

## Customer Part:



### Description

- Standard 1.6 x 1.2mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.
- Model IQXO-640
- Model Issue number 4

### Frequency Parameters

- Frequency 50.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 5\text{ppm max/yr @ } 25^\circ\text{C}$

### Electrical Parameters

- Supply Voltage  $3.3\text{V} \pm 10\%$
- Current Draw 8.000mA

### 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' ( $\geq 70\%V_s$ ) 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

### Environmental Parameters

- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- 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 (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: 3,000
- Alternative packing option available

### Outline (mm)

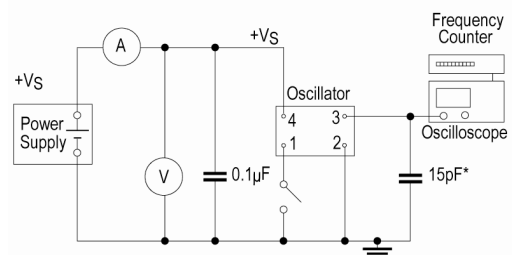


- Pad Connections
- Standby Operation
  - GND
  - Output
  - +Vs

### Solder Pad Layout



### Test Circuit



\* Inclusive of jigging and equipment capacitance

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