

**Customer Part:**

**Description**

- IQXT-205-2-18 is a 2.0 x 1.6mm SMD Voltage Controlled Temperature Compensated Crystal Oscillator (VCTCXO) in a hermetically sealed package.
- Model IQXT-205-2-18
- Model Issue number 1
- Developed frequencies: 16.2, 16.368, 16.369, 19.2, 20.0, 24.0, 25.0, 26.0, 27.456, 28.925, 28.974, 30.0, 32.0, 33.6, 38.4, 48.0, 50.0 and 52.0MHz

**Frequency Parameters**

- Frequency 52.0MHz
- Frequency Tolerance Max  $\pm 1.50\text{ppm}$
- Tolerance Condition  $@ 25^\circ\text{C} \pm 2^\circ\text{C}$
- Frequency Stability  $\pm 0.50\text{ppm}$
- Operating Temperature Range  $-30.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 1\text{ppm}$  max per year @  $25^\circ\text{C}$   
 $\pm 3^\circ\text{C}$
- Frequency Tolerance: Referred to nominal frequency before reflow soldering.
- Supply Voltage Variation:
  - @  $\pm 5\%$  change for  $\pm 0.5\text{ppm}$  stability:  $\pm 0.1\text{ppm}$  max
  - @  $\pm 5\%$  change for  $\pm 2.0\text{ppm}$  stability:  $\pm 0.2\text{ppm}$  max
- Load Variation:
  - @  $\pm 10\%$  change for  $\pm 0.5\text{ppm}$  stability:  $\pm 0.1\text{ppm}$  max
  - @  $\pm 10\%$  change for  $\pm 2.0\text{ppm}$  stability:  $\pm 0.2\text{ppm}$  max
- Short Term Stability (Allan variance):  $\pm 1\text{ppb}$  max (Tau = 0.1s)
- IR Reflow Resistance (ref to frequency before reflow):  $\pm 1\text{ppm}$  max

**Electrical Parameters**

- Supply Voltage 1.8V  $\pm 5\%$
- Current Draw Max 2.000mA
- Absolute Maximum Ratings:
  - Supply Voltage:  $-0.6\text{V}$  to  $4.6\text{V}$
  - Control Voltage:  $-0.6\text{V}$  to  $V_s+0.6\text{V}$

**Frequency Adjustment**

- Pulling  $\pm 8\text{ppm}$  min to  $\pm 13\text{ppm}$  max
- Control Voltage  $0.9\text{V} \pm 0.8\text{V}$
- Slope: Positive

**Output Details**

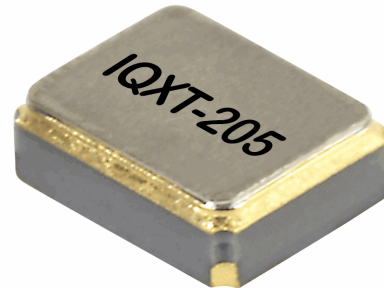
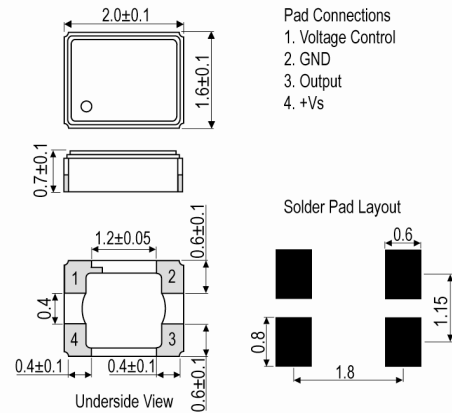
- Output Compatibility Clipped Sine
- Drive Capability  $10\text{k}\Omega//10\text{pF}$
- Output: DC coupled
- Output Level:  $0.8\text{V}$  pk-pk min
- Start Up Time (90% of V pk-pk): 2ms max
- Start Up Time (within  $\pm 0.5\text{ppm}$ ): 2ms max

**Noise Parameters**

- Phase Noise (typ):  $-135\text{dBc}/\text{Hz}$  @ 1kHz
- Harmonic Distortion:  $-5.0\text{dBc}$  max

**Environmental Parameters**

- Storage Temperature Range:  $-40$  to  $85^\circ\text{C}$


**Outline (mm)**

**Sales Office Contact Details:**

UK: +44 (0)1460 270200

France: 0800 901 383

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

Germany: 0800 1808 443

USA: +1.760.318.2824

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

**Customer Part:****Manufacturing Details**

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

**Compliance**

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

**Packaging Details**

- Pack Style: Cutt Cut tape  
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:](#)

[LFTVX0079055Cutt](#)