



ISSUE 11; December 2012 - RoHS 2011/65/EU



### Description

- Surface mount oscillator in a ceramic package with a hermetically sealed metal lid
- Fast Make capability: CFPP-73 series programmable oscillators are the nearest equivalent fast make model

### Frequency Range

- Frequency 0.012 to 170.0 MHz

### Supply Voltage

- Voltage 3.3V ±0.3V

### Ageing

- Ageing ±5ppm max typical in first year

### Output Compatibility & Load

- Output Compatibility HCMOS
- Drive Capability 15pF max

### Frequency Stabilities

- Frequency Stability ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage and output load variations over the operating temperature range)

### Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

### Output Control

- Tri-state Operation:
  - Logic '1' (0.7Vs min) to pad 1 enables oscillator output
  - Logic '0' (0.3Vs 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

### Environmental Parameters

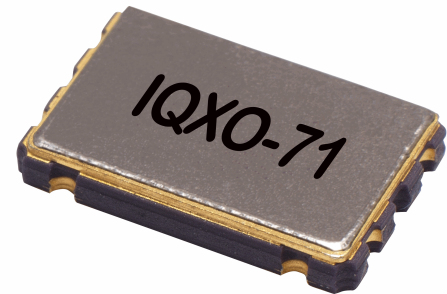
- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms, 1/2 sine)
- Vibration: MIL-STD-202F, Method 204D, Test condition D, 20G, frequency range 10-2000Hz, 4 hrs in 3 mutually perpendicular planes (total 12 hrs)

### Ordering Information (\*minimum required)

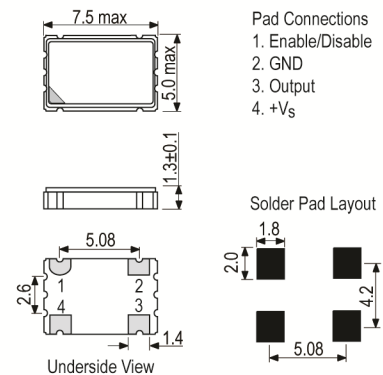
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage (\*minimum required)
- Example
  - 20.0MHz IQXO-71
  - HCMOS ±50ppm -10 to 70C 3.3V

### Marking

- Marking includes: Model, Frequency

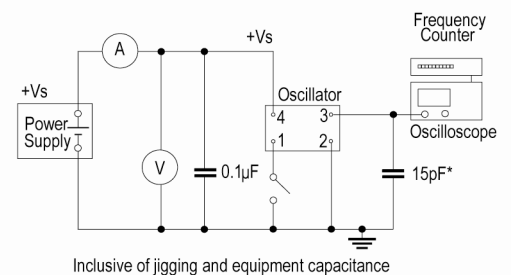


### Outline (mm)



- Pad Connections
1. Enable/Disable
  2. GND
  3. Output
  4. +Vs

### Test Circuit



### Sales Office Contact Details:

UK: +44 (0)1460 270200  
 Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18  
 USA: +1 (0)408.273.4530

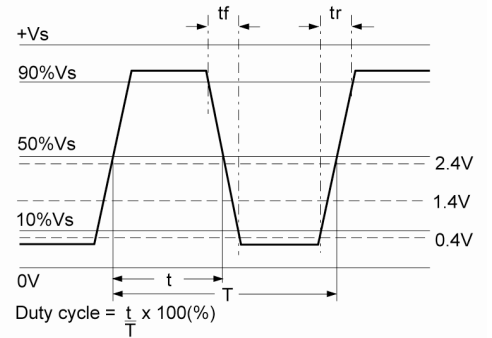
Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
 Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)



**Packing Details**

- Pack Style: **Bulk**            Loose in bulk pack  
Pack Size                    100
- Pack Style: **Reel**            Tape & reel in accordance with EIA-481-D  
Pack Size                    1,000
- Alternative packing options available

**Wave Form**



**Electrical Specification - maximum limiting values 3.3V ±0.3V**

Frequency Range	Temp Range	Stability Inclusive		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
0.012 to 1.544MHz	-10 to 70°C	±25ppm	±100ppm	12.0mA	6ns	45/55%
	-40 to 85°C	±50ppm	±100ppm	12.0mA	6ns	45/55%
1.544001 to 25.0MHz	-10 to 70°C	±25ppm	±100ppm	12.0mA	6ns	45/55%
	-40 to 85°C	±50ppm	±100ppm	12.0mA	6ns	45/55%
25.000001 to 32.0MHz	-10 to 70°C	±25ppm	±100ppm	12.0mA	6ns	45/55%
	-40 to 85°C	±50ppm	±100ppm	12.0mA	6ns	45/55%
32.000001 to 50.0MHz	-10 to 70°C	±25ppm	±100ppm	16.5mA	6ns	45/55%
	-40 to 85°C	±50ppm	±100ppm	16.5mA	6ns	45/55%
50.000001 to 67.0MHz	-10 to 70°C	±25ppm	±100ppm	18.0mA	6ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	18.0mA	6ns	40/60%
67.000001 to 80.0MHz	-10 to 70°C	±25ppm	±100ppm	40.0mA	6ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	40.0mA	6ns	40/60%
80.000001 to 125.0MHz	-10 to 70°C	±25ppm	±100ppm	40.0mA	4ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	40.0mA	4ns	40/60%
125.000001 to 170.0MHz	-10 to 70°C	±25ppm	±100ppm	50.0mA	4ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	50.0mA	4ns	40/60%

*This document was correct at the time of printing; please contact your local sales office for the latest version*

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