



## Description

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Model **CFPS-72**
- Model Issue number **14**

## Frequency Parameters

- Frequency **24.0MHz**
- Frequency Stability **±100.00ppm**
- Operating Temperature Range **-40.00 to 85.00°C**
- Ageing **±3ppm per year max**

## Electrical Parameters

- Supply Voltage **5.0V ±10%**
- Current Draw **30.000mA**
- Note: parameters are referenced to 15pF load

## Output Details

- Output Compatibility **HCMOS/TTL**
- Drive Capability **15pF std, 50pF max**
- Rise and Fall Time **6.0ns max**
- Duty Cycle **45/55%**
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Start up time: 10ms max  
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)

## 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: 10µA max, 2.3µA typ @ 25°C

## Noise Parameters

- RMS Phase Jitter: 350fs typical

## Environmental Parameters

- Shock: MIL-STD-202, Method 213, Condition E.
- Vibration: MIL-STD-883, Method 2007, Condition A.
- Storage Temperature Range: -55 to 125°



## Outline (mm)



## Test Circuit



\* Inclusive of jigging 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](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

## Manufacturing Details

- RoHS Terminations NiAu
- RoHS Reflow Temp 260°C 10s

## 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
- *Alternative packing option available*

## Wave Form



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