



Description

- Temperature compensated crystal oscillator in a ceramic package with a metal lid, not hermetically sealed
- Model IQXT-170
- Model Issue number 1

Frequency Parameters

- Frequency 16.3680MHz
- Frequency Tolerance @ 25°C INCLUSIVE
- Frequency Stability $\pm 1.00\text{ppm}$
- Operating Temperature Range -30.00 to 85.00°C
- Ageing $\pm 1\text{ppm}$ max per year
- Supply Voltage Variation (@ $\pm 5\%$): $\pm 0.2\text{ppm}$ max
- Load Variation (@ $\pm 10\%$): $\pm 0.1\text{ppm}$ max

Electrical Parameters

- Supply Voltage 3.0V
- Supply Voltage Tolerance $\pm 5\%$
- Current Draw 2.00mA max

Output Details

- Output Compatibility Clipped Sine
- Output Load 10k Ω /10pF

Output Levels

- 0.8V pk-pk min

Noise Parameters

- Harmonics: -5dBc max

Environmental Parameters

- Vibration: 1.5mm amplitude, 10Hz-55Hz-10Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)
- Storage Temperature Range: -40 to 85°C
- Drop: A test piece (100g) made of teflon is dropped 3 cycles (1 cycle: 6 directions) from a height of 150cm onto a hard board

Compliance

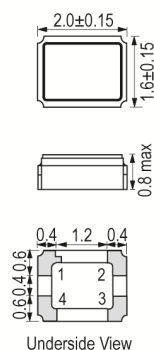
- RoHS Status Compliant
- REACH Status Compliant

Packaging

- Pack Type: Reel Tape & reel in accordance with EIA-481-D 4,000
- Alternative packing option available

This document is correct at the time of printing; please contact your local office for the latest version.

Outline (mm)

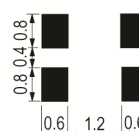


Pad Connections

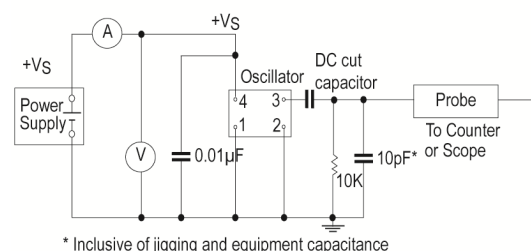
- GND
- GND
- Output
- +Vs

Notes: a 0.01 μF capacitor between Vs & GND is recommended.
Connect a DC-cut capacitor $\geq 1\text{nF}$ to the line-out terminal of the oscillator

Solder Pad Layout



Test Circuit



* Inclusive of jigging and equipment capacitance

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