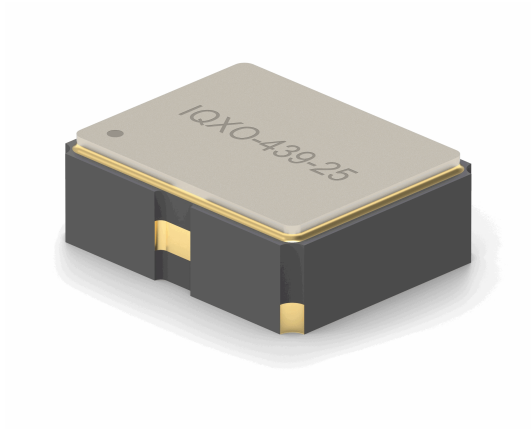
Crystal Clock Oscillator Specification

Part No. + Packaging: ***LFSPXO084278Reel***

Customer Part:

Description

- Simple Packaged Crystal Oscillator (SPXO) with an LVPECL output in a hermetically sealed ceramic package with a metal lid.
- Model IQXO-439-25
- Model Issue number 2



Frequency Parameters

- Frequency 125.0MHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ±5ppm max per year @ 25°C
- Frequency Stability: Inclusive of tolerance @ 25°C, operating temperature range, supply voltage variation, load variation and 1 year ageing.

Electrical Parameters

- Supply Voltage 2.5V ±5%
- Current Draw 45.000mA

Output Details

- Output Compatibility LVPECL
- Drive Capability 50Ω Vs-2.0V
- Rise and Fall Time 0.6ns max
- Duty Cycle 45/55%
- Output Voltage Levels:
  Level '1' VoH: Vs-1.025V to Vs-0.88V
  Level '0' VoL: Vs-1.81V to Vs-1.62V

Output Control

- Start-Up Time: 10ms max

Noise Parameters

- Phase Jitter (12kHz to 20MHz): 0.5ps RMS max
- Clock Jitter (n=50000 cycles): 5ps RMS max

Environmental Parameters

- Storage Temperature Range: –55 to 125°C
- Drop: 30cm free drop (3 times) onto a hard wooden board.
- Vibration: MIL-STD-202F, Method 201A, frequency range 10Hz~55Hz, 1.52mm amplitude, X, Y, Z axis, 2 hours in each axis (6 hours total).

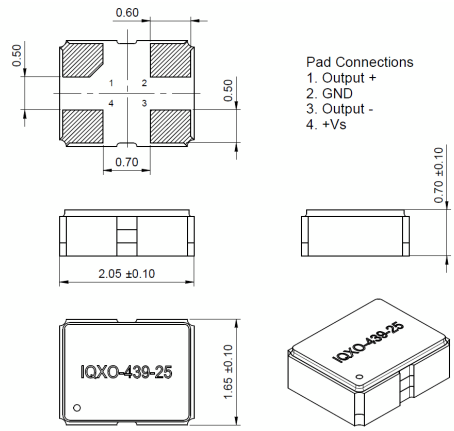
Manufacturing Details

- Note: a 0.01µF capacitor should be connected as close to the oscillator as possibe between +Vs and GND. A large value capacitor should also be located at the power supply.
- RoHS Terminations NiAu
- RoHS Reflow Temp 255°C ±5°C for 40s max

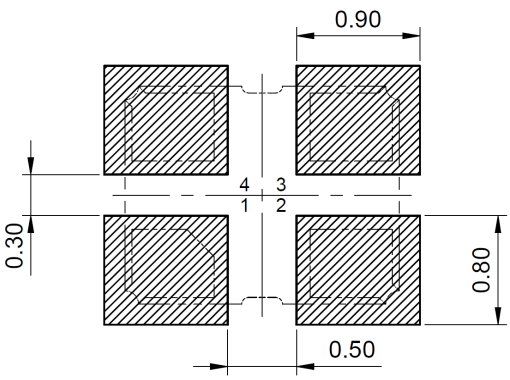
Compliance

- RoHS Status (2015/863/EU) Compliant
- REACh Status Compliant
- MSL Rating (JDEC-STD-033): 1

Outline (mm)



Recommended Solder Pad Layout



Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1 760 668 8935

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

Customer Part:

Packaging Details

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

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