

ISSUE 11; June 2024

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 Parameters

- Frequency: 12.0kHz to 170.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 5\text{ppm}$ max in 1st year

Electrical Parameters

- Supply Voltage: $3.3\text{V} \pm 0.3\text{V}$

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: HCMOS
- Drive Capability: 15pF max

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

- 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 2hrs in 3 mutually perpendicular planes (total 6hrs)
- Storage Temperature Range: -55 to 125°C

Manufacturing Details

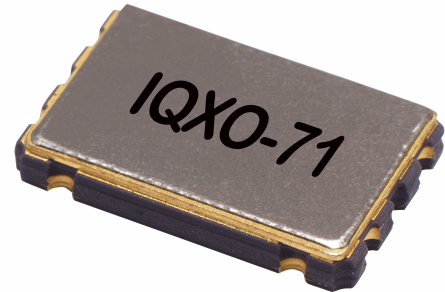
- RoHS Terminations: NiAu
- RoHS Reflow: 260degC 10s

Ordering Information

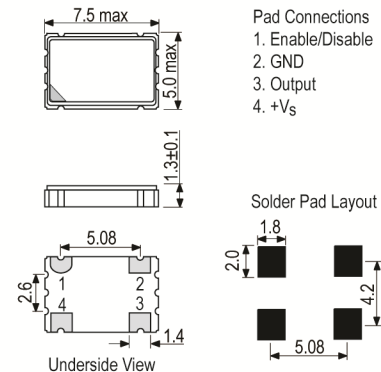
- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- (*minimum required)
- Example
- 20.0MHz IQXO-71
- HCMOS $\pm 50\text{ppm}$ -10 to 70C 3.3V

Compliance

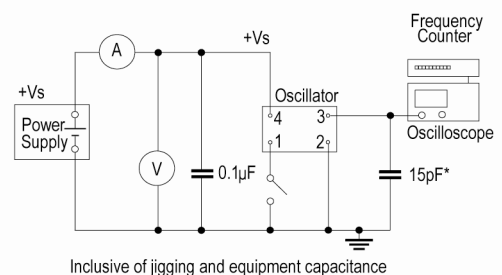
- RoHS Status (2015/863/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Test Circuit



Sales Office Contact Details:

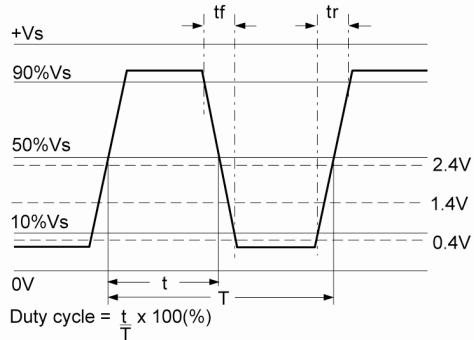
UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Standard Pack Quantity: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481
Standard Pack Quantity: 1,000

Wave Form



Electrical Specification - maximum limiting values 3.3V $\pm$ 0.3V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
12.0kHz	1.544MHz	-10 to 70	± 25.0	12	6	45/55%
		-40 to 85	± 50.0	12	6	45/55%
1.544001MHz	25.0MHz	-10 to 70	± 25.0	12	6	45/55%
		-40 to 85	± 50.0	12	6	45/55%
25.000001MHz	32.0MHz	-10 to 70	± 25.0	12	6	45/55%
		-40 to 85	± 50.0	12	6	45/55%
32.000001MHz	50.0MHz	-10 to 70	± 25.0	16.5	6	45/55%
		-40 to 85	± 50.0	16.5	6	45/55%
50.000001MHz	67.0MHz	-10 to 70	± 25.0	18	6	40/60%
		-40 to 85	± 50.0	18	6	40/60%
67.000001MHz	80.0MHz	-10 to 70	± 25.0	40	6	40/60%
		-40 to 85	± 50.0	40	6	40/60%
80.000001MHz	125.0MHz	-10 to 70	± 25.0	40	4	40/60%
		-40 to 85	± 50.0	40	4	40/60%
125.000001MHz	170.0MHz	-10 to 70	± 25.0	50	3	40/60%
		-40 to 85	± 50.0	50	3	40/60%

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

[Click to view latest version on our website.](#)

Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com