

# For Automotive

### Features

A small surface-mount type crystal unit, ideal for an engine control CPU clock; delivering the high reliability that is particularly demanded by automotive.

- •Compact and thin. (3.2 x 2.5 x 0.75 mm typ.)
- •High resistance to solder cracking.
- •Stable start-up characteristics even under extremely severe environmental conditions.
- •Excellent environment-resistant performance, including heat, vibration and shock resistance.
- •Meets the requirements for re-flow profiling using lead-free solder.
- •Conforms to AEC-Q200.



RoHS Compliant Directive 2011/65/EU

## Specifications

Item Model	NX3225GB
Nominal frequency	12 to 50 MHz
Overtone order	Fundamental
Frequency tolerance (25 ±3 °C)	±50 × 10 <sup>-6</sup>
Frequency versus temperature characteristics (with reference to +25 °C)	±150 × 10 <sup>-6</sup>
Operating temperature range	−40 to +150 °C
Storage temperature range	−40 to +150 °C
Equivalent series resistance	Refer to *1
Level of drive	10 μW (Max. 200 μW)
Load capacitance	8 pF

\*If you required 7.98 to 12MHz, please refer to NX3225GD.

### 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

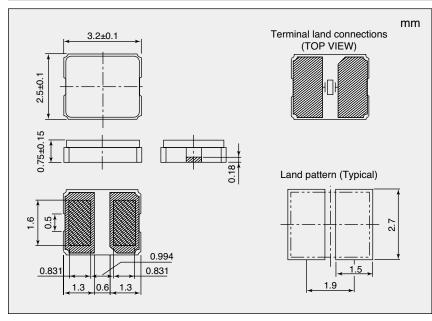
When ordering our products, specify them with an "Ordering Code" that consists of the following :

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

Example NX3225GB-12.000M-STD-CRA-2

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

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Nominal frequency (MHz)	Equivalent Series Resistance max. [Ω]	
12 to 20	120	
20 to 50	100	