

CFPS-39 SMD CLOCK OSCILLATORS

ISSUE 3; 1 NOVEMBER 2008 - RoHS 2002/95/EC

Description

- 3.3V surface mount oscillator in a ceramic package, with a hermetically sealed metal lid

Fast Make Capability

- Please see CFPP-39 series Programmable Oscillators for nearest equivalent fast make parts

Package Outline

- 3.2 x 2.5mm

Frequency Range

- 1.8 to 50MHz

Output Compatibility & Load

- Tri-state HCMOS
- Drive Capability 15pF max

Frequency Stabilities

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

Operating Temperature Ranges

- 10 to 70°C (CFPS-39)
- 40 to 85°C (CFPS-39I)

Storage Temperature Range

- 55 to 125°C

Tri-state Operation

- Logic '1' (>70% Vs) to pad 1 enables oscillator output
- Logic '0' (<30% Vs) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection to pad 1 enables oscillator output

Standby Current

- 10 μA max

Start-Up Time

- 10ms max

Environmental

- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms, 1/2 sine wave)
- Vibration: MIL-STD-202F, Method 204D test condition D20G, 10-2000Hz, 4hrs in each X, Y, Z axis (total 12 hrs)

Marking Includes

- Model Number + Frequency

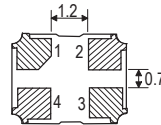
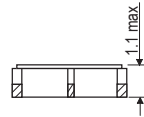
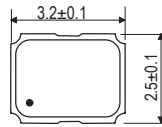
Packaging

- Bulk or Tape and Reel

Minimum Order Information Required

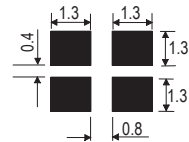
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

Outline (mm)

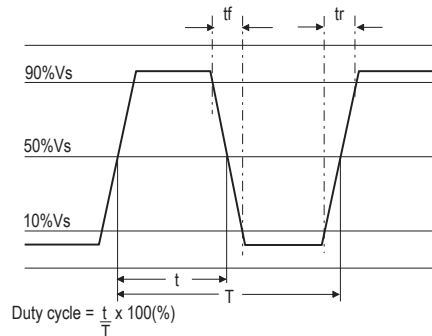


- Pad Connections
1. Enable/Disable
 2. GND
 3. Output
 4. +Vs

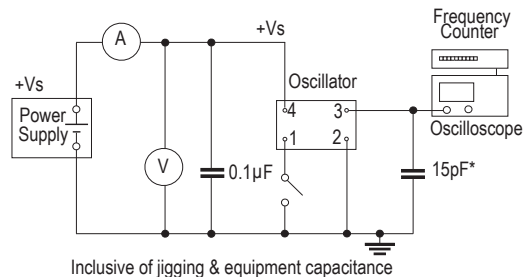
Solder pad layout



Output Waveform



Test Circuit



Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.80 to 50.0MHz	$\pm 25\text{ppm}^*$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	3.3V $\pm 10\%$	20mA	6ns	6ns	45/55%	CFPS-39 CFPS-39I

Ordering Example

Frequency 24.0MHz CFPS-39 C

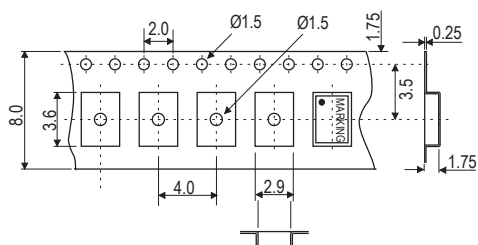
Model No. _____

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

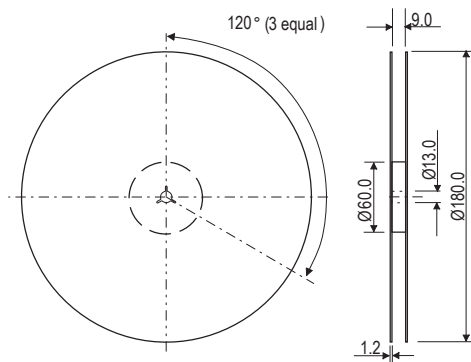
Frequency Stability: A = $\pm 25\text{ppm}$, = $\pm 50\text{ppm}$, C = $\pm 100\text{ppm}$ _____

*Note - Code IA, $\pm 25\text{ppm}$ over -40 to 85°C is not available

Tape (mm)



Reel (mm)



CLOCK
OSCILLATORS