

ISSUE 9; March 2016

Description

- PLL based, one time only factory programmable (for a fast lead time) crystal oscillator in a hermetically sealed 14-pin DIL package.
- This model is not approved for on-board avionics applications; in such instances our 'CFPP-307 AVIATION' version should be specified.
- See CFPS-306 and CFPS-307 for standard crystal oscillator alternative.

Frequency Parameters

- Frequency 1.0MHz to 133.0MHz
- 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

- Supply Voltage 3.3V $\pm 0.3\text{V}$

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility CMOS

Drive Capability	
1.0MHz to 40.0MHz	30pF max
40.0MHz to 133.0MHz	15pF max

Output Control

- 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

Noise Parameters

- Jitter pk-pk (typical):
1MHz to 33MHz: 100ps
>33MHz: 75ps
- Jitter pk-pk (max):
1MHz to 33MHz: 250ps
>33MHz: 175ps

Environmental Parameters

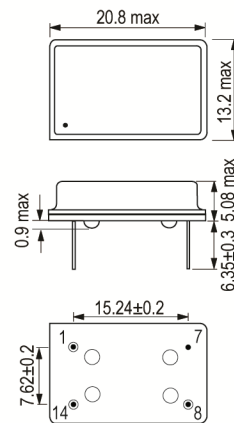
- Storage Temperature Range: -55 to 125°C

Ordering Information

- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- (*minimum requirement)
- Example
20.0MHz CFPP-307
CMOS $\pm 50\text{ppm}$ -40 to 85C 3.3V



Outline (mm)



Pin Connections
1. N/C or Tri-State
7. GND
8. Output
14. +Vs

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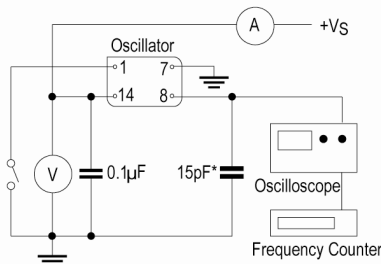
Compliance

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

Packaging Details

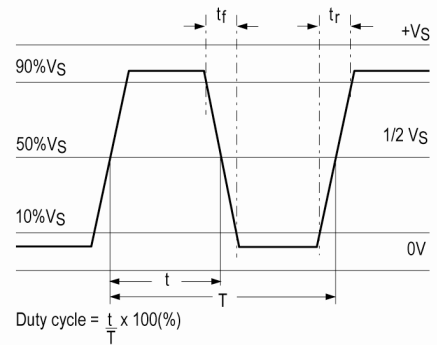
- Pack Style: Bulk Loose in bulk pack
- Pack Size: 1

Test Circuit



*Inclusive of jigging and equipment capacitance

Wave Form



Electrical Specification - maximum limiting values 3.3V ±0.3V

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	25	4	45/55%
		-40 to 85	±25.0	25	4	45/55%
40.000001MHz	66.0MHz	0 to 70	±25.0	25	4	40/60%
		-40 to 85	±25.0	25	4	40/60%
66.000001MHz	100.0MHz	0 to 70	±25.0	25	4	40/60%
		-40 to 85	±25.0	25	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%

This document was correct at the time of printing; please contact your local sales office for the latest version.

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