

# IQDTCVCXO-91

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## Delivery Options

- Common frequencies are available from stock. Please see p224 for details.

## Description

- IQDTCVCXO-91 is a surface mount temperature compensated crystal oscillator which comes in a ultra-compact, low profile package. Achieving high precision of frequency stability over a wide temperature range by digital control. An AFC (Automatic Frequency Control) function is also provided.

## Standard Frequencies

- 12.60MHz, 12.80MHz, 13.0MHz, 14.40MHz, 16.80MHz, 19.20MHz, 19.680MHz, 19.80MHz

## Output Waveform

- Clipped Sine 1V peak to peak

## Package Outline

- 9.0 × 7.0 × 2.0mm SMD (ceramic surface mount device)

## Ageing

- ±1ppm maximum first year @ 25°C

## Voltage Control

- 1.5±1.0V applied to pin 1

## Storage Temperature Range

- 40 to 85°C

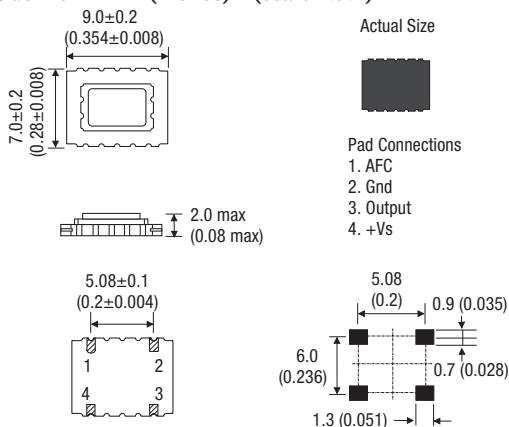
## Marking

- Model number
- Frequency Stability Code /Temperature Range Code
- Frequency
- Date code (Year/Week)

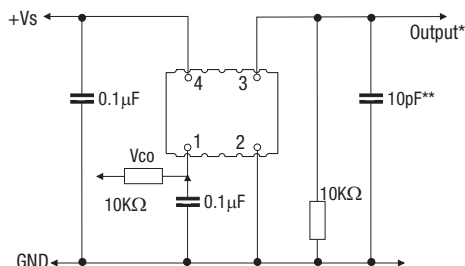
## Minimum Order Information Required

- Frequency + Model Number + Frequency Stability + Operating Temperature Range

## Outline in mm (inches) - (scale 1.5:1)

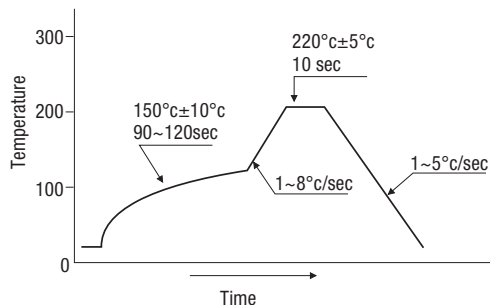


## Test Circuit



\* Output Voltage is DC biased  
\*\* inclusive of probe and jig capacitance

## Typical Solder Condition - Infrared Reflow



**Electrical Specification - maximum limiting values when measured in test circuit**

Frequency Range	Supply Voltage	Supply Current	Voltage Control Change	Output Waveform	Output	Model Number
12.60 to 13.0MHz	3V±0.15V	1.5mA	±5ppm min. / 1.5±1.0V	Clipped Sine	1Vp-p min	IQDTCVCXO-91
14.40 to 19.80MHz	3V±0.15V	2.0mA	±5ppm min. / 1.5±1.0V	Clipped Sine	1Vp-p min	IQDTCVCXO-91

**Frequency Stabilities Available Over Operating Temperature Ranges**

Operating Temperature Ranges		
	±2.5ppm	±5.0ppm
-20 to 75°C	Code HG	Code KG
-30 to 80°C	Code HV*	Code KV

\* Please note Code HV is the standard frequency stability vs operating temperature range

<b>Ordering Example</b>		14.40MHz	IQDTCVCXO-91	HV
Frequency				
Model number				
Frequency Stability Vs Operating Temperature Code				

SURFACE MOUNT  
TCXOs