

# CFPS-36

ISSUE 2; 13 DECEMBER 2005

## Delivery Options

- Please contact our sales office for current leadtimes

## Description

- The CFPS-36 is a 1.8V surface mount, low voltage oscillator with a CMOS output

## Output Compatibility

- Tri-state CMOS
- Drive Capability 15pF max

## Package Outline

- 5.0 x 3.2mm SMD Ceramic Package

## Frequency Range

- 1.8 to 125.0MHz

## Frequency Stabilities

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

## Operating Temperature Ranges

- -10 to 70°C (CFPS-36)
- -40 to 85°C (CFPS-36l)

## Storage Temperature Range

- -55 to 125°C

## Tri-state Operation

- Logic '1' to pad 1 enables oscillator output ( $\geq 70\% V_s$ )
- Logic '0' to pad 1 disables oscillator output: when the oscillator output goes to the high impedance state ( $\leq 30\% V_s$ )
- No connection to pad 1 enables oscillator output
- Supply current  $10\mu\text{A}$

## Solder Conditions

- For typical soldering conditions, please see the relevant

pages in Applications Notes

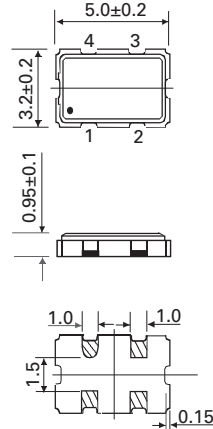
## Marking

- Model Number
- Frequency

## Minimum Order Information Required

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

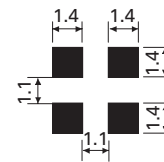
## Outline in mm



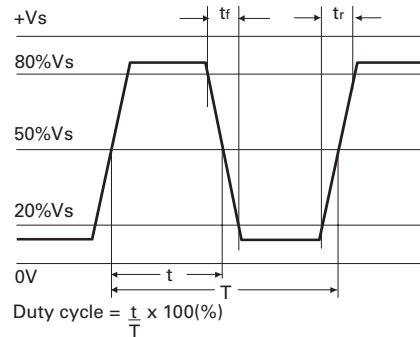
## Pad Connections

1. Enable/Disable
2. GND
3. Output
4. +Vs

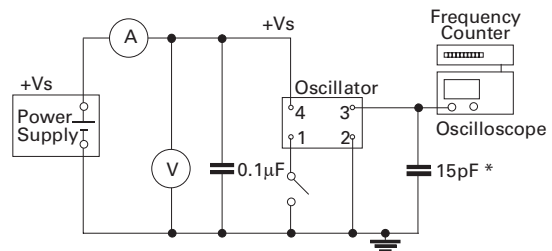
## Solder pad layout



## Output Waveform



## Test Circuit - CMOS



\* Inclusive of jigging & equipment capacitance

**Electrical Specification - maximum limiting values when measured in CMOS test circuit**

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.8 to 32.0MHz	±25ppm*, ±50ppm, ±100ppm	1.8V±5%	7mA	5.0ns	5.0ns	40/60%	CFPS-36 CFPS-36I
>32.0 to 80.0MHz			15mA	3.5ns	3.5ns		
>80.0 to 125.0MHz			25mA				

**Ordering Example** 20.0MHz CFPS-36 I C

Frequency \_\_\_\_\_

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

Operating Temperature Code: I = -40 to 85°C: Not applicable for -10 to 70°C \_\_\_\_\_

Frequency Stability: A = ±25ppm, B = ±50ppm, C = ±100ppm \_\_\_\_\_

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\*Note - Code IA, ±25ppm 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 practise the actual values are generally lower depending upon the spot frequency chosen. For typical values please contact our sales office.**