

**Customer Part:**

**Description**

- Surface mount Temperature Compensated Crystal Oscillator (TCXO) in a miniature 1.6 x 1.2mm surface mount package.
- Model IQXT-350
- Model Issue number 2

**Frequency Parameters**

- Frequency 52.0MHz
- Frequency Tolerance  $\pm 1.50\text{ppm}$
- Tolerance Condition @ 25°C  $\pm 2^\circ\text{C}$
- Frequency Stability  $\pm 0.50\text{ppm}$
- Operating Temperature Range -30.00 to 85.00°C
- Ageing  $\pm 1\text{ppm}$  max per year @ 25°C  $\pm 3^\circ\text{C}$
- Supply Voltage Variation ( $\pm 5\%$  change @ 25°C):  $\pm 0.1\text{ppm}$  max
- Load Variation ( $\pm 10\%$  change @ 25°C):  $\pm 0.1\text{ppm}$  max
- IR Reflow Resistance (referred to frequency before reflow):  $\pm 1\text{ppm}$  max

**Electrical Parameters**

- Supply Voltage 1.8V  $\pm 5\%$
- Current Draw 2.000mA
- Absolute Maximum Supply Voltage: -0.6V to 4.6V

**Output Details**

- Output Compatibility Clipped Sine
- Drive Capability 10k $\Omega$ /10pF
- Output Voltage Level: 0.8V pk-pk min
- Output: DC coupled
- Start Up Time ( $V_{\text{out}} \geq 90\%V_{\text{pk-pk}}$ ): 2ms max

**Noise Parameters**

- Harmonic distortion: -5.0dBc max
- Phase Noise @ 25°C: -135dBc/Hz @ 1kHz typ

**Environmental Parameters**

- Storage Temperature Range: -40 to 85°C

**Manufacturing Details**

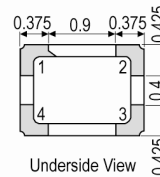
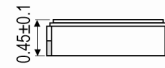
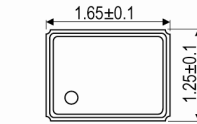
- Reflow Process  
Preheating: 170°C $\pm 10^\circ\text{C}$  for 1 to 2 minutes.  
Maximum reflow: 250°C $\pm 10^\circ\text{C}$  for 10secs.
- A DC-cut capacitor is not built in to the oscillator; a 1000pF DC-cut capacitor is therefore required in the output line.
- RoHS Terminations AuNi
- RoHS Reflow Temp Maximum reflow: 250°C $\pm 10^\circ\text{C}$  for

**Compliance**

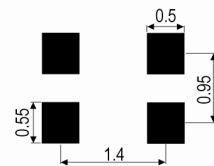
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

**Packaging Details**

- Pack Style: Reel Tape and reel in accordance with
- Pack Size: 1,000 EIA-481-D

**Outline (mm)**

**Pad Connections**

1. GND
2. GND
3. Output
4. +Vs

**Solder Pad Layout**

**Sales Office Contact Details:**

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## TCXO Specification

Part No. + Packaging: *LFTCXO073006Reel*

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### Customer Part:

- *Alternative packing option available*

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