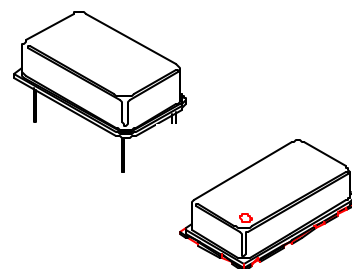




VCPL (VCXO)

- HIGH-FREQUENCY VCXO IN THRU-HOLE OR SMD METAL PACKAGE
- PHASED-LOCK LOOP CIRCUIT (PLL) USED
- 300 pS RMS MAXIMUM JITTER



STANDARD SPECIFICATIONS:

Frequency Range	60.000 - 160.000 MHz (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 Temperature Range and Supply Voltage	± 100 PPM is standard but ± 15, 25, 50 ppm also available.
Aging	3 PPM first year, 1 PPM per year thereafter at 25°C ± 5°C
Input Voltage	5 V ± 5% Volt is standard but 3.3 V ± 5% 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 ± 2.0V for Vcc = 5.0V, 1.65V ± 1.32V for Vcc = 3.3V
Frequency Deviation (Pullability) over the Control Voltage Range	± 25, 50, 100, 150, 200, and 300 PPM available.
Linearity	± 10%
Packaging	20 parts per tube, SMD: Tape and Reel TBD

PART NUMBERING GUIDE:

- The Pletronics part number for a VCPL VCXO consists of the following 6 elements:

- Model Number (Voltage):**
VCPL = 5V
3VCPL = 3.3V
- Frequency Stability:**
VCPL15: ±15 PPM
VCPL25: ±25 PPM
VCPL50: ±50 PPM
VCPL100: ±100 PPM
- Operating Temperature Range:**
VCPL100A: 0 to +50°
VCPL100C: -10 to +70°C
VCPL100E: -30 to +75°C
VCPL100B: 0 to +70°C
VCPL100D: -20 to +75°C
VCPL100F: -40 to +85°C
- Frequency Deviation over Control Voltage Range:**
VCPL100AT: ±25 PPM
VCPL100AW: ±100 PPM
VCPL100AY: ±200 PPM
VCPL100AV: ±50 PPM
VCPL100AX: ±150 PPM
VCPL100AZ: ±300 PPM

5. Frequency of Operation in MHz

6. Optional Surface Mount Configuration - SMD

EXAMPLE: VCPL100CW-60.000 MHz, VCPL50DZ-60.000 MHz-SMD, 3VCPL15FT-60.000 MHz

- When customer's requirements are non-standard, a special engineering part number will be assigned.

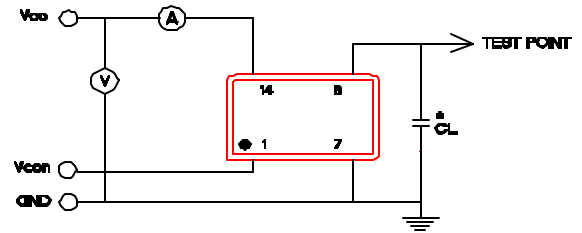
(continued)

VCPL VCXO

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

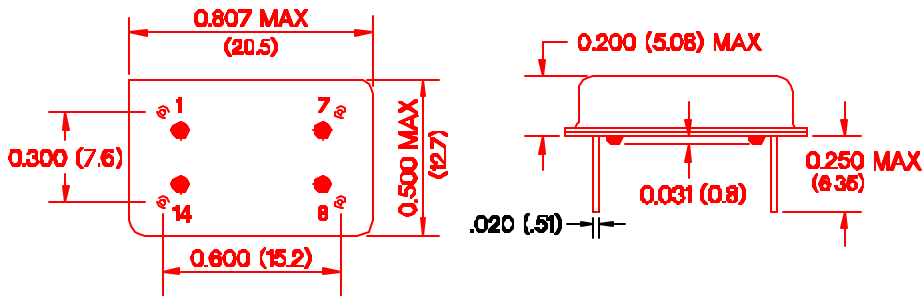
Freq. Range (MHz)	Icc (mA)		Tr & Tf (nS)	
	Typ	Max	Typ	Max
60.000 – 100.000	25.0	30.0	1.5	2.5
100.001 – 120.000	30.0	35.0	1.5	2.5
120.001 – 140.000	35.0	40.0	1.5	2.5
140.001 – 160.000	40.0	45.0	1.5	2.5

Recommended Test Circuit



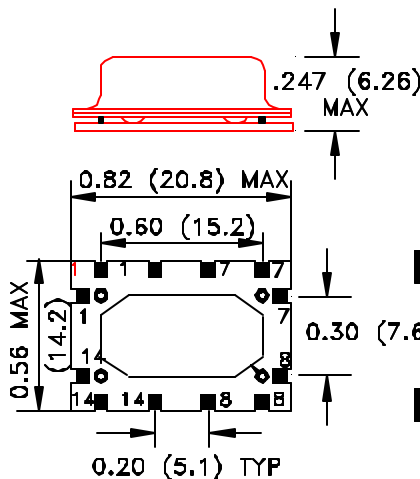
*CL (Capacitive Load): Includes the input capacitance of oscilloscope

Package Outline (Not to Scale):

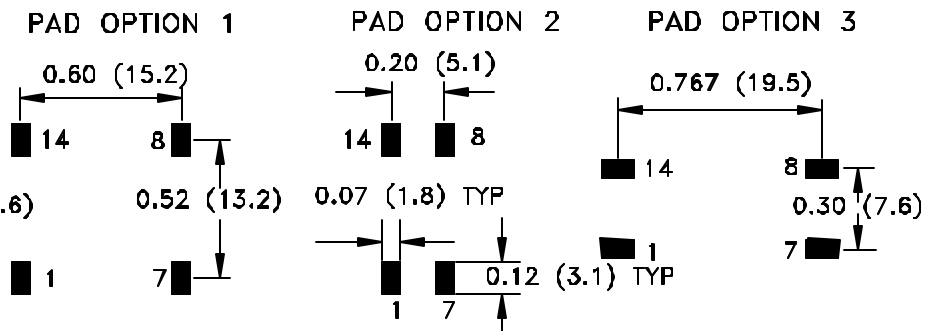


PIN CONNECTIONS	
PIN	CONNECTION
1	Vcontrol
7	GROUND & CASE
8	OUTPUT
14	Vcc

SMD OUTLINE



RECOMMENDED LAND PATTERN OPTIONS



INCHES (MILLIMETERS)

January 2000