



Crystal Clock Oscillator Specification

IQD Part No. + Packaging: LFSPXO082158RL3K

Würth Part No. 830208215809



Description

- Standard 2 x 1.6 crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed
- Model IQXO-540
- Model Issue number 2

Frequency Parameters

- Frequency 50.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$
- Operating Temperature Range -20.00 to 70.00°C
- Ageing $\pm 5\text{ppm}$

Electrical Parameters

- Supply Voltage $3.3\text{V} \pm 10\%$
- Current Draw 10.000mA
- Standby Current: $10\mu\text{A}$ max (pad 1 at logic '0')

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 5.0ns max
- Duty Cycle $45/55\%$

Output Control

- Standby Operation: Logic '1' ($\geq 70\%V_S$) to pad 1 enables oscillator output
Logic '0' ($\leq 30\%V_S$) 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

Environmental Parameters

- Impact: Weight of 10G dropped to centre of part from a height of 6mm
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)
- Storage Temperature Range: -40 to 85°C
- RoHS Terminations
- RoHS Reflow Temp 250°C 10S max

Compliance

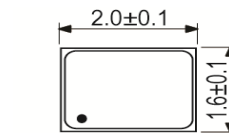
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

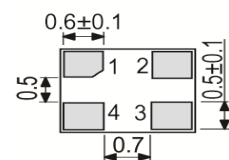
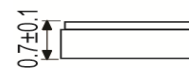
- Pack Style: RL3K Tape & reel in accordance with EIA-481-D
- Pack Size: 3,000



Outline (mm)

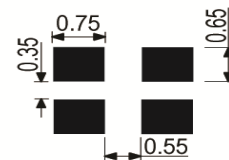


- Pad Connections
- Standby Operation
 - GND
 - Output
 - +Vs

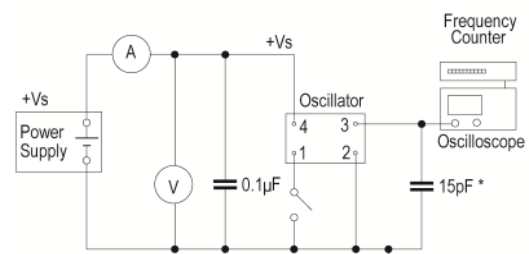


Underside View

Solder Pad Layout



Test Circuit



* Inclusive of jigging and 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: LFSPXO082158RL3K

Würth Part No. 830208215809



- Alternative packing option available

USEFUL LINKS

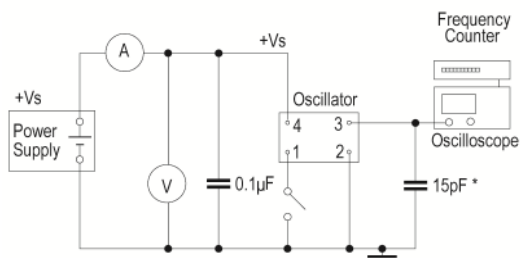
Toolbox:

www.we-online.com/toolbox

Product Catalog:

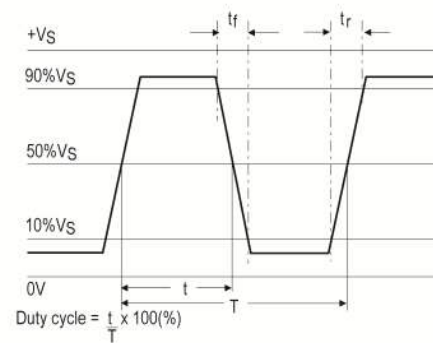
www.we-online.com/products

Test Circuit



* Inclusive of jigging and equipment capacitance

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
 Web: www.we-online.com