


**Description**

- Voltage controlled crystal oscillator in a ceramic package with a hermetically sealed metal lid
- Model IQXV-50
- Model Issue number 1

**Frequency Parameters**

- Frequency 2.0840MHz
- Frequency Stability  $\pm 25.00\text{ppm}$
- Operating Temperature Range 0.00 to 70.00°C
- Ageing (@ 25°C):  $\pm 3\text{ppm max}$

**Electrical Parameters**

- Supply Voltage 5.0V  $\pm 5\%$
- Current Draw 10.00mA

**Frequency Adjustment**

- Pulling  $\pm 100\text{ppm min}$
- Control Voltage 2.5V  $\pm 2.0\text{V}$
- Input Impedance 100k $\Omega$  min
- Linearity:  $\pm 10\%$  max

**Output Details**

- Output Compatibility HCMOS
- Drive Capability 15pF max
- Rise and Fall Time 10.0ns max
- Duty Cycle 45/55%
- Start Up Time: 10ms max

**Output Control**

- Standby Operation:  
 Logic '1' (>70% Vs) to pad 2 enables oscillator output  
 Logic '0' (<30% Vs) to pad 2 disables oscillator output: when disabled the oscillator output goes to the high impedance state  
 No connection pad 2 enables oscillator output

**Output Levels**

- VoH: >90% of Vs
- VoL: <10% of Vs

**Noise Parameters**

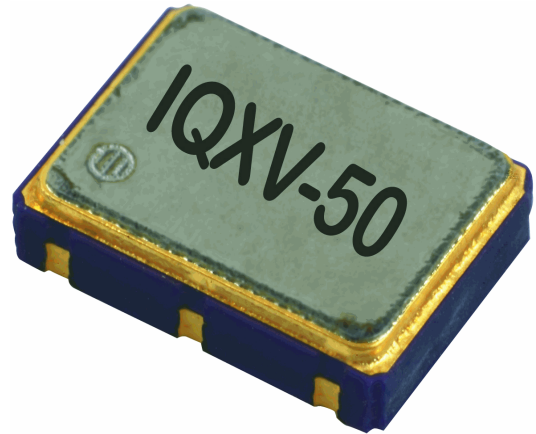
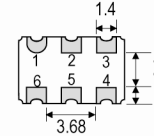
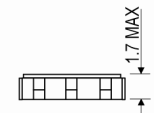
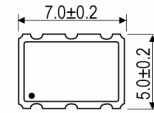
- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

**Environmental Parameters**

- Storage Temperature Range: -55 to 125°C
- Vibration: 1.5mm amplitude, 10-55-10Hz, full sine wave, 2mins in 3 mutually perpendicular planes, duration 2hrs in each plane
- Drop: 1.2m drop (3 times) onto a hard surface

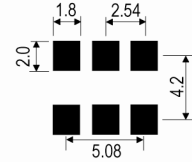
**Compliance**

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


**Outline (mm)**


Underside View

- Pad Connections
1. Voltage Control
  2. Standby Operation
  3. GND
  4. Output
  5. N/C
  6. +Vs

**Solder Pad Layout**

**Sales Office Contact Details:**

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

#### Packaging Details

- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 1
- *Alternative packing option available*

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