

CFPT-125

ISSUE 6 ; 20 DECEMBER 2005

Delivery Options

- Please contact our sales office for details

Package Outline

- 7.0 x 5.0 x 2.0mm SMD

Description

- CFPT-125 is a surface mount temperature compensated voltage controlled oscillator (TCVCXO) providing a high degree of frequency stability over a wide temperature range

Supply Voltage

- 3.3V ± 5%

Frequency Stability

- Temperature ±0.9ppm (code T)
- Supply Voltage Variation ±0.3ppm *
- Load Variation (15pF ±10%) ±0.2ppm
- After Reflow ±1.0ppm

* Supply Voltage Variation :
 ≥30.0MHz to <40.0MHz, ±0.4ppm
 ≥40.0MHz, ±0.5ppm

Operating Temperature Range

- -20 to 70°C (code S)

Supply Current

- 3mA @ 20MHz typical

Output Compatibility

- HCMOS
- Load: 15pF nom.
- VoL: <10% Vsupply
- VoH: >90% Vsupply
- Duty Cycle: 45/55%
- Rise Time: 8ns
- Fall Time: 8ns

Ageing

- ±1ppm / year typical in 1st year @ 25°C

Standard Stock Frequencies

- 10, 12.8, 13.0, 14.4, 16.32, 16.384, 19.44, 20.0, 26.0, 32.768 40.0MHz
- Other frequencies may be available, please contact our sales office

Frequency Adjustment

- >±5ppm by means of 1.65±1V control voltage

Marking

- CMAC and Batch Code
- Stab/Temp code + Frequency Code + Date Code

Minimum Ordering Information Required

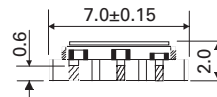
- Frequency + Model Number (example 10.0MHz CFPT-125)

Environmental Specification

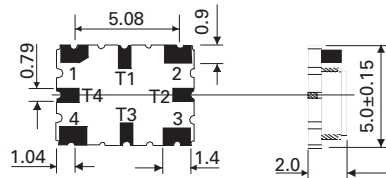
- Storage Temperature Range -55 to 125°C
- Vibration: IEC 60068-2-6 Test Fc Procedure B4, 10-60Hz 1.5mm displacement, at 98.1m/s², 30 minutes in each of three mutually perpendicular axes at 1 octave per minute
- Shock: IEC 60068-2-27 Test Ea, 980m/s² acceleration for 6ms duration, 3 shocks in each direction along three mutually perpendicular axes
- Solderability: MIL-STD-202, Method 208, Category 3
- RoHS: Parts are fully compliant with the European Union directive 2002/95/EC on the restriction of the use of hazardous substances in electrical and electronic equipment. Note: The RoHS compliant parts are suitable for assembly using both Lead-free solders and Tin / Lead solders.

SURFACE MOUNT TCXOs

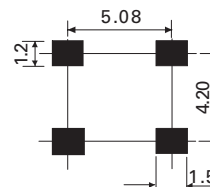
Outline in mm



Pad Connections
 1. Voltage Control
 2. GND
 3. Output
 4. +Vs
 T1, T2, T3, T4,
 Do Not Connect



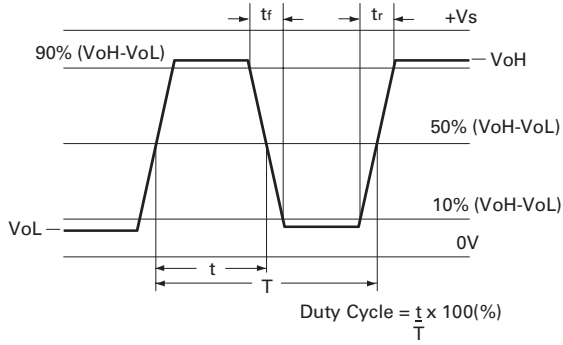
Solder pad layout



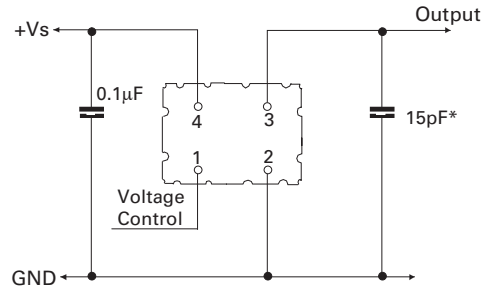
Manufacturing Information

- Soldering: SMD product suitable for Convection Reflow soldering. Peak temperature 260°C. Maximum time above 220°C, 60 secs.
- Washing: Able to withstand aqueous washing process.
- Packaging: Tape and reel, details available on request.

Output Waveform



Test Circuit



* inclusive of probe and jig capacitance

SURFACE MOUNT
TCXOs