IQD Frequency Products

Incorporating IQD FOQ GmbH

Oscillator Specification

Part No. + Packaging: ***LFSPXO056231BULK***

Description

- Standard 2 x 1.6 crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed
- Model — IQXO-541
- Model Issue number — 2

Frequency Parameters

- Frequency — 25.0MHz
- Frequency Tolerance @ 25°C — INCLUSIVE
- Frequency Stability — ±50.00ppm
- Operating Temperature Range — -40.00 to 85.00°C
- Ageing — ±5ppm

Frequency Stability

- Inclusive of tolerance, supply voltage and load variations over the operating temperature range

Electrical Parameters

- Supply Voltage — 2.5V
- Supply Voltage Tolerance — ±10%
- Current Draw — 6mA max
- Standby Current: 10µA max (pad 1 at logic '0')

Output Details

- Output Compatability — CMOS
- Output Load — 15pF max
- Rise and Fall time (10% - 90%) — 5.0ns max
- Duty Cycle — 45/55%

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

Environmental Parameters

- 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
- Impact: Weight of 10g dropped to centre of part from a height of 6mm

Compliance

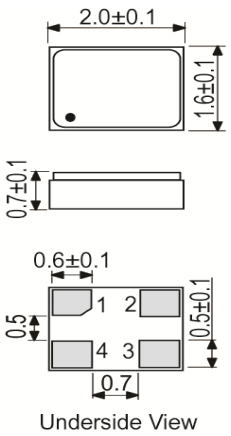
- RoHS Status — Compliant
- REACh Status — Compliant

Packaging

- Pack Type: Bulk — Loose in bulk pack
  Pack Size — 100
- Alternative packing option available

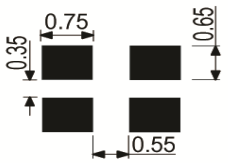
This document is correct at the time of printing; please contact your local office for the latest version.

Outline (mm)

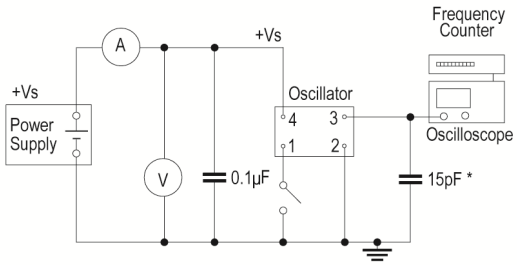


Pad Connections
1. Standby Operation
2. GND
3. Output
4. +Vs

Solder Pad Layout

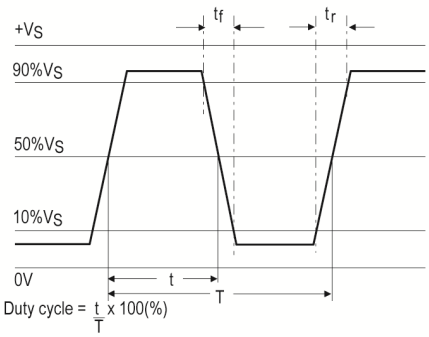


Test Circuit



* Inclusive of jigging and equipment capacitance

Wave Form



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