

# 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

- ±25ppm, ±50ppm, ±100ppm (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

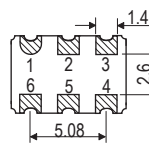
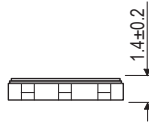
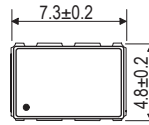
## Packaging

- Bulk or Tape and Reel

## Minimum Order Information Required

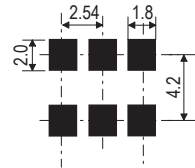
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

## Outline (mm)

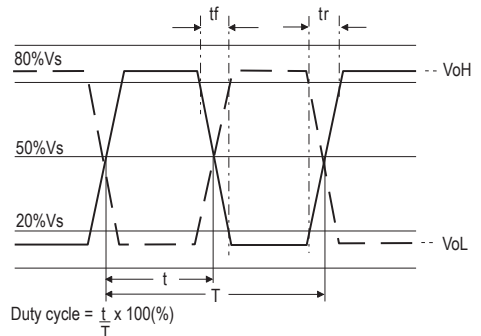


- Pad Connections
- N/C
  - Enable / Disable
  - GND
  - Output 1
  - Output 2
  - +Vs

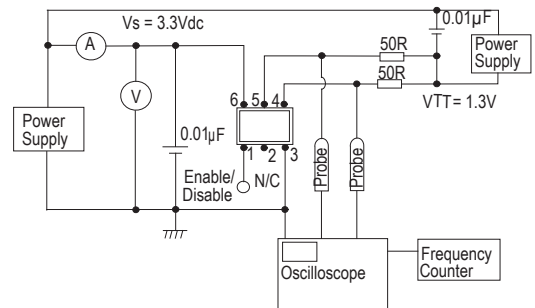
## Solder pad layout



## Output Waveform



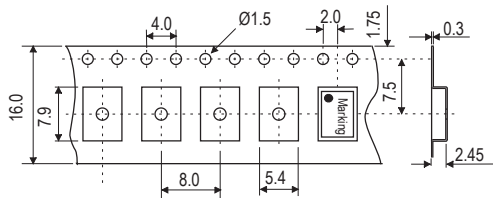
## Test Circuit



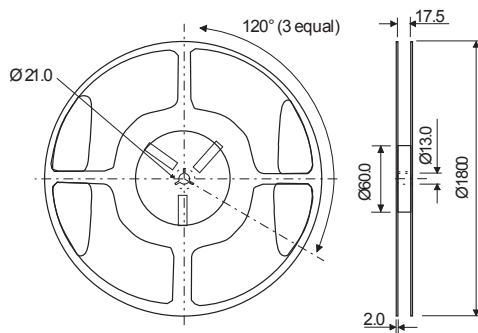
### Electrical Specifications - maximum limiting values

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	1ns	1ns	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)



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