

## Pletronics, Inc.

19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA Manufacturer of High Quality Frequency Control Products

# VC1 VCXO Series



Full Size or Half Size Metal Thru-Hole Voltage Controlled Xtal Oscillator

### CMOS/ TTL Compatible

2.00 MHz – 160.00 MHz

#### Standard Specifications Model VC14 & VC16 VC13 & VC15 Frequency Range 2.00 to 20.00 MHz 20.001 to 160.00 MHz 2.00 to 20.00 MHz **Overall Frequency Stability** ± 25, 50, 100 PPM + 15 PPM only ± 15, 25, 50, 100 PPM over OTR **Operating Temperature Range (OTR)** 0 to +70°C is standard, but can be extended to - 40 to +85°C for certain frequencies Supply Voltage (Vcc) 5.0 volts and 3.3 volts available Output Load Standard load is 15pF maximum, see Test Circuit 7 (consult factory for heavier loads) Control Voltage Range (CVR) 0.5 to 4.5 volts for 5.0 volt Supply; 0.33 to 2.97 volts for 3.3 volt Supply Pullablity over CVR ± 25, 50, 100, 150, 200 PPM. Consult factory for ± 300 PPM. $\pm$ 10% (Consult factory for $\pm$ 5%) Linearity Supply Current **Rise and Fall Time Frequency Range** (MHz) Icc (mA) Tr & Tf (nS) Maximum Typical Maximum Typical 2.000 - 20.000 10 15 3.5 5.0 20.001 - 30.000 20 25 3.0 4.5 30.001 - 50.000 25 30 3.0 4.0 50.001 - 60.000 30 35 2.5 3.5 TBD TBD TBD 60.001 -160.000 TBD Part Numbering Guide Portions of the part number that appear after the frequency may not be marked on part (C of C provided) 3 VC14H 100 A Z - 60.0M - XXX (Internal Code or blank) Supply Voltage Frequency in MHz Blank= 5.0 volts ±5% Model 3= 3.3 volts ±5% VC13=Full Size, 5.08mm Frequency Deviation (Pullability) over CVR VC14=Full Size, 8.0mm T: + 25 PPM X: ± 150 PPM Packaging VC15=Half Size, 6.0mm V: ± 50 PPM Y: + 200 PPM Tube or VC16=Half Size, 7.5mm W: ± 100 PPM Z: ± 300 PPM on Pads **Frequency Stability Operating Temperature Range** (N/a for VC13, 15) 15: ± 15 PPM A: 0 to +50°C D: -20 to +75°C 25: ± 25 PPM B: 0 to +70°C E: -30 to +75°C N/a for 2.0 to 20.0 MHz (VC14, 16) 50: ± 50 PPM C: -10 to +70°C F: -40 to +85°C Use VC13, 15 for 2.0 to 20.0 MHz 100: ± 100 PPM

Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned. Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

#### Mechanical: inches (mm)

not to scale

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.



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