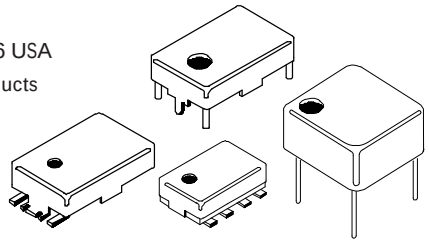
Pletronics, Inc.
19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA
Manufacturer of High Quality Frequency Control Products



TV4 TCVCXO Series

- Surface Mount or Full Size Metal Thru-Hole Temp. Compensated Voltage Controlled Xtal Oscillator
- HCMOS, Clipped Sine Wave or Sine Wave Compatible

10.00 MHz – 60.00 MHz

Standard Specifications

Operating Temperature Range	0 to +50°C to -40 to +85°C available			
Overall Frequency Stability	vs. Temp	± 1.0 to ± 15 PPM over Operating Temperature Range available		
	vs. Vcc / Load	± 0.5 PPM maximum over Vcc ± 5% / ± 0.3 PPM maximum over Load ± 5%		
	Aging	± 3 PPM first year, ± 1 PPM per year thereafter at 25°C ± 5%		
Frequency Adj by Trimmer	± 3 PPM minimum			
Supply Voltage (Vcc)	5.0 volts and 3.3 volts available			
Output Logic	HCMOS	Clipped Sine Wave	Sine Wave	
Output Voltage Levels	Logic "1" 90% of Vcc min Logic "0" 10% of Vcc max	1 volt p-p minimum	Consult Factory	
Supply Current (Icc)	20 to 40 mA max	2 to 5 mA max		
Output Load (see Test Circuit 7)	10 TTL Loads or 15pF	10 K // 10 pF		
Control Voltage Range (CVR)	0.5 to 4.5 volts for 5.0 volt Supply; 0.0 to 3.3 volts for 3.3 volt Supply			
Pullablity over CVR	± 5, 10, 15 PPM. Consult factory for ± 25 PPM.			
Linearity	± 10% (Consult factory for ± 5%)			

On Test Circuit for Clipped Sine Wave only: Add a 20 K resistor from output to ground

Part Numbering Guide

Consult factory for available frequencies and specs. Not all options available for all frequencies. A special p/n may be assigned.

Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

Portions of the part number that appear after the frequency may not be marked on part (C of C provided)

3TV4 6 H 100 A T - 60.0M - XXX (Internal Code or blank)

Model / Supply Voltage
TV4= 5.0 volts ±5%
3TV4= 3.3 volts ±5%

TCVCXO Package, Max Height
6=Thru-Hole, 5.0mm
7=Surface Mount, 5.5mm
8=Surface Mount, 4.0mm
9=Thru-Hole, 8.5mm

Logic
C: Clipped Sine Wave
H: HCMOS
S: Sine Wave

Frequency Stability (FS)
010: ± 1.0 PPM
015: ± 1.5 PPM
020: ± 2.0 PPM
025: ± 2.5 PPM
030: ± 3.0 PPM
050: ± 5.0 PPM
100: ± 10.0 PPM
150: ± 15.0 PPM

Operating Temperature Range {Tightest FS available}
A: 0 to +50°C {±1.0 PPM}
B: 0 to +70°C {±1.5 PPM}
C: -10 to +70°C {± 2.0 PPM}
D: -20 to +75°C {± 2.0 PPM}
E: -30 to +75°C {± 2.5 PPM}
F: -40 to +85°C {± 5.0 PPM}

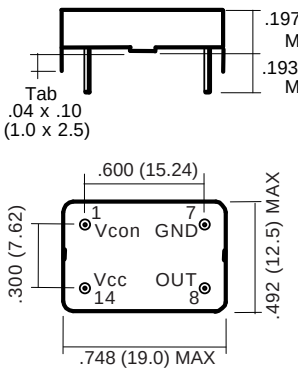
Frequency in MHz

Frequency Deviation (Pullability) over CVR
S: ± 5 PPM
R: ± 10 PPM
Q: ± 15 PPM
T: ± 25 PPM

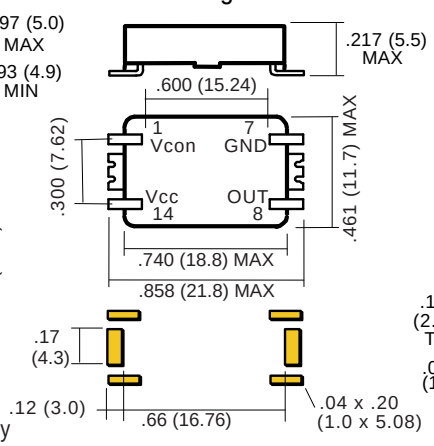
Mechanical: inches (mm) not to scale

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.

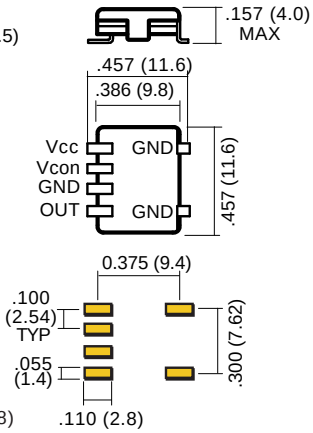
Package 6



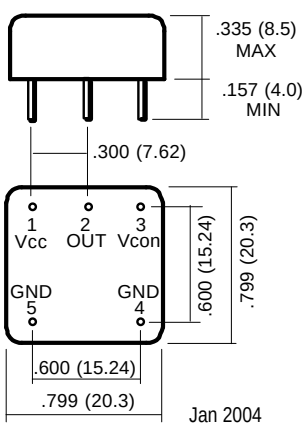
Package 7



Package 8



Package 9



Trimmer hole locations may vary

Jan 2004