



## Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPX0019805Reel

Würth Part No. 831019805



### 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  $\pm 50.00$ ppm
- Operating Temperature Range  $-40.00$  to  $85.00$ °C
- Ageing  $\pm 3$ ppm per year max

### Electrical Parameters

- Supply Voltage  $5.0V \pm 10\%$
- Current Draw  $50.000$ mA
- Note: parameters are referenced to  $15$ pF load

### Output Details

- Output Compatibility HCMOS/TTL
- Drive Capability  $15$ pF std,  $50$ pF max
- Rise and Fall Time  $6.0$ ns 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:  $10$ µA max

### Noise Parameters

- RMS Phase Jitter:  $350$ fs 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  $260$ degC 10s

### Compliance

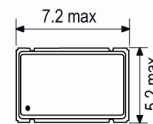
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

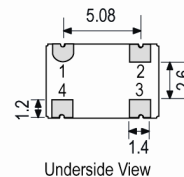
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
- Pack Size: 1,000



### Outline (mm)

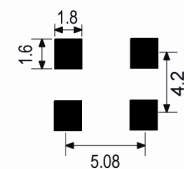


- Pad Connections
- Standby Operation
  - GND
  - Output
  - +Vs

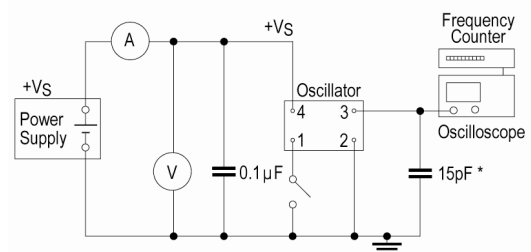


Underside View

### Solder Pad Layout



### Test Circuit



\* Inclusive of jigging and equipment capacitance

### CONTACT INFORMATION:

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- Alternative packing option available

### USEFUL LINKS

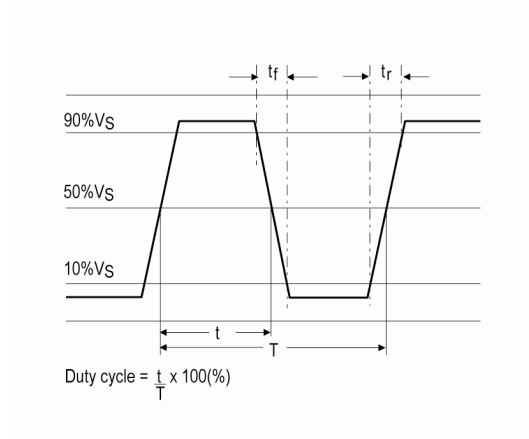
Toolbox:

[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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