

# IQVCXO-172, -173, -174

ISSUE 10; 13 OCTOBER 2004

## Delivery Options

- Please contact our sales office for current leadtimes

## Output Compatibility

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

## Package Outline

- 14 pin DIL compatible resistance welded enclosure, hermetically sealed with glass to metal seals

## Standard Frequency Stabilities

- $\pm 25\text{ppm}$ ,  $\pm 50\text{ppm}$ ,  $\pm 100\text{ppm}$  @  $V_C = 2.5\text{V}$   
(inclusive of supply voltage & output load variations over the operating temperature range)

## Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

## Storage Temperature Range

- -55 to 125°C

## Output Frequency Change

- $\pm 50\text{ppm}$  min (IQVCXO-172)
- $\pm 100\text{ppm}$  min (IQVCXO-173)
- $\pm 200\text{ppm}$  min (IQVCXO-174)

## Voltage Control Pin 1

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

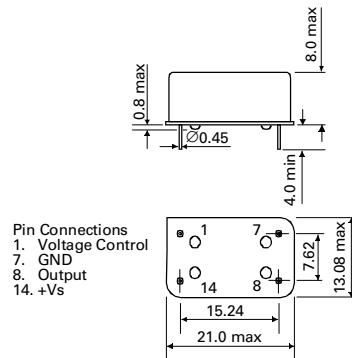
## Marking

- Model number
- Operating temperature Code (if applicable)
- Frequency Stability Code
- Frequency
- Date Code (Year/Week)

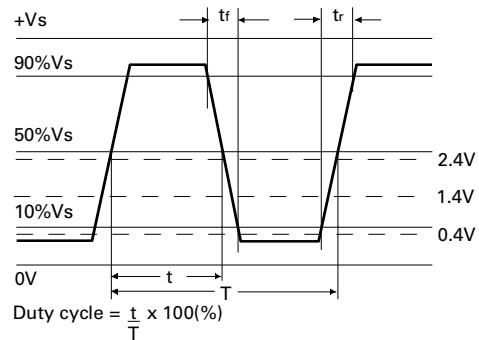
## Minimum Order Information Required

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

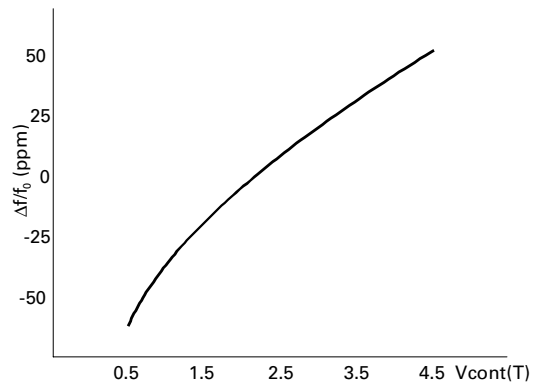
## Outline in mm



## Output Waveform - HCMOS/LS TTL



## Typical Voltage Control Curve @ 25°C & 20.0 MHz (IQVCXO-172)



**Electrical Specifications - maximum limiting values when measured in HCMOS test circuit.**

Frequency Range	Frequency Stability	Supply Voltage	Output Frequency Change	Supply Current	Rise Time(tr)	Fall Time(tf)	Duty Cycle	Model Number
1.0 to < 24.0MHz	±25ppm	5V±0.25V	±50ppm min	20mA	10ns	10ns	40/60%	IQVCXO-172 IQVCXO-172I
1.0 to < 24.0MHz	±25ppm ±50ppm	5V±0.25V	±100ppm min	20mA	10ns	10ns	40/60%	IQVCXO-173 IQVCXO-173I
1.0 to < 24.0MHz	±25ppm ±50ppm ±100ppm	5V±0.25V	±200ppm min	20mA	10ns	10ns	40/60%	IQVCXO-174 IQVCXO-174I
24.0 to 45.0MHz	±25ppm	5V±0.25V	±50ppm min	40mA	10ns	10ns	40/60%	IQVCXO-172 IQVCXO-172I
24.0 to 45.0MHz	±25ppm ±50ppm	5V±0.25V	±100ppm min	40mA	10ns	10ns	40/60%	IQVCXO-173 IQVCXO-173I
24.0 to 45.0MHz	±25ppm ±50ppm ±100ppm	5V±0.25V	±200ppm min	40mA	10ns	10ns	40/60%	IQVCXO-174 IQVCXO-174I

**Ordering Example** 22.0MHz IQVCXO-172 I C

Frequency \_\_\_\_\_

Model number \_\_\_\_\_

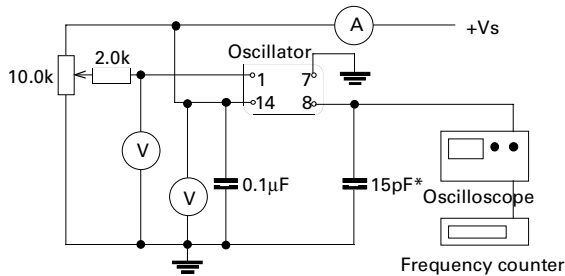
Operating Temperature Code: I = -40 to 85°C; Not applicable for 0 to 70°C \_\_\_\_\_

Frequency Stability: A = ±25ppm, B = ±50ppm, C = ±100ppm \_\_\_\_\_

Note: some specifications may not be available, please contact our sales office.

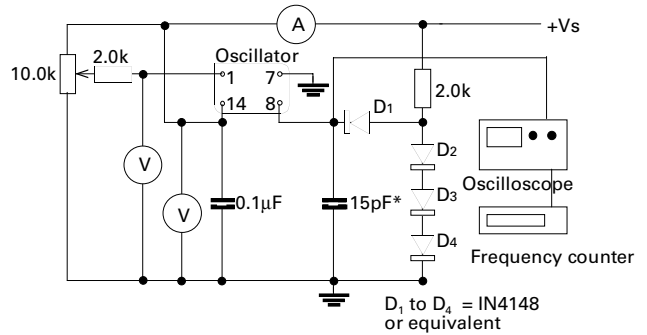
LEADED VCXOs

**Test Circuit - HCMOS**



\*Inclusive of jigging & equipment capacitance

**Test Circuit - LS TTL**



\*Inclusive of jigging & equipment capacitance