

CFPS-64 SMD CLOCK OSCILLATORS

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Description

- High frequency 3.3V surface mount oscillator in a ceramic package, with a hermetically sealed metal lid and LVPECL outputs

Package Outline

- 7.5 x 5mm

Frequency Range

- 12MHz to 700MHz

Output Compatibility & Load

- LVPECL
- Output Load 50Ω terminated to +1.3V

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-64)
- 40 to 85°C (CFPS-64I)

Storage Temperature Range

- 40 to 85°C

Tri-state Operation

- Logic '0' to pad 2 (<1.7V) enables oscillator output
- Logic '1' to pad 2 (>2.2V) disables oscillator output; when the oscillator output goes to the high impedance state
- No connection to pad 1 enables oscillator output

Output Voltage

- '0' Level VoL +1.7V max
- '1' Level VoH +2.2V min

Phase Jitter (12kHz to 20MHz)

- 5ps rms max

Phase Noise (max)

- 110dBc/Hz at 10kHz

Environmental

- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms 1/2 sine wave)
- Vibration: MIL-STD-202F, Method 204D, test condition D20G, freq range 10-2000Hz, 4 hours for X, Y & Z axes (total 12 hours)

Marking Includes

- Model Number + Frequency

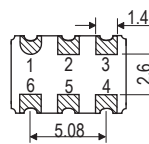
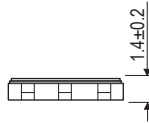
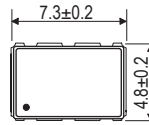
Packaging

- Bulk or Tape and Reel

Minimum Order Information Required

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

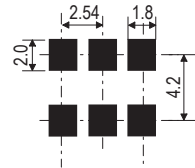
Outline (mm)



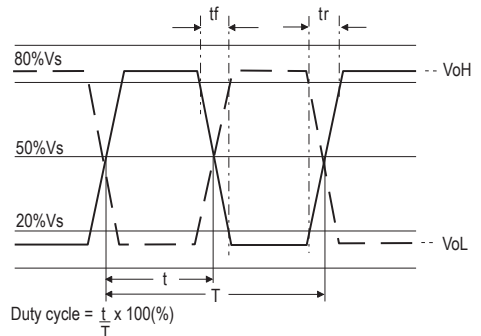
Pad Connections

- N/C
- Enable / Disable
- GND
- Output 1
- Output 2
- +Vs

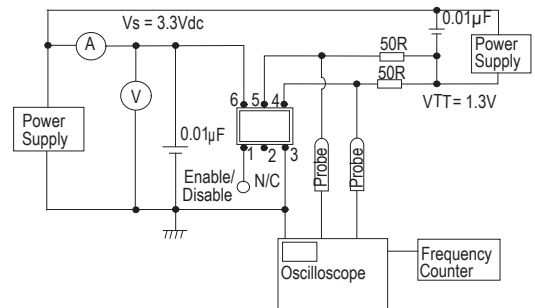
Solder pad layout



Output Waveform



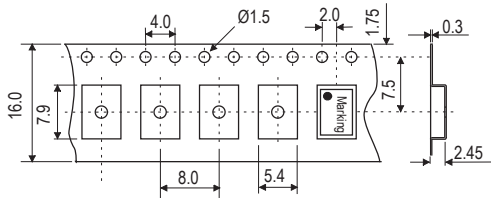
Test Circuit



Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr) (20-80-%)	Fall Time (tf) (80-20%)	Duty Cycle	Model Number	
12.0MHz to <100.0MHz	±25ppm*, ±50ppm, ±100ppm	3.3V±5%	120mA	1.0ns	1.0ns	40/60%	CFPS-64 CFPS-64I	
100.0MHz to 700.0MHz				0.5ns	0.5ns			
Ordering Example							100.0MHz	CFPS-64
Frequency _____								C
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 _____								
*Note - Code IA, ±25ppm over -40 to 85°C is not available								

Tape (mm)



Reel (mm)

