

CFPP-23, -303 FAST MAKE OSCILLATORS

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Outline (mm)

Description

- PLL based, one time only factory programmable for a fast lead time
- Crystal oscillator in an 8-pin DIL package hermetically sealed
- See CFPS-23 and CFPS-303 for standard crystal oscillator alternative

Frequency Range

- 1 to 150MHz

Output Compatibility & Load

- Tri-state CMOS (5.0V) (CFPP-23)

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

- Tri-state CMOS (3.3V) (CFPP-303)

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

Supply Voltage

- 5.0V CFPP-23
- 3.3V CFPP-303

Standard Frequency Stabilities

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

Operating Temperature Range

- 0 to 70°C
- -40 to 85°C

Storage Temperature Range

- -55 to 125°C

Tri-state Operation

- Logic '1' to pin 1 enables oscillator output
- Logic '0' to pin 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection to pin 1 enables oscillator output

Packaging

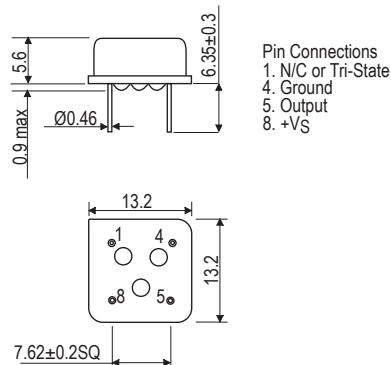
- Loose in bulk pack, 1pc per box

Ordering Information (*minimum required)

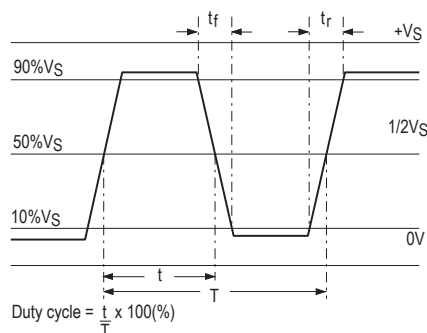
- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage

Example

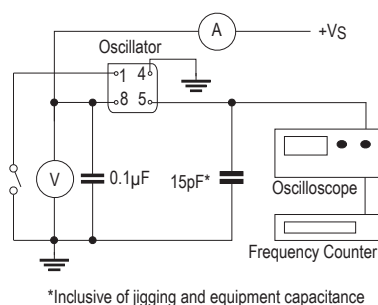
- 20.00MHz CFPP-23
CMOS ± 50 ppm -40 to 85C 5.0V



Output Waveform



Test Circuit





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-23
>40.0 to 66.0MHz		3.3V ±0.3V	25mA				CFPP-303
		5.0V ±0.5V	45mA				CFPP-23
>66.0MHz to 100.0MHz		3.3V ±0.3V	25mA			40/60%	CFPP-303
		5.0V ±0.5V	45mA				CFPP-23
		3.3V ±0.3V	25mA				CFPP-303
>100.0 to 133.0MHz		5.0V ±0.5V	45mA				CFPP-23
		3.3V ±0.3V					CFPP-303
>133.0 to 150.0MHz		5.0V ±0.5V	60mA				CFPP-23

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

