

**CXOS / CXOSV Model**  
**14 Pin Dip, 3.3V & 5V, Clipped Sine**

**Frequency Range:** 8MHz to 30MHz  
 3.3V limited to 25.6MHz

**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:** 3mA Typ, 5mA Max

**Output:** Clipped Sinewave

**Output Voltage:** 5V = 1.0Vpp Min  
 3.3V = 0.8Vpp Min

**Load:** 20K Ohm / 5pF 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

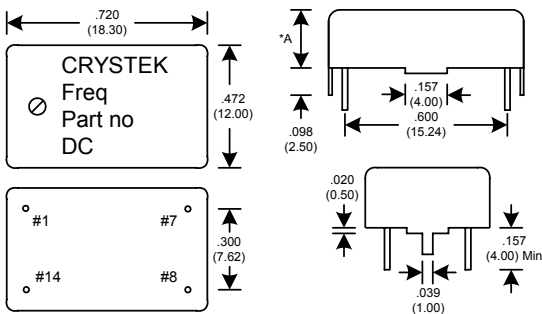


Designed to meet today's requirements for tighter frequency stability tolerance while reducing unit cost.

**VCTCXO Specification**

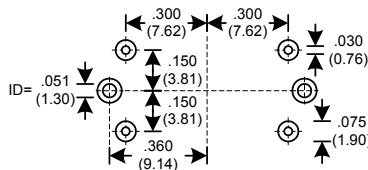
**Voltage Trim Pin 1:** ± 5ppm Min

**Control Voltage:** (5V) 2.5V ± 2.5V  
 (3.3V) 1.65V ± 1.65V



**CXOS**

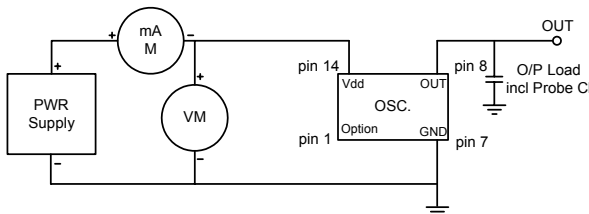
**Suggested PCB Layout**



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**

**CXOSV - 4 B C 3 - 25.000**

#1 Crystek TCXO Clipped Sine  
 #2 V or blank = (V = Volt. Trim) (Blank = Mech. Trim)  
 #3 4 or blank = Height (4 = 4.5mm)(Blank = 5mm)  
 #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 Frequency in MHz: 3 or 6 decimal places

Example:  
 CXOS-4BC3-25.000 = mech. trim, 4.5mm, -10/60, ±2.5ppm, 3.3V, 25.000MHz  
 CXOSV-4BC3-25.000 = volt. trim, 4.5mm, -10/60, ±2.5ppm, 3.3V, 25.000MHz

Specifications subject to change without notice.

TD-020812 Rev. E



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