

## Customer Part:



### Description

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

### Frequency Parameters

- Frequency 24.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 5\text{ppm}$

### Electrical Parameters

- Supply Voltage  $3.3\text{V} \pm 10\%$
- Current Draw 7.000mA
- Standby Current: 10 $\mu\text{A}$  max (pad 1 at logic '0')

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 5.0ns max
- Duty Cycle 45/55%

### 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

### Environmental Parameters

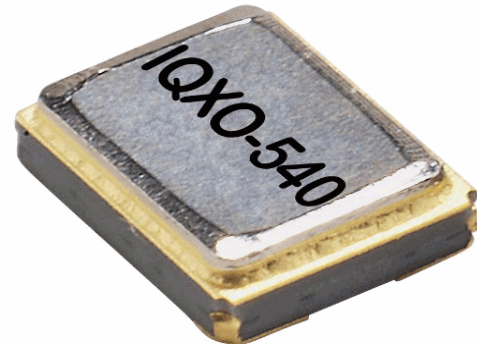
- Impact: Weight of 10G dropped to centre of part from a height of 6mm
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)
- Storage Temperature Range:  $-40$  to  $85^\circ\text{C}$
- RoHS Terminations
- RoHS Reflow Temp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

### Compliance

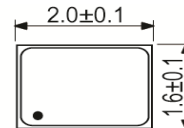
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

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

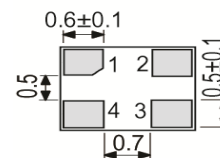
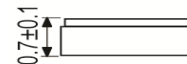


### Outline (mm)



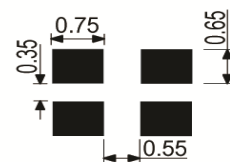
### Pad Connections

- Standby Operation
- GND
- Output
- +Vs

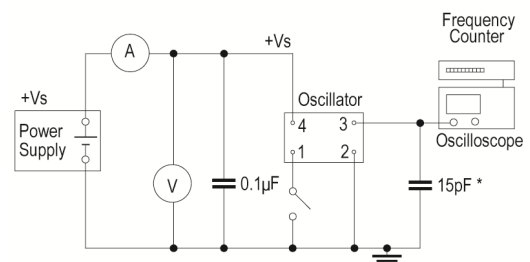


Underside View

### Solder Pad Layout



### Test Circuit



\* Inclusive of jigging and equipment capacitance

### Sales Office Contact Details:

UK: +44 (0)1460 270200

France: 0800 901 383

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

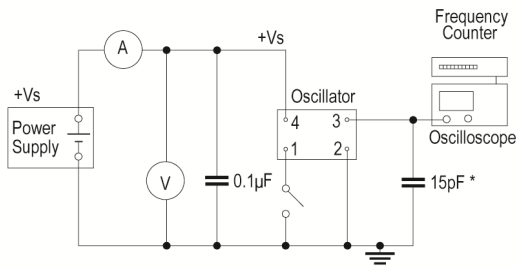
Germany: 0800 1808 443

USA: +1.760.318.2824

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

**Customer Part:**

**Test Circuit**



\* Inclusive of jigging and equipment capacitance

**Wave Form**



**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)