



ISSUE 6; September 2012 - RoHS 2011/65/EU



**Description**

- Standard 5 x 3.2 crystal oscillator.
- Ceramic package with a seam sealed metal lid, hermetically sealed.
- Please see our CFPS-12 for a 5.0V version of this package.
- Please see our CFPS-37 for a 2.5V version of this package.
- Please see our CFPS-69 for a low current version of this package.
- Fast Make capability: CFPS-9 programmable oscillator as the nearest equivalent fast make model.
- MEMS capability: IQMS-510 series oscillators are the nearest equivalent MEMS model.

**Frequency Range**

- Frequency 0.5 to 160.0 MHz

**Supply Voltage**

- Voltage 3.3V ±0.3V

**Ageing**

- Ageing ±3ppm max per year @ 25°C

**Output Compatibility & Load**

- Output Compatibility CMOS
- Drive Capability 15pF max

**Frequency Stabilities**

- Frequency Stability ±25ppm, ±100ppm  
(inclusive of supply voltage and output load variations over the operating temperature range)

**Operating Temperature Ranges**

- 10 to 70°C
- 40 to 85°C

**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

**Environmental Parameters**

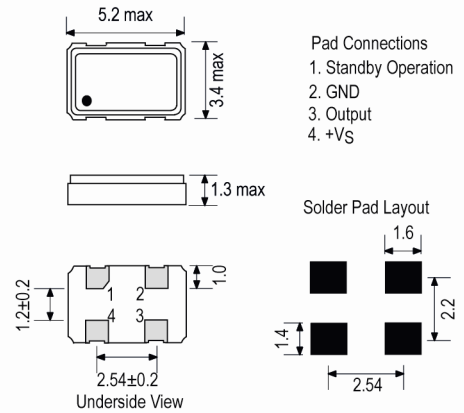
- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

**Ordering Information (\*minimum required)**

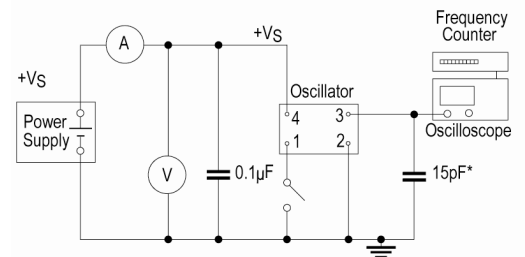
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage
- Example:  
10.0MHz CFPS-9  
CMOS ±50ppm -10 to 70C 3.3V



**Outline (mm)**



**Test Circuit**



\* Inclusive of jigging and equipment capacitance

**Sales Office Contact Details:**

UK: +44 (0)1460 270200  
Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18  
USA: +1 (0)408.273.4530

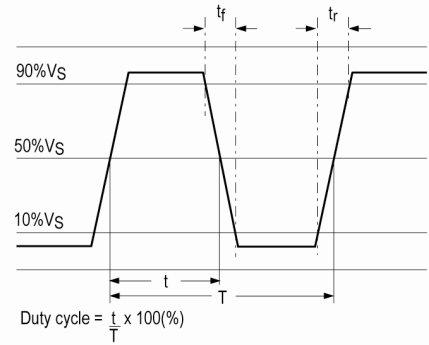
Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)



**Packing Details**

- Pack Style: **Bulk**            Loose in bulk pack  
Pack Size                    100
- Pack Style: **Reel**            Tape & reel in accordance with EIA-481-D  
Pack Size                    1,000
- Alternative packing options available

**Wave Form**



**Electrical Specification - maximum limiting values 3.3V ±0.3V**

Frequency Range	Temp Range	Stability Inclusive		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
0.5 to 9.999999MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
10.0 to 19.999999MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
20.0 to 31.999999MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
32.0 to 49.999999MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	20.0mA	10ns	40/60%
50.0 to 79.999999MHz	-10 to 70°C	±25ppm	±100ppm	30.0mA	8ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	30.0mA	8ns	40/60%
80.0 to 99.999999MHz	-10 to 70°C	±25ppm	±100ppm	40.0mA	5ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	40.0mA	5ns	40/60%
100.0 to 160.0MHz	-10 to 70°C	±25ppm	±100ppm	50.0mA	4ns	40/60%
	-40 to 85°C	±25ppm	±100ppm	50.0mA	4ns	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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Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)