

# CFPT-125 SMD TCVCXO

ISSUE 9; 3 APRIL 2009 - RoHS 2002/95/EC

## Description

- Surface mount temperature compensated voltage controlled oscillator (TCVCXO) providing a high degree of frequency stability over a wide temperature range in a hermetically sealed ceramic package

## Package Outline

- 7 x 5mm

## Standard Frequencies

- 10, 12.8, 13, 14.4, 16.32, 16.384, 19.44, 20, 26, 32.768 40MHz
- Other frequencies may be available, please contact our sales office

## Output Compatibility & Load

- HCMOS
- 15pF nom.

## Duty Cycle

- 45/55%

## Rise & Fall Time

- 8ns max

## Frequency Adjustment

- $\pm 5$ ppm min

## Control voltage

- 1.65V $\pm$ 1V

## Frequency Stability

- $\pm 0.9$ ppm (code T)

## Supply Voltage Variation

- <30MHz  $\pm 0.3$ ppm
- >30MHz to <40MHz  $\pm 0.4$ ppm
- >40MHz  $\pm 0.5$ ppm

## Load Variation

- $\pm 0.2$ ppm (@15pF  $\pm 10\%$ )

## After Reflow

- $\pm 1.0$ ppm

## Operating Temperature Range

- -20 to 70°C (code S)

## Storage Temperature Range

- -55 to 125°C

## Supply Voltage

- 3.3V  $\pm 5\%$

## Supply Current

- 3mA @ 20MHz typical

## Ageing

- $\pm 1$ ppm typical in 1st year @ 25°C

## Environmental

- Vibration: IEC 60068-2-6 Test Fc Procedure B4, 10-60Hz 1.5mm displacement, at 98.1m/s<sup>2</sup>, 30 minutes in each of three mutually perpendicular planes at 1 octave per minute
- Shock: IEC 60068-2-27 Test Ea, 980m/s<sup>2</sup> acceleration for 6ms duration, 3 shocks in each direction along three mutually perpendicular planes
- Solderability: MIL-STD-202, Method 208, Category 3

## Marking Includes

- IQD + Batch Code + Stab/Temp code + Frequency Code + Date Code

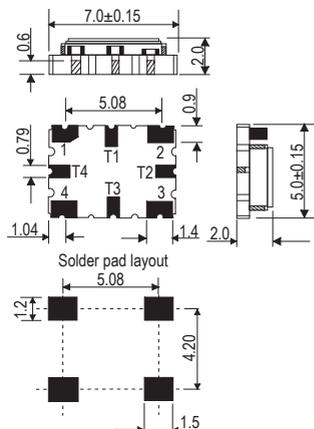
## Packaging

- Bulk or Tape & Reel

## 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.

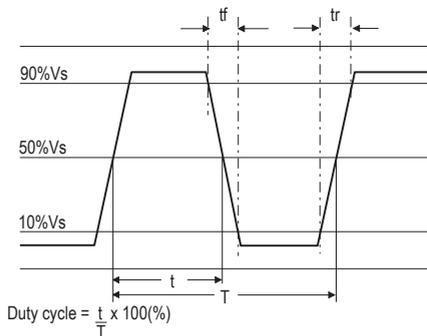
### Outline (mm)



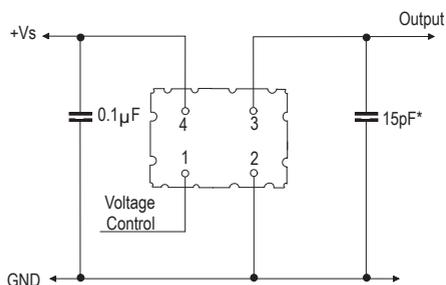
### Pad Connections

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

### Output Waveform



### Test Circuit



\* Inclusive of probe and jig capacitance

TCXOs