

ISSUE 1; July 2017

### Description

- Standard 5 x 3.2mm Voltage Controlled Crystal Oscillator Ceramic package with a seam sealed metal lid, hermetically sealed
- For higher frequencies up to 125MHz please contact our sales offices

### Frequency Parameters

- Frequency: 1.25MHz to 80.0MHz
- Frequency Stability:  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$

### Electrical Parameters

- Supply Voltage:  $2.8\text{V} \pm 5\%$

### Frequency Adjustment

- Pulling:  $\pm 100\text{ppm}$  min
- Control Voltage:  $1.4\text{V} \pm 1.4\text{V}$
- Input Impedance:  $100\text{k}\Omega$  typ
- Linearity:  $\pm 10\%$  max, positive sense
- Modulation Bandwidth:  $20\text{kHz}$  min

### Operating Temperature Ranges

- 10 to  $70^\circ\text{C}$
- 40 to  $85^\circ\text{C}$

### Output Details

- Output Compatibility: HCMOS
- Drive Capability:  $15\text{pF}$  max
- 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 to pad 2 enables oscillator output

### Environmental Parameters

- Storage Temperature Range:  $-40$  to  $85^\circ\text{C}$

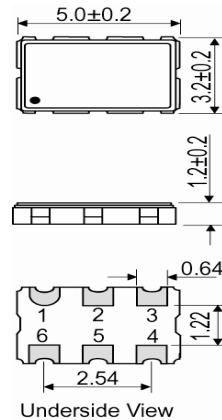
### Ordering Information

- Frequency\*
- Model\*
- Output
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage
- Pullability\*
- Example
- 10.0MHz IQXV-22
- HCMOS  $\pm 50\text{ppm}$  -10 to  $70^\circ\text{C}$   $2.8\text{V} \pm 100\text{ppm}$  min

### Compliance

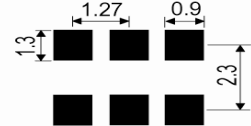
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Outline (mm)

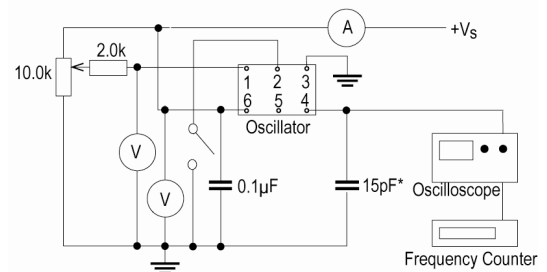


- Pad Connections
- Voltage Control
  - Tri-State Operation
  - GND
  - Output
  - N/C
  - +Vs

### Solder Pad Layout

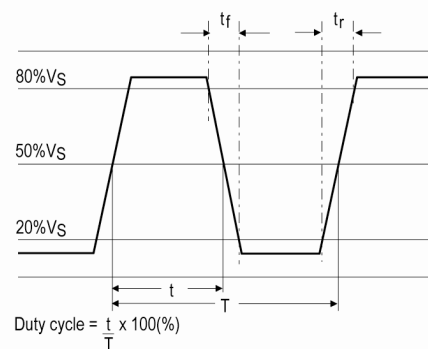


### Test Circuit



\*Inclusive of jigging and equipment capacitance

### Wave Form



### Sales Office Contact Details:

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Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
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#### Packaging Details

- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 100
- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000

#### Electrical Specification - maximum limiting values 2.8V $\pm$ 5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.25MHz	30.0MHz	-10 to 70 -40 to 85	$\pm$ 25.0 $\pm$ 25.0	15 15	5 5	40/60% 40/60%
30.000001MHz	52.0MHz	-10 to 70 -40 to 85	$\pm$ 25.0 $\pm$ 25.0	25 25	5 5	40/60% 40/60%
52.000001MHz	80.0MHz	-10 to 70 -40 to 85	$\pm$ 25.0 $\pm$ 25.0	35 35	5 5	40/60% 40/60%

*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.](#)

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