CFPT-120

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Delivery Options

- Common frequencies are available from stock. Please see p224 for details.

Description

- CFPT-120 is a surface mount temperature compensated voltage controlled crystal oscillator providing a high degree of frequency stability over a wide temperature range.

Package Outline

- 7.0 × 5.0 × 2.0mm SMD (surface mount device)

Standard Frequencies

- 12.6MHz, 12.8MHz, 13.0MHz, 14.4MHz, 14.85MHz, 19.2MHz, 19.44MHz, 19.68MHz, 19.8MHz

Output Waveform

- Clipped Sine 0.8V peak to peak minimum

Ageing

- ±1ppm typical first year @ 25°C

Frequency Adjustment

- ±5ppm to ±15ppm external control voltage at 1.5V ±1.0V applied to pin 1

Frequency Stability

- Temperature: see table
- Supply Voltage Variation: ±5% ±0.2ppm max.
- Load Variation: ±10% ±0.3ppm max.
- After reflow: ±1ppm max

Voltage Control

- 1.5V ±1.0V applied to pin 1

Storage Temperature Range

- –40 to 85°C

Solder Reflow

- Pre-heat: 150 to 180°C/55 to 70 seconds max.
- Reflow: 180°C/40 to 60 seconds max., 200°C/40 seconds max., 220°C ±5°C/5 to 15 seconds max.

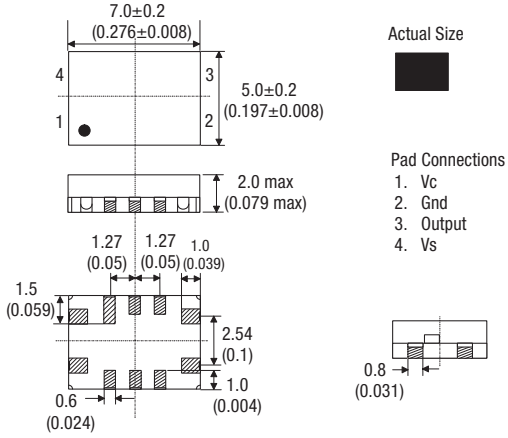
Marking

- Model number
- Frequency Stability Code /Temperature Range Code
- Frequency
- Date code (Year/Week)

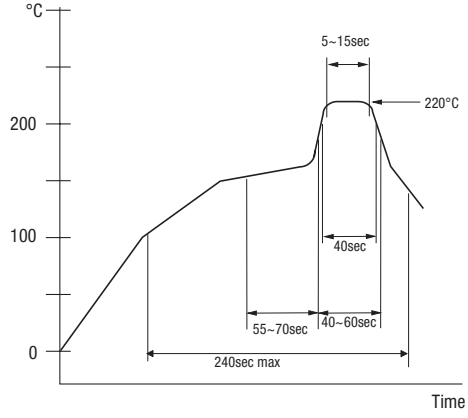
Minimum Order Information Required

- Frequency + Model Number + Frequency Stability + Operating Temperature Range

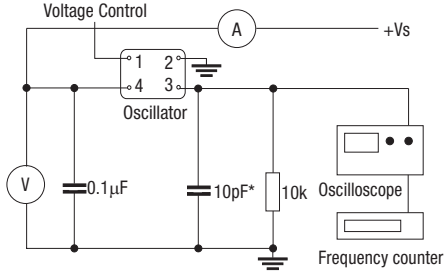
Outline in mm (inches) - (scale 2:1)



Typical Solder Condition - Infrared Reflow



Test Circuit



*Inclusive of jigging & equipment capacitance

SURFACE MOUNT TCXOs

Electrical Specification - maximum limiting values when measured in test circuit

Frequency Range	Frequency Tolerance @ 25°C	Supply Voltage	Supply Current	Voltage Control Change	Output Waveform	Output	Model Number
12.60 to 19.80MHz	±.1.0ppm	3V±0.15V	2.0mA	±8.0ppm min. / 1.5V±1.0V	Clipped Sine	0.8Vp-p min	CFPT-120

Frequency Stabilities Available Over Operating Temperature Ranges

Operating Temperature Ranges	Frequency Stabilities Vs Operating Temperature Range		
	±2.0ppm	±2.5ppm	±5.0ppm
0 to 50°C	Code GP	Code HP	Code KP
–10 to 60°C	Code GR	Code HR	Code KR
–20 to 75°C	—	Code HG*	Code KG
–30 to 75°C	—	—	Code KU

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

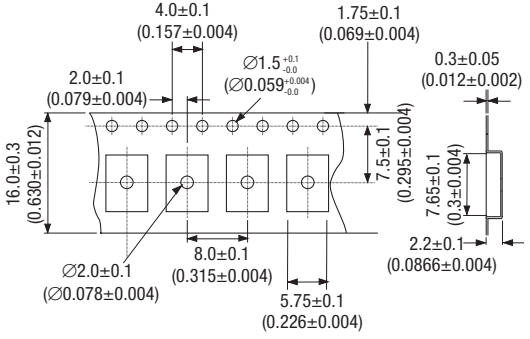
Ordering Example 12.60MHz CFPT-120 HG

Frequency

Model No

Frequency Stability Vs Operating Temperature Code

Outline in mm (inches) - Tape



Outline in mm (inches) - Reel (scale 1:8)