

ISSUE 1; July 2016

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

Output Levels

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

Noise Parameters

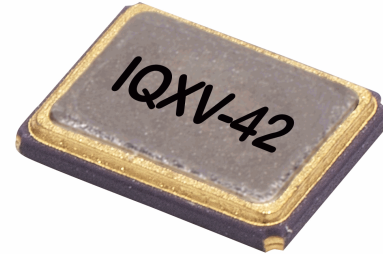
- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

Environmental Parameters

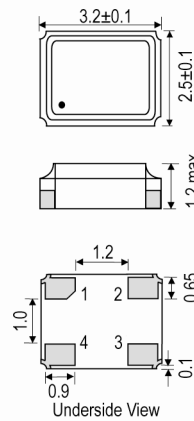
- Storage Temperature Range: -55 to 125°C
- Drop: 1.2m drop (3 times) onto a hard surface
- Vibration: 1.5mm amplitude, 10-55-10Hz, full sine wave, 2mins in 3 mutually perpendicular planes, duration 2hrs in each plane

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

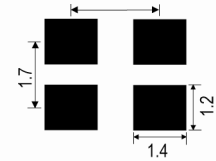


Outline (mm)



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

Solder Pad Layout



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Compliance

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

Packaging Details

- 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	\pm 20.0	7	10	45/55%
		-40 to 85	\pm 50.0	7	10	45/55%

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