IQD Frequency Products

Incorporating IQD FOQ GmbH

Oscillator Specification

Model: ***CFPS-32***

ISSUE 12; February 2012 - RoHS 2011/65/EU

Description

- Standard 7 x 5mm, 2.5V surface mount oscillator in a ceramic package, with a hermetically sealed metal lid
  Stock parts listed at the beginning of this chapter
  Fast Make capability: CFPP-72 and CFPP-73 series programmable oscillators are the nearest equivalent fast make model
  MEMS capability: IQMS-500 series oscillators are the nearest equivalent MEMS model

Frequency Range

- Frequency 0.5 to 156.0MHz

Supply Voltage

- Voltage 2.5V ±5%

Output Compatibility & Load

- Output Compatibility CMOS
- Drive Capability 15pF max

Frequency Stabilities

- Frequency Stability ±25ppm, ±50ppm, ±100ppm

Operating Temperature Ranges

- -10 to 70°C
- -40 to 85°C

Output Details

- Logic '1' (>70% VS) to pad 1 enables oscillator output
  Logic '0' (<30% VS) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state.
  No connection to pad 1 enables oscillator output.
  Standby Current: 10µA max

Environmental Parameters

- Shock: MIL-STD-202, Method 213, Condition E
- Vibration: MIL-STD-883, Method 2007, Condition A
- Storage Temperature Range: –55 to 125°C

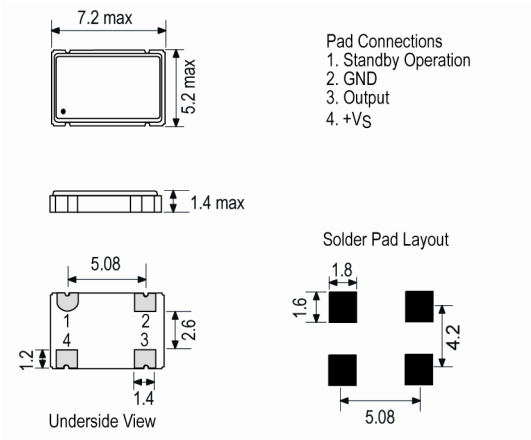
Ordering Information (*minimum required)

- Frequency*
  Model*
  Output
  Frequency Stability*
  Operating Temperature Range*
  Supply Voltage
- Example
  10.0MHz CFPS-32
  CMOS ±50ppm -10 to 70C 2.5V

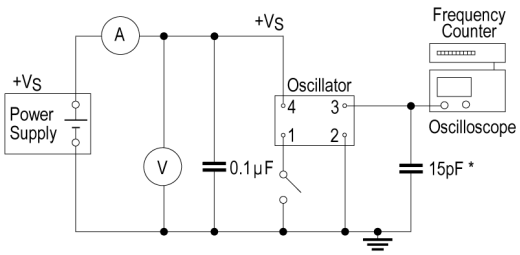
Packing Details

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

Outline (mm)



Test Circuit



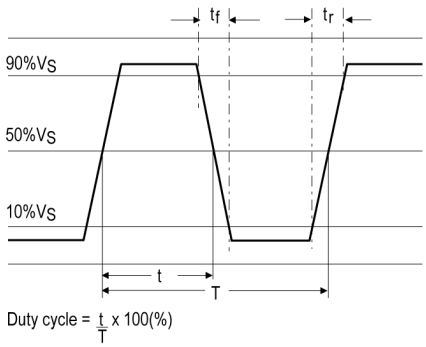
* Inclusive of jigging and equipment capacitance

Sales Office Contact Details:

UK: +44 (0)1460 270200 France: Opening 6th March 2012 Email: info@iqdfrequencyproducts.com

Germany: +49 (0)7264 9145-0 USA: +1 (0) 650 798 5047 Web: www.iqdfrequencyproducts.com

Output Waveform



Electrical Specification - maximum limiting values 2.5V ±5%

Frequency Range	Temp Range	Stability		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
0.50 to <10.0MHz	-10 to 70°C	±25ppm	±100ppm	6.0mA	5ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	6.0mA	5ns	40/60%
10.00 to <20.0MHz	-10 to 70°C	±25ppm	±100ppm	8.0mA	5ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	8.0mA	5ns	40/60%
20.00 to <32.0MHz	-10 to 70°C	±25ppm	±100ppm	8.0mA	5ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	8.0mA	5ns	40/60%
32.00 to <50.0MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	5ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	20.0mA	5ns	40/60%
50.00 to <80.0MHz	-10 to 70°C	±25ppm	±100ppm	20.0mA	4ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	20.0mA	4ns	40/60%
80.00 to <100.0MHz	-10 to 70°C	±25ppm	±100ppm	25.0mA	3ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	25.0mA	3ns	40/60%
100.00 to <156.0MHz	-10 to 70°C	±25ppm	±100ppm	30.0mA	3ns	40/60%
	-40 to 85°C	±50ppm	±100ppm	30.0mA	3ns	40/60%

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

Sales Office Contact Details:
UK: +44 (0)1460 270200
France: Opening 6th March 2012
Email: info@iqdfrequencyproducts.com
Germany: +49 (0)7264 9145-0
USA: +1 (0) 650 798 5047
Web: www.iqdfrequencyproducts.com