

CS33xx Model 5X7 mm SMD, 3.3V, CMOS



Clock Oscillator With Standby Mode

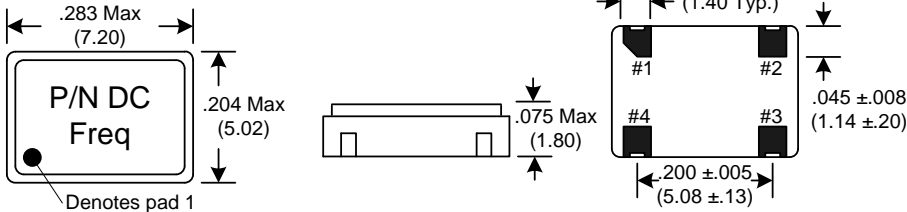
Frequency Range: 1.544MHz to 156.250MHz
Frequency Stability: ±20ppm to ±100ppm
Temperature Range: 0°C to 70°C
 (Option M) -20°C to 70°C
 (Option E) -40°C to 85°C
Storage: -55°C to 120°C
Input Voltage: 3.3V ± 0.3V
Input Current:
 1.544~34.00MHz 18mA Max
 35.00~50.00MHz 25mA Max
 51.00~69.00MHz 30mA Max
 70.00~156.25 MHz 45mA Max
Standby Current 3uA Typ., 10uA Max
Output: CMOS
 Symmetry: 45/55% Max @ 50% Vdd
 Rise/Fall Time (into 15pF Load):
 1.54~10.00 MHz 5ns Max @ 20% to 80%
 10.10~30.00 MHz 4ns Max @ 20% to 80%
 30.10~50.00 MHz 3ns Max @ 20% to 80%
 50.10~80.00 MHz 2.5ns Max @ 20% to 80%
 80.10~156.25 MHz 2ns Max @ 20% to 80%
 Logic: "0" = 10% Vdd Max
 "1" = 90% Vdd Min
 Start-up Time: 10ms Max
 Load: 30pF Max, >125MHz 15pF Max
Jitter RMS: 12KHz~80MHz 0.5ps Typ, 1ps Max
Aging: <3ppm 1st/yr, <1ppm every year thereafter



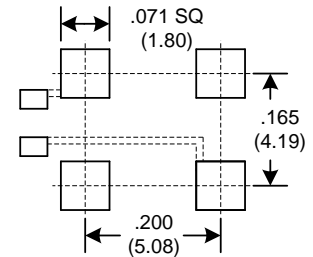
The CS33xx Series utilizes fundamental and 3rd overtone crystal technology to provide a low jitter output frequency. The oscillator is equipped with power saving standby feature for battery and other low drain applications. Available on 16mm tape and reel in quantities of 1K.

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

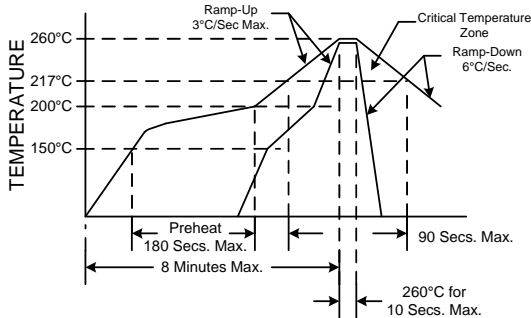


SUGGESTED PAD LAYOUT



0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE

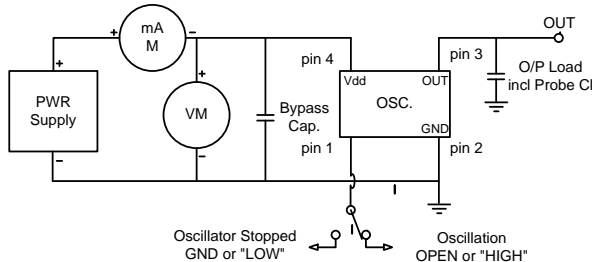


NOTE: Reflow Profile with 240°C peak also acceptable.

Crystek Part Number Guide

Example: CS3392-44.736MHZ
 Example: CSM3392-44.736MHZ
 Example: CSE3392-44.736MHZ

Temperature			Frequency Stability
0/ 70°C	-20/ 70°C	-40/ 85°C	
CS3390	CSM3390	CSE3390	+/- 100ppm
CS3392	CSM3392	CSE3392	+/- 50ppm
CS3391	CSM3391	CSE3391	+/- 25ppm
CS3398	N/A	N/A	+/- 20ppm



Standby Function	
Function pin 1	Oscillator State
Open	Oscillator Active
"1" level .7Vdd Min	Oscillator Active
"0" level 0.3Vdd Max	Oscillator Stopped

*Standby Mode output = High Impedance

Specifications subject to change without notice.

TD-052703 Rev.E



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