


**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-621
- Model Issue number 3

**Frequency Parameters**

- Frequency 106.250MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 3\text{ppm}$  max per year @  $25^\circ\text{C}$

**Electrical Parameters**

- Supply Voltage  $2.5\text{V} \pm 5\%$
- Current Draw  $70.000\text{mA}$

**Output Details**

- Output Compatibility LVPECL
- Drive Capability  $50\Omega$  terminated to  $V_S - 2.0\text{V}$
- Rise and Fall Time  $0.5\text{ns}$  max
- Duty Cycle  $45/55\%$
- Output Voltage Levels:  
Output Low (VoL):  $1.095\text{V}$  max  
Output High (VoH):  $1.475\text{V}$  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:  $10\mu\text{A}$  max

**Noise Parameters**

- Phase Jitter (12kHz to 20MHz):  $1\text{ps}$  rms max

**Environmental Parameters**

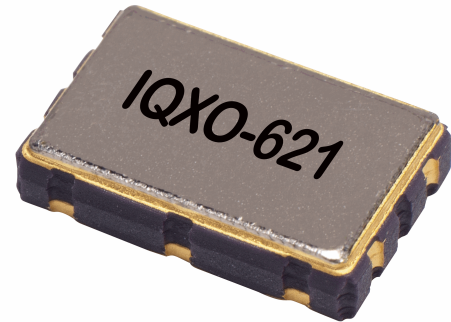
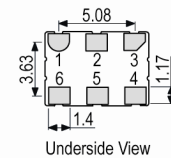
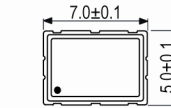
- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock: MIL-STD-202, Method 213, Condition E: 1000G,  $0.5\text{ms}$ , half sine wave.
- Vibration: MIL-STD-883, Method 2007, Condition A: 20G

**Compliance**

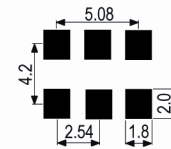
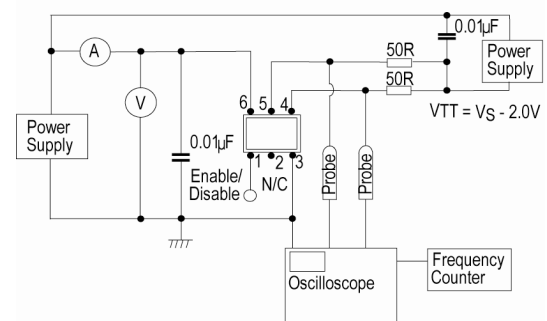
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

**Packaging Details**

- Pack Style: Bulk Loose in bulk pack  
Pack Size: 100
- *Alternative packing option available*


**Outline (mm)**

**Pad Connections**

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

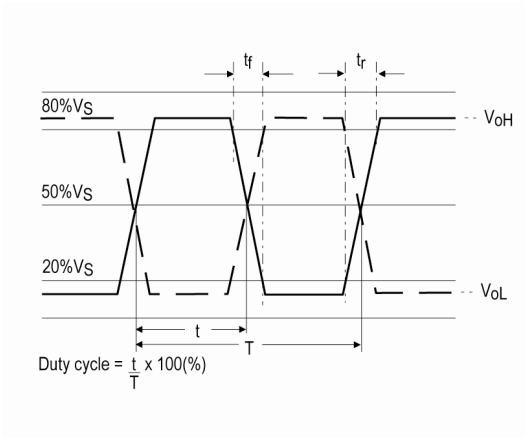
**Solder Pad Layout**

**Test Circuit**

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**Wave Form**



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