

Customer Part:

Description

- LVPECL output crystal oscillator using a high frequency fundamental crystal to give very low jitter. Hermetically sealed ceramic package with a seam sealed metal lid.
- Model IQXO-620
- Model Issue number 4

Frequency Parameters

- Frequency 25.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$
- Operating Temperature Range -10.00 to 70.00°C
- Ageing $\pm 3\text{ppm}$ per year
- Frequency stability is inclusive of $25^\circ\text{C} \pm 3^\circ\text{C}$ & operating temperature range

Electrical Parameters

- Supply Voltage $3.3\text{V} \pm 5\%$
- Current Draw 70.000mA

Output Details

- Output Compatibility LVPECL
- Drive Capability 50Ω terminated to $V_s - 2.0\text{V}$
- Rise and Fall Time 1.0ns max
- Duty Cycle 45/55
- Output Voltage Levels:
Output Low (VoL): 1.68V max
Output High (VoH): 2.275V min

Output Control

- Enable/Disable:
Logic '1' ($70\% V_s$ min) to pad 1 enables oscillator output.
Logic '0' ($30\% V_s$ max) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state.
No connection to pad 1 enables oscillator output.
Standby Current: $10\mu\text{A}$

Noise Parameters

- Phase Jitter rms (12kHz to 20MHz): 1ps max

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: 1500g , 0.5ms , 3 times for all 6 directions.
- Vibration: MIL-STD-883F: 2007.3, frequency range: $20 \sim 2000\text{Hz}$, peak to peak amplitude: 1.52mm , peak acceleration: 20g , sweep time: 20 minutes/axis, pendicular total test time: 4 hours. The specimen is measured for its frequency before the test into X, Y and Z axis, respectively, for the vibration test.

Manufacturing Details

- RoHS Reflow: 260°C max for 30 seconds max
- RoHS Terminations: Au

Compliance

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

Sales Office Contact Details:

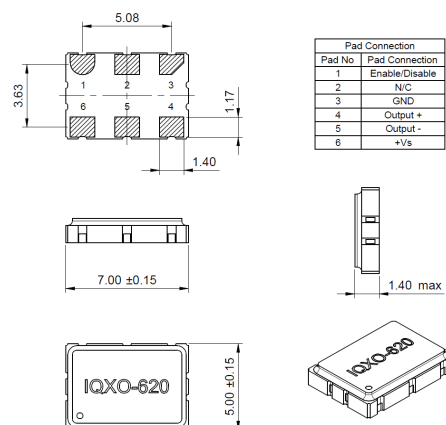
UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

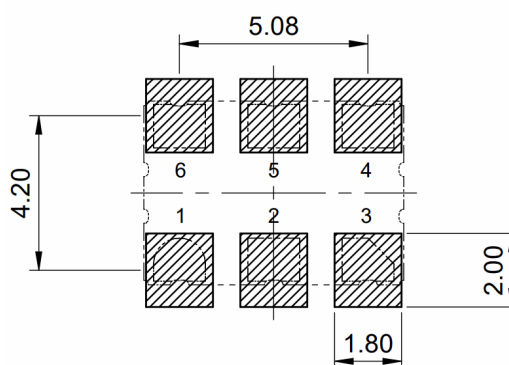
Web: www.iqdfrequencyproducts.com



Outline (mm)



Recommended Solder Pad Layout



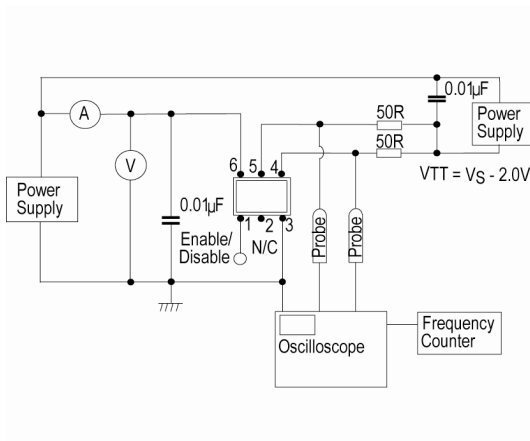
Customer Part:

Packaging Details

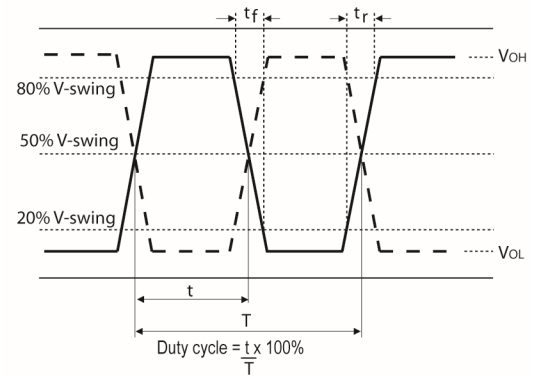
- Tape & reel in accordance with EIA-481
Quantities below the standard reel size to be supplied on cut tape

Standard Pack Quantity: 1,000

Test Circuit:



Waveform:



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