

## NX3225SC

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.

- Compact and thin. (3.2 x 2.5 x 0.6 mm typ.)
- Stable frequency characteristics even with a powerful centrifugal force of 2,000 G, as found in the transmission side of TPMS applications.
- High resistance to solder cracking.
- Excellent environmental characteristics, including heat, vibration and shock 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

### ■ Specifications

| Item  | Model | NX3225SC               |
|---|-------|------------------------|
| Nominal frequency   |       | 9.8433 to 50 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. 200 μW)    |
| Load capacitance  |       | 8 pF                   |

The above specifications are standard for this NDK product.

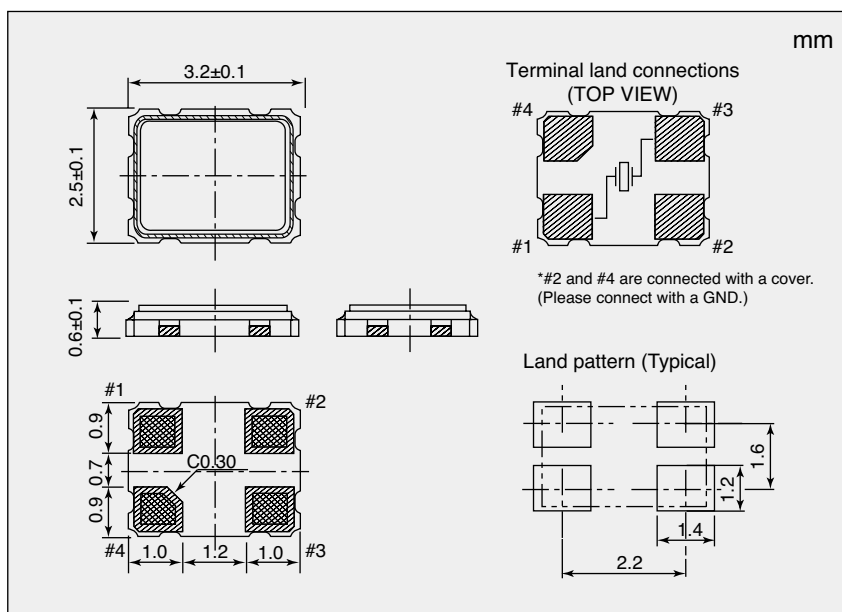
### ■ How to Specify an Order

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 NX3225SC-9.8433M-STD-CRS-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] |
|-------------------------|---------------------------------------|
| 9.8433 to 12            | 300                                   |
| 12 to 20                | 120                                   |
| 20 to 50                | 100                                   |