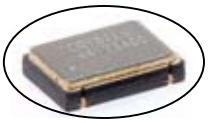
CRYSTEK CRYSTALS
A Division of Crystek Corporation

Clock Oscillator

CSO-016T Model
5×7 mm SMD, 5.0V, HCMOS/TTL

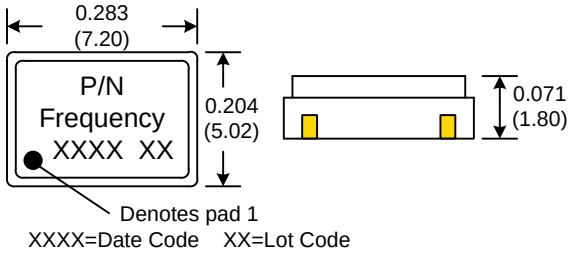
RoHS Compliant



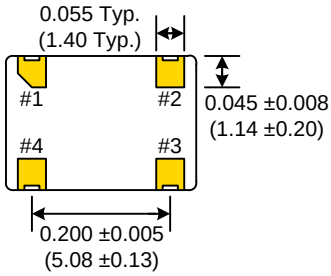
Frequency Range:	1.544 MHz to 100.00 MHz
Frequency Stability:	±25ppm to ±100ppm
Temperature Range:	
Operating:	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
Storage:	-45°C to 120°C
Input Voltage:	5V ±0.5V
Input Current:	45mA Max
Output:	HCMOS/TTL
Symmetry:	40/60% Max @ 50% Vdd
(Option Y)	45/55% Max @ 50% Vdd
Rise/Fall Time:	10ns Max @ 20/% to 80% Vdd
Logic:	"0" = 10% Vdd Max
	"1" = 90% Vdd Min
Load:	15pF/10 TTL Max
Aging:	<3ppm 1st/yr, 1ppm every year thereafter

Designed to meet today's requirements for economical 5V applications. Available on 16mm tape and reel in quantities of 1K.

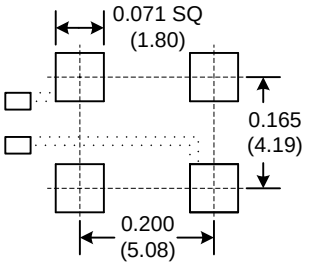
Dimensions inches (mm)
All dimensions are Max unless otherwise specified.



XXXX=Date Code XX=Lot Code

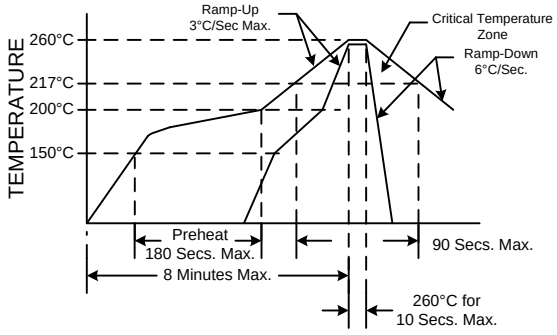


SUGGESTED PAD LAYOUT

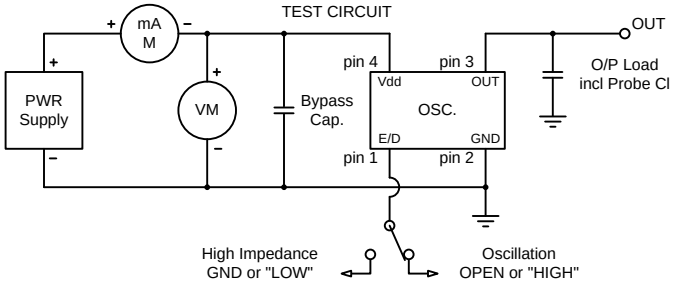


0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



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



Crystek Part Number Guide

CSO-016T X Y - 25 - 49.152
#1 #2 #3 #4 #5 #6

#1 Crystek Clock Osc.
#2 Model
#3 Temp. Range: Blank = 0/70°C, M= -20/70°C, X= -40/85°C
#4 Symmetry: Blank = (40/60), Y = (45/55)
#5 Stability: (see Table 1)
#6 Frequency in MHz: 3 or 6 decimal places

Stability Indicator	
Blank (std)	±100ppm
50	± 50ppm
25	± 25ppm

Table 1

Example:
CSO-016TXY-25-25.000 = 5V Tristate, -40/85°C, 45/55, 25ppm, 25.000 MHz
CSO-016T-50-19.660800 = 5V Tristate, 0/70, 40/60, 50ppm, 19.660800 MHz

Tristate Function	
Function pin 1	Output pin
Open	Active
"1" level 2.4V Min	Active
"0" level 0.4V Max	High Z

Specifications subject to change without notice.

TD-021002 Rev. K

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