

ISSUE 10; 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
- See CFPS-39 for our standard crystal oscillator alternative

### Frequency Parameters

- Frequency: 1.0MHz to 110.0MHz
- Frequency Stability:  $\pm 20.00\text{ppm}$  to  $\pm 100.00\text{ppm}$

### Electrical Parameters

- Supply Voltage:  $3.3\text{V} \pm 10\%$
- Standby Current:  $10\mu\text{A}$  max
- Start Up Time: 8ms max

### Operating Temperature Ranges

- 10 to  $60^\circ\text{C}$
- 20 to  $70^\circ\text{C}$
- 40 to  $85^\circ\text{C}$

### Output Details

- Output Compatibility: CMOS
- Drive Capability: 15pF max

### Output Control

- Logic '1' ( $>70\%V_s$ ) to pad 1 enables oscillator output
- Logic '0' ( $<30\%V_s$ ) 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

### Noise Parameters

- Period Jitter: 150ps max

### Environmental Parameters

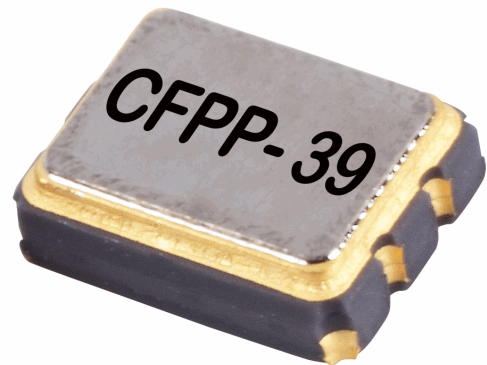
- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$

### Ordering Information

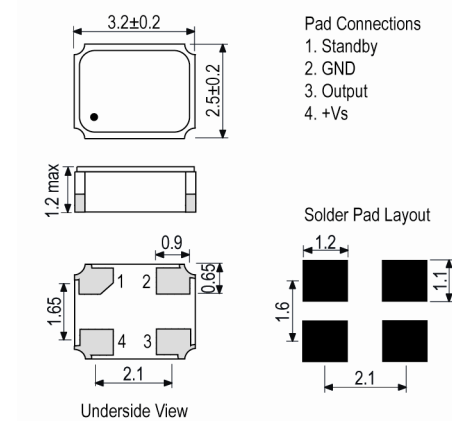
- Frequency\*
- Model\*
- Output Compatibility
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage
- (\*minimum required)
- Example
- 20.0MHz CFPP-39
- CMOS  $\pm 50\text{ppm}$   $-40$  to  $85^\circ\text{C}$  3.3V

### Compliance

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



### Outline (mm)



### Sales Office Contact Details:

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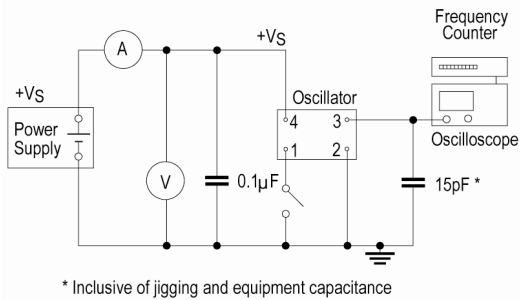
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Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

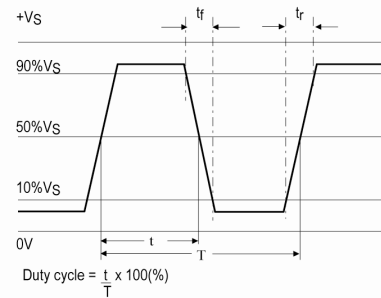
### Packaging Details

- Pack Style: Reel**      Tape & reel in accordance with EIA-481-D  
 Pack Size: 1,000
- Pack Style: Cutt**      In tape, cut from a reel  
 Pack Size: 1

### Test Circuit



### Wave Form



### Electrical Specification - maximum limiting values 3.3V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	19.999999MHz	-10 to 60	±20.0	10	5	45/55%
		-20 to 70	±25.0	10	5	45/55%
		-40 to 85	±50.0	10	5	45/55%
20.0MHz	39.999999MHz	-10 to 60	±20.0	15	5	45/55%
		-20 to 70	±25.0	15	5	45/55%
		-40 to 85	±50.0	15	5	45/55%
40.0MHz	74.999999MHz	-10 to 60	±20.0	15	5	45/55%
		-20 to 70	±25.0	15	5	45/55%
		-40 to 85	±50.0	15	5	45/55%
75.0MHz	89.999999MHz	-10 to 60	±20.0	20	5	45/55%
		-20 to 70	±25.0	20	5	45/55%
		-40 to 85	±50.0	20	5	45/55%
90.0MHz	110.0MHz	-10 to 60	±20.0	25	5	45/55%
		-20 to 70	±25.0	25	5	45/55%
		-40 to 85	±50.0	25	5	45/55%

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