


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 12.0MHz
- Frequency Stability $\pm 50.00\text{ppm}$
- Operating Temperature Range -40.00 to 85.00°C
- Ageing (@ 25°C): $\pm 3\text{ppm max}$

Electrical Parameters

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

Frequency Adjustment

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

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' ($>70\% V_s$) to pad 2 enables oscillator output
Logic '0' ($<30\% V_s$) 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: $>90\% \text{ of } V_s$
- VoL: $<10\% \text{ of } V_s$

Noise Parameters

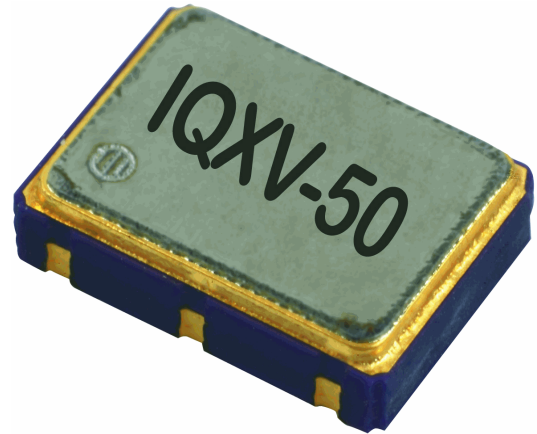
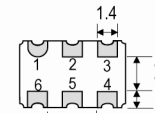
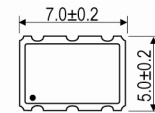
- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

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

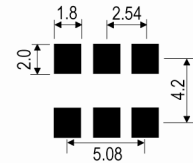
Compliance

- 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:

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

Packaging Details

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

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