



## CFPT-125 SMD TCVCXO

ISSUE 10; 1 NOVEMBER 2010 - 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

### 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 offices)

### Output Compatibility & Load

- HCMOS
- 15pF nom

### Supply Voltage

- 3.3V±5%

### Supply Current

- 3mA @ 20MHz typical

### Frequency Stability

- ±0.9ppm

### Supply Voltage Variation

- <30MHz ±0.3ppm
- 30MHz to <40MHz ±0.4ppm
- 40MHz ±0.5ppm

### Load Variation

- ±0.2ppm (@15pF ±10%)

### After Reflow

- ±1.0ppm

### Ageing

- ±1ppm typ in 1st year @ 25°C

### Operating Temperature Range

- -20 to 70°C

### Control Voltage

- 1.65V±1V

### Frequency Adjustment

- ±5ppm min

### Duty Cycle

- 45/55%

### Rise & Fall Time

- 8ns max

### Storage Temperature Range

- -55 to 125°C

### Environmental

- Shock: IEC 60068-2-27, Test Ea: 980m/s<sup>2</sup> acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz 1.5mm displacement, 60-2000Hz at 98.1m/s<sup>2</sup>, 30mins in 3 mutually perpendicular planes at 1 oct/min
- Solderability: MIL-STD-202, Method 208, Category 3

### Manufacturing Information

- Soldering: Suitable for Convection Reflow soldering. Peak temperature 260°C for 10sec max
- Washing: Able to withstand aqueous washing

### Packaging

- Loose in bulk pack, 100pcs per pack
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

### Ordering Information (\*minimum required)

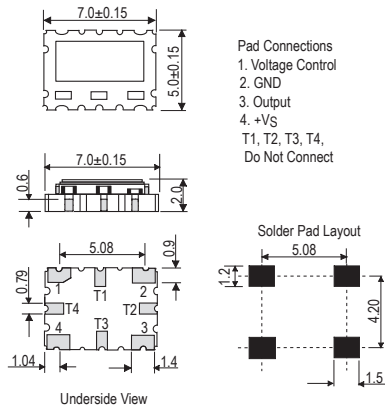
- Frequency\*
- Model\*
- Output
- Frequency Stability (over operating temperature range)
- Operating Temperature Range
- Supply Voltage
- Frequency Adjustment

### Example

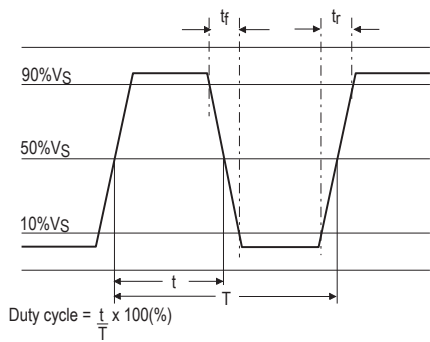
- 10.0MHz CFPT-125  
HCMOS ±0.9ppm -20 to 70C 3.3V ±5ppm min



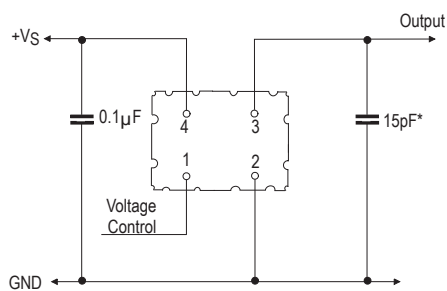
**Outline (mm)**



**Output Waveform**



**Test Circuit**



\* Inclusive of probe and jig capacitance