

# Temperature Compensated Crystal Oscillator With Voltage Trim & Hermetic Seal



Designed to meet today's requirements for tighter frequency stability and 14 Pin Dip layout compatibility.

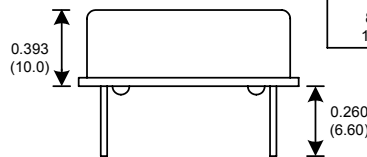
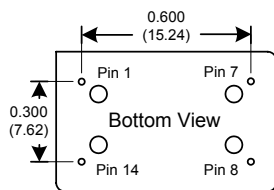
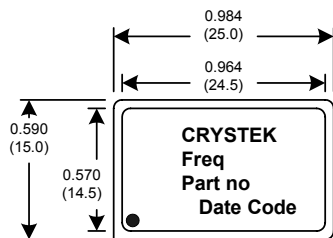
## CXOHV8 Model 14 Pin Dip, 3.3V & 5V, HCMOS/TTL

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

### VCTCXO Specification

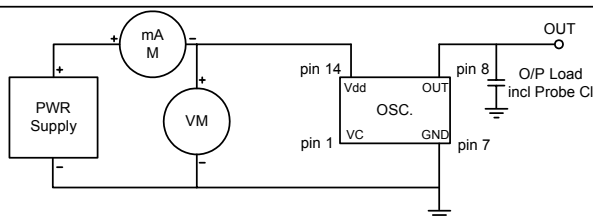
<b>Voltage Trim Pin 1:</b>	± 5ppm Min
<b>Control Voltage:</b>	(5V) 2.5V ± 2.5V
	(3.3V) 1.65V ± 1.65V

### CXOHV8



PIN	Function
1	Volt Trim
7	GND
8	OUT
14	Vcc

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

**CXOHV8 - B C 3 Y - 25.000**

#1	#2	#3	#4	#5	#6
C	X	O	H	V	8

#1 Crystek TCXO 14 Pin Dip HCMOS/TTL  
 #2 Letter = Operating Temperature (see table 1)  
 #3 Letter = Frequency Stability (see table 1)  
 #4 3 or blank = Input Volt (3 = 3.3 volts) (Blank = 5V)  
 #5 Y or blank = Symmetry (Y=45/55) (Blank = 40/60)  
 #6 Frequency in MHz: 3 or 6 decimal places

Example:  
 CXOHV8-BC3Y-25.000 = -10/60, ±2.5ppm, 3.3V, 45/55%, 25.000MHz

Specifications subject to change without notice.

TD-020901 Rev. B



**Crystek Crystals Corporation**

12730 Commonwealth Drive • Fort Myers, FL 33913  
 239.561.3311 • 800.237.3061 • FAX: 239.561.1025 • www.crystek.com