

### 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-623
- Model Issue number 4

### Frequency Parameters

- Frequency 125.0MHz
- Frequency Stability  $\pm 50.00$ ppm
- Operating Temperature Range -40.00 to 105.00°C
- Ageing  $\pm 3$ ppm max per year @ 25°C

### Electrical Parameters

- Supply Voltage 2.5V  $\pm 5\%$
- Current Draw 50.000mA max

### Output Details

- Output Compatibility LVPECL
- Rise and Fall Time 0.5ns max
- Duty Cycle 45/55% max
- Output Voltage Levels:  
Output Low (VoL): 1.095V max  
Output High (VoH): 1.475V min

### Output Control

- Standby Operation:  
Logic '1' (70% Vs min) to pad 1 enables oscillator output.  
Logic '0' (30% Vs max) to pad 1 disables oscillator output.  
No connection to pad 1 enables oscillator output due to internal pull-up resistor.
- Standby Current: 10 $\mu$ A max
- Start-up Time: 10ms max

### Noise Parameters

- Phase Jitter (12kHz to 20MHz): 300fs rms max
- Phase Jitter (12kHz to 20MHz):  
@100MHz: 129fs rms typ  
@125MHz: 101fs rms typ  
@156.25MHz: 79fs rms typ

### Environmental Parameters

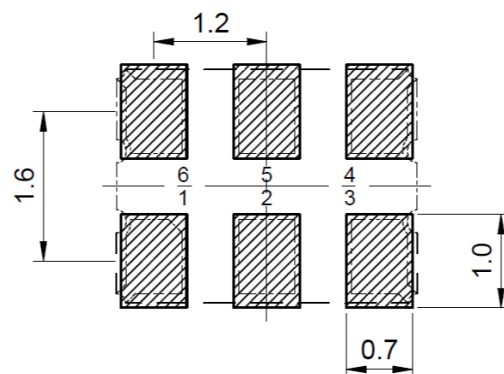
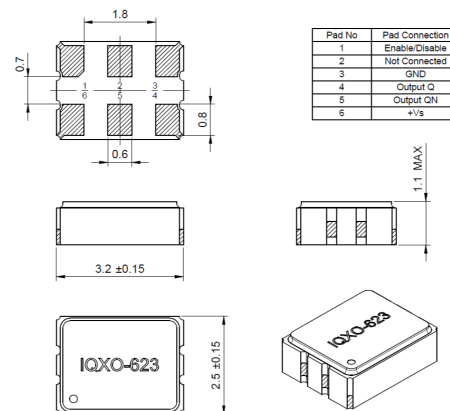
- Storage Temperature Range: -55 to 125°C
- Shock: 1500g, 0.5ms, 3 times for each surface, total 18 times.
- Vibration: Freq. range: 20~2000Hz, peak to peak amplitude: 1.52mm, peak acceleration: 20G (196m/s<sup>2</sup>), 3 directions (X, Y, Z) 20 minutes per cycle, 4 cycles in each of the 3 orientations.

### Manufacturing Details

- RoHS Terminations Au over Ni
- RoHS Reflow Temp 260°C max for 10sec max



### Outline (mm)



### CONTACT INFORMATION:

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### Compliance

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

### Packaging Details

- Tape & reel in accordance with EIA-481  
Quantities below the standard reel size to  
be supplied on cut tape.  
Standard Quantity: 3,000 Pieces

### USEFUL LINKS

**Toolbox:**

[www.we-online.com/toolbox](http://www.we-online.com/toolbox)

**Product Catalog:**

[www.we-online.com/products](http://www.we-online.com/products)

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