



## Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPX0019884Reel

Würth Part No. 831019884



### 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 13

### Frequency Parameters

- Frequency 48.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range 0.00 to 70.00°C
- Ageing  $\pm 3\text{ppm}$  per year max

### Electrical Parameters

- Supply Voltage 5.0V  $\pm 10\%$
- Current Draw 50.000mA
- 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%

### 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 $\mu$ A max

### 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°

### Manufacturing Details

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

### Compliance

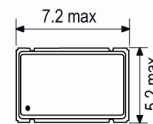
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

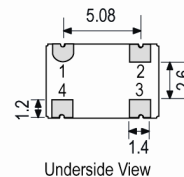
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
- Pack Size: 1,000



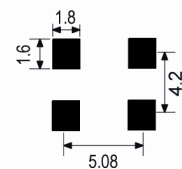
### Outline (mm)



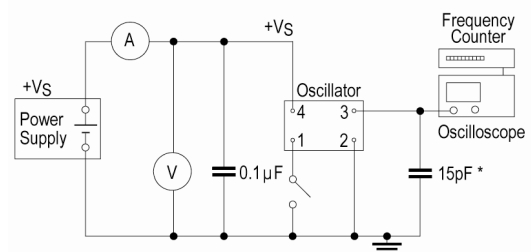
- Pad Connections
- Standby Operation
  - GND
  - Output
  - +Vs



### Solder Pad Layout



### Test Circuit



\* Inclusive of jigging and equipment capacitance

### CONTACT INFORMATION:

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- Alternative packing option available

### USEFUL LINKS

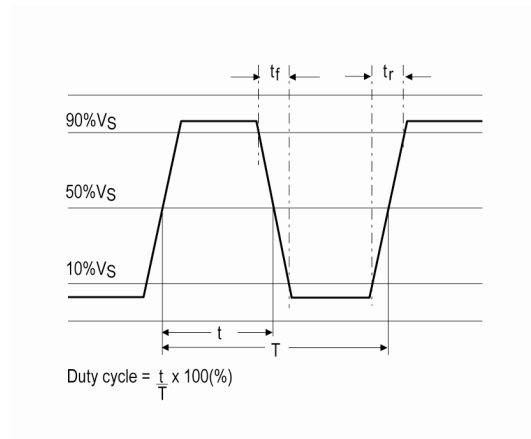
Toolbox:

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

Product Catalog:

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

### Wave Form



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