

ISSUE 4; August 2016

### Description

- Standard 3.2 x 2.5mm crystal oscillator  
Ceramic package with a seam sealed metal lid, hermetically sealed  
Fast Make capability: CFPP-39 programmable oscillator is the nearest equivalent fast make model



### Frequency Parameters

- Frequency: 2.0MHz to 50.0MHz
- Frequency Stability:  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing:  $\pm 3\text{ppm}$  max per year @ 25°C

### Electrical Parameters

- Supply Voltage: 3.3V  $\pm 10\%$

### Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

### Output Details

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

### Output Control

- Standby Operation:  
Logic '1' (>70% VS) to pad 1 enables oscillator output  
Logic '0' (<30% VS) 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  
Standby Current: 10µA max  
Start-Up Time: 10ms max

### Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

### Ordering Information

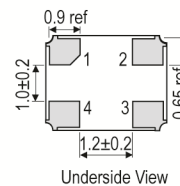
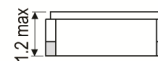
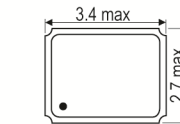
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage
- Example  
10.0MHz CFPS-39  
CMOS  $\pm 50\text{ppm}$  -10 to 70C 3.3V

### Compliance

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

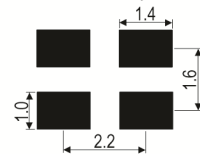


### Outline (mm)

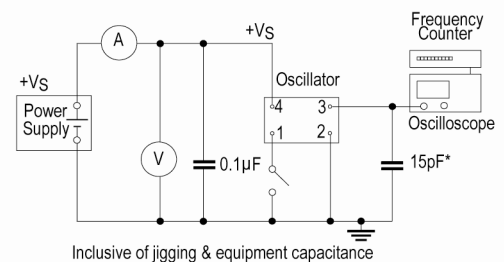


- Pad Connections
- Standby Operation
  - GND
  - Output
  - +Vs

### Solder Pad Layout



### Test Circuit



### Sales Office Contact Details:

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

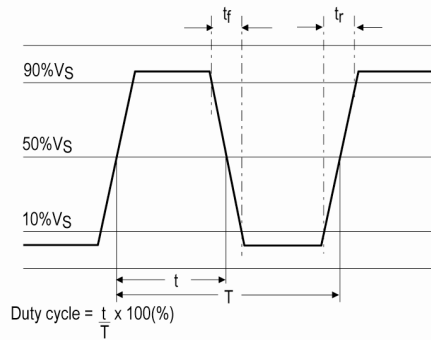
France: 0800 901 383  
USA: +1.760.318.2824

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

**Packaging Details**

- 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

**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	%
2.0MHz	9.999999MHz	-10 to 70	±25.0	7	5	45/55%
		-40 to 85	±25.0	7	5	45/55%
10.0MHz	19.999999MHz	-10 to 70	±25.0	7	5	45/55%
		-40 to 85	±25.0	7	5	45/55%
20.0MHz	31.999999MHz	-10 to 70	±25.0	12	5	45/55%
		-40 to 85	±25.0	12	5	45/55%
32.0MHz	50.0MHz	-10 to 70	±25.0	20	5	45/55%
		-40 to 85	±25.0	20	5	45/55%

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

[Click to view latest version on our website.](#)

**Sales Office Contact Details:**

UK: +44 (0)1460 270200

France: 0800 901 383

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Germany: 0800 1808 443

USA: +1.760.318.2824

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)