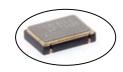




# **Clock Oscillator**



## C32xx/C39xx Model 5×7 mm SMD, 5V, HCMOS

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 Temperature:-45°C to 90°CInput Voltage:5.0V ±0.5VInput Current:60mA MaxStandby Current:10uA MaxOutput:HCMOS

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: 200ns Max

Start-up Time: 10ms Max Load: 30pF Max

Jitter RMS: 12kHz~20MHz 0.5ps Typical, 1ps Max

Sub-harmonics: None

**Aging:** <3ppm 1<sup>st</sup> year, <1ppm every year thereafter

Model C32xx/C39xx is a 1.544 MHz to 100.000 MHz HCMOS Clock Oscillator operating at 5.0 Volts. 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

Solvent Resistance: 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

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Rev: S

Date: 04-Aug-2020



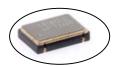


<sup>\*</sup>available in select frequencies -40/85

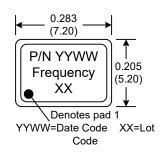


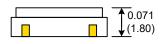


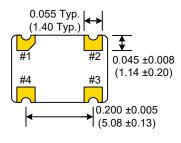
# Clock Oscillator

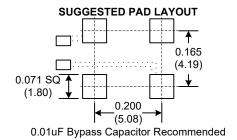


## C32xx/C39xx Model 5×7 mm SMD, 5V, HCMOS









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

Enable/Disable		
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**

 $C \underset{\#_1}{X} 3 \underset{\#_2}{X} 9 \underset{\#_3}{X} - \underbrace{44.736}_{\#_4} MHz$ 

#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

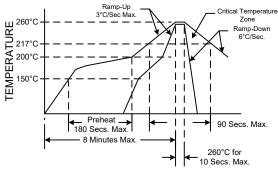
#### Example:

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

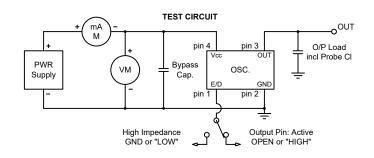
	Stability Indicator
0	±100ppm
2	± 50ppm
1	± 25ppm
8*	± 20ppm
*available in select frequencies -40/85	

Table 1

### RECOMMENDED REFLOW SOLDERING PROFILE



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



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Rev: S Date: 04-Aug-2020

Page 2 of 2