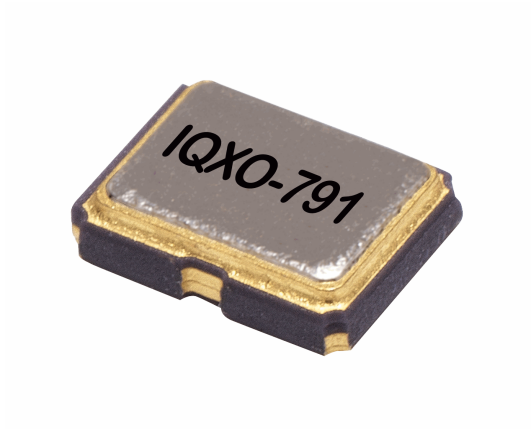
Crystal Clock Oscillator Specification

Part No. + Packaging: ***LFSPXO056293Reel***

Customer Part:

Description

- Standard 2.5 x 2.0 oscillator in a ceramic package with a hermetically sealed metal lid.
- Model IQXO-791
- Model Issue number 2



Frequency Parameters

- Frequency 20.0MHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ±3ppm max per year @ 25°C

Electrical Parameters

- Supply Voltage 3.3V ±10%
- Current Draw 12.000mA

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF
- Rise and Fall Time 7.0ns max
- Duty Cycle 40/60%
- Output Voltage Levels:
  Output Low (VoL): 10%Vs max
  Output High (VoH): 90%Vs min
- Start Up Time: 10ms max
  0.7ms typ to 90% of final amplitude (under ideal conditions @ 25°C)

Output Control

- Enable/Disable:
  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.
- Stand-by Current: 10µA max, 1.0µA typ @ 25°C

Noise Parameters

- Period Jitter (pk-pk): ±80ps typ
- Period Jitter (1σ): ±10ps typ
- Phase Jitter (12kHz to 20MHz): 1ps rms max

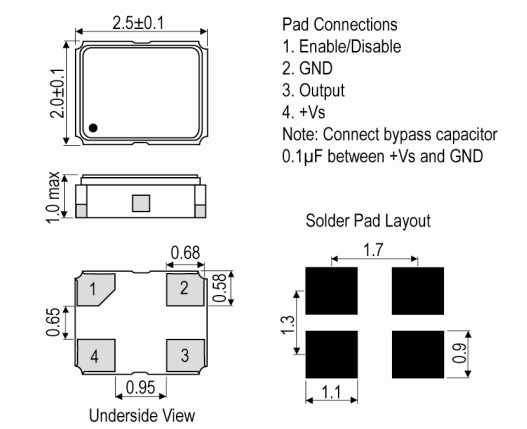
Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Mechanical Shock: MIL-STD-883, Method 2002, Condition B (or comparable).
- Vibration: MIL-STD-883, Method 2007, Condition A (or comparable).

Manufacturing Details

- Note: Do not connect inductor or bead between pad 2 and GND as it can make the output unstable.
- RoHS Terminations
- RoHS Reflow Temp 260°C max for 10secs max

Outline (mm)



Sales Office Contact Details:

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Customer Part:

Compliance

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

Packaging Details

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

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