CFPS-31

SURFACE MOUNT SPXOs

ISSUE 2; 28 JULY 2005

Delivery Options
- Please contact our sales office for current leadtimes

Description
- The CFPS-31 is a 1.8V 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
- ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage & output load variations over the operating temperature range)

Operating Temperature Ranges
- -10 to 70°C (CFPS-31)
- -40 to 85°C (CFPS-31I)

Storage Temperature Range
- -55 to 125°C

Tri-state Operation
- Logic '1' to pad 1 enables oscillator output (≥ 70% Vs)
- Logic '0' to pad 1 disables oscillator output; when the oscillator output goes to the high impedance state (≤ 30% Vs)
- No connection to pad 1 enables oscillator output
- Standby current 10μA max

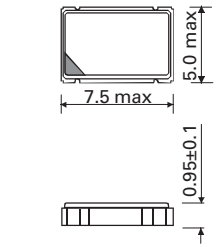
Solder Conditions
- For typical soldering conditions, please see the relevant

  pages in Applications Notes

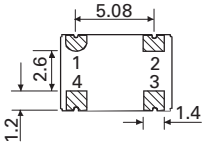
Marking
- Model Number
- Frequency

Minimum Order Information Required
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

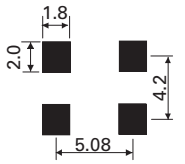
Outline in mm



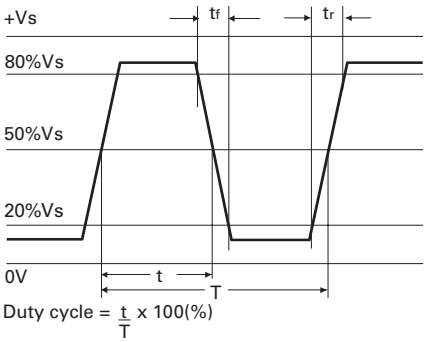
Pad Connections
1. Enable/Disable
2. GND
3. Output
4. +Vs



Solder pads layout

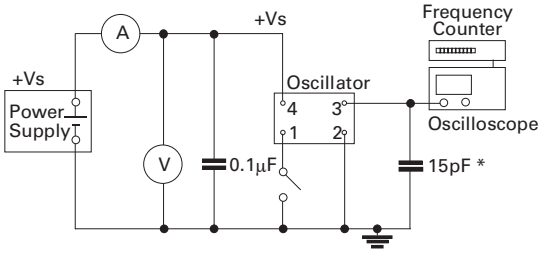


Output Waveform



Duty cycle = $\frac{t}{T}$ x 100(%)

Test Circuit - CMOS



* Inclusive of jigging & equipment capacitance

Europe Tel: +44 (0)1460 270200 Fax: +44 (0)1460 72578
Americas Tel: +1 919 941 9333 Fax: +1 919 941 9371
Asia Tel: +86 755 8826 5991 Fax: +86 755 8826 5990

Website: www.cmac.com

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-31 CFPS-31I
>32.0 to 80.0MHz			15mA	3.5ns	3.5ns		
>80.0 to 125.0MHz			25mA				
>125.0 to 160.0MHz			35mA	3.0ns	3.0ns		

Ordering Example 24.0MHz CFPS-31 I C

Frequency

Model Number

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

Frequency Stability: A = ±25ppm; B = ±50ppm; C = ±100ppm

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.

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Website: www.cmac.com