# CFPS-72, -73 SMD CLOCK OSCILLATORS



## ISSUE 11; 1 NOVEMBER 2008 - RoHS 2002/95/EC

## 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

DSCILLATORS

CLOCK

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**

 ±20ppm, ±25ppm, ±50ppm, ±100ppm (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

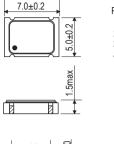
## Packaging

Bulk or Tape and Reel

# Minimum Order Information Required

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

# Outline (mm)



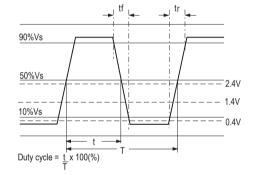
- Pad Connections 1. N/C or Enable/Disable 2. GND 3. Output
- 3. Outp 4. +Vs



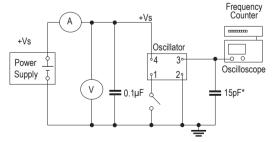




# **Output Waveform**



#### Test Circuit



\*Inclusive of jigging and equipment capacitance





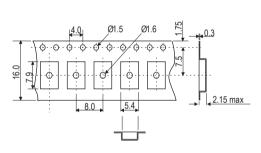
# Electrical Specifications - maximum limiting values

-		-					
Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Numbe
1.25 to 35.0MHz	±20ppm, * ±25ppm, ±50ppm, ±100ppm	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,
>20.0 to 35.0MHz			30mA				CFPS-72I
>35.0 to 70.0MHz			50mA				
>70.0 to 160.0MHz			70mA				
Ordering Example Frequency ———— Model No. ——— Operating Temperature C	Code: I= -40 to 85°C; Not a	pplicable for 0 to 70	)°C			<u>24.0</u>	MHz CFPS-73 I
-requency Stability: A = :	$\pm 25$ ppm; B = $\pm 50$ ppm; C =	±100ppm; G = ±20	ppm ———				

\*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)

