

CFPP-72, -73 FAST MAKE OSCILLATORS

ISSUE 11; 1 NOVEMBER 2010 - RoHS 2002/95/EC

Description

- PLL based, one time only factory programmable for a fast lead time
- Crystal oscillator in a hermetically sealed ceramic package with a metal lid
- See CFPS-72 and CFPS-73 for standard crystal oscillator alternative
- See IQMS-500 series for MEMS oscillator alternative

Frequency Range

- 1 to 150MHz

Output Compatibility & Load

- Tri-state CMOS (5.0V) (CFPP-72)

Maximum Capacitive Load	
CMOS \leq 66.0MHz	50pF
CMOS $>$ 66.0 to 150.0MHz	25pF

- Tri-state CMOS (3.3V) (CFPP-73)

Maximum Capacitive Load	
CMOS \leq 40.0MHz	30pF
CMOS $>$ 40.0 to 133.0MHz	15pF

Supply Voltage

- 5.0V CFPP-72
- 3.3V CFPP-73

Standard Frequency Stabilities

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

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Storage Temperature Range

- -55 to 125°C

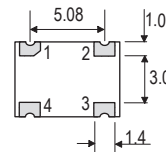
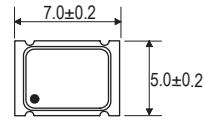
Tri-state Operation

- Logic '1' to pad 1 enables oscillator output
- Logic '0' 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

Packaging

- Loose in bulk pack, 1pc per bag
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

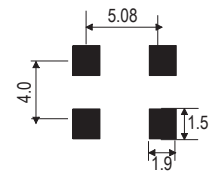
Outline (mm)



Underside View

- Pad Connections
1. N/C or Tri-State
 2. GND
 3. Output
 4. +VS

Solder Pad Layout



Ordering Information (*minimum required)

- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage

Example

- 20.00MHz CFPP-72
CMOS ± 50 ppm -40 to 85C 5.0V



Electrical Specifications - maximum limiting values

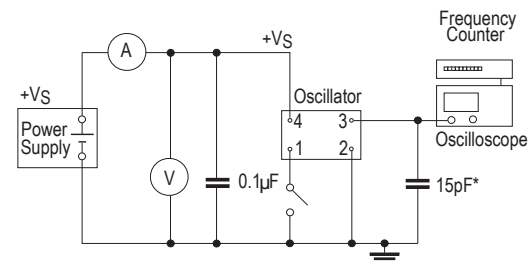
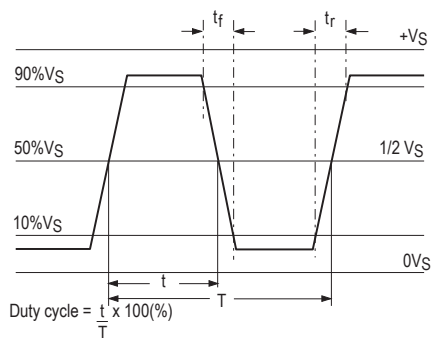
Frequency Range	Frequency Stability	Supply Voltage	Supply Current (unloaded)	Rise Time (tr) (10-90%)	Fall Time (tf) (90-10%)	Duty Cycle	Model Number	
1.0 to 40.0MHz	±25ppm ±50ppm ±100ppm	5.0V ±0.5V	45mA	4ns	4ns	45/55%	CFPP-72	
		3.3V ±0.3V	25mA				CFPP-73	
>40.0 to 66.0MHz		5.0V ±0.5V	45mA				40/60%	CFPP-72
		3.3V ±0.3V	25mA					CFPP-73
>66.0MHz to 100.0MHz		5.0V ±0.5V	45mA			CFPP-72		
		3.3V ±0.3V	25mA			CFPP-73		
>100.0 to 133.0MHz		5.0V ±0.5V	45mA			CFPP-72		
		3.3V ±0.3V				CFPP-73		
>133.0 to 150.0MHz	5.0V ±0.5V	60mA	CFPP-72					

Note: For other frequency/specification combinations, please contact our sales offices

Jitter pk-pk (typical)		Jitter pk-pk (max)	
1.0 to 33.0MHz	>33.0MHz	1.0 to 33.0MHz	>33.0MHz
100ps	75ps	250ps	175ps

Test Circuit

Output Waveform



* Inclusive of jigging and equipment capacitance

