

ISSUE 11; June 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-73 AVIATION' version should be specified.
- See CFPS-73 for our 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
- 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 40.0MHz	30pF max
40.0MHz to 133.0MHz	15pF max

### Noise Parameters

- Jitter pk-pk:  
1 to 33MHz 250ps max  
>33MHz 175ps max
- Jitter pk-pk:  
1 to 33MHz 100ps typ  
>33MHz 75ps typ

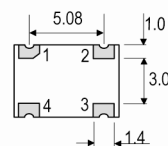
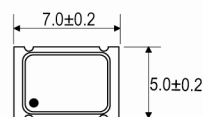
### Environmental Parameters

- 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  
20.0MHz CFPP-73  
CMOS  $\pm 50\text{ppm}$  -40 to 85C 3.3V

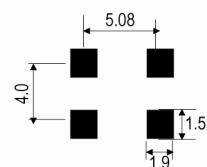
### Outline (mm)



Underside View

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

### Solder Pad Layout



### Sales Office Contact Details:

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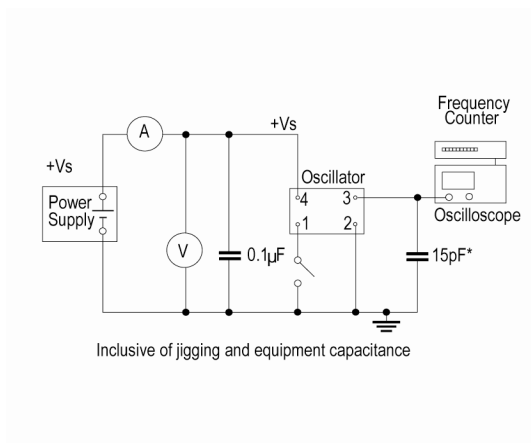
### Compliance

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

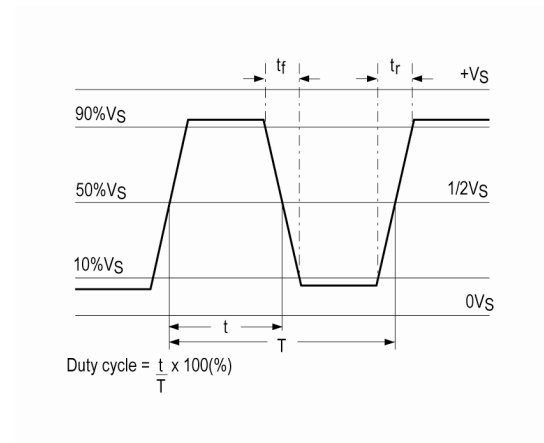
### Packaging Details

- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 1
- Pack Style: Cutt      In tape, cut from a reel  
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 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 -40 to 85	±25.0 ±25.0	25 25	4 4	45/55% 45/55%
40.000001MHz	66.0MHz	0 to 70 -40 to 85	±25.0 ±25.0	25 25	4 4	45/55% 45/55%
66.000001MHz	100.0MHz	0 to 70 -40 to 85	±25.0 ±25.0	25 25	4 4	40/60% 40/60%
100.000001MHz	133.0MHz	0 to 70 -40 to 85	±25.0 ±25.0	45 45	4 4	40/60% 40/60%

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