

CFPS-61 SMD CLOCK OSCILLATORS

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Description

- 2.5V surface mount oscillator in a ceramic package, with a hermetically sealed metal lid and LVDS outputs

Package Outline

- 7 x 5mm

Frequency Range

- 80 to 160MHz

Output Compatibility & Load

- LVDS
- Differential Output Voltage (VOD) 0.25V min, 0.33V typ
- Offset Voltage (VOS) 1.125V to 1.375V (1.25V typ)
- Output Load 100Ω

Frequency Stabilities

- ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage and output load variations over the operating temperature range)

Operating Temperature Ranges

- 10 to 70°C (CFPS-61)
- 40 to 85°C (CFPS-61I)

Storage Temperature Range

- 5 to 125°C

Tri-state Operation

- Logic '1' to pad 1 (>70% Vs) enables oscillator outputs
- Logic '0' to pad 1 (<30% Vs) disables oscillator outputs and the oscillator outputs go to the high impedance state
- No connection to pad 1 enables oscillator outputs

Standby Current

- 30μA max

Clock Jitter

- 5ps rms max

Environmental

- Drop: natural drop, 3 times, from 75cm onto a hard wooden plate (30mm thick)
- Vibration: MIL-STD-202F, Method 204D, Test condition D 20G (10-2000Hz, 4 hrs in X, Y & Z axes, total 12 hrs)

Marking Includes

- Model Number + Frequency

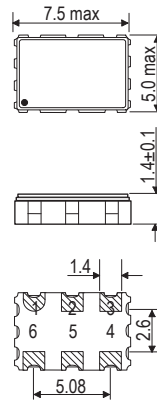
Packaging

- Bulk or Tape and Reel

Minimum Order Information Required

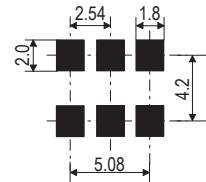
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

Outline (mm)

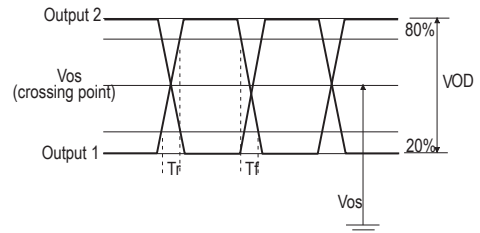


- Pad Connections
1. Enable/Disable
 2. N/C
 3. GND
 4. Output 1
 5. Output 2
 6. +Vs

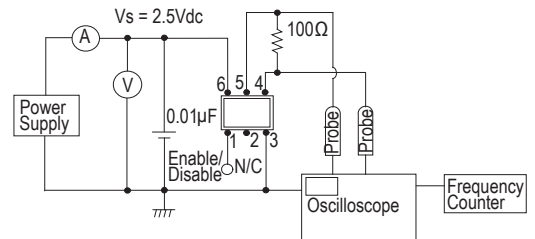
Solder pad layout



Output Waveform



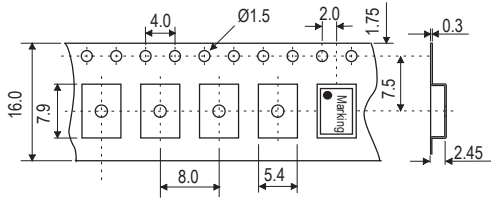
Test Circuit



Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr) (20% to 80% Vp-p)	Fall Time (tf) (80% to 20% Vp-p)	Duty Cycle (crossing point)	Model Number
80.0 to 160.0MHz	±25ppm*, ±50ppm, ±100ppm	2.5V±5%	63mA	0.7ns	0.7ns	45/55%	CFPS-61 CFPS-61I
Ordering Example							100.0MHz CFPS-61 I C
Frequency _____							
Model No. _____							
Operating Temperature Code: I = -40 to 85°C; not applicable for -10 to 70°C _____							
Frequency Stability _____							
*Note - Code IA, ±25ppm over -40 to 85°C is not available							

Tape (mm)



Reel (mm)

