

ISSUE 1; July 2016

### Description

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



### Frequency Parameters

- Frequency: 1.25MHz 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: 3.3V  $\pm 5\%$

### Frequency Adjustment

- Pulling:  $\pm 50\text{ppm}$  min
- Control Voltage: 1.65V  $\pm 1.65\text{V}$
- Input Impedance: 100k $\Omega$  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

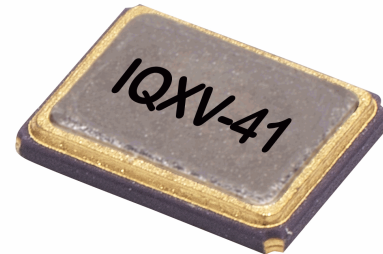
- Period Jitter (pk-pk): 100ps max
- Period Jitter (one sigma): 25ps max

### Environmental Parameters

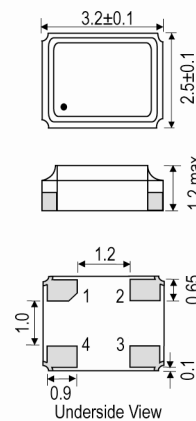
- Storage Temperature Range: -55 to 125°C
- Drop: 1.2m drop (3 times) onto a hard surface
- Vibration: 1.5mm amplitude, 10-55-10Hz, full sine wave, 2mins in 3 mutually perpendicular planes, duration 2hrs in each plane

### Ordering Information

- Frequency\*
- Model\*
- Output
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage
- Pullability
- (\*minimum required)
- Example
- 10.0MHz IQXV-41
- HCMOS  $\pm 50\text{ppm}$  -40 to 85C 3.3V  $\pm 50\text{ppm}$  min



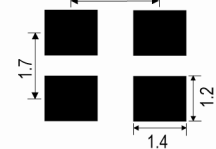
### Outline (mm)



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 3.3V ±5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.25MHz	54.0MHz	0 to 70	±20.0	10	10	45/55%
		-40 to 85	±50.0	10	10	45/55%

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

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