

ISSUE 1; February 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: 3.3V $\pm 5\%$

Frequency Adjustment

- Pulling: $\pm 100\text{ppm}$ min
- Control Voltage: 1.65V $\pm 1.5\text{V}$
- Input Impedance: 100k Ω typ
- Linearity: $\pm 10\%$ max, positive sense
- Modulation Bandwidth: 20kHz min

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: HCMOS
- Drive Capability: 15pF 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°C

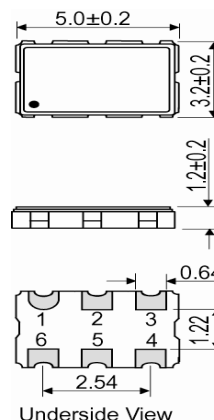
Ordering Information

- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Pullability*
- Example
- 10.0MHz IQXV-21
- HCMOS $\pm 50\text{ppm}$ -10 to 70C 3.3V $\pm 100\text{ppm}$ min

Compliance

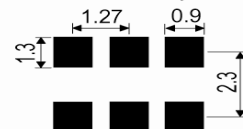
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Outline (mm)

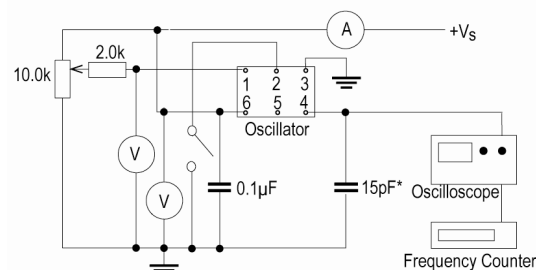


- Pad Connections
- Voltage Control
 - Tri-State Operation
 - GND
 - Output
 - N/C
 - +V_s

Solder Pad Layout

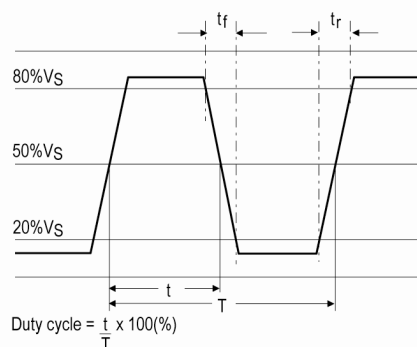


Test Circuit



*Inclusive of jigging and equipment capacitance

Wave Form



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

Electrical Specification - maximum limiting values 3.3V \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.](#)

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