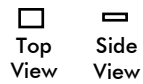


FEATURES

- Fast start-up
- Tight tolerance
- High shock resistance
- Optional Enable/Disable with Tri-State
- Low EMI emission
- Full military testing available
- Hermetically sealed package

Actual Size



DESCRIPTION

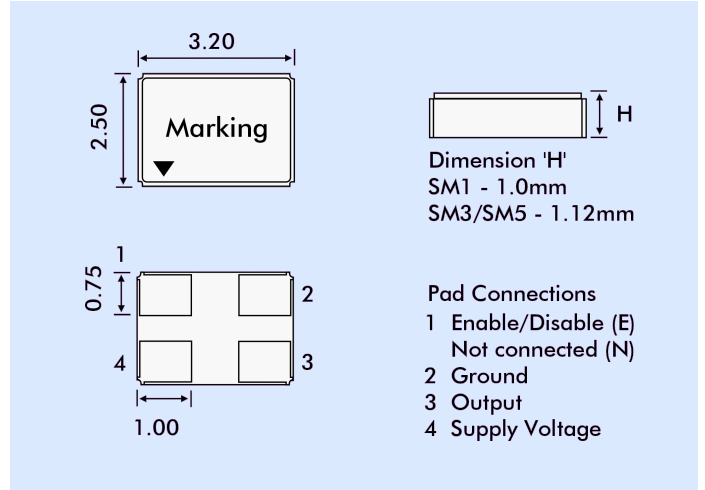
CXOX oscillators are 32.768kHz, ultra-miniature, surface mount units packaged in a 3.40 x 2.50 x 1.12mm package. The oscillators have been designed to provide a fast start-up time with tight frequency stability over a wide operating temperature range of -55° to +125°C. The design of the part ensures there is a significantly greater ability to withstand significantly higher shock levels than standard tuning fork crystal designs.

SPECIFICATION

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

Frequency:	32.768kHz
Supply Voltage:	+3.3 Volts ±10%
Calibration Tolerance:	±25ppm
Frequency Stability over Operating Temperature Range	
Commercial (0° ~ +70°C):	±10 to ±50ppm
Industrial(-40° ~ +85°C):	±20 to ±100ppm
Military (-55° ~ +125°C):	±50 to ±100ppm
Typical Input Current:	650µA
Output Load:	15pF (CMOS)
Rise Time:	85ns typical, 160ns maximum
Fall Time:	45ns typical, 100ns maximum
Duty Cycle:	45/55%
Ageing First Year:	±5ppm
Shock, Survival:	Standard: 5000g, 0.3ms, ½ sine HG: 10,000g, 0.3ms, ½ sine
Vibration Survival:	20g, 10~2000Hz swept sine
Maximum Process Temperature:	260°C for 20 seconds
Storage Temperature:	-55° to +125°C

OUTLINE & DIMENSIONS



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 Oscillator	Frequency Oscillates	High Z state Stops
Current	Normal	Very Low

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

PACKAGING OPTIONS

CXOX oscillators are available either tray packed (<250pcs) or tape and reel (>250 pieces).
12mm tape, 178mm or 330mm reels (EIA 418).

HOW TO ORDER CXOX 32.768kHz SMD CRYSTAL OSCILLATORS

