

Clock Oscillator



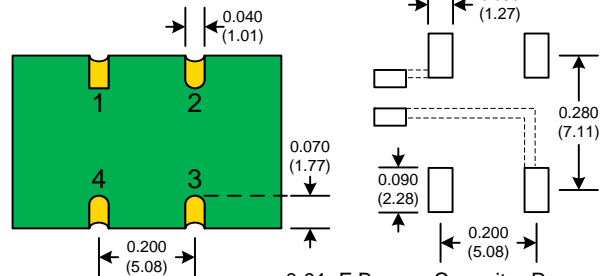
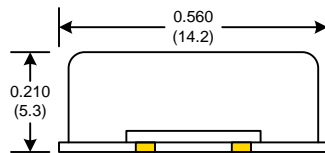
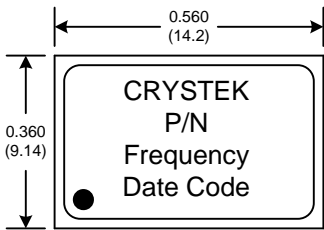
CF33xx Model

9x14 mm SMD, 3.3V, HCMOS

| | |
|--------------------------------|---|
| Frequency Range: | 1.544 MHz to 156.250 MHz |
| 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: | -45°C to 90°C |
| Input Voltage: | 3.3V ±0.3V |
| Input Current: | |
| 1.544~34.00 MHz | 18mA Max |
| 35.00~50.00 MHz | 25mA Max |
| 51.00~69.00 MHz | 30mA Max |
| 70.00~156.25 MHz | 45mA Max |
| Output: | HCMOS |
| 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 1 st year, <1ppm every year thereafter |



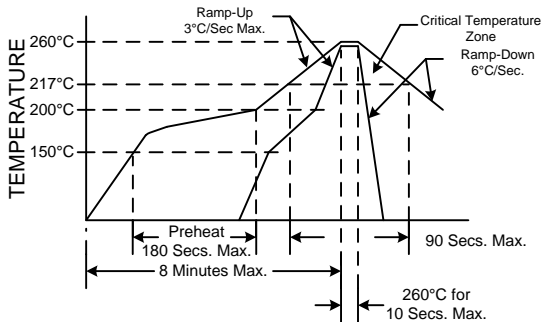
The CF33xx Series utilizes fundamental and 3rd overtone crystal technology to provide a low jitter output frequency. This oscillator provides all the electrical features of the 5x7mm SMD C33XX series in a standard 9x14mm SMD foot print. Available on tape and reel in quantities of 500ea.



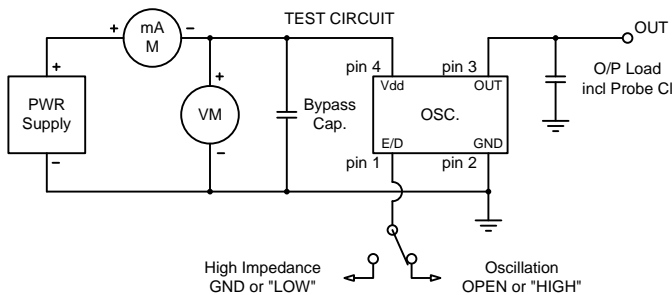
SUGGESTED PAD LAYOUT

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 | Output pin |
|-----------------------|------------|
| Open | Active |
| "1" level 0.7xVdd Min | Active |
| "0" level 0.3xVdd Max | High Z |

Specifications subject to change without notice.

TD-040102 Rev. F