

Temperature Compensated Crystal Oscillator

Voltage Trim Option Available

CXOHD4 / CXOHVD4 Model 12.2×18.6 SMD, 3.3V & 5V, HCMOS/TTL

Frequency Range: 1 MHz to 38.880 MHz
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: -45°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 Typical, 30mA Max
Output: HCMOS/TTL
 Symmetry: 40/60% Max @ 50% Vdd
 (Option Y) 45/55% Max
 Rise/Fall Time: 4ns Typical, 10ns Max
 Output Voltage: "0" = 10% Vdd Max
 "1" = 90% Vdd Min
 Load: 15pF/10TTL Max



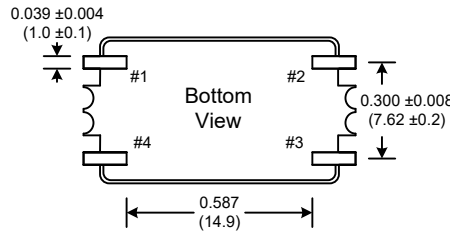
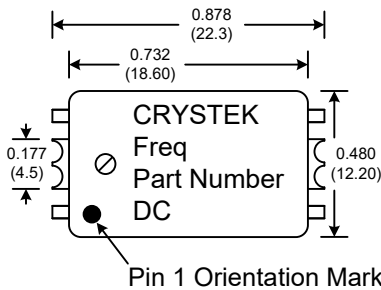
Designed to meet today's requirements for tighter frequency stability while reducing unit cost.

VCTCXO Specification

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

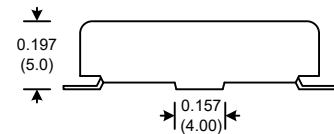
Phase Noise Typical:	10 Hz	@10 MHz	-100 dBc/Hz	@27 MHz	-87 dBc/Hz
	100 Hz		-130 dBc/Hz		-117 dBc/Hz
	1 kHz		-140 dBc/Hz		-140 dBc/Hz
	10 kHz		-145 dBc/Hz		-153 dBc/Hz
	100 kHz		-150 dBc/Hz		-155 dBc/Hz

Aging: <1ppm Max/year

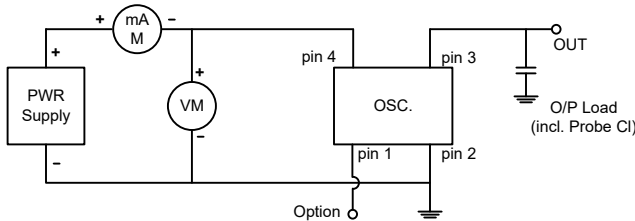


Dimensions inches (mm)
All dimensions are Max unless otherwise specified.

PIN	Function
1	VT or NC
2	GND
3	OUT
4	Vcc



Note: Recommended soldering method is by hand



Crystek Part Number Guide

CXOHVD4 - B C 3 Y - 25.000

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

Example:
 CXOHD4-BC3Y-25.000 = mech. trim, -10/60, ±2.5ppm, 3.3V, 45/55%, 25.000 MHz
 CXOHVD4-HEY-25.000 = volt. trim, -40/85, ±4.0ppm, 5.0V, 45/55%, 25.000 MHz

	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 Corporation reserves the right to make changes to its products and/or information contained herein without notice.
 No liability is assumed as a result of its use or application.

CXOHD4/CXOHVD4 Rev. R