

Customer Part:



Description

- LVDS 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-660
- Model Issue number 3

Frequency Parameters

- Frequency 100.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$
- Operating Temperature Range -40.00 to 85.00°C
- Ageing $\pm 3\text{ppm}$ max per year at 25°C

Electrical Parameters

- Supply Voltage $3.3\text{V} \pm 5\%$
- Current Draw 50.000mA

Output Details

- Output Compatibility LVDS
- Drive Capability 100Ω
- Rise & Fall Time (20 - 80%) 0.5ns max
- Duty Cycle 45/55%
- Differential Output Voltage (VoD): 0.247V min, 0.330V typ, 0.454V max.
- Offset Voltage (VOS): 1.125V min, 1.250V typ, 1.375V max.
- Output Voltage Levels:
Output Low (VoL): 0.9V min
Output High (VoH): 1.6V max

Output Control

- Enable/Disable:
Logic '1' ($\geq 70\%$ Vs) to pad 1 enables oscillator output.
Logic '0' ($\leq 30\%$ 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.
Standby Current: $10\mu\text{A}$ max

Noise Parameters

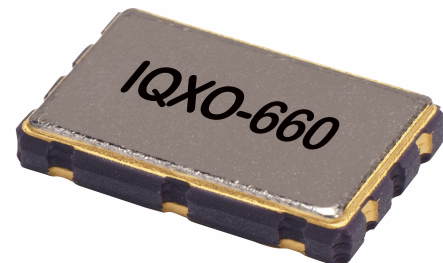
- Phase Jitter (12kHz to 20MHz): 1ps rms max

Environmental Parameters

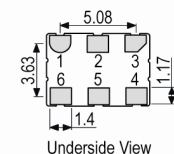
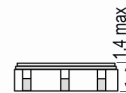
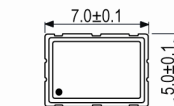
- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202, Method 213, Condition E: 1000G, 0.5ms , half sine wave.
- Vibration: MIL-STD-883, Method 2007, Condition A: 20G

Compliance

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



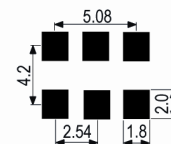
Outline (mm)



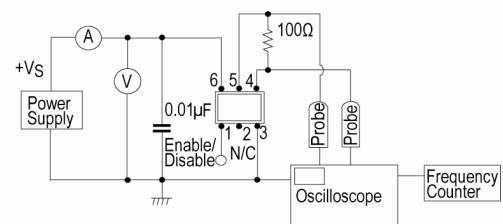
Pad Connections

1. Enable/Disable
2. N/C
3. GND
4. Output +
5. Output -
6. +Vs

Solder Pad Layout



Test Circuit



Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

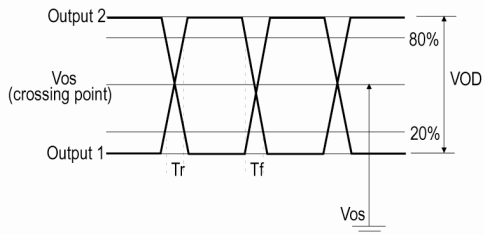
Web: www.iqdfrequencyproducts.com

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

Wave Form



Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com