)
	Output	Frequency Output	High Z state
	Oscillator	Oscillates	Stops
	Current	Normal	Very Low

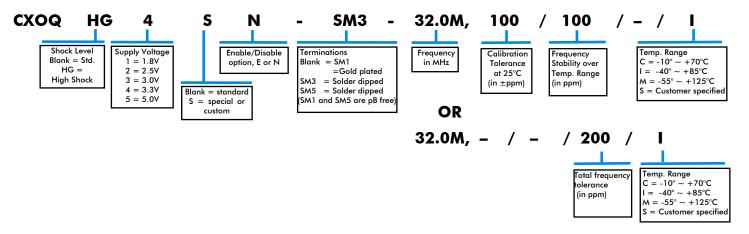
When Pad 1 is allowed to float it is held high by an internal pull-up resistor.

PACKAGING OPTIONS

CXOQ oscillators are available either tray packed (<250pcs) or tape and reel (>250 pieces).

12mm tape, 178mm or 330mm reels (EIA 418).

HOW TO ORDER CXOQ OSCILLATORS



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