

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

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

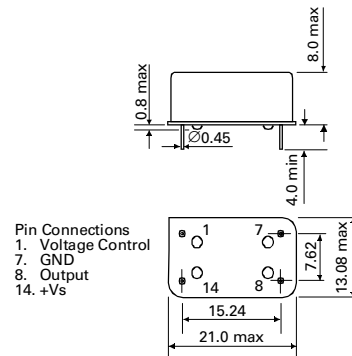
Marking

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

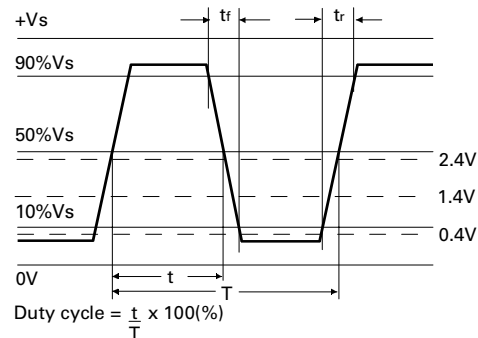
Minimum Order Information Required

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

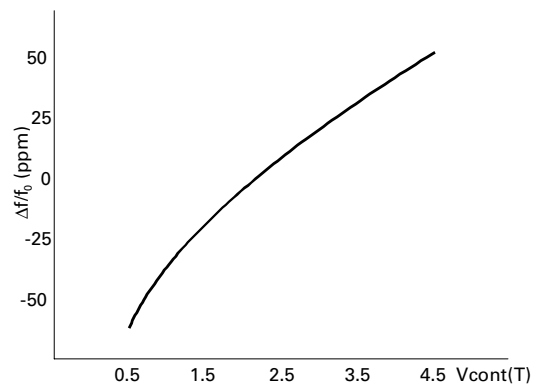
Outline in mm



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.

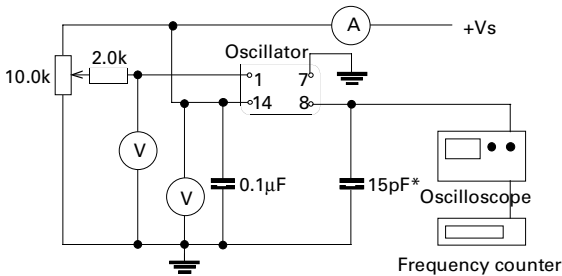
Frequency Range	Frequency Stability	Supply Voltage	Output Frequency Change	Supply Current	Rise Time(t_r)	Fall Time(t_f)	Duty Cycle	Model Number
1.0 to < 24.0MHz	$\pm 25\text{ppm}$	$5V \pm 0.25V$	$\pm 50\text{ppm min}$	20mA	10ns	10ns	40/60%	IQVCX0-172 IQVCX0-172I
1.0 to < 24.0MHz	$\pm 25\text{ppm}$ $\pm 50\text{ppm}$	$5V \pm 0.25V$	$\pm 100\text{ppm min}$	20mA	10ns	10ns	40/60%	IQVCX0-173 IQVCX0-173I
1.0 to < 24.0MHz	$\pm 25\text{ppm}$ $\pm 50\text{ppm}$ $\pm 100\text{ppm}$	$5V \pm 0.25V$	$\pm 200\text{ppm min}$	20mA	10ns	10ns	40/60%	IQVCX0-174 IQVCX0-174I
24.0 to 45.0MHz	$\pm 25\text{ppm}$	$5V \pm 0.25V$	$\pm 50\text{ppm min}$	40mA	10ns	10ns	40/60%	IQVCX0-172 IQVCX0-172I
24.0 to 45.0MHz	$\pm 25\text{ppm}$ $\pm 50\text{ppm}$	$5V \pm 0.25V$	$\pm 100\text{ppm min}$	40mA	10ns	10ns	40/60%	IQVCX0-173 IQVCX0-173I
24.0 to 45.0MHz	$\pm 25\text{ppm}$ $\pm 50\text{ppm}$ $\pm 100\text{ppm}$	$5V \pm 0.25V$	$\pm 200\text{ppm min}$	40mA	10ns	10ns	40/60%	IQVCX0-174 IQVCX0-174I

Ordering Example

Frequency _____ 22.0MHz IQVCX0-172 I C
Model number _____
Operating Temperature Code: I = -40 to 85°C; Not applicable for 0 to 70°C _____
Frequency Stability: A = $\pm 25\text{ppm}$, B = $\pm 50\text{ppm}$, C = $\pm 100\text{ppm}$ _____

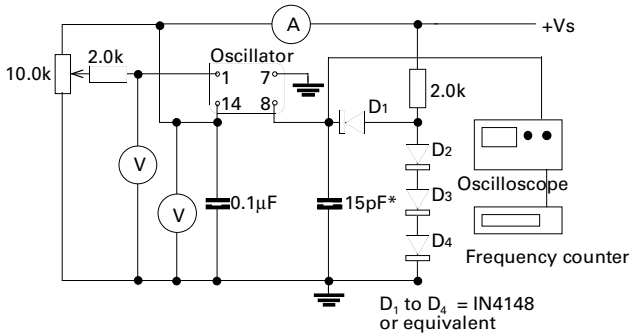
Note: some specifications may not be available, please contact our sales office.

Test Circuit - HCMOS



*Inclusive of jigging & equipment capacitance

Test Circuit - LS TTL



*Inclusive of jigging & equipment capacitance