


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 3

Frequency Parameters

- Frequency 24.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$
- Operating Temperature Range -20.00 to 70.00°C
- Ageing $\pm 5\text{ppm}$

Electrical Parameters

- Supply Voltage $1.8\text{V} \pm 10\%$
- Current Draw 5.000mA

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 5.0ns max
- Duty Cycle $45/55\%$
- Start up Time: 10ms max.
 1.1ms typ to 90% of final amplitude (Under ideal conditions @ 25°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, $0.6\mu\text{A}$ typ @ 25°C

Environmental Parameters

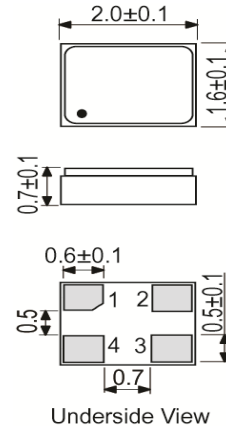
- Impact: Weight of 10g dropped to centre of part from a height of 6mm
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)
- Storage Temperature Range: -40 to 85°C

Compliance

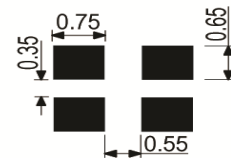
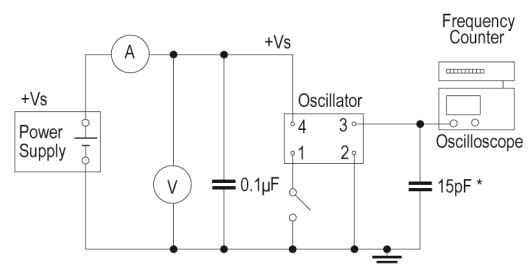
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: **Cutt** In tape, cut from a reel
 Pack Size: 100
- *Alternative packing option available*

Outline (mm)

Pad Connections

1. Standby Operation
2. GND
3. Output
4. +Vs

Solder Pad Layout

Test Circuit


* Inclusive of jigging and equipment capacitance

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