


Description

- 32.768kHz miniature 2 x 1.6mm crystal oscillator in an hermetically sealed ceramic package with a seam sealed metal lid.
- Model IQXO-402
- Model Issue number 2

Frequency Parameters

- Frequency 32.7680kHz
- Frequency Stability $\pm 100.00\text{ppm}$
- Operating Temperature Range -40.00 to 125.00°C
- Ageing $\pm 3\text{ppm max per year @ } 25^\circ\text{C}$

Electrical Parameters

- Supply Voltage $3.3\text{V} \pm 10\%$
- Current Draw 0.200mA

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF
- Rise and Fall Time 100.0ns max
- Duty Cycle $40/60\%$

Output Control

- E/D Operation:
Logic '1' ($\geq 70\%V_s$) to pad 1 enables oscillator output
Logic '0' ($\leq 30\%V_s$) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state.
No connection to pad 1 enables oscillator output.
- Standby Current (pad 1 at logic '0'):
 $10\mu\text{A max @ } -40+85^\circ\text{C}$
 $20\mu\text{A max @ } -40+125^\circ\text{C}$

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock : 1500G , 0.5ms , 3 times for each surface, total 18 times.
- Vibration: Frequency range: $20\sim 2000\text{Hz}$, peak to peak amplitude 1.52mm , peak acceleration: 20G (196m/s^2), 3 directions (X, Y,Z), each cycle: 20min , 4 cycles for each direction.

Manufacturing Details

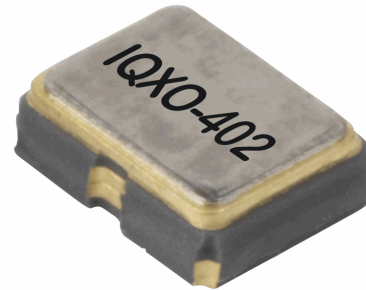
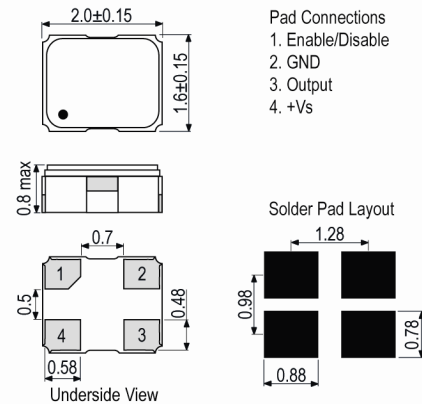
- RoHS Terminations Au over Ni
- RoHS Reflow Temp $260^\circ\text{C max for } 10\text{s max}$

Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 3,000
- *Alternative packing option available*


Outline (mm)


- Pad Connections**
1. Enable/Disable
 2. GND
 3. Output
 4. +Vs

Solder Pad Layout
Sales Office Contact Details:

UK: +44 (0)1460 270200

Germany: 0800 1808 443

France: 0800 901 383

USA: +1.760.318.2824

 Email: info@iqdfrequencyproducts.com

 Web: www.iqdfrequencyproducts.com