

ISSUE 10; April 2016

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. This model is not approved for on-board avionics applications; in such instances our 'CFPP-12 AVIATION' version should be specified. See CFPS-12 for standard crystal oscillator alternative.



Frequency Parameters

- Frequency: 1.0MHz to 150.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 5\text{ppm}$ max in 1st year @ 25°C

Electrical Parameters

- Load Capacitance (CL): 0.0pF to 50.0pF
- Supply Voltage: 5.0V $\pm 0.5\text{V}$

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: CMOS
- 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

Drive Capability	
0.0MHz to 66.0MHz	50pF
66.0MHz to 150.0MHz	25pF

Noise Parameters

- Jitter pk-pk (max)

1 to 33MHz	>33MHz
250ps	175ps
- Jitter pk-pk (typical)

1 to 33MHz	>33MHz
100ps	75ps

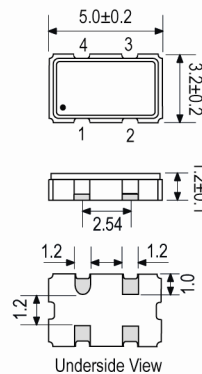
Environmental Parameters

- Storage Temperature Range: -55 to 125°C

Ordering Information

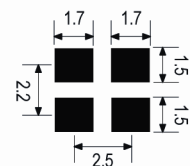
- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Example
 - 20.00MHz CFPP-12
 - CMOS $\pm 50\text{ppm}$ -40 to 85C 5V

Outline (mm)



- Pad Connections
- N/C or Tri-State
 - GND
 - Output
 - +VS

Solder Pad Layout



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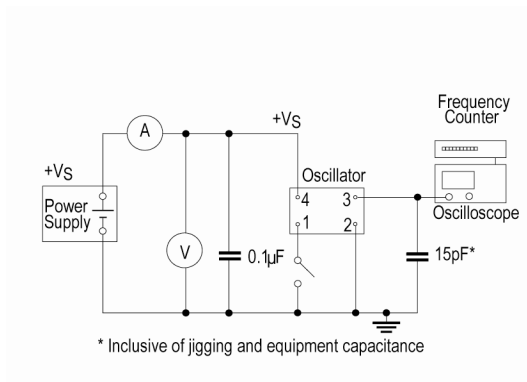
Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JEDEC-STD-033): Not Applicable

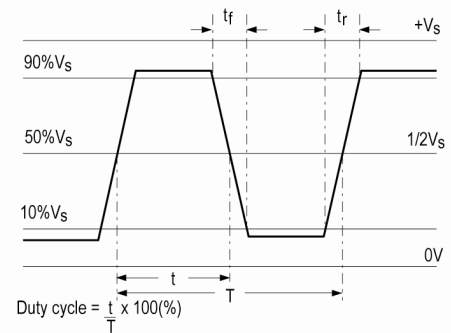
Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Test Circuit



Wave Form



Electrical Specification - maximum limiting values 5.0V ±0.5V

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	40.0MHz	0 to 70	±25.0	45	4	45/55%
		-40 to 85	±25.0	45	4	45/55%
40.000001MHz	66.0MHz	0 to 70	±25.0	45	4	45/55%
		-40 to 85	±25.0	45	4	45/55%
66.000001MHz	100.0MHz	0 to 70	±25.0	45	4	40/60%
		-40 to 85	±25.0	45	4	40/60%
100.000001MHz	133.0MHz	0 to 70	±25.0	45	4	40/60%
		-40 to 85	±25.0	45	4	40/60%
133.000001MHz	150.0MHz	0 to 70	±25.0	60	4	40/60%
		-40 to 85	±25.0	60	4	40/60%

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