

# 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.







#### ■ Specifications

Item Model	NX5032SD	
Standard	Standard	Optional
Nominal Frequency (MHz)	9.75 to 40	9.75 to 40
Overtone Order	Fundamental	Fundamental
Frequency Tolerance (25 ±3 °C)	±15 × 10 <sup>-6</sup>	±15 × 10 <sup>-6</sup>
Frequency versus Temperature Characteristics (with reference to +25 °C)	±50 × 10 <sup>-6</sup>	±50 × 10⁻ <sup>6</sup>
Operating Temperature Range (°C)	−40 to +125	-40 to +125
Storage Temperature Range (°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
Ferquency Aging (+25 °C)		Max. ±3 × 10 <sup>-6</sup> / 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.

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

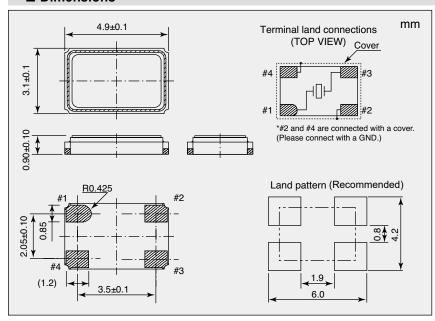
- Operating Temperature Range(-40 to +125°C) Frequency versus Temperature Characteristics (±50 × 10-6)
- Frequency Tolerance (±15 × 10<sup>-6</sup>) Load Capacitance (10pF)

NX5032SD

24.000000MHz

S1-40125-50-15-10

## **■** Dimensions



\*1 Equivalent Series Resistance

Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)
9.75 to 10	150
10 to 15	120
15 to 20	100
20 to 40	80

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

<sup>\*2</sup> If you have any other requests, NDK will study it.

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