

CXOH / CXOHV Model
14 Pin Dip, 3.3V & 5V, HCMOS/TTL

Frequency Range: 1MHz to 38MHz
Frequency Stability: ±1ppm to ±5ppm
Freq. Stability vs Volt: ±0.5ppm Max
Freq. Stability vs Load: ±0.3ppm Max
Temperature Range: -40°C to 85°C
Storage: -55°C to 120°C
Input Voltage: 3.3V or 5V ± 5%
Mech. Trim. Range: ±3ppm Min
 (Option V) Voltage Trim Pin 1
Input Current: 15mA Typ, 30mA Max
Output: HCMOS/TTL
 Symmetry: 40/60% Max @ 50% Vdd
 (Option Y) 45/55% Max
 Rise/Fall Time: 4ns Typ, 10ns Max
 Output Voltage: "0" = 10% Vdd Max
 "1" = 90% Vdd Min
 Load: 15pF/10TTL Max
Phase Noise Typ.: 10Hz -100dBc/Hz
 100Hz -130dBc/Hz
 1KHz -140dBc/Hz
 10KHz -145dBc/Hz
 100KHz -150dBc/Hz
Aging: <1ppm Max/Yr



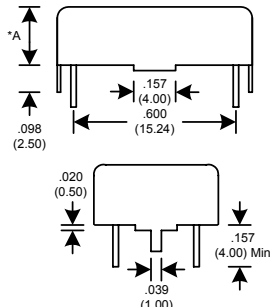
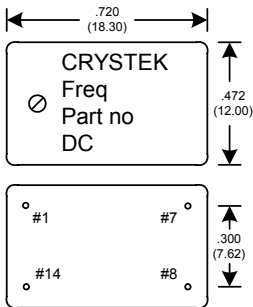
Temperature Compensated Crystal Oscillator Voltage Trim Option Available



Designed to meet today's requirements for tighter frequency stability tolerance while reducing unit cost.

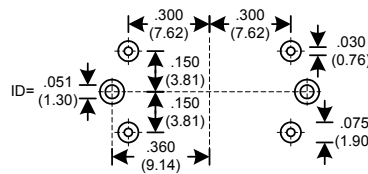
VCTCXO Specification

Voltage Trim Pin 1: ± 5ppm Min
Control Voltage: (5V) 2.5V ± 2.5V
 (3.3V) 1.65V ± 1.65V



CXOH

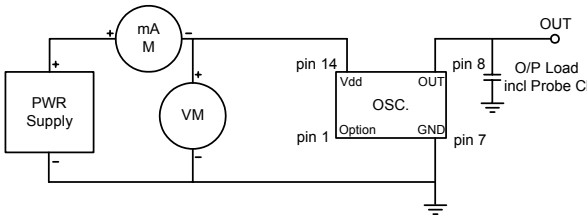
Suggested PCB Layout



PIN	Function
1	VT or NC
7	GND
8	OUT
14	Vcc

*A	.178 (4.50)
	.197 (5.00)

Dimensions inches (mm)
 All dimensions are Max unless otherwise specified.



	Operating Temperature	Freq. Stability (± ppm)						
		1.0	1.5	2.0	2.5	3.0	4.0	5.0
A	0°C to 50°C							
B	-10°C to 60°C			2.0	2.5	3.0	4.0	5.0
C	-10°C to 70°C			2.0	2.5	3.0	4.0	5.0
D	-20°C to 70°C			2.0	2.5	3.0	4.0	5.0
E	-30°C to 60°C			2.0	2.5	3.0	4.0	5.0
F	-30°C to 70°C			2.0	2.5	3.0	4.0	5.0
G	-30°C to 75°C			2.0	2.5	3.0	4.0	5.0
H	-40°C to 85°C					3.0	4.0	5.0
P		A	B	C	D	E	F	

Table 1

Crystek Part Number Guide

CXOHV - 4 B C 3 Y - 25.000

#1 #2 #3 #4 #5 #6 #7 #8

#1 Crystek TCXO HCMOS/TTL
 #2 V or blank = (V = Volt Trim) (Blank = Mech. Trim)
 #3 4 or blank = Height (4 = 4.5mm) (Blank = 5.0mm)
 #4 Letter = Operating Temperature (see table 1)
 #5 Letter = Frequency Stability (see table 1)
 #6 3 or blank = Input Volt (3 = 3.3 volts) (Blank= 5V)
 #7 Y or blank = Symmetry (Y=45/55) (Blank = 40/60)
 #8 Frequency in MHz: 3 or 6 decimal places

Example:
 CXOH-4BC3Y-25.000 = mech. trim, 4.5mm, -10/60, ±2.5ppm, 3.3V, 45/55%, 25.000MHz
 CXOHV-4B3CY-25.000 = volt. trim, 4.5mm, -10/60, ±2.5ppm, 3.3V, 45/55%, 25.000MHz

Specifications subject to change without notice.

TD-020811 Rev. E

