


Description

- Standard 1.6 x 1.2mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.
- Model IQXO-642
- Model Issue number 4

Frequency Parameters

- Frequency 24.0MHz
- Frequency Stability ± 50.00 ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ± 5 ppm max/yr @ 25°C

Electrical Parameters

- Supply Voltage 1.8V $\pm 10\%$
- Current Draw 4.000mA

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 4.5ns max
- Duty Cycle 45/55%
- Output Voltage Low (Vol): 10%Vs max
Output Voltage High (Voh): 90%Vs min

Output Control

- Standby Operation:
Logic '1' ($\geq 70\%$ Vs) to pad 1 enables oscillator output.
Logic '0' ($\leq 30\%$ Vs) 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: 10µA max

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: IEC 60068-2-27: 1000g, 1ms, 3 times in each of 3 mutually perpendicular planes.
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs).

Manufacturing Details

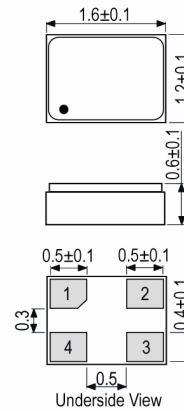
- RoHS Terminations W($15 \pm 4\mu\text{m}$), Ni($8 \sim 20\mu\text{m}$), Au($0.2 \sim 260 \pm 5^\circ\text{C}$ for 5s max)

Compliance

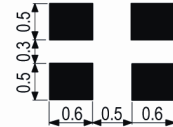
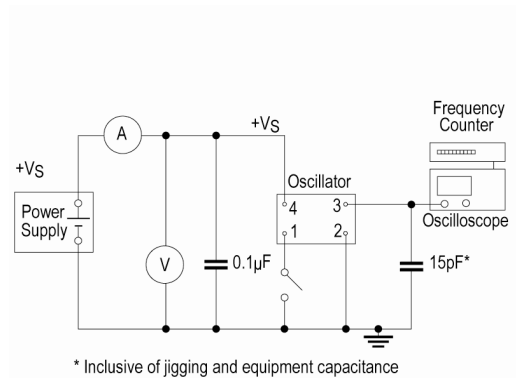
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: *Cutt* Cut tape
Pack Size: 100
- Alternative packing option available*

Outline (mm)


- Pad Connections
- Standby Operation
 - GND
 - Output
 - +Vs

Solder Pad Layout

Test Circuit

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