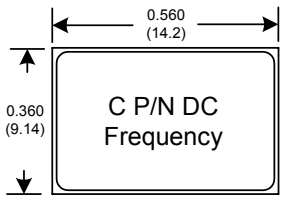
CF33xx Model
9x14 mm SMD, **3.3V, CMOS**

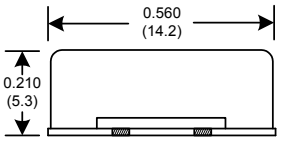
Lead Free RoHS Compliant

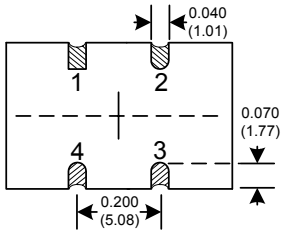
Clock Oscillator

The CF33xx Series utilizes fundamental and 3rd overtone crystal technology to provide a low jitter output frequency. This oscillator provides all the electrical features of the 5x7mm SMD C33XX series in a standard 9x14mm SMD foot print. Available on tape and reel in quantities of 500ea.

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
Output:	CMOS
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	
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, >80MHz 15pF Max
Jitter RMS: 12KHz~80MHz	0.5ps Typ, 1ps Max
Aging:	<3ppm 1st/yr, <1ppm every year thereafter

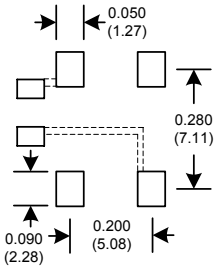






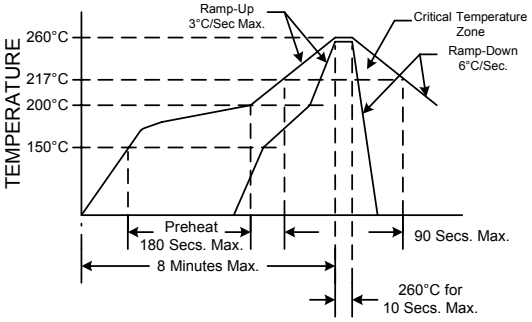
Bottom View

SUGGESTED PAD LAYOUT

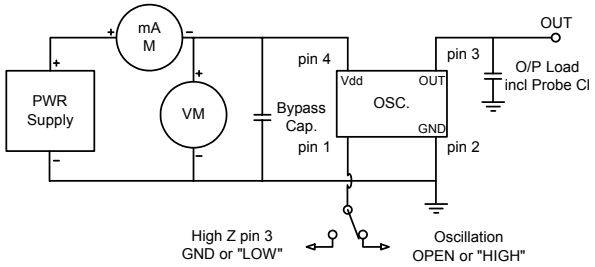


0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



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



Crystek Part Number Guide

Example: CF3392-44.736MHZ
Example: CFM3392-44.736MHZ
Example: CFE3392-44.736MHZ

Temperature			Frequency Stability
0/ 70°C	-20/ 70°C	-40/ 85°C	
CF3390	CFM3390	CFE3390	+/- 100ppm
CF3392	CFM3392	CFE3392	+/- 50ppm
CF3391	CFM3391	CFE3391	+/- 25ppm
CF3398	N/A	N/A	+/- 20ppm

Enable/Disable Function	
Function pin 1	Oscillator State
Open	Oscillator Active
"1" level .7Vdd Min	Oscillator Active
"0" level 0.3Vdd Max	High Z

Specifications subject to change without notice. TD-040102 Rev.B

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