

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

- $5.0 \times 3.2 \times 1.2\text{mm}$ SMD

Stock Frequencies

- 12.80, 13.0, 19.2, 20.0, 26.0MHz

Output Waveform

- Clipped Sine 0.8V pk-pk min
- Output Load $10\text{k}\Omega/10\text{pF} \pm 10\%$

Voltage Control

- $1.5\text{V} \pm 1.0\text{V}$ applied to pad 1
- VC Input Impedance $>1.0\text{M}\Omega$

Frequency Adjustment

- $\pm 3\text{ppm}$ to $\pm 7\text{ppm}$

Frequency Stability

- Temperature: see table
- Supply Voltage Variation: $\pm 0.2\text{ppm}$ (5% change)
- Load Variation: $\pm 0.2\text{ppm}$ max (10% change)
- Ageing $\pm 1\text{ppm}$ 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

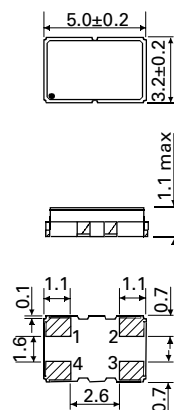
Marking

- Model number
- Frequency

Minimum Order Information Required

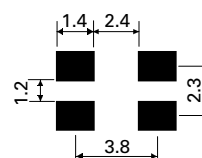
- Frequency + Model Number + Frequency Stability + Operating Temperature

Outline in mm

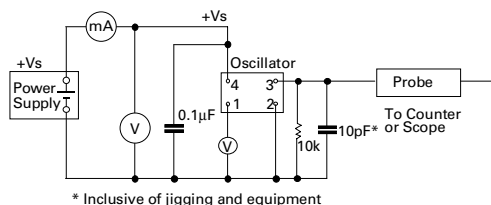


Pad Connections
 1. Voltage Control
 2. GND
 3. Output
 4. +Vs

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 ±0.15V	2.0mA	±3ppm min. / ±7ppm max.	Clipped Sine	0.8 V pk-pk min	CFPT-141

Frequency Stabilities Available Over Temperature Ranges

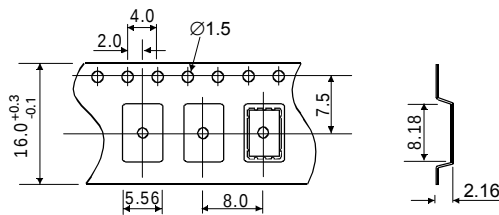
Operating Temperature Ranges	Frequency Stabilities Vs Operating Temperature Range			
	±1.5ppm	±2.0ppm	±2.5ppm	±5ppm
0 to 50°C	Code CP	Code GP	Code HP	Code KP
-10 to 60°C	Code CR	Code GR	Code HR	Code KR
-20 to 70°C	-	Code GS	Code HS	Code KS
-30 to 85°C	-	-	Code HW*	Code KW
-40 to 85°C	-	-	Code HX	Code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

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

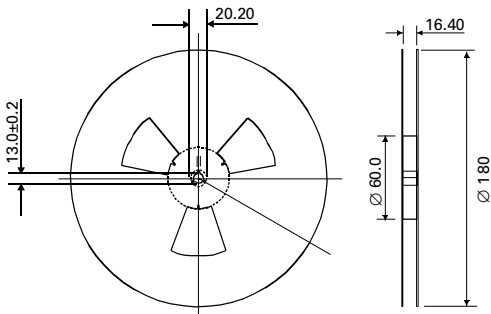
Ordering Example	13.0MHz	CFPT-141	HW
Frequency _____			
Model Number _____			
Frequency Stability Vs Operating Code _____			

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

Outline in mm - Tape



Outline in mm - Reel



SURFACE MOUNT
TCXOs