

# IQVCXO-172, -173 LEADED VCXOs

ISSUE 12; 1 NOVEMBER 2008 - RoHS 2002/95/EC

Outline (mm)

## Description

- A 14-pin DIL voltage controlled crystal oscillator (VCXO) in a hermetically sealed metal package

## Package Outline

- 14-pin DIL

## Frequency Range

- 1 to 45MHz

## Output Compatibility & Load

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

## Frequency Stabilities

- $\pm 25\text{ppm}$ ,  $\pm 50\text{ppm}$  @  $V_c = 2.5\text{V}$  (inclusive of supply voltage and output load variations over the operating temperature range)

## Operating Temperature Ranges

- 0 to 70°C (IQVCXO-172, -173)
- -40 to 85°C (IQVCXO-172I, -173I)

## Storage Temperature Range

- -55 to 125°C

## Voltage Control (pin 1)

- 2.5V  $\pm 2.0\text{V}$

## Pullability

- $\pm 50\text{ppm}$  min (IQVCXO-172)
- $\pm 100\text{ppm}$  min (IQVCXO-173)

## Linearity

- Positive  $< \pm 10\%$

## Input Impedance (voltage control, pin 1)

- $> 50\text{k}\Omega$

## Modulation Bandwidth

- $> 10\text{kHz}$

## Marking Includes

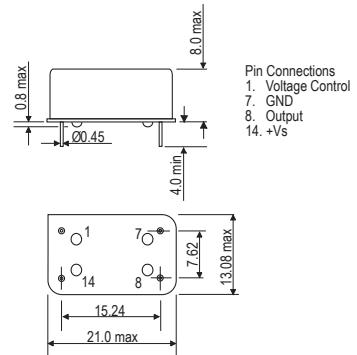
- Model Number + Frequency + Operating Temperature Code (if applicable) + Frequency Stability Code + Date Code

## Packaging

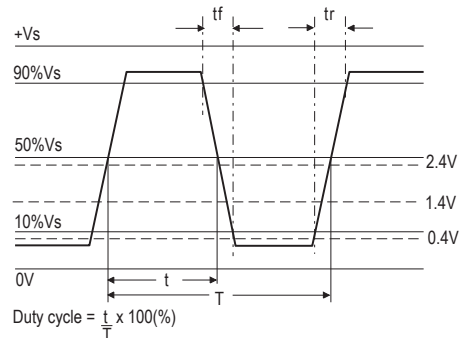
- Bulk

## Minimum Order Information Required

- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability



## Output Waveform



VCXOs

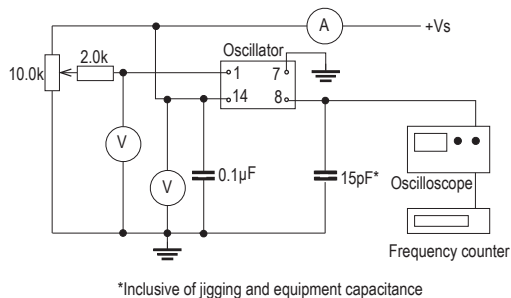
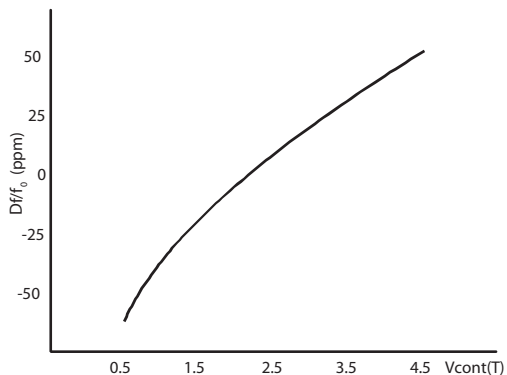
**Electrical Specification - maximum limiting values**

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Pullability	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.0 to < 24.0MHz	±25ppm	5.0 ±0.25V	20mA	±50ppm min	10ns	10ns	40/60%	IQVCXO-172 IQVCXO-172I
1.0 to < 24.0MHz	±25ppm, ±50ppm			±100ppm min				
24.0 to < 45.0MHz	±25ppm	40mA	40mA	±50ppm min				IQVCXO-172 IQVCXO-172I
24.0 to < 45.0MHz	±25ppm, ±50ppm			±100ppm min				

Ordering Example 22.0MHz IQXO-172 I B  
 Frequency \_\_\_\_\_  
 Model No. \_\_\_\_\_  
 Operating Temperature Code: I = -40 to 85°C; not applicable for 0 to 70°C \_\_\_\_\_  
 Frequency Stability: A = ±25ppm; B = ±50ppm \_\_\_\_\_  
 Some combinations of specification may not be available, please check with our sales office.

**Typical Voltage Control Curve @25°C & 20.0MHz**

**Test Circuit**



VCXOs