



ISSUE 10; February 2012 - RoHS 2011/65/EU



Description

- PLL based, one time only factory programmable for a fast lead time
- Crystal oscillator in a hermetically sealed ceramic package with a metal lid
- See CFPS-39 for standard crystal oscillator alternative
- See IQMS-520 for MEMS oscillator alternative

Frequency Range

- Frequency 1.0 to 110.0MHz

Supply Voltage

- Voltage 3.3V $\pm 10\%$

Output Compatibility & Load

- Output Compatibility CMOS
- Drive Capability 15pF max

Frequency Stabilities

- Frequency Stability $\pm 20\text{ppm}$, $\pm 25\text{ppm}$, $\pm 50\text{ppm}$

Operating Temperature Ranges

- -20 to 70°C
- -10 to 60°C
- -40 to 85°C

Electrical Parameters

- Standby Current: 10 μ A max
- Start Up Time: 8ms max

Frequency Stability

- All frequency stabilities are inclusive of tolerance, supply voltage variation, load variation, 1st year ageing, shock and vibration.

Output Control

- 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

Noise Parameter

- Period Jitter: 150ps max

Environmental Parameters

- Storage Temperature Range: -55 to 125°C

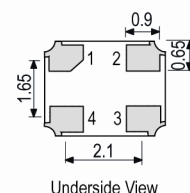
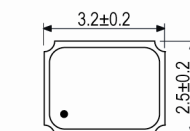
Ordering Information (*minimum required)

- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- (*minimum required)
- Example
- 20.0MHz CFPP-39
- CMOS $\pm 50\text{ppm}$ -40 to 85C 3.3V

Packing Details



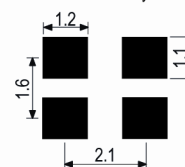
Outline (mm)



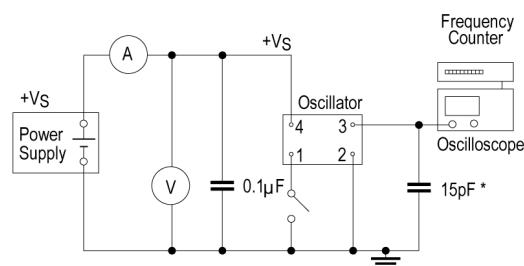
Pad Connections

1. Standby
2. GND
3. Output
4. +Vs

Solder Pad Layout



Test Circuit



* Inclusive of jigging and equipment capacitance

Sales Office Contact Details:

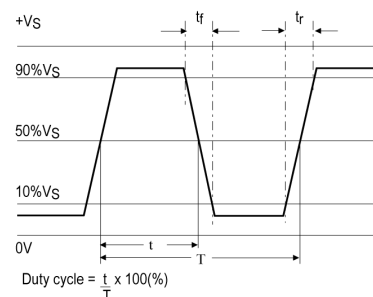
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- Pack Style: **Bulk** Loose in bulk pack
- Pack Size 1
- Pack Style: **Reel** Tape and reel in accordance with EIA-481-D
- Pack Size 1,000
- Alternative packing options available

Output Waveform**Electrical Specification - maximum limiting values 3.3V $\pm$ 10%**

Frequency Range	Temp Range	Stability		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
1.0 to <20.0MHz	-10 to 60°C	$\pm$ 20ppm	$\pm$ 100ppm	10.0mA	5ns	45/55%
	-20 to 70°C	$\pm$ 25ppm	$\pm$ 100ppm	10.0mA	5ns	45/55%
	-40 to 85°C	$\pm$ 50ppm	$\pm$ 100ppm	10.0mA	5ns	45/55%
20.0 to <40.0MHz	-10 to 60°C	$\pm$ 20ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
	-20 to 70°C	$\pm$ 25ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
	-40 to 85°C	$\pm$ 50ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
40.0 to <75.0MHz	-10 to 60°C	$\pm$ 20ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
	-20 to 70°C	$\pm$ 25ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
	-40 to 85°C	$\pm$ 50ppm	$\pm$ 100ppm	15.0mA	5ns	45/55%
75.0 to <90.0MHz	-10 to 60°C	$\pm$ 20ppm	$\pm$ 100ppm	20.0mA	5ns	45/55%
	-20 to 70°C	$\pm$ 25ppm	$\pm$ 100ppm	20.0mA	5ns	45/55%
	-40 to 85°C	$\pm$ 50ppm	$\pm$ 100ppm	20.0mA	5ns	45/55%
90.0 to <110.0MHz	-10 to 60°C	$\pm$ 20ppm	$\pm$ 100ppm	25.0mA	5ns	45/55%
	-20 to 70°C	$\pm$ 25ppm	$\pm$ 100ppm	25.0mA	5ns	45/55%
	-40 to 85°C	$\pm$ 50ppm	$\pm$ 100ppm	25.0mA	5ns	45/55%

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

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