

CFPV-115 SMD VCXO

ISSUE 3; 1 NOVEMBER 2010 - RoHS 2002/95/EC

Description

- Standard 3.2 x 2.5mm Voltage Controlled Crystal Oscillator
- Ceramic package with a seam sealed metal lid, hermetically sealed

Frequency Range

- 6 to 54MHz

Output Compatibility & Load

- HCMOS
- Load 15pF max

Frequency Stabilities

- ± 25 ppm, ± 50 ppm, ± 100 ppm (inclusive of supply voltage and output load variations over the operating temperature range)

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Start-Up Time

- 10ms max

Voltage Control (pad 1)

- 1.65V \pm 1.65V

Pullability

- ± 50 ppm min APR

Linearity

- Positive $< \pm 10\%$

Input Impedance (voltage control, pad 1)

- 1M Ω min

Modulation Bandwidth

- > 20 kHz

Phase Noise (typical @ 21.25MHz)

- 60dBc/Hz @ 10Hz
- 90dBc/Hz @ 100Hz
- 125dBc/Hz @ 1kHz
- 145dBc/Hz @ 10kHz
- 150dBc/Hz @ 100kHz

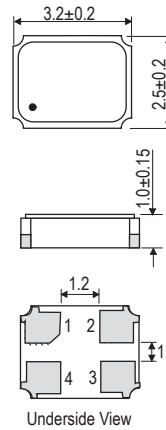
Storage Temperature Range

- 40 to 85°C

Environmental

- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms, 1/2 sine)
- Vibration: MIL-STD-202F, Method 204D, Test condition D 20G, frequency range 10-2000Hz, 4 hrs in X, Y & Z axes (total 12 hrs)

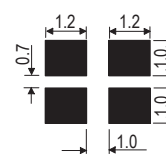
Outline (mm)



Pad Connections

- Voltage Control
- GND
- Output
- +VS

Solder Pad Layout



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
- Pullability

Example

- 10.0MHz CFPV-115
HCMOS ± 50 ppm -40 to 85C 3.3V ± 50 ppm min



Electrical Specification - maximum limiting values

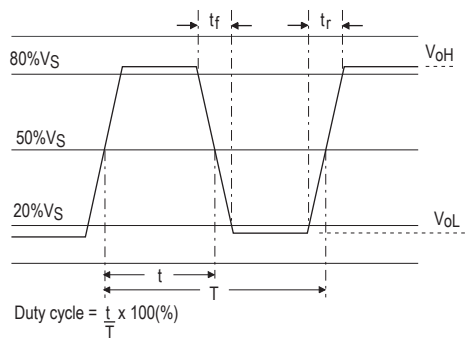
Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Pullability APR	Rise Time (tr) (20-80%)	Fall Time (tf) (80-20%)	Duty Cycle	Model Number
6.0 to 30.0MHz	±25ppm	3.3V±5%	15mA	±50ppm min	5ns	5ns	40/60%	CFPV-115
>30.0 to 54.0MHz	±50ppm ±100ppm		25mA					

APR - Absolute Pulling Range

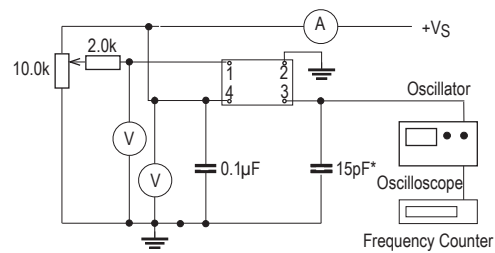
The APR is the minimum pulling from nominal after an allowance is made for frequency shift due to temperature, ageing, supply voltage and load variation plus environmental effects.

Note: For other frequency / specification combinations, please contact our sales offices

Output Waveform



Test Circuit



*Inclusive of jigging and equipment capacitance

