

TV5 TCVCXO SERIES

- SURFACE MOUNT TCVCXO IN METAL PACKAGE, AVAILABLE WITH OR WITHOUT TRIMMER

STANDARD SPECIFICATIONS:

Frequency Range		10.000 MHz - 60.000 MHz (Consult factory for specific available frequencies)
Operating Temperature Range		Various temperature ranges up to -40 to +85°C available.
Frequency Stability	vs. Temperature	± 1.5, 2, 2.5, 3, 5, 10 & 15 PPM over operating temperature range available. See below for available frequency stability options per temperature range.
	vs. Supply Voltage	± 0.5 PPM maximum over 5V ± 5%
	Aging	3 PPM first year, 1 PPM per year thereafter at 25°C ± 5°C
Frequency Adjustment by Trimmer		± 3 PPM minimum
Input Voltage		5 ± 5% Volt standard, but 3.0 V also available for HCMOS output
Output Logic		Clipped Sine Wave
Output Voltage Levels		1 Vp-p min.
Input Current (Icc) or Current Consumption		2 - 5 mA max.
Output Load		10kΩ/10 pF
Control Voltage Range		2.5V ± 2.0V for Vcc = 5.0V, 1.65V ± 1.32V for Vcc = 3.0V
Frequency Deviation (Pullability) over the Control Voltage Range		± 5, ±10, or ±15 PPM minimum standard, but up to ± 25 PPM available for certain frequencies.
Linearity		± 10% is standard, but ± 5% also available.
Packaging		TBD

PART NUMBERING GUIDE:

- The Pletronics part number for a TV5 series TCVCXO consists of the following 6 elements:

1. Model Number (Voltage):

TV5 = 5V
 3TV5 = 3.0V

2. Package:

TV51C: 11.4 x9.6 x 2.0 mm High, w/o trimmer
 TV58C: 11.4 x9.6 x 2.0 mm High, with trimmer
 TV59C: 9.0 x 7.0 x 2.0 mm High, w/o trimmer

3. Frequency Stability:

TV51C015: ±1.5 PPM TV51C030: ±3 PPM TV51C150: ±15 PPM
 TV51C020: ± 2 PPM TV51C050: ±5 PPM
 TV51C025: ±2.5 PPM TV51C100: ±10 PPM

4. Operating Temperature Range {with Tightest Frequency Stability Available}:

TV51C015A: 0 to +50°C {± 1.5 PPM} TV51C015B: 0 to +70°C {± 1.5 PPM}
 TV51C020C: -10 to +70°C {± 2.0 PPM} TV51C020D: -20 to +75°C {± 2.0 PPM}
 TV51C025E: -30 to +75°C {± 2.5 PPM} TV51C050E: -40 to +85°C {± 5.0 PPM}

5. Frequency Deviation over Control Voltage Range:

TV51C100BS: ±5 PPM TV51C100BR: ±10 PPM
 TV51C100BQ: ±15 PPM TV51C100BJ: ±25 PPM

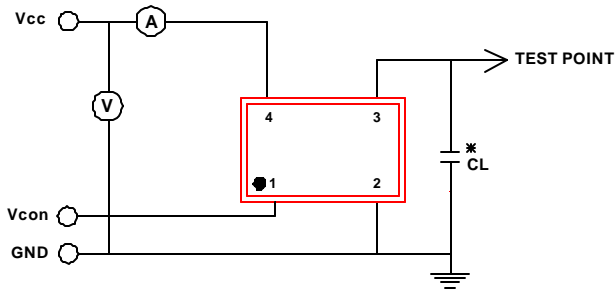
6. Frequency of Operation in MHz

EXAMPLE: TV59C150EQ-12.800 MHz, TV58C020DT-10.000 MHz, 3TV51C050ER-30.000 MHz

(continued)

TV5 TCVCXO SERIES

Recommended Test Circuit

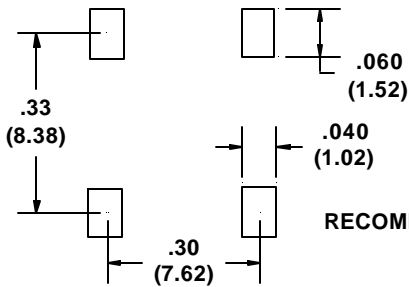
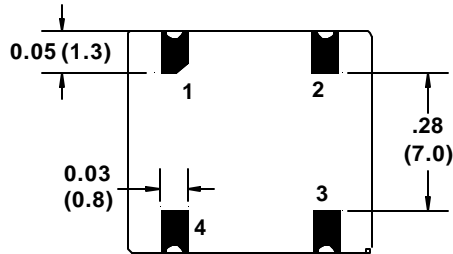
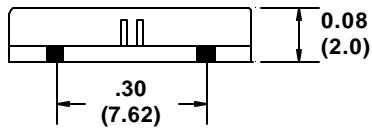
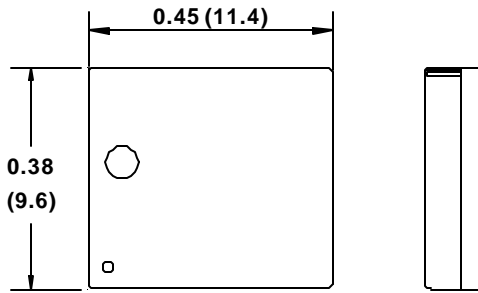


PIN CONNECTIONS	
PIN	CONNECTION
1	Vcontrol
2	GROUND & CASE
3	OUTPUT
4	Vcc

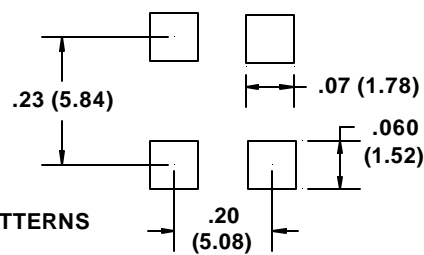
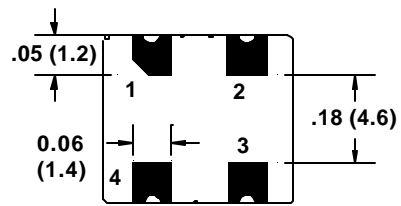
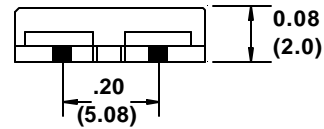
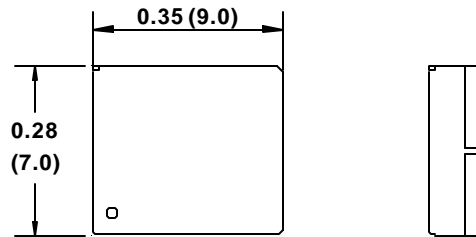
*CL (Capacitive Load): Includes the input capacitance of oscilloscope.

TV5 PACKAGE OUTLINES (NOT TO SCALE)

PACKAGE 1 and 8



PACKAGE 9



RECOMMENDED LAND PATTERNS

INCHES (MILLIMETERS)

October 2000