

CFPV-45, -46 SMD VCXOs

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Description

- A range of surface mount voltage controlled oscillators (VCXOs) in a hermetically sealed ceramic package

Package Outline

- 7 x 5mm

Frequency Ranges

- 1.5 to 80MHz (CFPV-45)
- 1.5 to 51.84MHz (CFPV-46)

Output Compatibility & Load

- Tri-state HCMOS
- Drive Capability: 15pF max

Frequency Stabilities

- ±100ppm (inclusive of frequency tolerance, ageing, shock and vibration)

Operating Temperature Range

- 0 to 70°C

Operable Temperature Range

- 40 to 85°C

Storage Temperature Range

- 55 to 125°C

Tri-state Operation

- Logic '1' (>2.5V) to pad 2 enables oscillator output
- Logic '0' (<0.5V) to pad 2 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection pad 2 enables oscillator output

Supply Voltage

- 3.3V CFPV-45
- 5.0V CFPV-46

Voltage Control (pad 1)

- 1.65V±1.65V (CFPV-45)
- 2.5V±2.0V (CFPV-46)

Pullability

- ±100ppm min APR

Linearity

- Positive < ±10%

Input Impedance (voltage control, pad 1)

- 50kΩ min

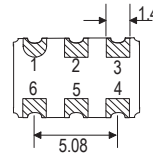
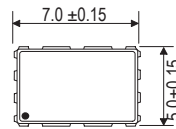
Modulation Bandwidth

- >10kHz (@-3dB, Vc=2.5V)

Phase Jitter

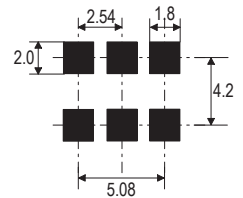
- 20ps max @ 1sigma

Outline (mm)



- Pad Connections
1. Voltage Control
 2. Enable / Disable
 3. Ground
 4. Output
 5. N/C
 6. +Vs

Solder pad layout



Environmental Specification

- Shock: MIL-STD-202, Method 213, Cond. E
- Vibration: MIL-STD-883, Method 2007, Cond. A

Marking Includes

- Model Number + Frequency

Packaging

- Bulk or Tape & Reel

Minimum Order Information Required

- Frequency + Model Number

Electrical Specification - maximum limiting values

Frequency Range	Supply Voltage	Supply Current	Pullability APR	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.5 to 80.0MHz	3.3V \pm 0.3V	50mA	\pm 100ppm min	10ns	10ns	40/60%	CFPV-45
1.5 to 51.84MHz	5.0 \pm 0.25V	60mA					CFPV-46

Ordering Example

Frequency _____

Model No. _____

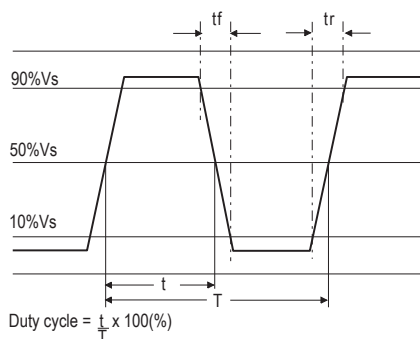
13.0MHz CFPV-45

APR - Absolute Pulling Range

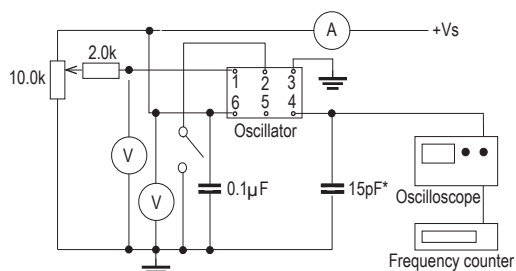
The APR is the minimum pulling from nominal after an allowance is made for frequency shift due to temperature, ageing, supply voltage and load variation plus environmental effects. Note. For other frequencies / specifications please contact our sales office.

For operation over -40 to 85°C , please discuss your requirements with our sales office

Output Waveform

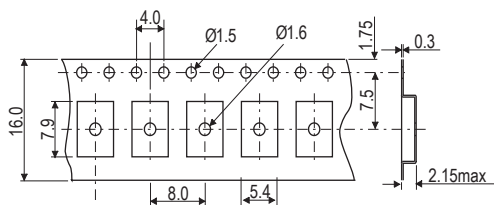


Test Circuit



*Inclusive of jigging and equipment capacitance

Tape (mm)



Reel (mm)

