

ISSUE 14; April 2022

Description

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
Stock parts are available.
Fast Make Capability: The CFPP-72 series programmable oscillators are the nearest equivalent fast make model.



Frequency Parameters

- Frequency: 500.0kHz to 100.0MHz
- Frequency Stability: $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 3\text{ppm}$ per year max

Electrical Parameters

- Supply Voltage: $5.0\text{V} \pm 10\%$
- Note: parameters are referenced to 15pF load

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: HCMOS/TTL
- Start up time: 10ms max
1.1ms typ to 90% of final amplitude (under ideal conditions @ 25°C)

Drive Capability	
0.5MHz to 50.0MHz	15pF std, 50pF max
50.0MHz to 80.0MHz	15pF std, 30pF max
80.0MHz to 100.0MHz	15pF 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; the oscillator output goes to the high impedance state.
No connection to pad 1 enables oscillator output.
Standby Current: 10µA max, 2.3µA typ @ 25°C

Noise Parameters

- RMS Phase Jitter: 350fs typical

Environmental Parameters

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

Manufacturing Details

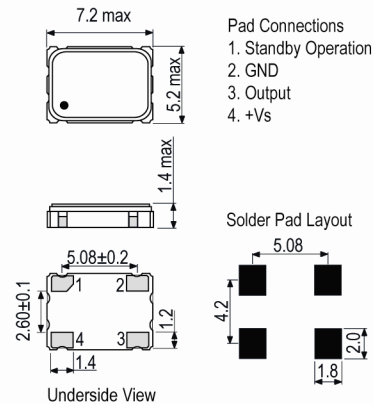
- RoHS Terminations: NiAu
- RoHS Reflow: 260°C 10s

Compliance

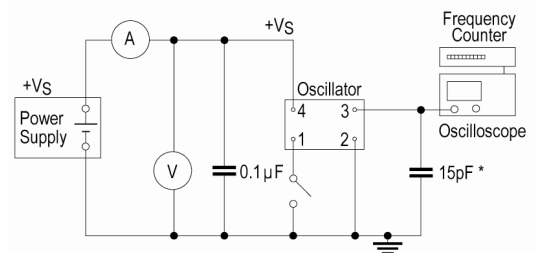
- RoHS Status (2015/863/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Test Circuit



* Inclusive of jigging and equipment capacitance

Sales Office Contact Details:

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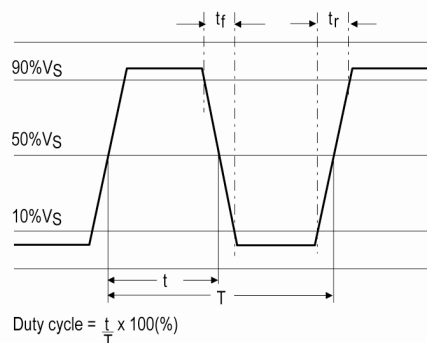
Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

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 @ 15pF and 5.0V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability Min	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
500.0kHz	20.0MHz	0 to 70	±25.0	20	10	45/55%
		-40 to 85	±25.0	20	10	45/55%
20.000001MHz	35.0MHz	0 to 70	±25.0	30	6	45/55%
		-40 to 85	±25.0	30	6	45/55%
35.000001MHz	70.0MHz	0 to 70	±25.0	50	6	45/55%
		-40 to 85	±25.0	50	6	45/55%
70.000001MHz	100.0MHz	0 to 70	±25.0	70	6	45/55%
		-40 to 85	±25.0	70	6	45/55%

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