



ISSUE 1; January 2015 - RoHS 2011/65/EU

Description

- Voltage controlled crystal oscillator in a ceramic package with a hermetically sealed metal lid

Frequency Parameters

- Frequency 4.0MHz to 54.0MHz
- Frequency Stability $\pm 20.00\text{ppm}$ to $\pm 50.00\text{ppm}$
- Ageing (@ 25°C): $\pm 3\text{ppm}$ max

Electrical Parameters

- Supply Voltage 2.5V $\pm 5\%$

Frequency Adjustment

- Pulling $\pm 50\text{ppm}$ min
- Control Voltage 1.25V $\pm 1.25\text{V}$
- Input Impedance 5M Ω min
- Linearity: 10% max

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF max
- Start Up Time: 10ms max

Output Levels

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

Noise Parameters

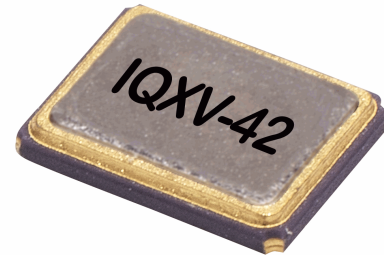
- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

Environmental Parameters

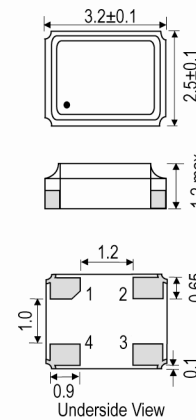
- Storage Temperature Range: -55 to 125°C
- Drop: 1.2m drop (3 times) onto a hard surface
- Vibration: 1.5mm amplitude, 10-55-10Hz, full sine wave, 2mins in 3 mutually perpendicular planes, duration 2hrs in each plane

Ordering Information

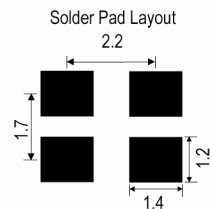
- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Pullability
- (*minimum required)
- Example
10.0MHz IQXO-42
HCMOS $\pm 50\text{ppm}$ -40 to 85C 2.5V $\pm 50\text{ppm}$ min



Outline (mm)



Pad Connections
1. Voltage Control
2. GND
3. Output
4. +Vs



Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: +49 (0) 30 408 192 300

France: +33 (0)5 34 50 91 18
USA: +1 408.273.4530

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com



Compliance

- RoHS Status Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Electrical Specification - maximum limiting values 2.5V $\pm$ 5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
4.0MHz	54.0MHz	0 to 70 -40 to 85	$\pm$ 20.0 $\pm$ 50.0	7 7	10 10	45/55 45/55

This document was correct at the time of printing; please contact your local sales office for the latest version.

[Click to view latest version on our website.](#)

Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: +49 (0) 30 408 192 300

France: +33 (0)5 34 50 91 18
USA: +1 408.273.4530

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com