

### Customer Part:



#### Description

- Standard 2 x 1.6mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid
- Model IQXO-540
- Model Issue number 3

#### Frequency Parameters

- Frequency 8.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 5\text{ppm}$  max per year @  $25^\circ\text{C}$

#### Electrical Parameters

- Supply Voltage  $3.3\text{V} \pm 10\%$
- Current Draw  $4.000\text{mA}$

#### Output Details

- Output Compatibility CMOS
- Drive Capability  $15\text{pF}$  max
- Rise and Fall Time  $5.0\text{ns}$  max
- Duty Cycle  $45/55\%$
- Start up time:  $10\text{ms}$  max.  
 $0.7\text{ms}$  typ to 90% of final amplitude (under ideal conditions @  $25^\circ\text{C}$ )

#### Output Control

- Standby 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:  $10\mu\text{A}$  max,  $1.0\mu\text{A}$  typ @  $25^\circ\text{C}$

#### Environmental Parameters

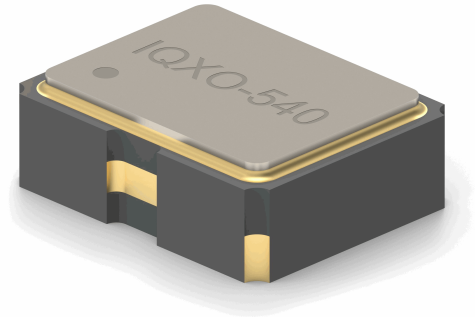
- Impact: Weight of 10G dropped to centre of part from a height of 6mm
- Storage Temperature Range:  $-40$  to  $85^\circ\text{C}$
- Vibration: IEC 60068-2-6:  $1.5\text{mm}$  amplitude,  $10\text{Hz}$ - $55\text{Hz}$ ,  $1\text{min}$  in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)
- RoHS Terminations
- RoHS Reflow Temp  $250^\circ\text{C}$  max for 10s max

#### Compliance

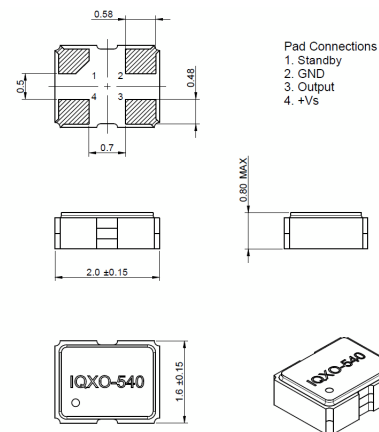
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

#### Packaging Details

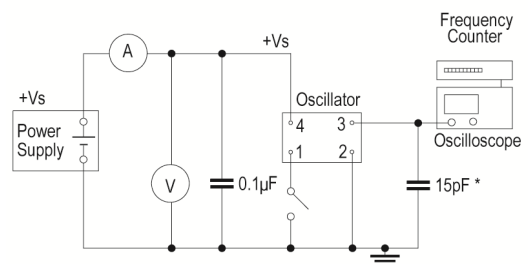
- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Alternative packing option available



#### Outline (mm)



#### Test Circuit



\* Inclusive of jigging and equipment capacitance

#### Sales Office Contact Details:

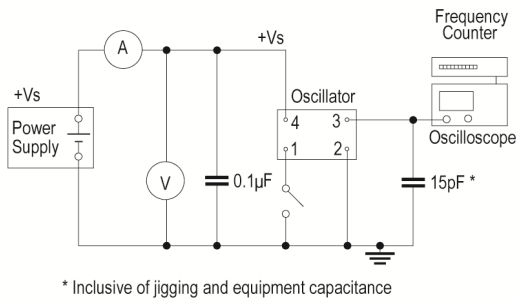
UK: +44 (0)1460 270200  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

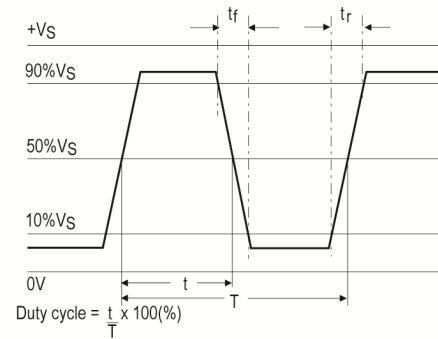
Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

## Customer Part:

## Test Circuit



## Wave Form



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