



## Description

- Standard 2 x 1.6 crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed
- Model IQXO-542
- Model Issue number 2

## Frequency Parameters

- Frequency 19.440MHz
- Frequency Stability  $\pm 50.00$ ppm
- Operating Temperature Range  $-40.00$  to  $85.00$ °C
- Ageing  $\pm 5$ ppm

## Electrical Parameters

- Supply Voltage  $1.8V \pm 10\%$
- Current Draw 3.000mA
- Standby Current: 10µA 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  $85$ °C

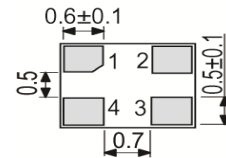
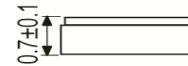
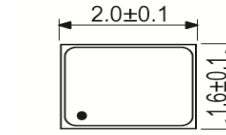
## Compliance

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

## Packaging Details

- Pack Style: Bulk Loose in bulk pack  
Pack Size: 100
- Alternative packing option available

## Outline (mm)

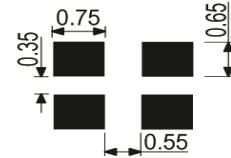


Underside View

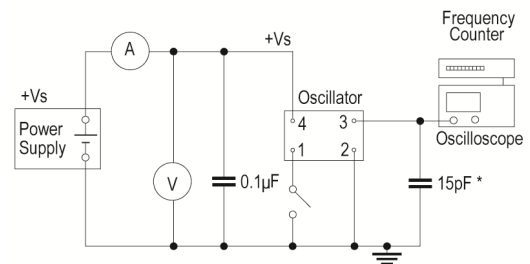
## Pad Connections

- Standby Operation
- GND
- Output
- +Vs

## Solder Pad Layout



## Test Circuit



\* Inclusive of jiggging and equipment capacitance

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