TCXO Specification
Part No. + Packaging: LFTCX075792Cutt

Description
- Temperature compensated crystal oscillator (TCXO) in a hermetically sealed 3.2x2.5mm SMD package.
- Model: IQXT-220-1
- Model Issue number: 1

Frequency Parameters
- Frequency: 10.0MHz
- Frequency Tolerance: ±1.00ppm
- Frequency Stability: ±0.28ppm
- Operating Temperature Range: -40.00 to 85.00°C
- Ageing: ±0.02ppm max/day, ±1ppm max/year

Frequency Tolerance: Measurement referenced to frequency observed with TA=25°C, Vs=3.3V and load=10kΩ/10pF, within 30 days after ex-works.
Frequency Stability: TA varied across the operating temperature range, measurement referenced to frequency observed with \( f_{ref} = \frac{(f_{max} + f_{min})}{2} \), Vs=3.3V, load=10kΩ/10pF and temperature variable speed less than 2°C/min.
Ageing: Vs, TA and load constant, measurement referenced to frequency observed with TA=25°C, Vs=3.3V, load=10kΩ/10pF and after 1hr of operation.
Supply Voltage Variation (measurement referenced to frequency observed TA=25°C, Vs varied from 3.13V to 3.47V and load=10kΩ/10pF): ±0.1ppm max
Load Variation (measurement referenced to frequency observed with TA=25°C, Vs=3.3V and load change=10kΩ/10pF ±5%): ±0.1ppm max

Electrical Parameters
- Supply Voltage: 3.3V ±5%
- Current Draw: 5.000mA
- Current Consumption (@ TA=25°C, Vs=3.3V and load=10kΩ/10pF): 5mA max

Output Details
- Output Compatibility: Clipped Sine
- Drive Capability: 10kΩ/10pF
- Output Voltage Level: 0.8V pk-pk min

Noise Parameters
- Phase Noise @ 25°C (F=10.0MHz, typ): -90dBC/Hz @ 10Hz
- -120dBC/Hz @ 100Hz
- -140dBC/Hz @ 1kHz
- -145dBC/Hz @ 10kHz
- -148dBC/Hz @ 100kHz

Sales Office Contact Details:
UK: +44 (0)1460 270200
France: 0800 901 383
Germany: 0800 1808 443
USA: +1.760.318.2824
Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Printed on 19 Apr 17 16:46 using Part Data Sheet V1.00014
Environmental Parameters

- Operable Temperature Range: -40 to 85°C
- Storage Temperature Range: -55 to 105°C
- ESD Levels: ANSI/ESDA/JEDEC JS-001-2010:
  Human Body Model, Class 2: 2000V to 4000V
  Machine Model, Class B: 200V to 400V
- Shock: IEC 60068-2-27, Test Ea, Severity 50A: 100G
  acceleration for 6ms, half sine wave, 3 times in 3 mutually
  perpendicular planes.
- Vibration: IEC 60068-2-06, Test Fc: 10Hz-2000Hz, 0.75mm
  amplitude, 10G acceleration, 30mins per cycle, 3 times in 3
  mutually perpendicular planes, test duration 2hrs.

Manufacturing Details

- Storage Conditions:
  Temperature: -10 to 35°C
  Humidity: 20 to 70% RH
- Maximum Process Temperature: 260°C (30secs max)

Compliance

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

Packaging Details

- Pack Style: Cutt
  Cut tape
- Pack Size: 1

Alternative packing option available

Sales Office Contact Details:

UK: +44 (0)1460 270200  France: 0800 901 383  Email: info@iqdfrequencyproducts.com
Germany: 0800 1808 443  USA: +1.760.318.2824  Web: www.iqdfrequencyproducts.com

Printed on 19 Apr 17 16:46 using Part Data Sheet V1.00014  Page 2 of 2