

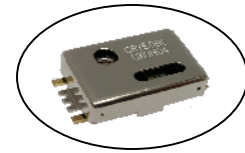
Temperature Compensated Crystal Oscillator

Voltage Trim Option Available

CXOHD4 / CXOHVD4 Model

12.2x18.6 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



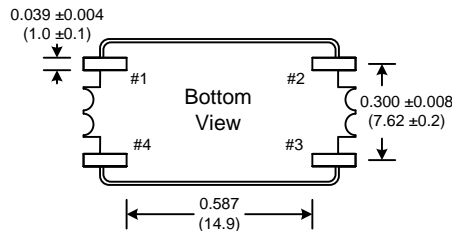
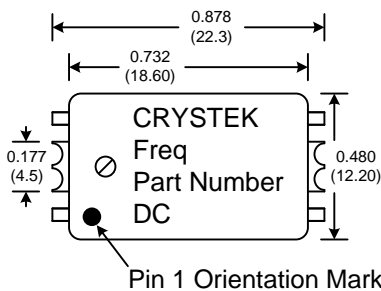
Designed to meet today's requirements for tighter frequency stability while reducing unit cost.

VCTCXO Specification

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

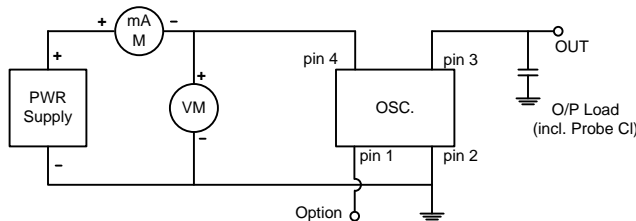
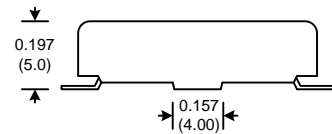
Phase Noise Typical:	10 Hz	@10 MHz -100 dBc/Hz	@27 MHz -87 dBc/Hz
	100 Hz	-130 dBc/Hz	-117 dBc/Hz
	1 kHz	-140 dBc/Hz	-140 dBc/Hz
	10 kHz	-145 dBc/Hz	-153 dBc/Hz
	100 kHz	-150 dBc/Hz	-155 dBc/Hz

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



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

Specifications subject to change without notice.

TD-020815 Rev. Q