# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Part No. + Packaging: LFTCX0077227Reel

#### Description

- IQXT-225 is a 2.0 x 1.6mm SMD Temperature Compensated Crystal Oscillator (TCXO) in a hermetically sealed package with E/D on pad 1 for low power operation.
- Model IQXT-225-12
- Model Issue number
- Developed frequencies: 16.368, 16.369, 19.2, 26.0, 33.6 and 38.4MHz

#### **Frequency Parameters**

Frequency 

16.3690MHz

1

- Frequency Tolerance Max ±1.50ppm
- Frequency Stability ±0.50ppm
- **Operating Temperature Range**
- Ageing

-30.00 to 85.00°C ±1ppm max per year @ 25°C

- ±2°C Frequency Tolerance: @ 25°C ±2°C referred to nominal frequency before reflow soldering.
- Supply Voltage Variation (@ ±5% change): ±0.1ppm max
- Load Variation (@ ±10% change): ±0.1ppm max
- Reflow Variation (at 25°C ±2°C referred to frequency before reflow): ±1ppm max, 24 hrs after reflow.

#### **Electrical Parameters**

Current Draw Max

- Supply Voltage
- 1.2V ±5% 1.700mA
- Absolute Maximum Ratings: Supply Voltage: -0.6V to 4.6V E/D Control Voltage: -0.6V to Vs+0.6V (4.6V max)

#### **Output Details**

- Output Compatibility . Drive Capability
- **Clipped Sine** 10kΩ//10pF ±10%
- Output: DC coupled Note: a 1000pF DC-cut capacitor is to be connected in the output line of the TCXO.
- Output Level: 0.8V pk-pk min
- Start Up Time: Vout ≥90% of V pk-pk: 2ms max
- Start Up Time (within ±0.5ppm): 2ms max

#### **Output Control**

Enable/Disable (pad 1): 

Logic '1' (80%Vs min) or no connection to pad 1 enables the oscillator output.

Logic '0' (20%Vs max) to pad 1 disables the oscillator output, the output goes to a high impedance state. Disable current in E/D mode: 3µA max

#### **Noise Parameters**

Phase Noise (typ): -135dBc/Hz @ 1kHz

# Manufacturing Details

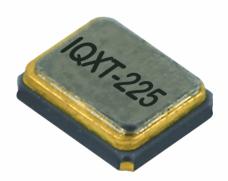
### **RoHS** Terminations

**Environmental Parameters** 

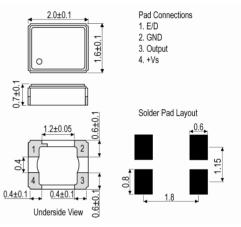
- **RoHS Reflow Temp**
- NiAu +250°C ±10°C for 10 sec max

## Sales Office Contact Details: UK: +44 (0)1460 270200 Germany: 0800 1808 443

France: 0800 901 383 USA: +1.760.318.2824



#### Outline (mm)



Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

a



#### Compliance

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

#### Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
  Pack Size: 3,000
- 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 Web: www.iqdfrequencyproducts.com