

ISSUE 7; May 2015

### Description

- Standard 7 x 5mm Voltage Controlled Crystal Oscillators  
Pulling of  $\pm 100$ ppm min APR  
Ceramic package with a seam sealed metal lid, hermetically sealed

### Frequency Parameters

- Frequency 1.5MHz to 80.0MHz
- Frequency Stability  $\pm 100.00$ ppm

### Electrical Parameters

- Supply Voltage 3.3V  $\pm 0.3$ V

### Frequency Adjustment

- Pulling  $\pm 100$ ppm min APR
- Control Voltage 1.65V  $\pm 1.65$ V
- Input Impedance 50k $\Omega$  min
- Modulation Bandwidth: >10kHz (@-3dB, Vc=2.5V)
- Linearity: Positive <  $\pm 10$ %

### Operating Temperature Ranges

- 0 to 70°C

### Output Details

- Output Compatability HCMOS
- Drive Capability 15pF max

### Output Control

- 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

### Noise Parameters

- Phase Jitter: 20ps max @ 1sigma

### Environmental Parameters

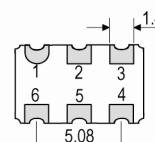
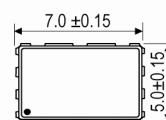
- Operable Temperature Range: -40 to 85°C
- Shock: MIL-STD-202, Method 213, Cond. E
- Vibration: MIL-STD-883, Method 2007, Cond. A
- Storage Temperature Range: -55 to 125°C

### Ordering Information

- Frequency\*
- Model\*
- Output
- Frequency Stability (over operating temperature range)
- Operating Temperature Range
- Supply Voltage
- Pullability
- Example  
20.0MHz CFPV-45  
HCMOS  $\pm 100$ ppm 0 to 70C 3.3V  $\pm 100$ ppm min

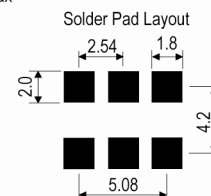


### Outline (mm)



Underside View

Pad Connections  
 1. Voltage Control  
 2. Tri-State Operation  
 3. Ground  
 4. Output  
 5. N/C  
 6. +Vs



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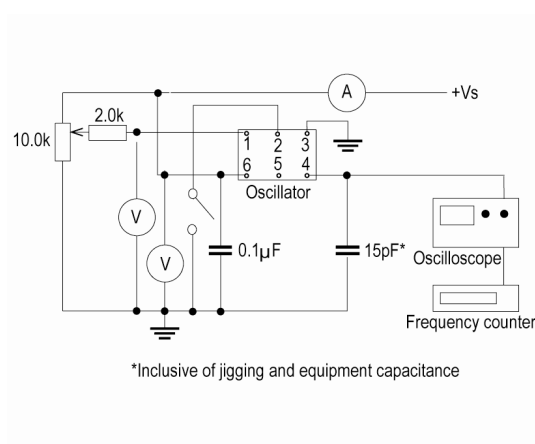
**Compliance**

- RoHS Status (2011/65/EU)      Compliant
- REACH Status                      Compliant
- MSL Rating (JDEC-STD-033):    Not Applicable

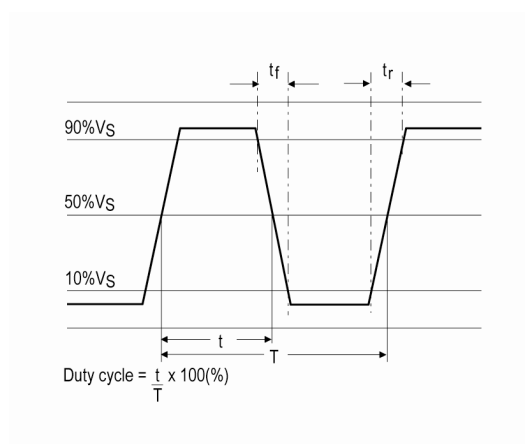
**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 100
- Pack Style: Cutt      In tape, cut from a reel  
Pack Size: 1

**Test Circuit**



**Wave Form**



**Electrical Specification - maximum limiting values 3.3V ±0.3V**

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.5MHz	80.0MHz	0 to 70	±100.0	50	10	40/60

*This document was correct at the time of printing; please contact your local sales office for the latest version.*

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