

Pletronic, Inc.

19013 36th Ave. West • Suite H • Lynnwood, WA 98036, USA

# **VC7 VCXO SERIES**

- LEADLESS SURFACE MOUNT VCXO IN 7 x 5 mm CERAMIC PACKAGE
- HCMOS/TTL COMPATIBLE WITH TRI-STATE OUTPUT

### STANDARD SPECIFICATIONS:

Frequency Range	8.000 MHz - 36.000 MHz		
Frequency Range	(Consult factory for specific available frequencies)		
Operating Temperature Range	0 - 70°C is standard, but can be extended to -40 to +85°C.		
Frequency Stability over Operating	$\pm$ 50 is standard, but 25 PPM also available		
Temperature Range and Supply Voltage			
Aging at 25°C ± 5°C	± 5 PPM per year		
Supply Voltage	$5\pm5\%$ Volt is standard, but 3.3V also available		
Output Logic Level	HCMOS/TTL Compatible		
Input Current (Icc) & Rise & Fall Time (Tr & Tf)	Depends on frequency. See table on next page.		
Output Load	CMOS Load + 15 pF		
Control Voltage Range	$2.5V \pm 2.0V$		
Frequency Deviation (Pullability) over the Control Voltage Range	$\pm$ 100 PPM minimum is standard. Consult factory for other values.		
Linearity	± 10%		
Tri-State Output	Normal output when pin #2 is open (optional);		
	Normal output when pin #2 is at logic "1";		
	High-impedance output when pin #2 is at logic "0".		
Packaging (see page R1, Figure 4)	16 mm tape, 178 or 254 or 330 mm reel: 1000 parts per reel.		
	For quantities <250: 100 parts per tray.		

#### PART NUMBERING GUIDE

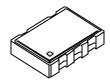
- The Pletronics part number for this VCXO series consists of the following 5 elements:
  - 1. Model Number (Input Voltage):
    - VC75H = 5V 3VC75H = 3.3V
  - 2. Frequency Stability: VC75H<u>25</u>: ±25 PPM VC75H<u>50</u>: ±50 PPM
  - 3. Operating Temperature Range: VC75H50<u>B</u>: 0 to +70°C VC75H50F:-40 to +85°C
  - 4. Frequency Deviation over Control Voltage Range:

VC75H50BW: ± 100 PPM

5. Frequency of Operation in MHz

EXAMPLE: VC75H50BW-12.800 MHz, 3VC75H25FW-10.000 MHz

(continued)

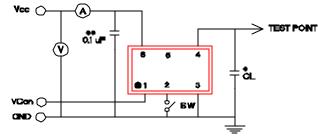


## **VC7 VCXO SERIES**

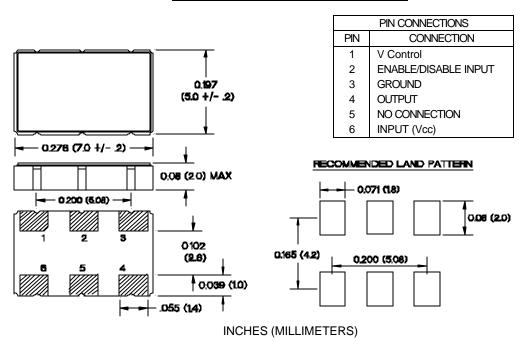
Freq. Range (MHz)	lcc (mA)		Tr & Tf (nS)	
	Тур	Max	Тур	Max
8.000 - 20.000	10	15	3.5	5.0
20.001 - 30.000	20	25	3.0	4.5
30.001 - 36.000	25	30	3.0	4.0

### Input Current and Rise & Fall Time with 15 pF CMOS Load

### **Recommended Test Circuit with CMOS Load**



\* CL (Capacitive Load): Includes the input capacitance of oscilloscope. \*\* 0.1μF **external** by-pass filter is recommended.



### Package Outline (Not to Scale):

January 2000