

NX5032SD

For Automotive

■ Features

A small surface-mount type crystal unit, ideal for the special requirements of automotive, such as TPMS (Tire Pressure Monitoring System). The crystal unit is ideally suited for the clock signal generating source of the transmission unit in a tire wheel that is subject to strong centrifugal force.

- Stable frequency characteristics even with a powerful centrifugal force of 2,000 G, as found in the transmission side of TPMS applications.
- Excellent environmental performance including heat, vibration, shock and heat cycle resistance.
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.
- Conforms to AEC-Q200.



Pb Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

■ Specifications

Item	Model	NX5032SD	
		Standard	Optional
Standard		Standard	Optional
Nominal Frequency (MHz)		$9.75 \leq F \leq 40$	$9.75 \leq F \leq 40$
Overtone Order		Fundamental	Fundamental
Frequency Tolerance ($25 \pm 3 \text{ }^\circ\text{C}$)		$\pm 15 \times 10^{-6}$	$\pm 15 \times 10^{-6}$
Frequency versus Temperature Characteristics (with reference to $+25 \text{ }^\circ\text{C}$)		$\pm 50 \times 10^{-6}$	$\pm 50 \times 10^{-6}$
Operating Temperature Range ($^\circ\text{C}$)		-40 to $+125$	-40 to $+125$
Storage Temperature Range ($^\circ\text{C}$)		-40 to $+125$	-40 to $+125$
Equivalent Series Resistance		Refer to *1	Refer to *1
Level of Drive (μW)		10 (Max. 100)	10 (Max. 100)
Load Capacitance (pF)		12	6 to 32
Frequency Aging ($+25 \text{ }^\circ\text{C}$)		---	Max. $\pm 3 \times 10^{-6}$ / year *2
Specifications Number		STD-CSY-1	Refer to *3

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.

*2 If you have any other requests, NDK will study it.

*3 Ordering information: Overtone Order Fundamental / 3rd Overtone, the Operating Temperature Range, Frequency versus Temperature Characteristics, Frequency Tolerance, and Load Capacitance.

Ex. Model, Frequency(24.000000MHz 6digits), S1: Fundamental or S3 : 3rd overtone

– Operating Temperature Range(-40 to $+125^\circ\text{C}$) – Frequency versus Temperature Characteristics ($\pm 50 \times 10^{-6}$)

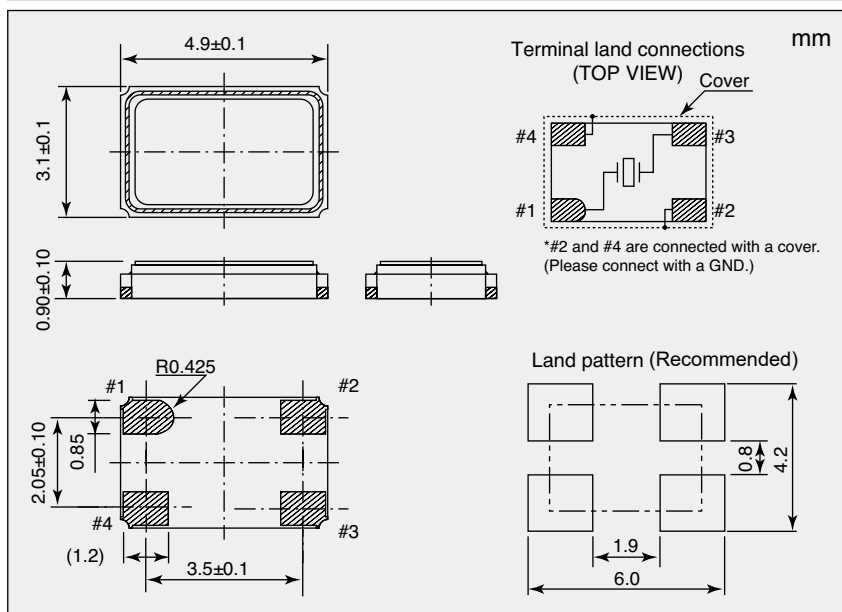
– Frequency Tolerance ($\pm 15 \times 10^{-6}$) – Load Capacitance (10pF)

NX5032SD

24.000000MHz

S1-40125-50-15-10

■ Dimensions



*1 Equivalent Series Resistance

Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)
$9.75 \leq F < 10$	150
$10 \leq F < 15$	120
$15 \leq F < 20$	100
$20 \leq F \leq 40$	80

If you have any other requests, NDK will study it.