



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

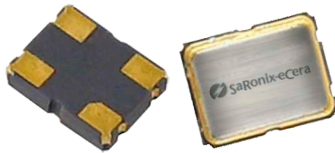
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2.5V CMOS Low Jitter XO

FK


3.2 x 2.5mm Ceramic SMD

Product Features

- 1 to 156.25 MHz Frequency Range
- <1 ps RMS jitter
- 2.5V CMOS compatible logic levels
- Designed for standard reflow and washing techniques
- Low power standby mode
- Pb-free and RoHS/Green compliant

Product Description

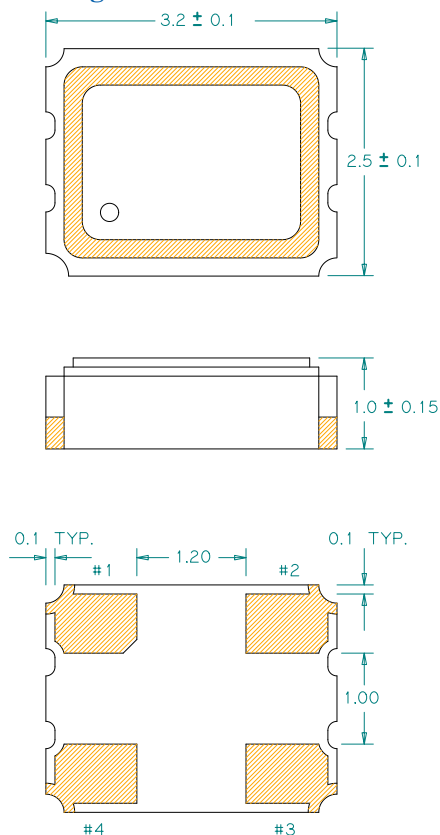
The FK Series 2.5V crystal clock oscillator achieves superb stability and low power consumption over a broad range of operating conditions and frequencies. The low jitter output clock signal, generated internally with a non-PLL oscillator design, is compatible with LVCMOS logic levels. The device, available on tape and reel, is contained in a 3.2 x 2.5mm surface-mount ceramic package.

Applications

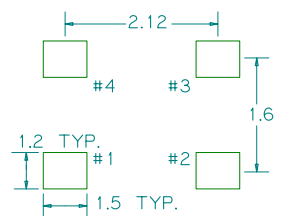
Ideal for compact, high-density applications requiring low power or tight stability, including:

- Network adapter cards
- Portable Multimedia Devices
- Hard Disk Drives
- GPS/Navigation
- Bluetooth
- 802.11a/b/g WiFi

Package:



Recommended Land Pattern:

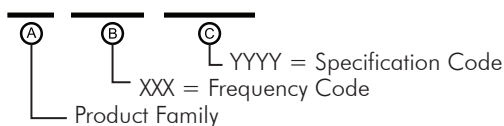


Pin Functions:

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

Part Ordering Information:

FK XXX YYYY



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

Electrical Performance

Parameter		Min.	Typ.	Max.	Units	Notes
Output Frequency		1		156.25	MHz	As specified
Supply Voltage		2.25	2.5	2.75	V	
Supply Current, Output Enabled				10	mA	1 to 50 MHz
				18		50 to 156.25 MHz
Supply Current, Standby Mode				10	μA	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 10/90% of waveform
Jitter, Phase	1 to 156.25 MHz			1	ps RMS (1-σ)	12kHz to 20 MHz frequency band
Jitter, Accumulated	up to 75 MHz			5	ps RMS (1-σ)	20.000 adjacent periods
	75 to 156.25 MHz			3		
Jitter, Total	up to 75 MHz			50	ps pk-pk	100.000 random periods
	75 to 156.25 MHz			30		

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 other than those listed, please contact sales.

Output Enable / Disable Function

Parameter	Min.	Typ.	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	50			kΩ	
Output Disable Delay			100	ns	
Output Enable Delay			10	ms	

Absolute Maximum Ratings

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

For the latest product information visit: <http://www.pericom.com/products/timing/oscillators/FK2.5/>

For test circuit go to: http://www.pericom.com/pdf/sre/tc_hcm052.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_3225_xo.pdf