

# Voltage Controlled Crystal Oscillator

## CVXO-016T Model

5x7 mm SMD, 5V, HCMOS/TTL

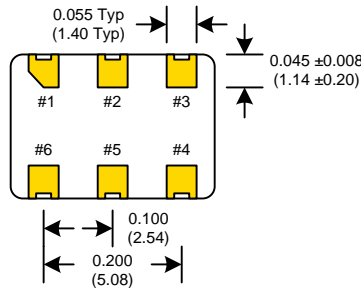
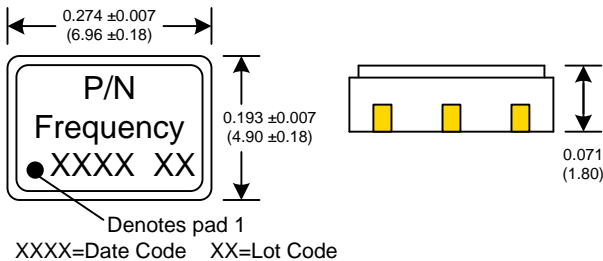
<b>Frequency Range:</b>	1 MHz to 52 MHz
<b>Frequency Stability:</b>	±25ppm to ±100ppm
<b>Temperature Range:</b>	
Operating:	0°C to 70°C
(Option X)	-40°C to 85°C
<b>Storage:</b>	-45°C to 90°C
<b>Input Voltage:</b>	5V ±0.5V
<b>Control Voltage:</b>	2.5V ±2.0V
<b>Settability* At Nominal:</b>	2.5V ±0.5V
<b>Frequency Pulling:</b>	±100ppm Min
<b>Input Current:</b>	40mA Max
<b>Output:</b>	HCMOS/TTL
Load:	15pF / 10 TTL
Symmetry:	40/60% Max @ 50% Vdd
Rise/Fall Time:	5ns Max @ 20% to 80% Vdd
Logic:	"0" = 10% Vdd Max "1" = 90% Vdd Min
Linearity:	±10% Max
<b>Aging:</b>	<3ppm 1 <sup>st</sup> /yr, <1ppm every year thereafter



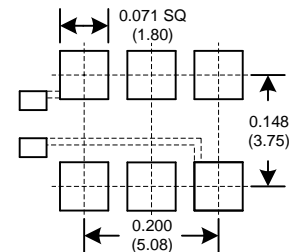
Designed to meet today's requirements for 5V Voltage Controlled Crystal Oscillator SMD Applications. The CVXO-016T provides a disable function for ICT (in-circuit-testing). Available on 16mm tape and reel in quantities of 1K.

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

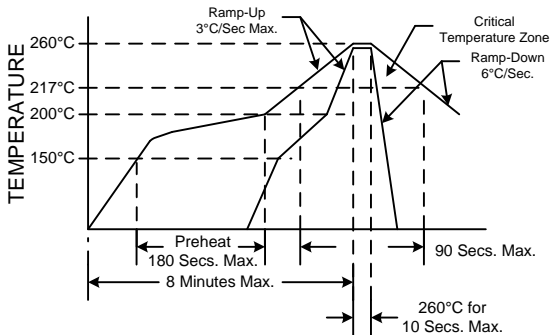


### SUGGESTED PAD LAYOUT



0.01uF Bypass Capacitor Recommended

### RECOMMENDED REFLOW SOLDERING PROFILE



NOTE: Reflow Profile with 240°C peak also acceptable.

### Crystek Part Number Guide

CVXO - 016T - X - 25 - 49.152

#1	#2	#3	#4	#5
#1 Crystek VCXO	#2 Model	#3 Temp. Range: Blank= 0/70°C, X= -40/85°C	#4 Stability: (see Table 1)	#5 Frequency in MHz: 3 or 6 decimal places
				Stability Indicator
				Blank (std) ± 100ppm
				25 ± 25ppm
				50 ± 50ppm

Example:

CVXO-016TX-25-25.000 = 5.0V Tristate, -40/85°C, 40/60, 25ppm, 25.000 MHz  
CVXO-016T-50-19.660800 = 5.0V Tristate, 0/70°C, 40/60, 50ppm, 19.660800 MHz

Table 1

PIN	Connection
1	Volt Cont.
2	Tri-State
3	GND
4	Output
5	N/C
6	Vdd

Tri-State Function	
Tri-State pin	Output pin
Open	Active
"1" level 2.7V Min	Active
"0" level 0.3V Max	High Z

Specifications subject to change without notice.

TD-021003 Rev. H

\*Settability is the Control Voltage at which the Output Frequency is equal to the nominal Frequency.