

### Description

- Standard 7.0 x 5.0mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Model **CFPS-72**
- Model Issue number **16**

### Frequency Parameters

- Frequency **48.0MHz**
- Frequency Stability **±50.00ppm**
- Operating Temperature Range **-40.00 to 85.00°C**
- Ageing **±5ppm per year max**

### Electrical Parameters

- Supply Voltage **5.0V ±10%**
- Current Draw **35.000mA max**
- Note: parameters are referenced to 15pF load

### Output Details

- Output Compatibility **CMOS**
- Drive Capability **15pF typ, 30pF max**
- Rise and Fall Time **6.0ns max**
- Duty Cycle **40/60 max**
- 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.

### Environmental Parameters

- Shock: Half Sine shock pulse with peak acceleration 500g; Pulse duration: 0.3ms
- Vibration: MIL-STD-202 Method 204. 5g for 20 minutes, 12 cycles in each of the 3 orientations, 10 - 2000 Hz. As per Table 11 of AEC-Q200.
- Storage Temperature Range: -55 to 125°C

### Manufacturing Details

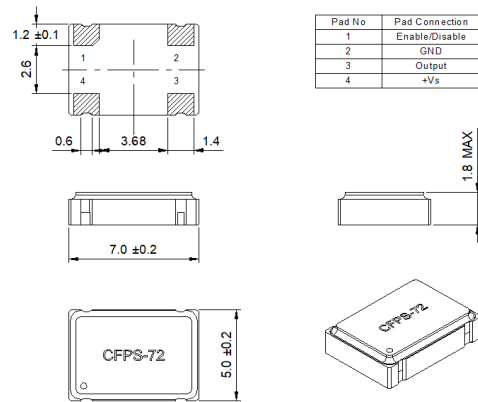
- RoHS Terminations **NiAu**
- RoHS Reflow Temp **260°C 10s max**

### Compliance

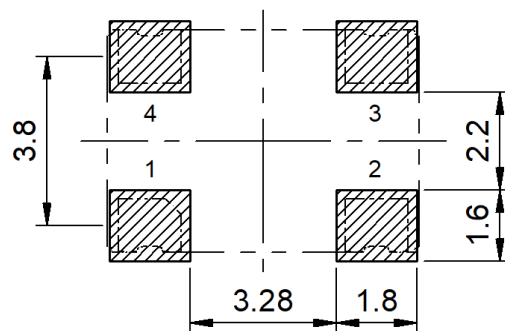
- RoHS Status (2015/863/EU) **Compliant**
- REACH Status **Compliant**
- MSL Rating (JDEC-STD-033): **Not Applicable**



### Outline (mm)



### Recommended Solder Pad Layout



### CONTACT INFORMATION:

Würth Elektronik eiSos GmbH & Co. KG  
Max-Eyth-Str. 1, 74638 Waldenburg, Germany  
Tel: +49(0) 7942 945-0

Email: [eiSos@we-online.de](mailto:eiSos@we-online.de)  
Web: [www.we-online.com](http://www.we-online.com)

### Packaging Details

- Tape & reel in accordance with EIA-481  
Quantities below the standard reel size to be supplied on cut tape.  
Standard Quantity: 1,000 Pieces

### USEFUL LINKS

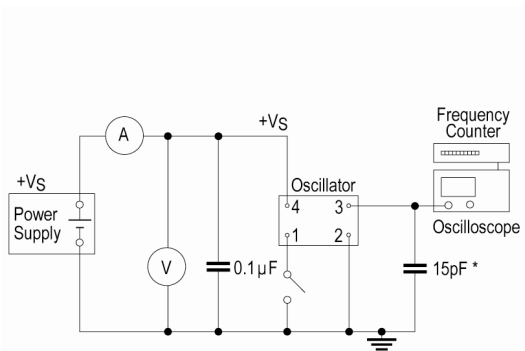
Toolbox:

[www.we-online.com/toolbox](http://www.we-online.com/toolbox)

Product Catalog:

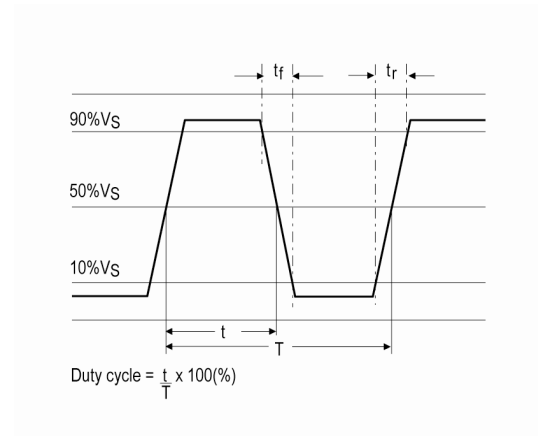
[www.we-online.com/products](http://www.we-online.com/products)

### Test Circuit



\* Inclusive of jigging and equipment capacitance

### Waveform



### CONTACT INFORMATION:

Würth Elektronik eiSos GmbH & Co. KG  
Max-Eyth-Str. 1, 74638 Waldenburg, Germany  
Tel: +49(0) 7942 945-0

Email: [eiSos@we-online.de](mailto:eiSos@we-online.de)  
Web: [www.we-online.com](http://www.we-online.com)