



ISSUE 12; September 2014 - RoHS 2011/65/EU

Description

- Standard 7 x 5mm crystal oscillator
- Ceramic package with a seam sealed metal lid, hermetically sealed
- Stock parts available
- Fast Make capability: 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: $5.0\text{V} \pm 10\%$

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility: HCMOS/TTL

Drive Capability	
0.5MHz to 50.0MHz	50pF max
50.0MHz to 80.0MHz	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: $10\mu\text{A}$ max

Noise Parameters

- Phase Noise (@125.0MHz) typical:
 - 10Hz -54dBC/Hz
 - 100Hz -93dBC/Hz
 - 1KHz -131dBC/Hz
 - 10KHz -150dBC/Hz
 - 100KHz -160dBC/Hz
 - 1MHz -163dBC/Hz
 - 10MHz -164dBC/Hz
- Phase Jitter RMS (@:125.0MHz): 53fs typical

Environmental Parameters

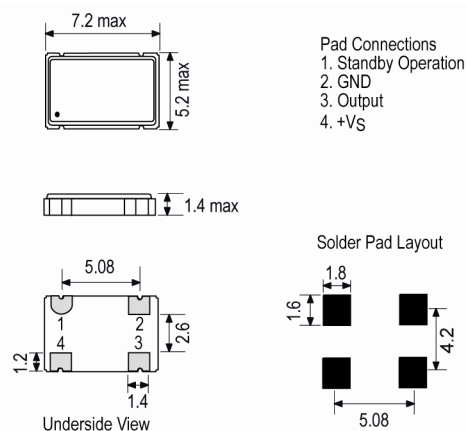
- Shock: MIL-STD-202, Method 213, Condition E
- Vibration: MIL-STD-883, Method 2007, Condition A

Compliance

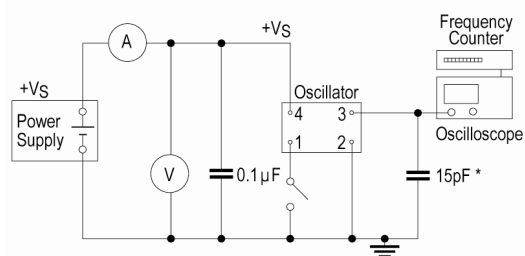
- RoHS Status: Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Test Circuit



* Inclusive of jigging and equipment capacitance

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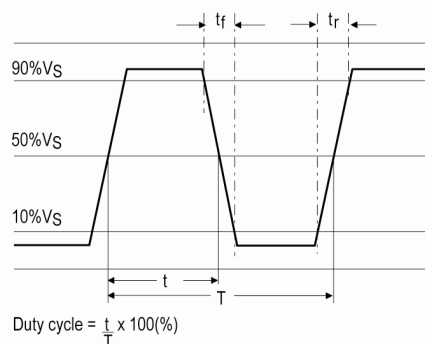
Email: info@iqdfrequencyproducts.com
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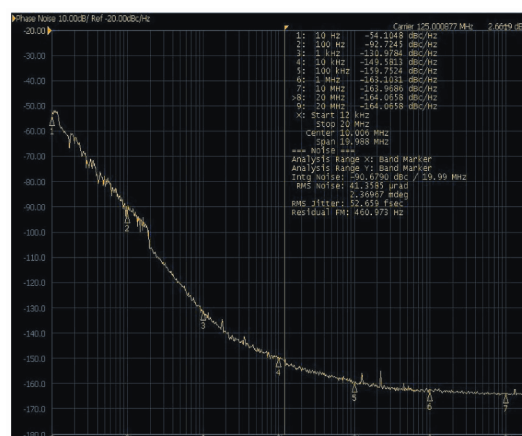
Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Pack Size: 10
- Pack Style: R500 Tape & reel of 500pcs
Pack Size: 500
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000
- Pack Style: R250 Tape & reel of 250pcs
Pack Size: 250
- Pack Style: Bulk Loose in bulk pack
Pack Size: 100

Wave Form



Phase Noise / Jitter



Electrical Specification - maximum limiting values 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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