

CFPS-32

ISSUE 2; 28 JULY 2005

Delivery Options

- Please contact our sales office for current leadtimes

Description

- The CFPS-32 is a 2.5V low voltage, surface mount oscillator with a CMOS output

Output Compatibility

- Tri-state CMOS
- Drive Capability 15pF max

Package Outline

- 7.5 x 5.0mm SMD Ceramic Package

Frequency Range

- 1.8 to 160.0MHz

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-32)
- -40 to 85°C (CFPS-32I)

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
- Standby current 10 μA max

Solder Conditions

- For typical soldering conditions, please see the relevant pages in Applications Notes

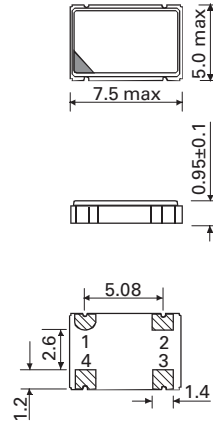
Marking

- Model Number
- Frequency

Minimum Order Information Required

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

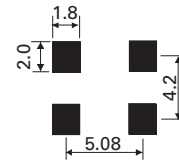
Outline in mm



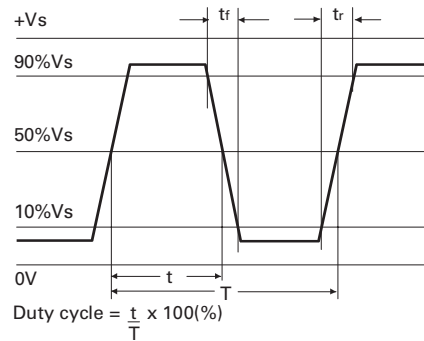
Pad Connections

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

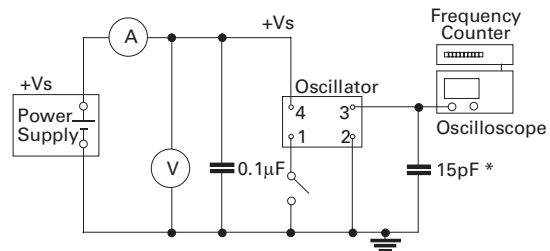
Solder pads layout



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	2.5V ±5%	10mA	5.0ns	5.0ns	45/55% for 1.0 to 50.0MHz	CFPS-32 CFPS-32I
>32.0 to 80.0MHz			18mA				
>80.0 to 125.0MHz			28mA	4.0ns	4.0ns	40/60% for >50.0 to 160.0MHz	
>125.0 to 160.0MHz			38mA	3.0ns	3.0ns		

Ordering Example

Frequency 24.0MHz CFPS-32 I C

Model Number _____

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

Frequency Stability: A = $\pm 25\text{ppm}$; B = $\pm 50\text{ppm}$; C = $\pm 100\text{ppm}$ _____

SURFACE MOUNT
SPX08

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.