# **Quartz Crystal Units**

## NX5032SD

### 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.



Free Directive 2002/95/EC

#### Specifications

Item	NX5032SD
Nominal frequency	9.75 to 40 MHz
Overtone order	Fundamental
Frequency tolerance (25 ±3 °C)	±15 × 10 <sup>-6</sup>
Frequency versus temperature characteristics (with reference to +25 °C)	±50 × 10 <sup>-6</sup>
Operating temperature range	–40 to +125 °C
Storage temperature range	–40 to +125 °C
Equivalent series resistance	Refer to *1
Level of drive	10 μW (Max. 100 μW)
Load capacitance	12 pF

The above specifications are standard for this NDK product.

Custom-made specifications such as load capacitance and temperature characteristics are also available. Please contact NDK sales with your enquiries.

#### How to Specify an Order

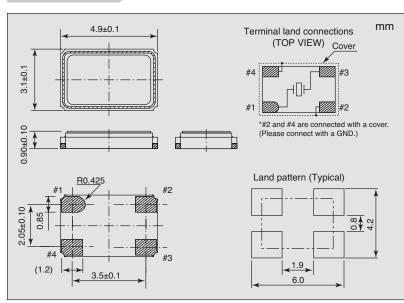
When ordering our products, specify them with an "Ordering Code" that consists of the following :

Model name - Frequency (Max : 9 digits) M - Number for specifying an order

Example NX5032SD-9.750M-STD-CSY-1

If you have any queries concerning our standard frequencies and numbers for specifying orders, please contact our sales representatives or visit our homepage (http://www.ndk.com/).

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



#### For Automotive