

Customer Part:

Description

- Surface mount temperature compensated voltage controlled crystal oscillator (TCVCXO) providing a high degree of frequency stability over a wide temperature range in a hermetically sealed ceramic package and is particularly suited to applications where space is at a premium.
- Model CFPT-141
- Model Issue number 8

Frequency Parameters

- Frequency 16.0MHz
- Frequency Tolerance $\pm 0.50\text{ppm}$
- Frequency Stability $\pm 2.50\text{ppm}$
- Operating Temperature Range -30.00 to 85.00°C
- Ageing $\pm 1\text{ppm typ in 1st year @ } 25^\circ\text{C}$

Electrical Parameters

- Supply Voltage $3.0\text{V} \pm 0.15\text{V}$
- Current Draw 2.000mA
- Supply Voltage Variation: $\pm 0.2\text{ppm}$ (5% change)
- Load Variation: $\pm 0.2\text{ppm max}$ (10% change)

Frequency Adjustment

- Pulling $\pm 3\text{ppm min to } \pm 7\text{ppm max}$
- Control Voltage $1.5\text{V} \pm 1.0\text{V}$
- Input Impedance (Pad1): $1.0\text{M}\Omega \text{ min}$

Output Details

- Output Compatibility Clipped Sine
- Drive Capability $10\text{k}\Omega // 10\text{pF} \pm 10\%$
- Output: 0.8Vpk-pk min

Noise Parameters

- Phase Noise (typical @ 13MHz)
 - $80\text{dBc/Hz @ } 10\text{Hz}$
 - $105\text{dBc/Hz @ } 100\text{Hz}$
 - $130\text{dBc/Hz @ } 1\text{kHz}$
 - $140\text{dBc/Hz @ } 10\text{kHz}$

Environmental Parameters

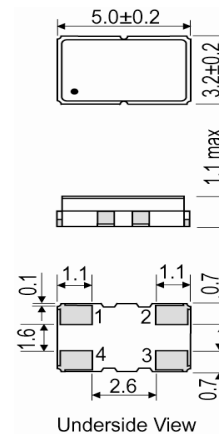
- Shock: MIL-STD-883D, Method 2002.3, Test Condition B: 1500G, 0.5ms, 1/2 sine wave, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: MIL-STD-883D, Method 2005.2, Test Condition B: 20G (20Hz-2000Hz), 1.5mm amplitude, in 3 mutually perpendicular planes, 4hrs in each plane
- Storage Temperature Range: -55 to 125°C

Manufacturing Details

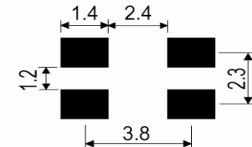
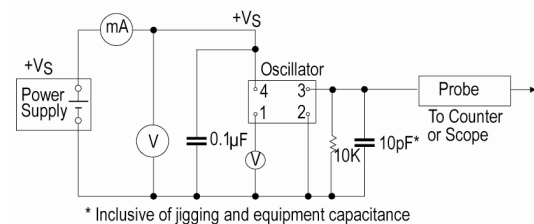
- RoHS Terminations NiAu
- RoHS Reflow Temp $260\text{degC } 10\text{s}$

Compliance

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


Outline (mm)


Pad Connections
 1. Voltage Control
 2. GND
 3. Output
 4. +Vs

Solder Pad Layout

Test Circuit

Sales Office Contact Details:

UK: +44 (0)1460 270200
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TCVCXO Specification

Part No. + Packaging: *LFTVXO024239Reel*

Customer Part:

Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000
- *Alternative packing option available*

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