

# Temperature Compensated Crystal Oscillator

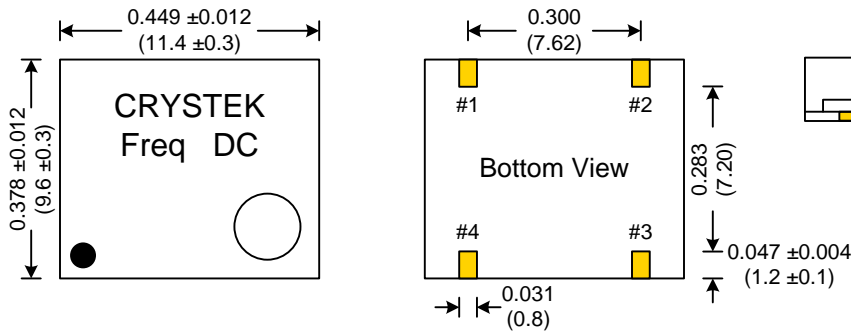
## CXOHD5 Model

### 9.6x11.4 SMD, 3.3V & 5V, HCMOS

<b>Frequency Range:</b>	10 MHz to 30 MHz
<b>Frequency Stability:</b>	±2ppm 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>	-45°C to 90°C
<b>Input Voltage (Vdd):</b>	3.3V or 5V ±5%
<b>Trimmer Adj. Range:</b>	±3ppm Min
<b>Input Current:</b>	20mA Max
<b>Output:</b>	CMOS
Symmetry:	40/60% @ 50% Vdd
Rise/Fall Time:	5ns Max
Output Voltage:	"0" = 0.1xVdd Max "1" = 0.9xVdd Min
Load:	15pF Typical
<b>Phase Noise Typ.:</b>	10Hz: -90dBc/Hz 100Hz: -120dBc/Hz 1kHz: -135dBc/Hz 10kHz: -145dBc/Hz 100kHz: -150dBc/Hz
<b>Aging:</b>	<1ppm Max/Yr

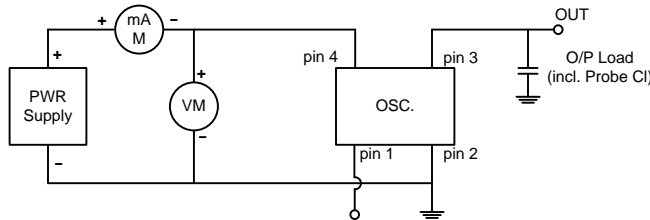


Designed to meet today's requirements for tighter frequency stability while reducing pad layout requirement.



PIN	Connection
1	No Connect
2	GND
3	Output
4	Vdd

Dimensions inches (mm)  
All dimensions are maximum unless otherwise specified



### Crystek Part Number Guide

**CXOHD5 - B C 3 - 25.000**

- #1 Crystek TCXO 4 Pad SMD HCMOS
- #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 Frequency in MHz: 3 or 6 decimal places

Example:  
CXOHD5-BC3-25.000 = -10/60, ±2.5ppm, 3.3V, 25.000MHz

	Operating Temperature	Freq. Stability (± ppm)					
		1.5	2.0	2.5	3.0	4.0	5.0
A	0°C to 50°C	1.5	2.0	2.5	3.0	4.0	5.0
B	-10°C to 60°C	1.5	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					4.0	5.0
		A	B	C	D	E	F

Table 1

Specifications subject to change without notice.

TD-090401 Rev. J