



## Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPX0073905RL3K

Würth Part No. 830207390509



### Description

- Suitable for real time clock applications  
32.768kHz output crystal oscillators  
Ceramic package with a seam sealed metal lid, hermetically sealed
- Model CFPS-109
- Model Issue number 5

### Frequency Parameters

- Frequency 32.7680kHz
- Frequency Stability  $\pm 30.00$ ppm
- Operating Temperature Range  $-40.00$  to  $85.00$ °C
- Ageing  $\pm 3$ ppm max per year

### Electrical Parameters

- Supply Voltage  $3.3V \pm 5\%$
- Current Draw 3.500mA

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 50.0ns max
- Duty Cycle 40/60%

### Output Control

- Standby Operation:  
Logic '1' to pad 1 enables oscillator output  
Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state  
No connection to pad 1 enables oscillator output
- Start-up Time: 35ms max  
2ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Standby Current: 10 $\mu$ A max, 1.35 $\mu$ A typ @ 25°C

### Environmental Parameters

- Storage Temperature Range:  $-55$  to  $125$ °C
- Shock: MIL-STD-883F, Method 2002.4: 1500G, 0.5ms, 3 times in each of 3 mutually perpendicular planes.
- Vibration: MIL-STD-883F, Method 2007.3: 20G (20Hz-2000Hz), 1.52mm amplitude

### Manufacturing Details

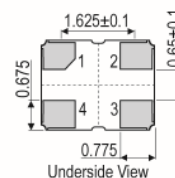
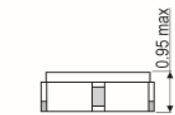
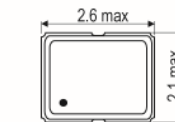
- RoHS Terminations NiAu
- RoHS Reflow Temp 260degC 10s

### Compliance

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



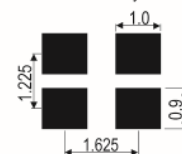
### Outline (mm)



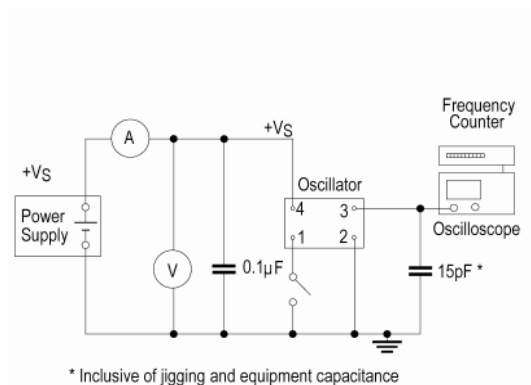
### Pad Connections

1. Standby Operation
2. GND
3. Output
4. +Vs

### Solder Pad Layout



### Test Circuit



### CONTACT INFORMATION:

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### Packaging Details

- Pack Style: RL3K Tape & reel in accordance with EIA-481-D  
Pack Size: 3,000
- *Alternative packing option available*

### USEFUL LINKS

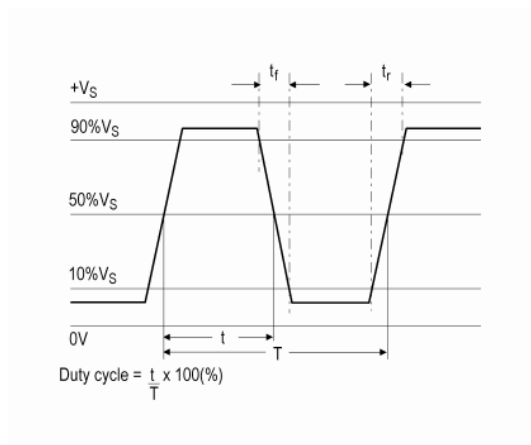
#### Toolbox:

[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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