



CRYSTEK
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A DIVISION OF CRYSTEK CORPORATION

C32xx 5x7mm SMD
HCMOS Clock Oscillator
5.0 Volts



Model C32xx is a 1.544MHz to 106.250MHz 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.



5x7mm SMD

Applications:

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





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Frequency Range:	1.544 to 106.250Mhz
Frequency Stability Options(ppm):	±10, ±20, ±25, ±50, ±100
Temperature Range: (standard)	0°C to +70°C
(Option M)	-20°C to +70°C
(Option E)	-40°C to +85°C
Storage:	-55°C to 120°C
Input Voltage:	5.0V ± 0.5V
Input Current:	60mA Max
Output:	HCMOS/TTL
Symmetry:	40/60 % Max @ 50% Vdd
(Option)	45/55 % Max @ 50% Vdd
Rise/Fall Time:	6nsec 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 0.5psec Typ., 1psec Max
Sub-harmonics:	None
Aging:	<3ppm 1st/yr, <1ppm every year thereafter

PART NUMBER GUIDE

Example: C3292-44.736MHz

Intermediate Temp: CM3292-44.736MHz

Extended Temp: CE3292-44.736MHz

Symmetry 40/60 %	
Part Number	Stability
C*3290	±100ppm
C*3292	±50ppm
C*3291	±25ppm
C*3298	±20ppm
C3297	±10ppm

C = 0°C to 70°C
*CM = -20°C to 70°C
*CE = -40°C to 85°C

Symmetry 45/55 %	
Part Number	Stability
C*3990	±100ppm
C*3992	±50ppm
C*3991	±25ppm
C*3998	±20ppm
C3997	±10ppm

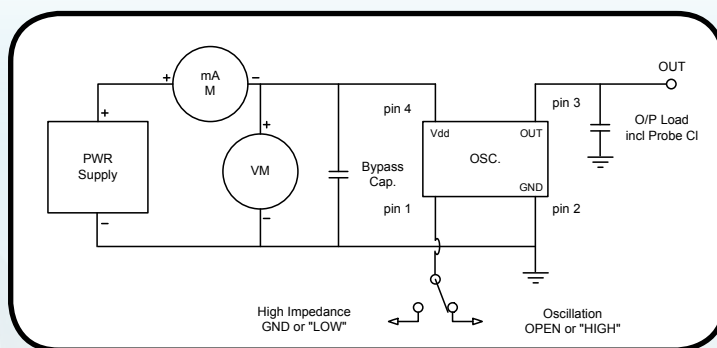


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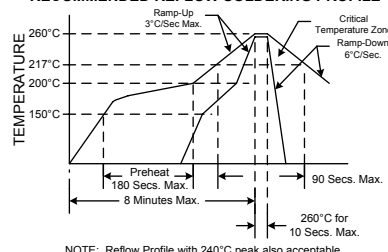
Mechanical:

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

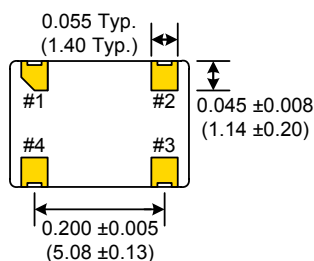
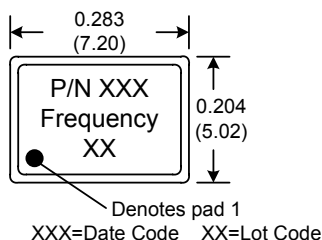
Environmental:

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

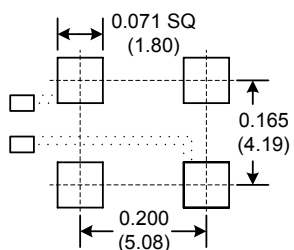
RECOMMENDED REFLOW SOLDERING PROFILE



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



SUGGESTED PAD LAYOUT



0.01uF Bypass Capacitor Recommended

Tri-State Function

Pin #1 State	Output State
Open or N/C	Active
"1" level 0.7*Vcc Min	Active
"0" level 0.3*Vcc Max	High Z

Pad	Connection
1	Enable/Disable
2	GND
3	Out
4	Vcc