



## Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPX0025493RL3K

Würth Part No. 831025493



### Description

- Surface mount 3.2 x 2.5mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.
- Model CFPS-39
- Model Issue number 6

### Frequency Parameters

- Frequency 14.318180MHz
- Frequency Stability  $\pm 50.00$ ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing  $\pm 3$ ppm max per year @ 25°C

### Electrical Parameters

- Supply Voltage 3.3V  $\pm 10\%$
- Current Draw 7.000mA

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 5.0ns max
- Duty Cycle 45/55%
- Start-Up Time: 10ms max.  
0.7ms 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; when disabled the oscillator output goes to the high impedance state  
No connection to pad 1 enables oscillator output  
Standby Current: 10 $\mu$ A max

### Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20g (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

### Manufacturing Details

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

### Compliance

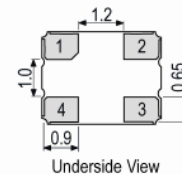
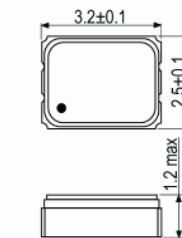
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JEDEC-STD-033): Not Applicable

### Packaging Details

- Pack Style: RL3K Tape & reel in accordance with EIA-481-D  
Pack Size: 3,000



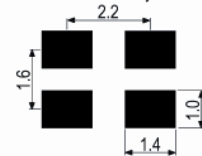
### Outline (mm)



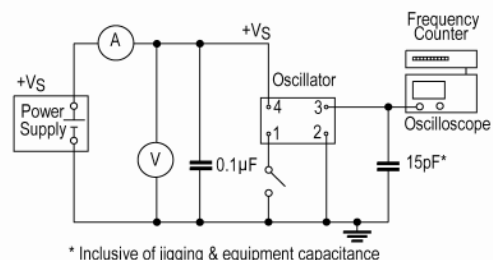
### Pad Connections

- Standby Operation
- GND
- Output
- +Vs

### Solder Pad Layout



### Test Circuit



\* Inclusive of jiggig & equipment capacitance

### 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  
Web: www.we-online.com



## Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPXO025493RL3K

Würth Part No. 831025493



- Alternative packing option available

### USEFUL LINKS

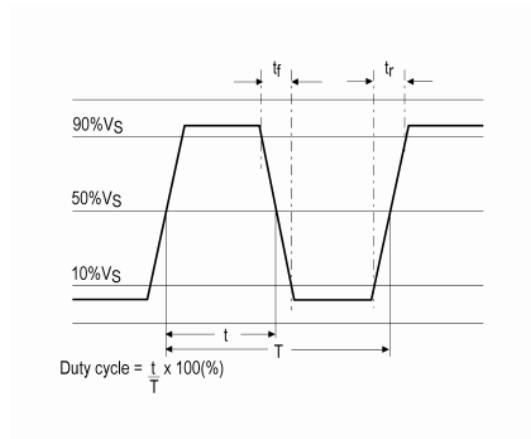
Toolbox:

[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



### 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)