

ISSUE 10; November 2015

Description

- Voltage Controlled Crystal Oscillator (VCXO) in a 14-pin DIL hermetically sealed package

Frequency Parameters

- Frequency 1.0MHz to 90.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$ to $\pm 50.00\text{ppm}$
- Modulation Bandwidth: $>15\text{kHz}$

Electrical Parameters

- Supply Voltage 5.0V $\pm 0.25\text{V}$

Frequency Adjustment

- Pulling $\pm 100\text{ppm}$ min
- Control Voltage 2.5V $\pm 2.0\text{V}$

Operating Temperature Ranges

- -20 to 70°C
- 0 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility HCMOS/LSTTL
- Drive Capability 15pF/10LSTTL

Environmental Parameters

- Storage Temperature Range: -40 to 85°C
- Shock: 981m/s², 6ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: 0.76mm amplitude, 10Hz-55Hz, sweep 1min in 3 mutually perpendicular planes, duration 2hrs each plane
- Solderability: MIL-STD-202E, Method 208C
- Rapid Change of Temperature over Operating Temperature Range: 10 cycles
- Terminal Strength: 0.91kg max. force perpendicular to top and bottom
- Hermetic Seal: Not to exceed 1x10⁻⁸mBar litres of Helium leakage

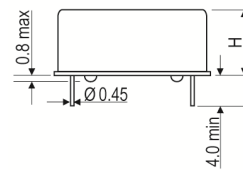
Ordering Information

- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Pullability (*minimum required)
- Example
20.0MHz IQVCXO-161
HCMOS $\pm 50\text{ppm}$ 0 to 70C 5.0V $\pm 100\text{ppm}$ min

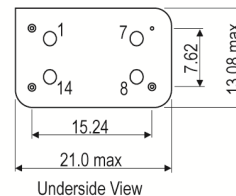
Compliance

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

Outline (mm)



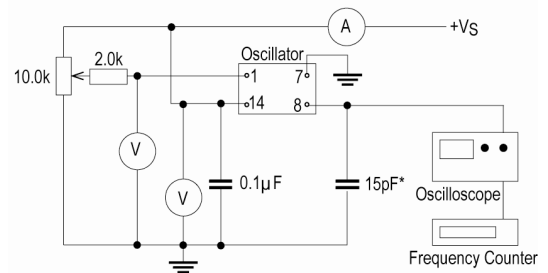
Pin Connections
 1. Voltage Control
 7. GND
 8. Output
 14. +VS



Frequency Range Height (H)
 1.0 to < 30.0MHz 5.1 max
 30.0 to 90.0MHz 8.0 max

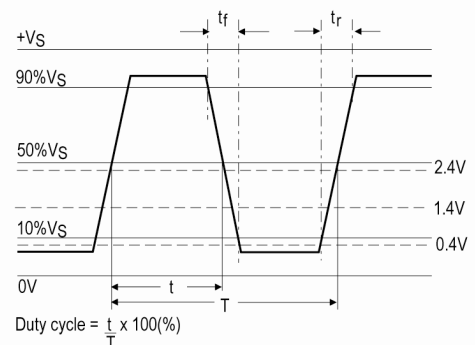


Test Circuit



*Inclusive of jiggig and equipment capacitance

Wave Form



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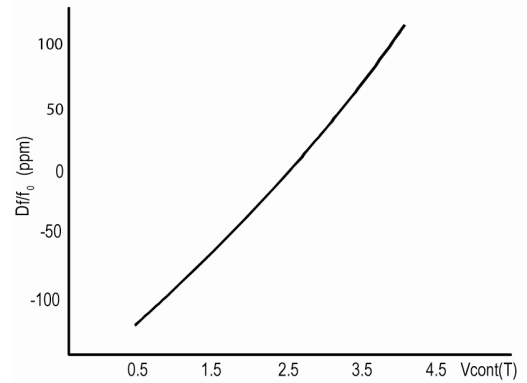
Email: info@iqdfrequencyproducts.com

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Packaging Details

- Pack Style: Bulk Loose in bulk pack
- Pack Size: 25

Typical Voltage Control Curve @ 25°C & 20.0MHz



Electrical Specification - maximum limiting values 5.0V ±0.25V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	23.999999MHz	0 to 70	±25.0	15	10	40/60%
		-20 to 70	±25.0	15	10	40/60%
24.0MHz	29.999999MHz	0 to 70	±25.0	40	10	40/60%
		-20 to 70	±25.0	40	10	40/60%
30.0MHz	90.0MHz	0 to 70	±25.0	30	5	40/60%
		-20 to 70	±25.0	30	5	40/60%
		-40 to 85	±25.0	30	5	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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