

ISSUE 12; July 2016



Description

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
Stock parts are available.
Fast Make Capability: The CFPP-72 series programmable oscillators are the nearest equivalent fast make model.

Frequency Parameters

- Frequency: 500.0kHz to 100.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 3\text{ppm}$ per year max

Electrical Parameters

- Supply Voltage: $5.0\text{V} \pm 10\%$

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility: HCMOS/TTL

| Drive Capability | |
|---------------------|----------|
| 0.5MHz to 50.0MHz | 50pF max |
| 50.0MHz to 80.0MHz | 30pF max |
| 80.0MHz to 100.0MHz | 15pF max |

Output Control

- Standby Operation:
Logic '1' ($>70\%$ Vs) to pad 1 enables oscillator output.
Logic '0' ($<30\%$ Vs) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state.
No connection to pad 1 enables oscillator output.
- Standby Current: $10\mu\text{A}$ max

Noise Parameters

- Phase Jitter RMS : 350fs typical

Environmental Parameters

- Shock: MIL-STD-202, Method 213, Condition E.
- Vibration: MIL-STD-883, Method 2007, Condition A.

Compliance

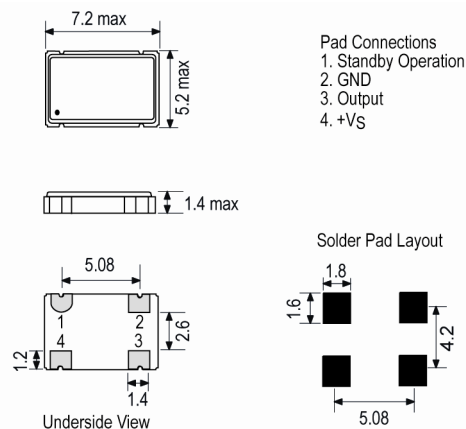
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

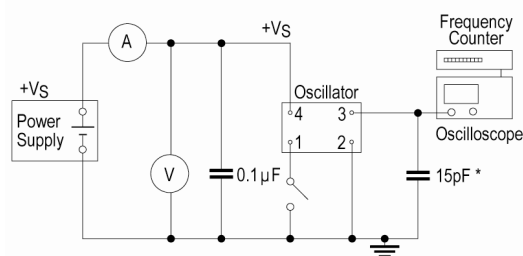
- Pack Style: Bulk Loose in bulk pack
Pack Size: 100
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000



Outline (mm)



Test Circuit



* Inclusive of jiggig and equipment capacitance

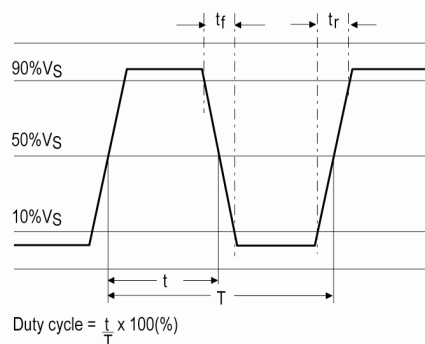
Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

France: 0800 901 383
USA: +1.760.318.2824

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

Wave Form



Electrical Specification - maximum limiting values 5.0V ±10%

| Frequency Min | Frequency Max | Temperature Range | Stability Min | Current Draw | Rise and Fall Time | Duty Cycle |
|---------------|---------------|-------------------|---------------|--------------|--------------------|------------|
| | | °C | ppm | mA | ns | % |
| 500.0kHz | 20.0MHz | 0 to 70 | ±25.0 | 20 | 10 | 45/55% |
| | | -40 to 85 | ±25.0 | 20 | 10 | 45/55% |
| 20.000001MHz | 35.0MHz | 0 to 70 | ±25.0 | 30 | 6 | 45/55% |
| | | -40 to 85 | ±25.0 | 30 | 6 | 45/55% |
| 35.000001MHz | 70.0MHz | 0 to 70 | ±25.0 | 50 | 6 | 45/55% |
| | | -40 to 85 | ±25.0 | 50 | 6 | 45/55% |
| 70.000001MHz | 100.0MHz | 0 to 70 | ±25.0 | 70 | 6 | 45/55% |
| | | -40 to 85 | ±25.0 | 70 | 6 | 45/55% |

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
Germany: 0800 1808 443

France: 0800 901 383
USA: +1.760.318.2824

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