

# IQXO-62, -63

ISSUE 2; 19 OCTOBER 1999

## Delivery Options

- Please contact our sales office for current leadtimes

## Output Compatibility

- Tri-state HCMOS/TTL (5.0V) (IQXO- 62)
- Tri-state HCMOS (3.3V) (IQXO- 63)

## Package Outline

- SMD (surface mount device) ceramic package with high drive capability

## Standard Frequencies

- 1.84320MHz, 2.0MHz, 3.68640MHz, 4.0MHz, 5.0MHz, 8.0MHz, 10.0MHz, 12.0MHz, 14.318180MHz, 16.0MHz, 20.0MHz, 24.0MHz, 25.0MHz, 29.49120MHz, 30.0MHz, 32.0MHz, 33.86880MHz, 36.8640MHz, 40.0MHz, 44.23680MHz, 48.0MHz, 50.0MHz

## Standard Frequency Stabilities

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

## Operating Temperature Range

- -10 to 70°C

## Storage Temperature Range

- -30 to 85°C

## Tri-state Operation

- Logic '1' to pad 1 enables oscillator output, 2.2V min
- Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state, 0.8V max
- No connection to pad 1 enables oscillator output

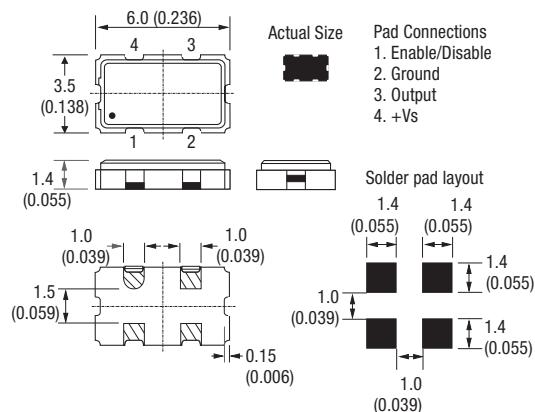
## Marking

- Model number
- Frequency Stability Code
- Frequency

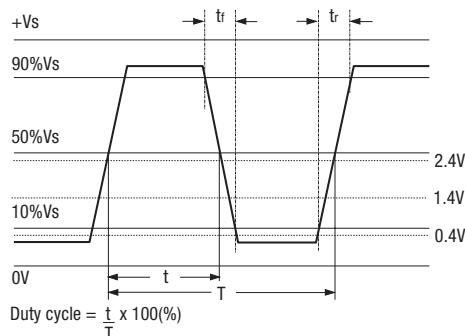
## Minimum Order Information Required

- Frequency + Model Number + Frequency Stability

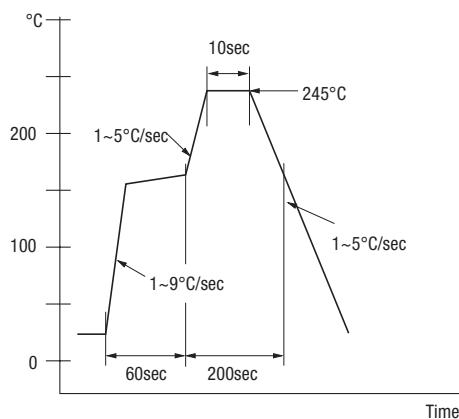
## Outline in mm (inches) - (scale 3:1)



## Output Waveform - HCMOS/TTL



## Typical Solder Condition - Infrared Reflow



## Electrical Specification - maximum limiting values when measured in HCMOS test circuit

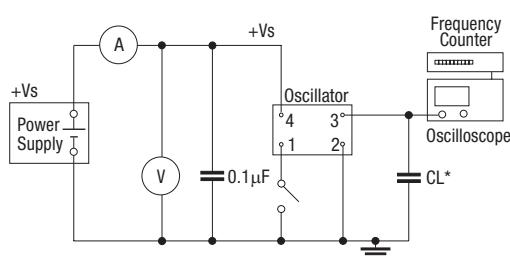
Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (t <sub>r</sub> )	Fall Time (t <sub>f</sub> )	Duty Cycle	Model Number
1.80 to 25.0MHz	$\pm 50\text{ppm}$ , $\pm 100\text{ppm}$	3.3V $\pm 0.3\text{V}$	15mA	6ns	6ns	40/60%	IQXO-63
		5.0V $\pm 0.5\text{V}$	27mA	5ns	5ns		IQXO-62
> 25.0 to 50.0MHz	$\pm 50\text{ppm}$ , $\pm 100\text{ppm}$	3.3V $\pm 0.3\text{V}$	15mA	6ns	6ns	40/60%	IQXO-63
		5.0V $\pm 0.5\text{V}$	40mA	5ns	5ns		IQXO-62

**Ordering Example**

Frequency	24.0MHz
Model No	IQXO-62
Frequency Stability: B = $\pm 50\text{ppm}$ ; C = $\pm 100\text{ppm}$	B

SURFACE MOUNT  
SPXOs

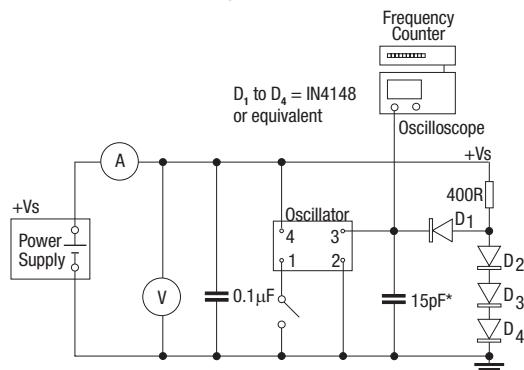
### Test Circuit - HCMOS



\* Inclusive of jigging & equipment capacitance

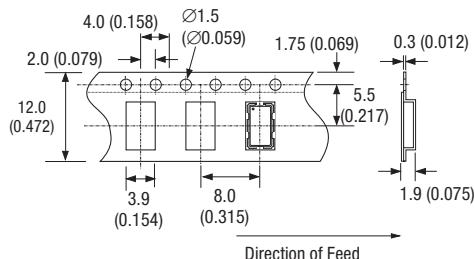
Note: CL = 50pF for model IQXO-62 and 15pF for model IQXO-63

### Test Circuit - TTL (IQXO-62)



\*Inclusive of jigging & equipment capacitance

### Outline in mm (inches) - Tape



### Outline in mm (inches) - Reel (scale 1:8)

