IQD Frequency Products

Incorporating IQD FOQ GmbH

Oscillator Specification

Model: ***CFPS-73***

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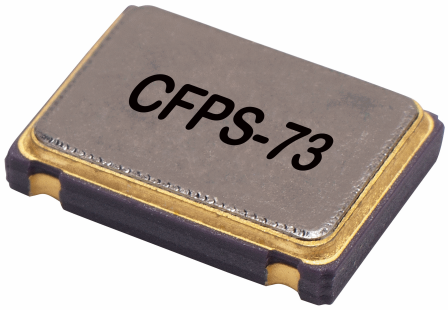
Description

- Standard 7 x 5 crystal oscillators
  Ceramic package with a seam sealed metal lid, hermetically sealed
  Stock parts are availible
  Fast Make capability: 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 156.0 MHz

Supply Voltage

- Voltage 3.3V ±10%

Ageing

- Ageing ±3ppm per year max

Output Compatibility & Load

- Output Compatibility HCMOS

Maximum Capacitive Load	
0.5MHz to 50MHz	50pF max
>50MHz to 80MHz	30pF max
>80MHz to 160MHz	15pF max

Frequency Stabilities

- Frequency Stability ±20ppm, ±25ppm, ±50ppm, ±100ppm
  (inclusive of supply voltage and output load variations over the operating temperature range)

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Output Control

- 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

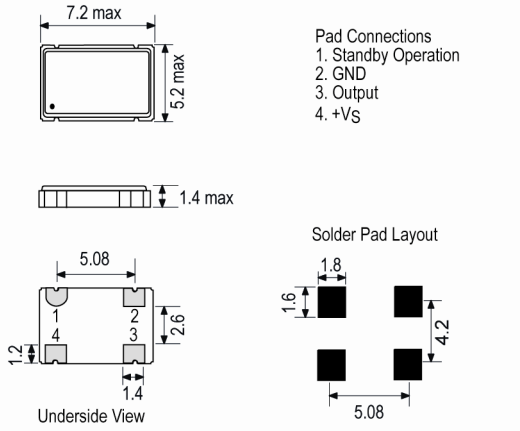
Environmental Parameters

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

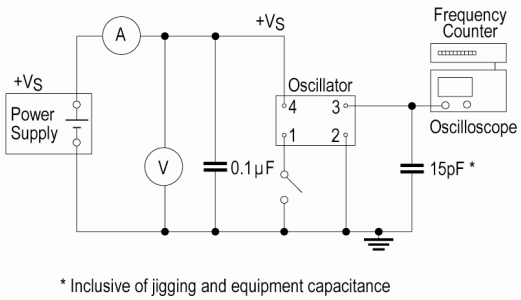
Packing Details

- 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

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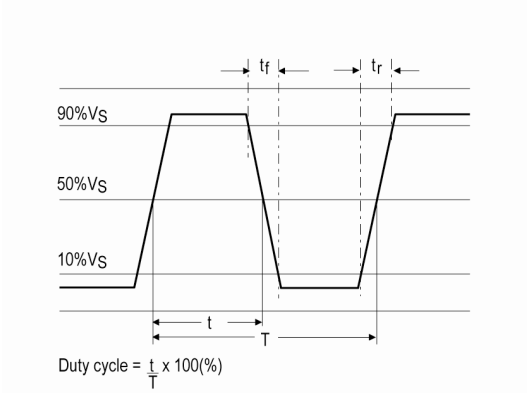
Wave Form



Electrical Specification - maximum limiting values 3.3V ±10%

Frequency Range	Temp Range	Stability Inclusive		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
0.5 to 19.999999MHz	0 to 70°C	±20ppm	±100ppm	7.0mA	10ns	45/55
	-40 to 85°C	±25ppm	±100ppm	7.0mA	10ns	45/55
20.0 to 31.999999MHz	0 to 70°C	±20ppm	±100ppm	12.0mA	10ns	45/55
	-40 to 85°C	±25ppm	±100ppm	12.0mA	10ns	45/55
32.0 to 49.999999MHz	0 to 70°C	±20ppm	±100ppm	20.0mA	10ns	45/55
	-40 to 85°C	±25ppm	±100ppm	20.0mA	10ns	45/55
50.0 to 79.999999MHz	0 to 70°C	±20ppm	±100ppm	25.0mA	8ns	45/55
	-40 to 85°C	±25ppm	±100ppm	25.0mA	8ns	45/55
80.0 to 99.999999MHz	0 to 70°C	±20ppm	±100ppm	30.0mA	5ns	45/55
	-40 to 85°C	±25ppm	±100ppm	30.0mA	5ns	45/55
100.0 to 156.0MHz	0 to 70°C	±20ppm	±100ppm	40.0mA	4ns	45/55
	-40 to 85°C	±25ppm	±100ppm	40.0mA	4ns	45/55

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