

IQXO-62, -63 SMD CLOCK OSCILLATORS

ISSUE 8; 1 NOVEMBER 2010 - RoHS 2002/95/EC

Description

- Standard 6 x 3.5 crystal oscillator
- Ceramic package with a seam sealed metal lid, hermetically sealed

Frequency Range

- 1.8 to 50MHz

Output Compatibility & Load

- HCMOS (5.0V) (IQXO-62) 50pF/10TTL max
- HCMOS (3.3V) (IQXO-63) 15pF max

Frequency Stabilities

- ± 50 ppm, ± 100 ppm (inclusive of supply voltage and output load)
- Note: ± 50 ppm is not available over -40 to 85°C

Operating Temperature Ranges

- -10 to 70°C
- -40 to 85°C

Storage Temperature Range

- -40 to 85°C

Standby Operation

- Logic '1' (IQXO-62 2.2V min, IQXO-63 70%V_S min) to pad 1 enables oscillator output
- Logic '0' (IQXO-62 0.8V max, IQXO-63 30%V_S max) 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
- Standby Current: 10 μA max (IQXO-63)

Environmental

- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

Packaging

- Loose in bulk pack, 100pcs per pack
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

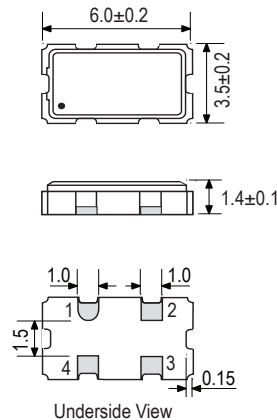
Ordering Information (*minimum required)

- Frequency*
- Model Number*
- Output
- Frequency Stability*
- Operating Temperature Range*
- Supply Voltage

Example

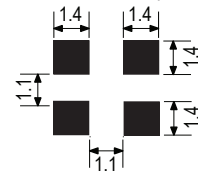
- 10.0MHz IQXO-63
HCMOS ± 50 ppm -10 to 70°C 3.3V

Outline (mm)

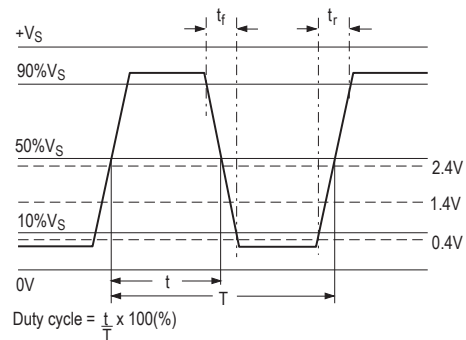


- ### Pad Connections
- Standby Operation
 - GND
 - Output
 - +V_S

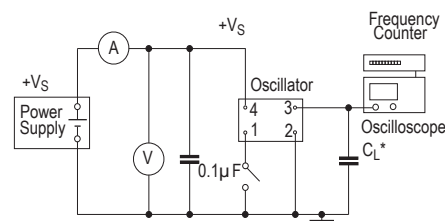
Solder Pad Layout



Output Waveform



Test Circuit



* Inclusive of jigging and equipment capacitance
Note: C_L = 50pF for model IQXO-62 and 15pF for model IQXO-63



Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr) (10-90%)	Fall Time (tf) (90-10%)	Duty Cycle	Model Number
1.8 to 32.0MHz	±50ppm ±100ppm	3.3V±0.3V	15mA	7ns	7ns	40/60%	IQXO-63
		5.0V±0.5V	27mA				IQXO-62
> 32.0 to 50.0MHz		3.3V±0.3V	20mA				IQXO-63
		5.0V±0.5V	45mA				IQXO-62

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 offices

Note: For other frequency/specification combinations, please contact our sales offices

