


Description

- Voltage controlled temperature compensated crystal oscillator (VCTCXO) in a hermetically sealed 14-pin DIL metal package.
- Model IQXT-120-27
- Model Issue number 2

Frequency Parameters

- Frequency 10.0MHz
- Frequency Tolerance $\pm 1.00\text{ppm}$
- Tolerance Condition @ 25°C & VC=2.5V
- Frequency Stability $\pm 1.00\text{ppm}$
- Operating Temperature Range 0.00 to 70.00°C
- Ageing $\pm 1.0\text{ppm max/1st yr @ 25°C}$
 $\pm 5.0\text{ppm max/10 yrs @ 25°C}$
- Supply Voltage Variation ($\pm 5\%$ change @ 25°C): $\pm 0.3\text{ppm max}$
- Load Variation ($\pm 10\%$ change @ 25°C): $\pm 0.2\text{ppm max}$
- Frequency Perturbation: $\pm 0.5\text{ppm max/}^\circ\text{C}$ in 2°C steps
- Static Temperature Hysteresis: $\pm 0.4\text{ppm max}$

Electrical Parameters

- Supply Voltage 5.0V $\pm 5\%$
- Current Draw 20.000mA

Frequency Adjustment

- Pulling $\pm 10\text{ppm} \sim \pm 15\text{ppm}$
- Control Voltage 2.5V $\pm 2.0\text{V}$
- Input Impedance 100k Ω min
- Slope: Positive
- Linearity: 10% max

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF
- Rise and Fall Time 3.0ns max
- Duty Cycle 40/60%

Noise Parameters

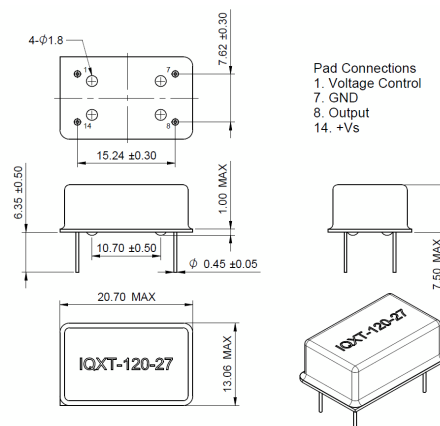
- Phase Noise (typ @ 25°C):
-70dBc/Hz @ 1Hz
-100dBc/Hz @ 10Hz
-125dBc/Hz @ 100Hz
-145dBc/Hz @ 1kHz
-155dBc/Hz @ 10kHz
- Phase Noise (max @ 25°C):
-67dBc/Hz @ 1Hz
-97dBc/Hz @ 10Hz
-123dBc/Hz @ 100Hz
-144dBc/Hz @ 1kHz
-154dBc/Hz @ 10kHz

Environmental Parameters

- Storage Temperature Range: -45 to 90°C

Compliance

- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): 1


Outline (mm)

Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com



TCVCXO Specification

Part No. + Packaging: **LFTVXO084474Bulk**

Packaging Details

- Pack Style: Bulk Bulk pack
Pack Size: 1
- *Alternative packing option available*

Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com