

**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-624
- Model Issue number 2

**Frequency Parameters**

- Frequency 100.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $105.00^\circ\text{C}$
- Ageing  $\pm 3\text{ppm}$  max per year @  $25^\circ\text{C}$

**Electrical Parameters**

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

**Output Details**

- Output Compatibility LVPECL
- Rise and Fall Time  $0.5\text{ns}$  max
- Duty Cycle  $45/55\%$
- Output Voltage Levels:  
Output Low (VOL):  $1.680\text{V}$  max  
Output High (VOH):  $2.275\text{V}$  min

**Output Control**

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

**Noise Parameters**

- Phase Jitter (12kHz to 20MHz):  $1\text{ps}$  rms max  
Phase Jitter (12kHz to 20MHz):  $0.171\text{ps}$  rms typ @ 100MHz

**Environmental Parameters**

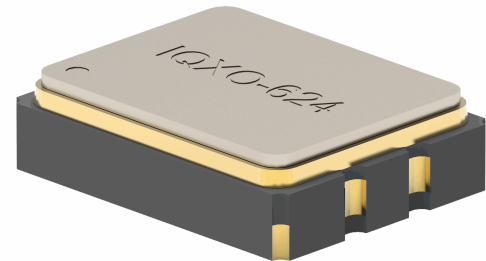
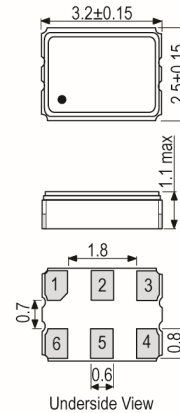
- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock:  $1500\text{G}$ ,  $0.5\text{ms}$ , 3 times for each surface, total 18 times.
- Vibration: Freq. range:  $20\sim 2000\text{Hz}$ , peak to peak amplitude:  $1.52\text{mm}$ , peak acceleration:  $20\text{G}$  ( $196\text{m/s}^2$ ), 3 direction(X, Y,Z), each cycle:  $20\text{min}$ , 4 cycles for each direction.

**Manufacturing Details**

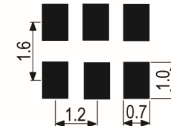
- RoHS Terminations Au over Ni
- RoHS Reflow Temp  $260^\circ\text{C}$  max for 10sec max

**Compliance**

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


**Outline (mm)**


- Pad Connections
1. Standby Operation
  2. N/C
  3. GND
  4. Output +
  5. Output -
  6. +Vs

**Solder Pad Layout**

**Sales Office Contact Details:**

UK: +44 (0)1460 270200

Germany: 0800 1808 443

France: 0800 901 383

USA: +1.760.318.2824

 Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

 Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)



**Customer Part:**

**Packaging Details**

- Pack Style: Cutt      In tape, cut from a reel  
Pack Size: 100
- *Alternative packing option available*

---

**Sales Office Contact Details:**

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[IQD Frequency Products:](#)

[LFSPXO083343Cutt](#)