

# IQXO-53, -57 SMD CLOCK OSCILLATORS

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## Description

- 5.0V surface mount oscillator in a 'J' lead plastic package

## Fast Make Capability

- Please see CFPP-57 series Programmable Oscillators for nearest equivalent fast make parts

## Package Outline

- 13 x 9mm

## Frequency Range

- 1 to 60MHz

## Output Compatibility & Load

- HCMOS
- Drive Capability 15pF max
- Tri-state (IQXO-57, -57I)
- Non tri-state (IQXO-53, 53I)

## Standard Frequency Stabilities

- ±50ppm, ±100ppm (inclusive of supply voltage variations over the operating temperature range)

## Operating Temperature Range

- 0 to 70°C (IQXO-53, -57)
- 40 to 85°C (IQXO-53I, -57I)

## Storage Temperature Range

- 50 to 125°C

## Tri-state Operation

- Logic '1' (2.0Vmin) to pad 1 enables oscillator output,
- Logic '0' (0.8Vmax) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection to pad 1 enables oscillator output
- When oscillator is enabled, maximum transition time = 100ns

## Marking Includes

- Model Number + Frequency + Date Code

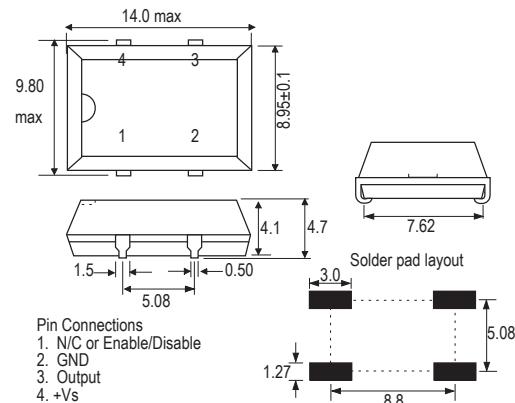
## Packaging

- Bulk or Tape and Reel

## Minimum Order Information Required

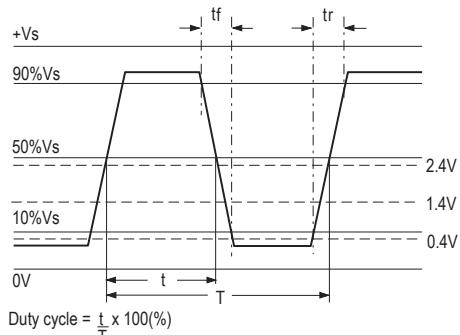
- Frequency + Model Number + Frequency Stability + Operating Temperature Range (if applicable)

## Outline (mm)

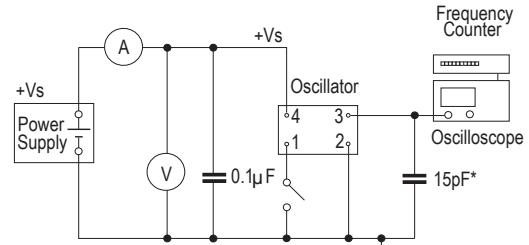


Note: Pin 1 = No connection on non tri-state models

## Output Waveform



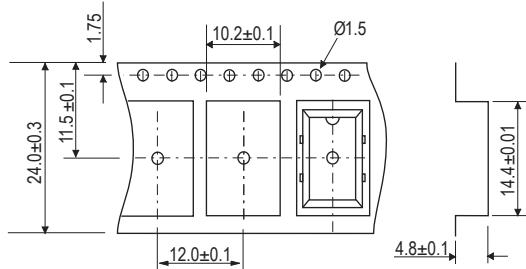
## Test Circuit



Inclusive of jigging and equipment capacitance

**Electrical Specifications - maximum limiting values**

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.0 to < 26.0MHz	$\pm 50\text{ppm}$ , $\pm 100\text{ppm}$	$5.0\text{V} \pm 0.5\text{V}$	15mA	8ns	8ns	40/60%	IQXO-53, 53I, 57, 57I
26.0 to < 40.0MHz			30mA				
40.0 to < 50.0MHz			6ns	6ns			
50.0 to 60.0MHz			38mA				
Ordering Example							
Frequency						24.0MHz	IQXO-57
Model Number: 57, 57I = Tri-state; 53, 53I = Non Tri-state							C
Operating Temperature Code: I = $-40$ to $85^\circ\text{C}$ ; Not applicable for 0 to $70^\circ\text{C}$							
Frequency Stability: B = $\pm 50\text{ppm}$ ; C = $\pm 100\text{ppm}$							
Please note that the rise and fall times listed are the maximum values we specify to cover various frequency breaks. In practice the actual values are generally lower depending upon the spot frequency chosen. For typical values please contact our sales office.							
For higher frequencies than shown above, please see our CFPP-57 Programmable Oscillator series.							

**Tape (mm)**

**Reel (mm)**
