![Chipsmall logo]

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.

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Contact us

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7.0 x 5.0mm Ceramic SMD

ASSP XO™ for Networking

Product Features

• Very low Pk to Pk jitter - 50ps Max

• Low output current - 15mA Max
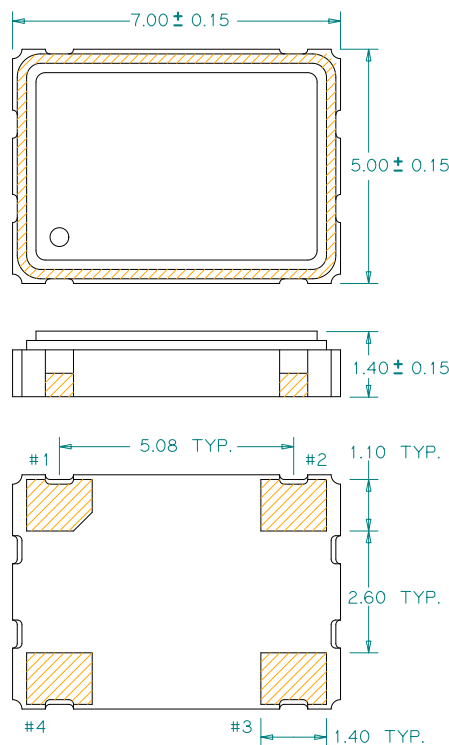
• Low power standby mode

• RoHS Compliant

Product Description

This is an enhanced 3.3V, 25MHz crystal clock oscillator with superb jitter and low operating current for providing clock references in Gigabit Ethernet applications.
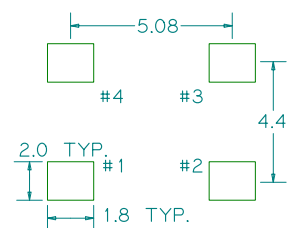
Applications

• Gigabit Ethernet Switch

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

7.00 ± 0.15

5.00 ± 0.15

Recommended Land Pattern:

5.08

#4   #3

4.4

2.0 TYP.   #1   #2

1.8 TYP.

1.40 ± 0.15

#1   5.08 TYP.   #2   1.10 TYP.

2.60 TYP.

#4   #3   1.40 TYP.

Pin Functions:

Pin	Function
1	OE Function
2	Ground
3	Clock Output
4	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:
FNETHE025

SaRonix-eCera™ is a Pericom® Semiconductor company   •   US: +1-408-435-0800 TW: +886-3-4518888   •   www.pericom.com

PERICOM
Enabling Serial Connectivity

12-0051

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PERICOM®
SaRonix-eCera®

ASSP XO™
Application Specific Crystal Oscillator 7.0 x 5.0mm

Electrical Performance

Parameter	Min.	Typ.	Max.	Units	Notes
Output Frequency		25		MHz	
Supply Voltage V_{DD}	2.97	3.3	3.63	V	
Supply Current, Output Enabled			15	mA	
Supply Current, Output Disabled			10	μA	
Frequency Stability			±25	ppm	See Note 1 below
Operating Temperature Range	-20		+70	°C	
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			7	ns	Measured 20/80% of waveform
Jitter, Phase, RMS(1-σ)			1	ps	12kHz~20MHz Frequency Band
Jitter, pk-pk			50	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. For specifications othere 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	30			kΩ	
Output Disable Delay			50	ns	
Output Enable Delay			2	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/assp-xo/?part=FNETHE025

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

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