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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!



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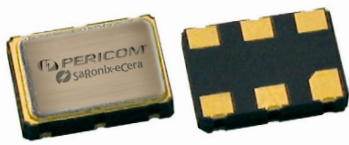
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2.5V/3.3V CMOS XO

NX701



7.0 x 5.0mm Ceramic SMD

Product Features

- Very low phase jitter - < 1ps RMS max.
- Wide frequency range - 5 ~ 250MHz
- Thicker crystal for improved reliability
- Low supply current - 60mA max.
- Industrial Temperature Range
- Pb-free & RoHS compliant
- Fast lead time

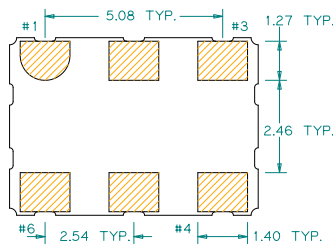
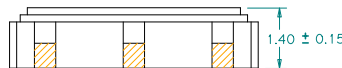
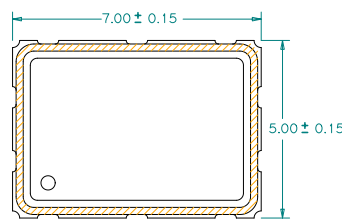
Product Description

The NX701 XO series is a high performance CMOS crystal oscillator family with very low jitter performance. It supports various options including wider frequency range, 2.5V/3.3V voltage, and various stabilities. It is designed to meet the clock source specifications for communication systems, and other high performance equipment.

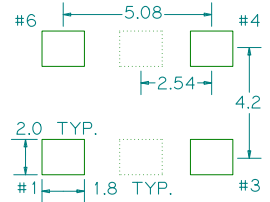
Applications

- Networking systems
- Servers and storage systems
- Profession video equipments
- Test and measurement
- FPGA/ASIC clock generation

Package: (Scale: none, Dimensions are in mm)



Recommended Land Pattern:



*Note: pads 2 and 5 are optional (shown as dotted lines). XO's are designed to fit on industry standard, 4 pad layouts.

Pin Functions:

Pin	Function
1	OE Function
2	N/C
3	Ground
4	Output
5	N/C
6	V _{DD}

*Extended high frequency power decoupling is recommended (see test circuit for minimum recommendation). To ensure optimal performance, do not route RF traces beneath the package.

Part Ordering Information:

NX 701 V 1 FFFF.FFFFFFFF

Voltage:
1 = +3.3V
2 = +2.5V

Stability and Temp Range:

Stability	Temp Range
A = +/-20 ppm	-20/+70°C
B = +/-25 ppm	-20/+70°C
C = +/-50 ppm	-20/+70°C
D = +/-25 ppm	-40/+85°C
E = +/-50 ppm	-40/+85°C

Frequency:

FFFF.FFFFFFFF

MHz, "4 digits/decimal/6 digits" format



Electrical Performance

Parameter	Min.	Typ.	Max.	Units	Notes
Output Frequency	5		250	MHz	
Supply Voltage	3.135	3.3	3.465	V	See ordering options
	2.375	2.5	2.625		
Supply Current, Output Enabled			60	mA	
Supply Current, Output Disabled only			40	mA	
Frequency Stability			±50	ppm	See ordering options
Operating Temperature Range	-40		+85	°C	See ordering options
Output Logic 0, V _{OL}			0.4	V	
Output Logic 1, V _{OH}	V _{DD} -0.4			V	
Output Load			15	pF	
Duty Cycle	45		55	%	Measured 50% V _{DD}
Rise and Fall Time			3	ns	Measured 20/80% of waveform
Jitter, Accumulated, RMS (1-σ)			6	ps	20,000 adjacent periods
Jitter, Phase, RMS	< 40MHz	0.4	1	ps	12kHz to 5 MHz frequency band
	40 to 250MHz	0.4	1	ps	12kHz to 20 MHz frequency band
	125MHz, 156.25MHz	0.4	0.6	ps	12kHz to 20 MHz frequency band
Jitter, pk-pk			40	ps	100,000 random periods

Notes:

1. 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.
2. Phase jitter typical value is depending on output frequencies.
3. 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
Output Disable Delay			100	ns	
Output Enable Delay			100	ns	
Start up Time			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/crystals-and-crystal-oscillators/hiflex-xo/?part=NX701>

For test circuit go to: http://www.pericom.com/pdf/sre/tc_6pcmos.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_7050_xo.pdf