

CFS33xx Model

9x14 mm SMD, 3.3V, CMOS



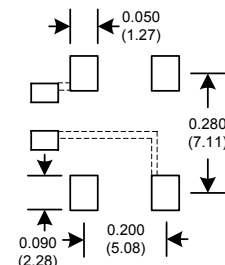
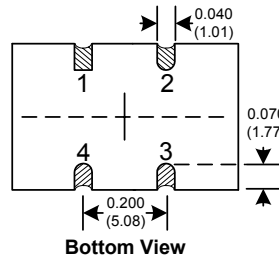
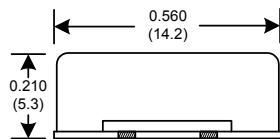
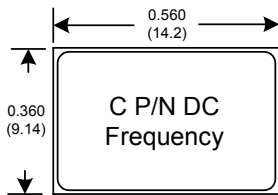
Clock Oscillator With Standby Mode



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:
 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: 5ms Max
 Load: 30pF Max, >80MHz 15pF Max
Jitter RMS: 12KHz~80MHz 0.5ps Typ, 1ps Max
Aging: <3ppm 1st/yr, <1ppm every year thereafter

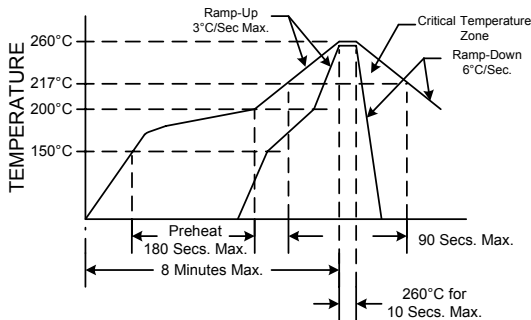
The CFS33xx Series utilizes fundamental and 3rd overtone crystal technology to provide a low jitter output frequency. The oscillator is equipped with power saving standby feature for battery and other low drain applications. Available on tape and reel in quantities of 500ea.

SUGGESTED PAD LAYOUT

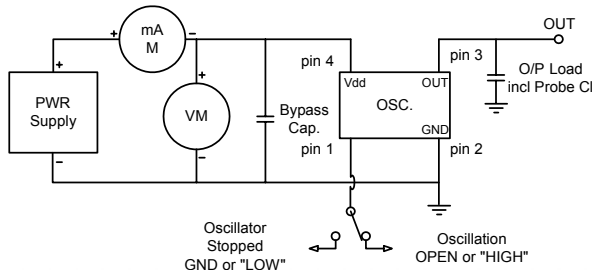


0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



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



Crystek Part Number Guide

Example: CFS3392-44.736MHZ
 Example: CF5M3392-44.736MHZ
 Example: CFSE3392-44.736MHZ

	Temperature			Frequency Stability
	0/ 70°C	-20/ 70°C	-40/ 85°C	
CFS3390	CF5M3390	CFSE3390		+/- 100ppm
CFS3392	CF5M3392	CFSE3392		+/- 50ppm
CFS3391	CF5M3391	CFSE3391		+/- 25ppm
CFS3398	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 Feature: When pin 1 is disabled by applying a logic "0", the output buffer of the oscillator goes into tri-state (high impedance). In addition, the internal oscillator is stopped, hence the entire oscillator consumes less than 10uA from the supply pin.

Specifications subject to change without notice.

TD-102703 Rev.C



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