

# CFPS-72, -73 SMD CLOCK OSCILLATORS

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## Description

- Surface mount oscillators in a ceramic package with a hermetically sealed metal lid available in two voltages

## Fast Make Capability

- Please see CFPP-72, 73 series Programmable Oscillators for nearest equivalent fast make parts

## Package Outline

- 7 x 5mm SMD ceramic package

## Frequency Range

- 1.25 to 160MHz

## Output Compatibility & Load

- Tri-state HCMOS/TTL (5.0V) (CFPS-72)
- Tri-state HCMOS (3.3V) (CFPS-73)

Maximum Capacitive Load	
1.5MHz to 50MHz	50pF max
>50MHz to 80MHz	30pF max
>80MHz to 160MHz	15pF max

## Frequency Stabilities

- $\pm 20\text{ppm}$ ,  $\pm 25\text{ppm}$ ,  $\pm 50\text{ppm}$ ,  $\pm 100\text{ppm}$  (inclusive of supply voltage and output load variations over the operating temperature range)

## Operating Temperature Range

- 0 to 70°C (CFPS-72, -73)
- 40 to 85°C (CFPS-72I, -73I)

## Storage Temperature Range

- 55 to 125°C

## Tri-state Operation

- Logic '1' (2.2V min) to pad 1 enables oscillator output
- Logic '0' to pad 1 (0.8V max) disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection to pad 1 enables oscillator output

## Marking Includes

- Model Number + Frequency Stability Code + Frequency

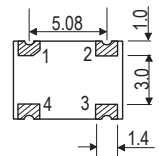
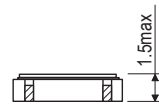
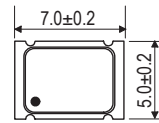
## Packaging

- Bulk or Tape and Reel

## Minimum Order Information Required

- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

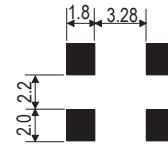
## Outline (mm)



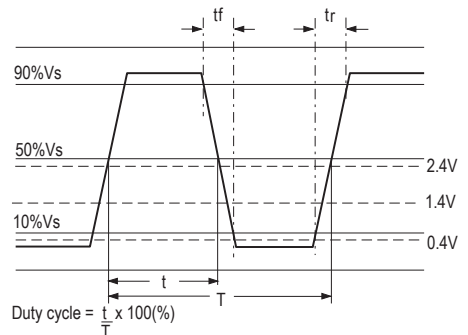
## Pad Connections

- N/C or Enable/Disable
- GND
- Output
- +Vs

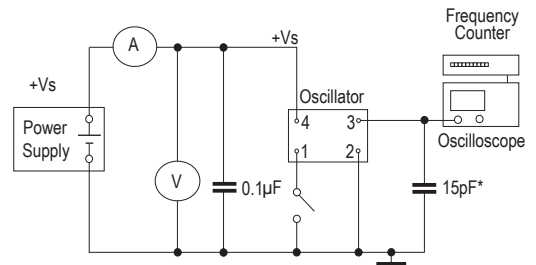
## Solder pad layout



## Output Waveform



## Test Circuit



\*Inclusive of jigging and equipment capacitance

**Electrical Specifications - maximum limiting values**

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.25 to 35.0MHz	±20ppm, *	3.3V ±10%	15mA	6ns	6ns	45/55%	CFPS-73, CFPS-73I
>35.0 to 70.0MHz			30mA				
>70.0 to 160.0MHz			40mA				
1.25 to 20.0MHz	±25ppm, ±50ppm, ±100ppm	5.0V ±10%	20mA				CFPS-72, CFPS-72I
>20.0 to 35.0MHz			30mA				
>35.0 to 70.0MHz			50mA				
>70.0 to 160.0MHz			70mA				

Ordering Example \_\_\_\_\_ **24.0MHz** **CFPS-73** **C**

Frequency \_\_\_\_\_

Model No. \_\_\_\_\_

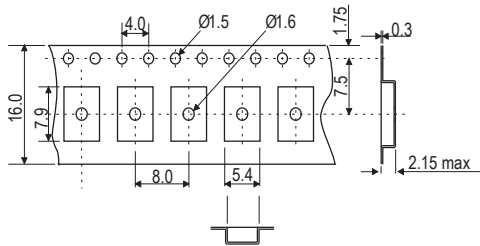
Operating Temperature Code: I= -40 to 85°C; Not applicable for 0 to 70°C \_\_\_\_\_

Frequency Stability: A = ±25ppm; B = ±50ppm; C = ±100ppm; G = ±20ppm \_\_\_\_\_

\*Note: Code IG, ±20ppm over -40 to 85°C is not available

Please note that the rise and fall times listed are the maximum values we specify to cover various frequency breaks. In practice the actual values are generally lower depending upon the spot frequency chosen. For typical values please contact our sales office.

**Tape (mm)**



**Reel (mm)**

