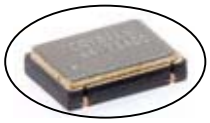
CRYSTEK CRYSTALS
A Division of Crystek Corporation

RoHS Compliant

Clock Oscillator



C32xx Model
5×7 mm SMD, 5V, HCMOS/TTL

Frequency Range:	1.544 MHz to 100.000 MHz
Frequency Stability Options:	±20*, ±25, ±50, ±100 (ppm)
Temperature Range: (standard)	0°C to +70°C
(Option "M")	-20°C to +70°C
(Option "E"*)	-40°C to +85°C
Storage:	-45°C to 90°C
Input Voltage:	5.0V ±0.5V
Input Current:	60mA Max
Output:	HCMOS/TTL
Symmetry:	
(Standard "2")	40/60% Max @ 50% Vdd
(Option "9")	45/55% Max @ 50% Vdd
Rise/Fall Time:	6ns Max @ 20% to 80% Vdd
Logic:	"0" = 10% Vdd Max
	"1" = 90% Vdd Min
Disable Time:	200nSec Max
Start-up Time:	1mSec Typ., 2mSec Max
Load:	50pF/10TTL Max
Jitter RMS: 12kHz~20MHz	0.5ps Typ, 1ps Max
Sub-harmonics:	None
Aging:	<3ppm 1st/yr, <1ppm every year thereafter

*available in select frequencies -40/85

Model C32xx is a 1.544 MHz to 100.000 MHz HCMOS Clock Oscillator operating at 5.0Volts. The oscillator utilizes Fundamental or High Q Third Overtone crystal design providing very low Jitter and Phase Noise. No Sub-Harmonics are present in the Output Signal.

Applications:
Digital Video
SONET/SDH/DWDM
Storage Area Networks
Broadband Access
Ethernet, Gigabit Ethernet

Mechanical:

Shock:	MIL-STD-883, Method 2002, Condition B
Vibration:	MIL-STD-883, Method 2007, Condition A
Solderability:	MIL-STD-883, Method 2003
Solvent Resistance:	MIL-STD-202, Method 215
Resistance to Soldering Heat:	MIL-STD-202, Method 210, Condition I or J

Environmental:

Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

Specifications subject to change without notice.

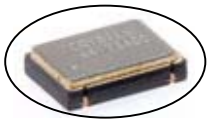
Rev: K
Date: 10-Jan-12

CRYSTEK CORPORATION
12730 Commonwealth Drive • Fort Myers, Florida 33913
Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com

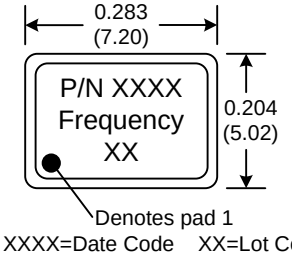
CRYSTEK CRYSTALS
A Division of Crystek Corporation

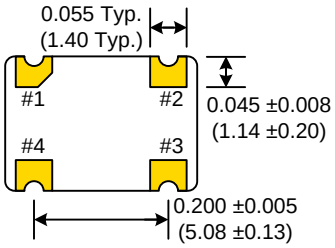
RoHS Compliant

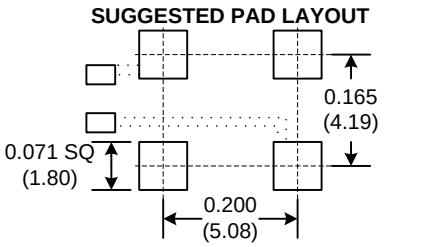
Clock Oscillator



C32xx Model
5×7 mm SMD, 5V, HCMOS/TTL







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

Tri-State Function	
Function pin 1	Output pin
Open "1" level 0.7×Vcc Min "0" level 0.3×Vcc Max	Active Active High Z

PIN	Function
1	E/D
2	GND
3	OUT
4	Vcc

Crystek Part Number Guide

C X 3 X 9 X - 44.736
#1 #2 #3 #4

#1 Temp. Range: Blank = 0/70°C, M = -20/70°C, E = -40/85°C
#2 Symmetry: 2 = 40/60%, 9 = 45/55%
#3 Stability: (see Table 1)
#4 Frequency in MHz: 3 or 6 decimal places

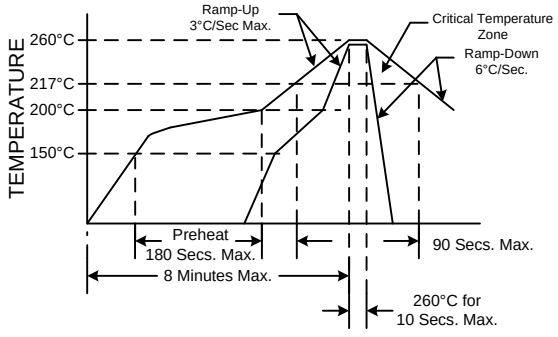
Stability Indicator	
0	±100ppm
2	± 50ppm
1	± 25ppm
8*	± 20ppm

*available in select frequencies -40/85

Table 1

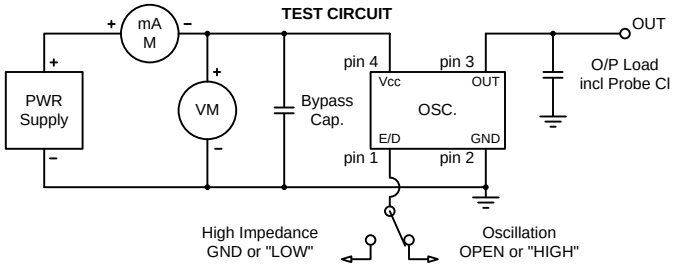
Example:
C3292-44.736MHz = 5.0V, 0/70°C, 40/60%, ±50ppm, 44.736MHz
CM3991-44.736MHz = 5.0V, -20/70°C, 45/55%, ±25ppm, 44.736MHz
CE3290-44.736MHz = 5.0V, -40/85°C, 40/60%, ±100ppm, 44.736MHz

RECOMMENDED REFLOW SOLDERING PROFILE



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

TEST CIRCUIT



Specifications subject to change without notice.

Rev: K
Date: 10-Jan-12

CRYSTEK CORPORATION
12730 Commonwealth Drive • Fort Myers, Florida 33913
Phone: 239-561-3311 • 800-237-3061
Fax: 239-561-1025 • www.crystek.com