

ISSUE 8; July 2024

**Description**

- Surface mount 3.2 x 2.5mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.
- Fast Make capability: CFPP-40 programmable oscillator is the nearest equivalent fast make model.

**Frequency Parameters**

■ Frequency	1.0MHz to 54.0MHz
■ Frequency Stability	$\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
■ Ageing	$\pm 3\text{ppm}$ max per year @ $25^\circ\text{C}$

**Electrical Parameters**

- Supply Voltage 2.5V  $\pm 5\%$

**Operating Temperature Ranges**

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

**Output Details**

■ Output Compatibility	CMOS
■ Drive Capability	15pF max
■ Output Low Vol: 10% Vs max	
■ Output High Vol: 90% Vs min	
■ Start-Up Time: 10ms max	

**Output Control**

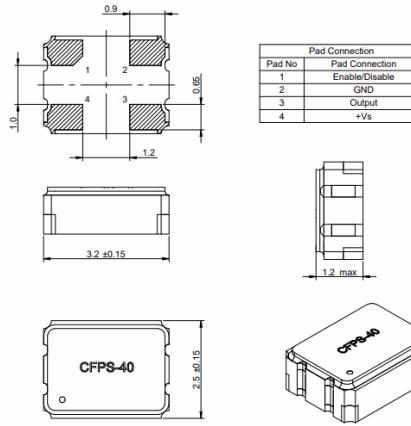
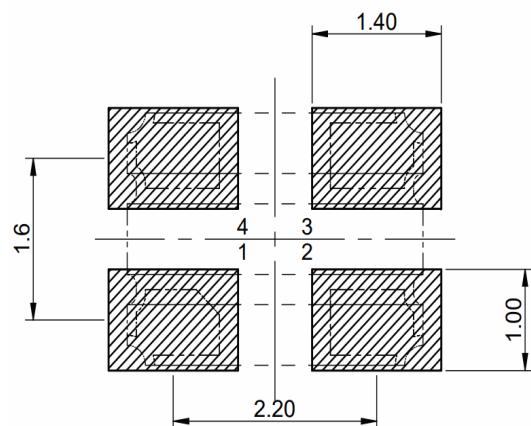
- Standby Operation:  
Logic '1' (>70% Vs) to pad 1 enables oscillator output  
Logic '0' (<30% Vs) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state  
No connection to pad 1 enables oscillator output  
Standby Current: 10 $\mu\text{A}$  max

**Environmental Parameters**

- Storage Temperature Range: -55 to  $125^\circ\text{C}$
- Drop Test: in accordance with JIS-C0044; The specimen is measured for its frequency before the test. It is then dropped from a height of 75cm or more as a free fall object onto a hard wooden plate of 30mm or more in thickness.
- Vibration: MIL-STD-883F : 2007.3, Test Condition: Peak acceleration:20g Frequency range;(20Hz~2000Hz), Peak to peak amplitude: 1.52mm, Sweep time: 20 minute/axis, Ppendicular total test time: 4 hours

**Manufacturing Details**

■ RoHS Terminations	NiAu
■ RoHS Reflow	260°C max for 30s max

**Outline (mm)****Recommended Solder Pad Layout****Sales Office Contact Details:**

UK: +44 (0)1460 270200

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

## Ordering Information

- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage
- (\*minimum required)
- Example  
10.0MHz CFPS-40  
CMOS  $\pm 50$ ppm -10 to 70C 2.5V

## Compliance

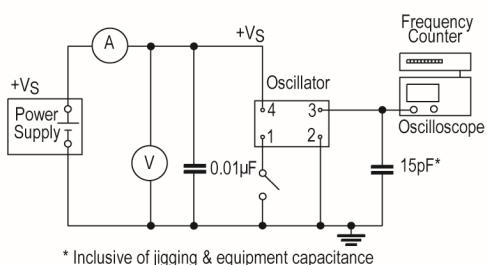
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

## Packaging Details

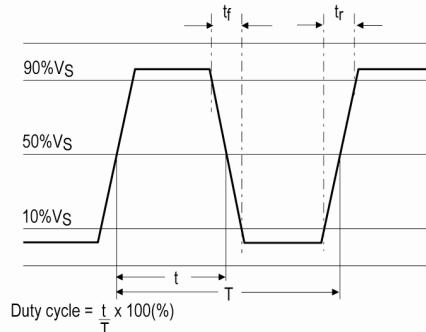
- Tape & reel in accordance with EIA-481

Standard Pack Quantity: 3,000

## Test Circuit



## Wave Form

Electrical Specification - maximum limiting values 2.5V  $\pm 5\%$ 

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
1.0MHz	9.999999MHz	-20 to 70	$\pm 20.0$	6	5	40/60
		-40 to 85	$\pm 20.0$	6	5	40/60
10.0MHz	19.999999MHz	-20 to 70	$\pm 20.0$	7	5	40/60
		-40 to 85	$\pm 20.0$	7	5	40/60
20.0MHz	31.999999MHz	-20 to 70	$\pm 20.0$	8	5	40/60
		-40 to 85	$\pm 20.0$	8	5	40/60
32.0MHz	54.0MHz	-20 to 70	$\pm 20.0$	20	5	40/60
		-40 to 85	$\pm 20.0$	20	5	40/60

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

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