

ISSUE 7; April 2018



Description

- Standard 5 x 3.2mm 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

Frequency Parameters

- Frequency 500.0kHz to 160.0MHz
- 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 $\pm 0.3\text{V}$

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max

Output Control

- Enable/Disable 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)

Manufacturing Details

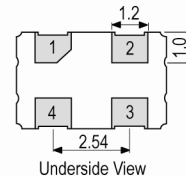
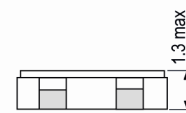
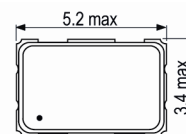
- RoHS Terminations NiAu
- RoHS Reflow 260degC 10s

Ordering Information

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



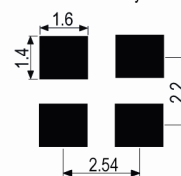
Outline (mm)



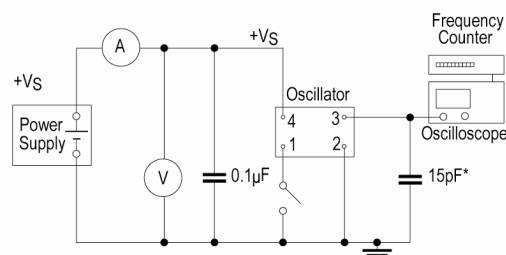
Pad Connections

1. Enable/Disable
2. GND
3. Output
4. +Vs

Solder Pad Layout



Test Circuit



* Inclusive of jigging and equipment capacitance

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
Web: www.iqdfrequencyproducts.com

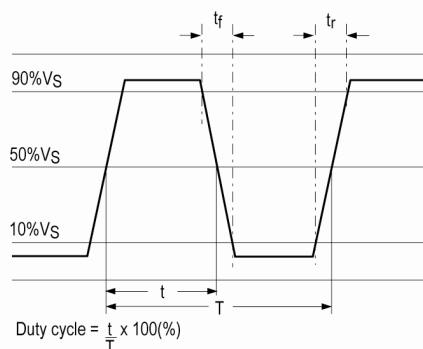
Compliance

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

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: 100

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	%
500.0kHz	9.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	20 20	10 10	40/60%
10.0MHz	19.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	20 20	10 10	40/60%
20.0MHz	31.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	20 20	10 10	40/60%
32.0MHz	49.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	20 20	10 10	40/60%
50.0MHz	79.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	30 30	8 8	40/60%
80.0MHz	99.999999MHz	-10 to 70 -40 to 85	±25.0 ±25.0	40 40	5 5	40/60%
100.0MHz	160.0MHz	-10 to 70 -40 to 85	±25.0 ±25.0	50 50	4 4	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
 Germany: 0800 1808 443

France: 0800 901 383
 USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
 Web: www.iqdfrequencyproducts.com