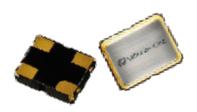
2.5 x 2.0mm

1.8V CMOS Low Jitter XO





2.5 x 2.0mm Ceramic SMD

Product Features

- •1 to 156.25 MHz Frequency Range
- 1 ps RMS jitter with fundamental or overtone design
- •1.8V CMOS compatible logic levels
- Designed for standard reflow and washing techniques
- •Low power standby mode: 10 µA max
- Pb-free and RoHS/Green compliant

Product Description

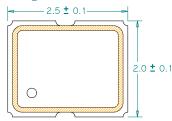
The FJ Series crystal clock oscillators achieve superb jitter and stability over a broad range of operating conditions and frequencies. The output clock signal, generated internally with a non-PLL oscillator design, is compatible with LVCMOS logic levels. The device, available on tape and reel, is contained in a 2.5 x 2.0mm surface-mount ceramic package.

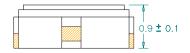
Applications

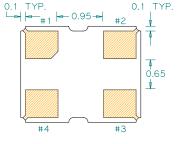
Ideal for compact, high-density applications:

- •WLAN
- HBA
- Portable Multimedia Player (PMP)
- Notebook Computer
- SDIO / PCMIA CARD
- USB BT Interface
- Bluetooth

Package:





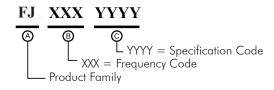


Recommended Land Pattern: 1.7 #4 #4 #3 1.3 1.0 TYP. #1 #2 #1 1.2 TYP.

Pin Functions:

Pin	Function				
1	OE				
2	Ground				
3	Clock Output				
4	V_{DD}				

Part Ordering Information:



Following the above format, Saronix-eCera part numbers will be assigned upon confirmation of exact customer requirements.

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FJ Series Crystal Clock Oscillator (XO) 2.5 x 2.0mm

Electrical Performance

Parameter	Min.	Тур.	Max.	Units	Notes
Output Frequency	1		156.25	MHz	As specified
Supply Voltage	1.62	1.8	1.98	V	
Supply Current, Output Enabled			4	mA	1 to 75 MHz
Supply Current, Standby Mode			10	μΑ	Output Hi-Z
Frequency Stability			±20 to ±50	ppm	See Note 1 below
Operating Temperature Range	-20		+70	°C	Commercial (standard)
	-40		+85		Industrial (standard)
Output Logic 0, V _{OL}			10% V _{DD}	V	
Output Logic 1, V _{OH}	90% V _{DD}			V	
Output Load			15	pF	
Duty Cycle	45		55	%	Measured 50% V _{DD}
Rise and Fall Time			5	ns	Measured 20/80% of waveform
Jitter, Phase			1	ps RMS (1-σ)	12kHz to 20 MHz frequency band
Jitter, Accumulated			5	ps RMS (1-σ)	20.000 adjacent periods
Jitter, Total			50	ps pk-pk	100.000 random periods

Notes:

- Stability includes all combinations of operating temperature, load changes, rated input (supply) voltage changes, initial calibration tolerance (25°C), aging (1 year at 25°C average effective ambient temperature), shock and vibration.
- For specifications othere than those listed, please contact sales.

Output Enable / Disable Function

Parameter	Min.	Тур.	Max.	Units	Notes
Input Voltage (pin 1), Output Enable	0.7 V _{DD}			V	or open
Input Voltage (pin 1), Output Disable (low power standby)			0.3 V _{DD}	V	Output is Hi-Z
Internal Pullup Resistance	30			$k\Omega$	
Output Disable Delay			100	ns	
Output Enable Delay			10	ms	

Absolute Maximum Ratings

Parameter	Min.	Тур.	Max.	Units	Notes
Storage Temperature	-55		+125	°C	

For the latest product information visit: http://www.pericom.com/products/timing/oscillators/FJ1.8/

For test circuit go to: http://www.pericom.com/pdf/sre/tc_hcmos2.pdf

For soldering reflow profile and reliability test ratings go to: http://www.pericom.com/pdf/sre/reflow.pdf

For tape and reel information go to: http://www.pericom.com/pdf/sre/tr_2520_xo.pdf



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