IQVCXO-161 LEADED VCXO

ISSUE 10; 1 NOVEMBER 2010 - RoHS 2002/95/EC

Description

- Standard 14pin DIL package Voltage Controlled Crystal Oscillator
- Crystal oscillator in a 14pin DIL package hermetically sealed

Frequency Range

- 1 to 90MHz

Output Compatibility & Load

- HCMOS/TTL
- Drive Capability: 15pF/10TTL max

Frequency Stabilities

- ±25ppm, ±50ppm @ Vc = 2.5V (inclusive of supply voltage and output load variations over the operating temperature range)

Operating Temperature Ranges

- 0 to 70°C
- –20 to 70°C
- –40 to 85°C (available 30 to 90MHz only)

Voltage Control (pin 1)

- 2.5V ±2.0V

Pullability

- ±100ppm min

Modulation Bandwidth

- >15kHz

Storage Temperature Range

- –40 to 85°C

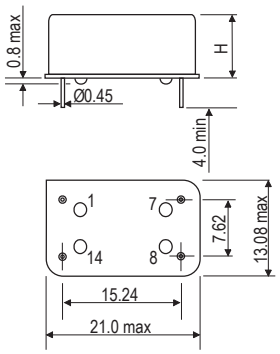
Environmental

- Terminal Strength: 0.91kg max. force perpendicular to top and bottom
- Hermetic Seal: not to exceed 1 x 10^{-8} mBar litres of Helium leakage
- Solderability: MIL-STD-202E, Method 208C
- Vibration: 10 to 55Hz 0.76mm displacement, sweep 60 seconds, duration 2 hours
- Rapid Change of Temperature over Operating Temperature Range: 10 cycles
- Shock: 981m/s2 for 6ms, three shocks in each direction along the three mutually perpendicular planes

Packaging

- Loose in bulk pack, 25pcs per tube

Outline (mm)

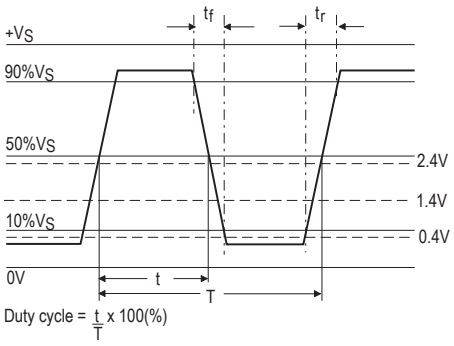


Pin Connections
1. Voltage Control
7. GND
8. Output
14. +VS

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

Underside View

Output Waveform



Ordering Information (*minimum required)

- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Pullability

Example

- 20.0MHz IQVCXO-161
  HCMOS ±50ppm 0 to 70C 5.0V ±100ppm min

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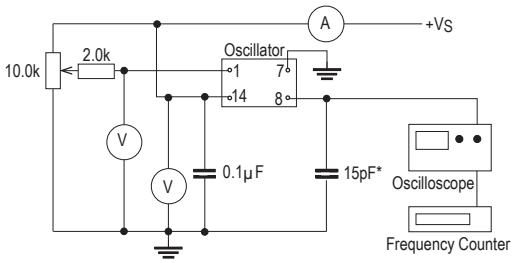
Electrical Specification - maximum limiting value

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Pullability	Rise Time (t_r) (10-90%)	Fall Time (t_f) (90-10%)	Duty Cycle	Model Number
1.0 to < 24.0MHz	±25ppm ±50ppm	5.0 ±0.25V	15mA	±100ppm min	10ns	10ns	40/60%	IQVCXO-161
24.0 to < 30.0MHz			40mA					
30.0 to 90.0MHz			30mA		5ns	5ns		
Note: For other frequency / specification combinations, please contact our sales offices								

Typical Voltage Control Curve @25°C & 20.0MHz

Test Circuit



*Inclusive of jigging and equipment capacitance