

CVXO-018T Model
5X7 mm SMD, 3.3V, HCMOS



Voltage Controlled Crystal Oscillator



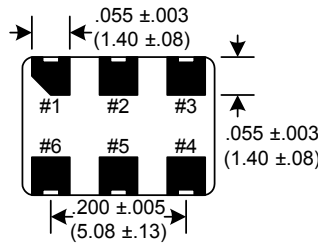
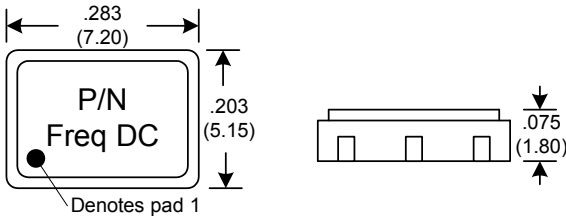
Designed to meet today's requirements for 3.3V Voltage Controlled Crystal Oscillator SMD Applications. The CVXO-018T provides a disable function for ICT (in-circuit-testing). Available on 16mm tape and reel in quantities of 1K.

Frequency Range: 1MHz to 52MHz
Frequency Stability: ±25ppm to ±100ppm
Temperature Range:
 Operating: 0°C to 70°C
 (Option M) -20°C to 70°C
 (Option X) -40°C to 85°C
Storage: -55°C to 125°C
Input Voltage: 3.3V ± 0.3V
Control Voltage: 1.65V ± 1.65V
Settability At Nominal: 1.65V ± 0.25V
Control Range: ±100ppm Min
Input Current: 40mA Max
Output: HCMOS
 Load: 15pF
 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

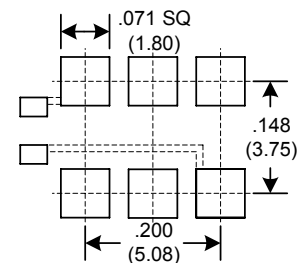
Aging: <3ppm 1st/yr, <1ppm every year thereafter

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

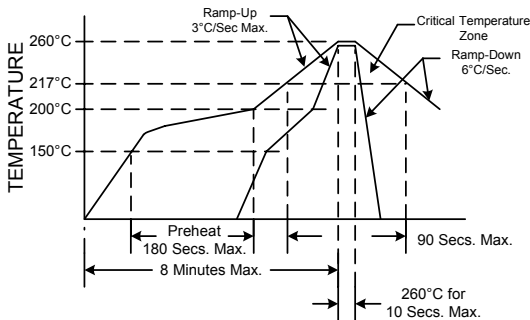


SUGGESTED PAD LAYOUT



0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



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

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

Crystek Part Number Guide

CVXO-018T X - 25 - 49.152

#1	#2	#3	#4	#5
#1 Crystek VCXO	#2 Model	#3 Temp. Range: Blank= 0/70°C M= -20/70°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

Table 1

Example:

CVXO-018TX-25-25.000 = 3.3V Tristate, -40/85°C, 40/60, 25ppm, 25.000 MHz
 CVXO-018T-50-19.660800 = 3.3V Tristate, 0/70°C, 40/60, 50ppm, 19.660800 MHz

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

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

Specifications subject to change without notice.

TD-021004 Rev. D

