IQXO-53, -57

ISSUE 10; 17 JULY 1998

Delivery Options

- Common frequencies are available from stock. Please see p180 for details

Output Compatibility

- HCMOS/LS TTL
- Tri-state (IQXO-57, -57I)
- Non tri-state (IQXO-53, -53I)

Package Outline

- SMD (surface mount device) plastic encapsulated. Available over 0 to 70°C (IQXO-53, -57) or –40 to 85°C (IQXO-53I, -57I)

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

Non-Standard Duty Cycle

- Tighter duty cycles are available on request

Tri-state Operation (IQXO-57, -57I)

- Logic '1' to pin 1 enables oscillator output, 2.0V min
- Logic '0' to pin 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state, 0.8V max
- No connection to pin 1 enables oscillator output
- When oscillator is enabled, maximum transition time = 100ns

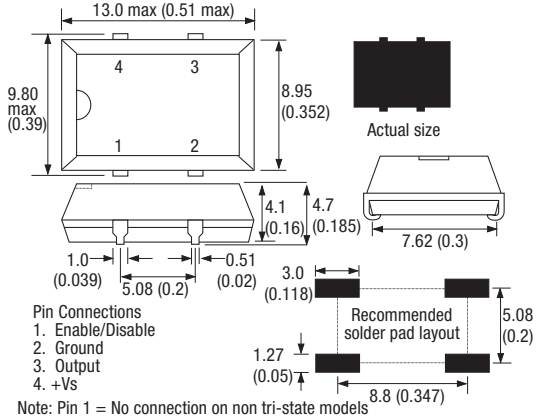
Marking

- Model number (+ Operating Temperature Code; if applicable)
- Frequency Stability Code
- Frequency
- Date Code

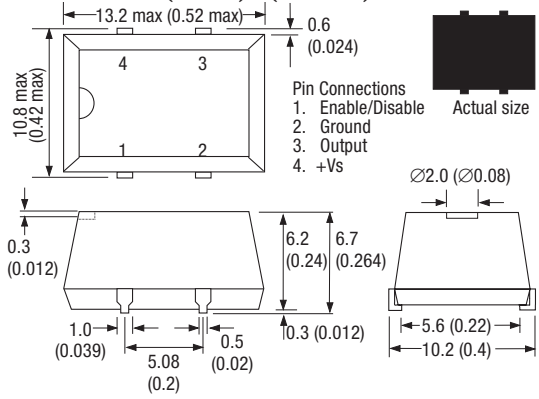
Minimum Order Information Required

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

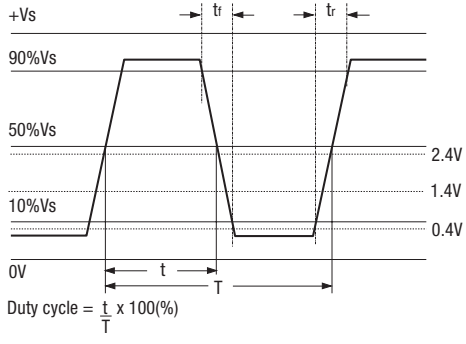
Outline in mm (inches) - (scale 2:1)



Outline in mm (inches) - (scale 2:1)



Output Waveform - HCMOS/LS TTL



Electrical Specification – maximum limiting values when measured in HCMOS test circuit

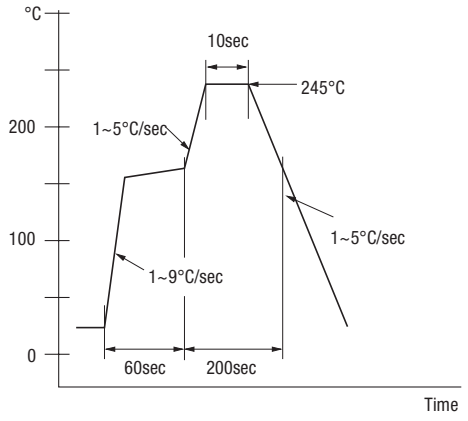
Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (t_r)	Fall Time (t_f)	Duty Cycle	Model Number
1.0 to < 26.0MHz	±50ppm, ±100ppm	5V±0.5V	15mA	8ns	8ns	40/60%	IQXO-53, 53I, 57, 57I
26.0 to < 40.0MHz	±50ppm, ±100ppm	5V±0.5V	30mA	8ns	8ns	40/60%	IQXO-53, 53I, 57, 57I
40.0 to < 50.0MHz	±50ppm, ±100ppm	5V±0.5V	30mA	6ns	6ns	40/60%	IQXO-53, 53I, 57, 57I
50.0 to 70.0MHz	±50ppm, ±100ppm	5V±0.5V	38mA	6ns	6ns	40/60%	IQXO-53, 53I, 57, 57I
> 70.0 to 130.0MHz	±50ppm, ±100ppm	5V±0.5V	65mA	3ns	3ns	40/60%	IQXO-53, 53I, 57, 57I

Please note: TTL models (IQXO-52, -52I, -56, -56I) are available; contact our sales office for further details

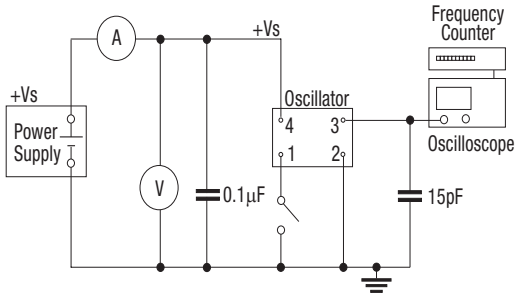
Ordering Example 24.0MHz IQXO-57I C

Frequency
Model No: 57, 57I = Tri-state 53, 53I = Non Tri-state
Operating Temperature Code: I = –40 to 85°C Not applicable for 0 to 70°C
Frequency Stability: B = ±50ppm; C = ±100ppm

Typical Solder Condition - Infrared Reflow



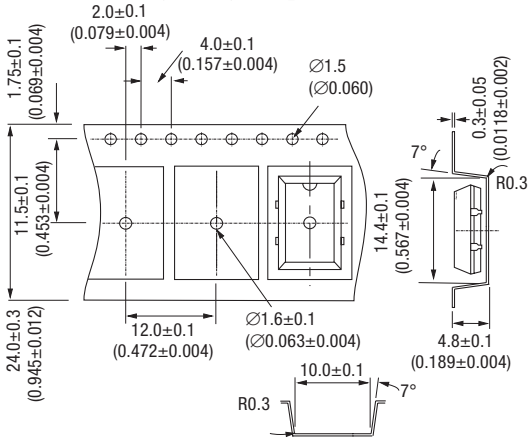
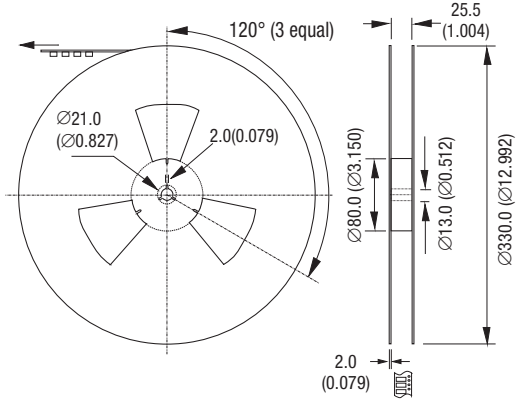
Test Circuit - HCMOS



Load Capacitance (C_L) - Inclusive of jigging & equipment
C_L = 15pF (1.0 to 70.0MHz)

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

Outline in mm (inches) - Tape



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