

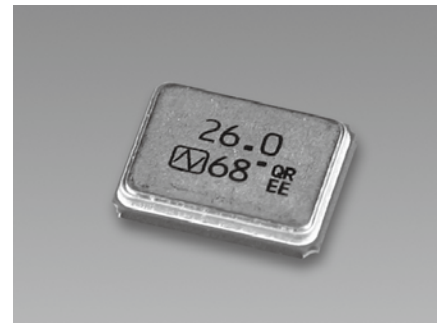
## NX3225SA

For Automotive

### ■ Features

A small surface-mount type crystal unit, ideal for automotive applications.

- With a well established reputation for reliability, this product is best suited for automotive equipment.
- Stable start-up characteristic even under extremely severe environmental conditions.
- 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	NX3225SA
Nominal frequency		12 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.

Custom-made specifications such as load capacitance and temperature characteristics are also available.

Please contact NDK sales with your enquiries.

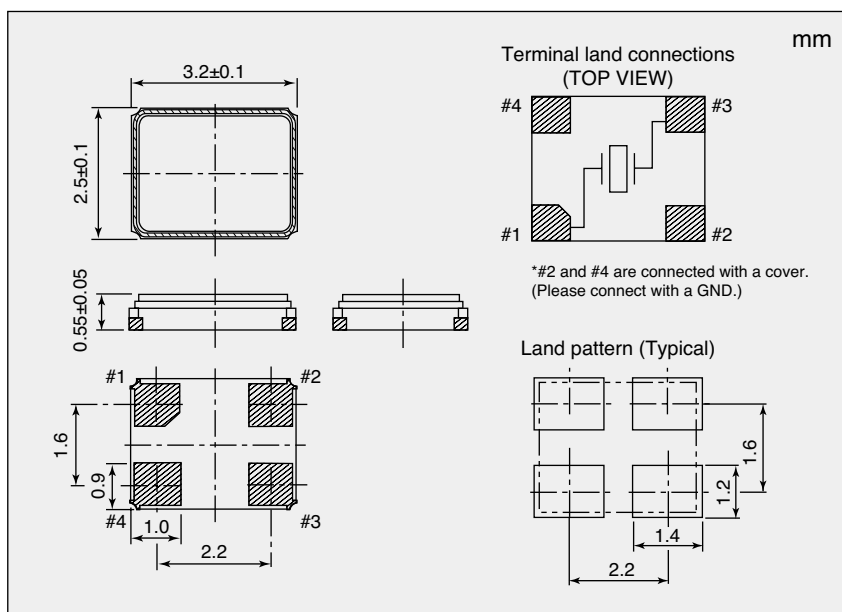
### ■ How to Specify an Order

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 NX3225SA-20.000M-STD-CRS-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

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