

# CFPT-141

ISSUE 5; 19 OCTOBER 2004

## Delivery Options

- Please contact our sales office for current leadtimes

## Description

- CFPT-141 is a surface mount temperature compensated voltage controlled crystal oscillator (TCVCXO) providing a high degree of frequency stability over a wide temperature range. They are particularly suited to applications where space is at a premium

## Package Outline

- 5.0 × 3.2 × 1.2mm SMD

## Stock Frequencies

- 12.80, 13.0, 19.2, 20.0, 26.0MHz

## Output Waveform

- Clipped Sine 0.8V pk-pk min
- Output Load 10kΩ/10pF ±10%

## Voltage Control

- 1.5V ±1.0V applied to pad 1
- VC Input Impedance >1.0MΩ

## Frequency Adjustment

- ±3ppm to ±7ppm

## Frequency Stability

- Temperature: see table
- Supply Voltage Variation: ±0.2ppm (5% change)
- Load Variation: ±0.2ppm max (10% change)
- Ageing ±1ppm typical first year @ 25°C

## Storage Temperature Range

- -55 to 125°C

## Soldering Conditions

- For typical soldering conditions, please see the relevant pages in Application Notes

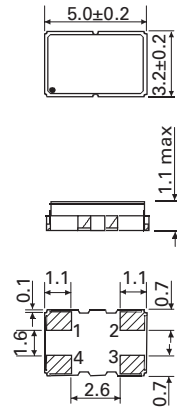
## Marking

- Model number
- Frequency

## Minimum Order Information Required

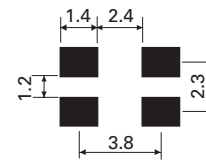
- Frequency + Model Number + Frequency Stability + Operating Temperature

## Outline in mm

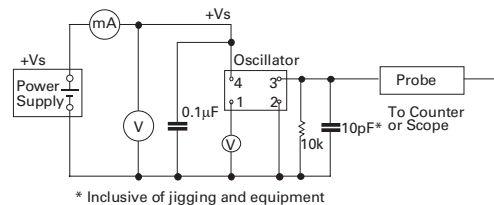


- Pad Connections
1. Voltage Control
  2. GND
  3. Output
  4. +Vs

## Solder pad layout



## Test Circuit



**Electrical Specifications - maximum limiting values when measured in test circuit**

Frequency Range	Supply Voltage	Supply Current	Voltage Control Change	Output Waveform	Output	Model Number
10.0 to 30.0MHz	3.0V $\pm$ 0.15V	2.0mA	$\pm$ 3ppm min. / $\pm$ 7ppm max.	Clipped Sine	0.8 V pk-pk min	CFPT-141

**Frequency Stabilities Available Over Temperature Ranges**

Operating Temperature Ranges	Frequency Stabilities Vs Operating Temperature Range			
	$\pm$ 1.5ppm	$\pm$ 2.0ppm	$\pm$ 2.5ppm	$\pm$ 5ppm
0 to 50°C	Code CP	Code GP	Code HP	Code KP
-10 to 60°C	Code CR	Code GR	Code HR	Code KR
-20 to 70°C	-	Code GS	Code HS	Code KS
-30 to 85°C	-	-	Code HW*	Code KW
-40 to 85°C	-	-	Code HX	Code KX

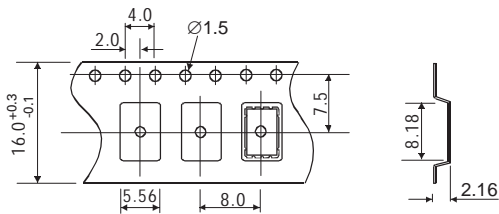
\*Please note Code HW is the standard frequency stability vs operating temperature range

Ordering Example	13.0MHz	CFPT-141	HW
Frequency _____	_____	_____	_____
Model Number _____	_____	_____	_____
Frequency Stability Vs Operating Code _____	_____	_____	_____

SURFACE MOUNT TCXOs

**Note. Other frequencies / specifications may be available, please contact our sales office.**

**Outline in mm - Tape**



**Outline in mm - Reel**

