

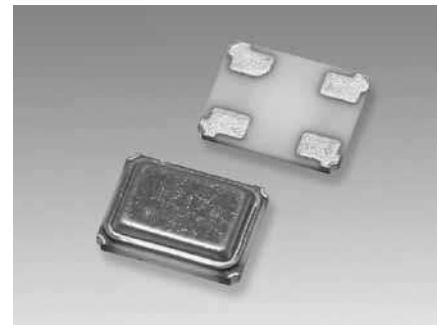
## NX3225HA

For OA / AV

### ■ Features

A small surface-mount type crystal unit, especially suited for small-sizing requirements.

- Compact and thin. (3.2 × 2.5 × 0.80 mm max.)
- Supports intermediate range between deviation of Ceramic resonators (Wide deviation) and deviation of conventional Crystal unit (Narrow deviation). Outstanding cost performance.
- Ideal for HDD, SSD, USB, Blu-ray, and etc.
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.



Pb Free

RoHS Compliant  
Directive 2011/65/EU

### ■ Specifications

Item	Model	NX3225HA
Nominal frequency		12 to 50 MHz
Overtone order		Fundamental
Overall frequency tolerance *1		$\pm 100 \times 10^{-6}$
Operating temperature range		-20 to +70 °C
Storage temperature range		-40 to +85 °C
Equivalent series resistance		Refer to *2
Level of drive		10 $\mu$ W (Max. 200 $\mu$ W)
Load capacitance		8 pF

\*1: It includes frequency tolerance (at 25 °C), temperature characteristics, reflow and tolerance worth of one-year Environmental test.

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.

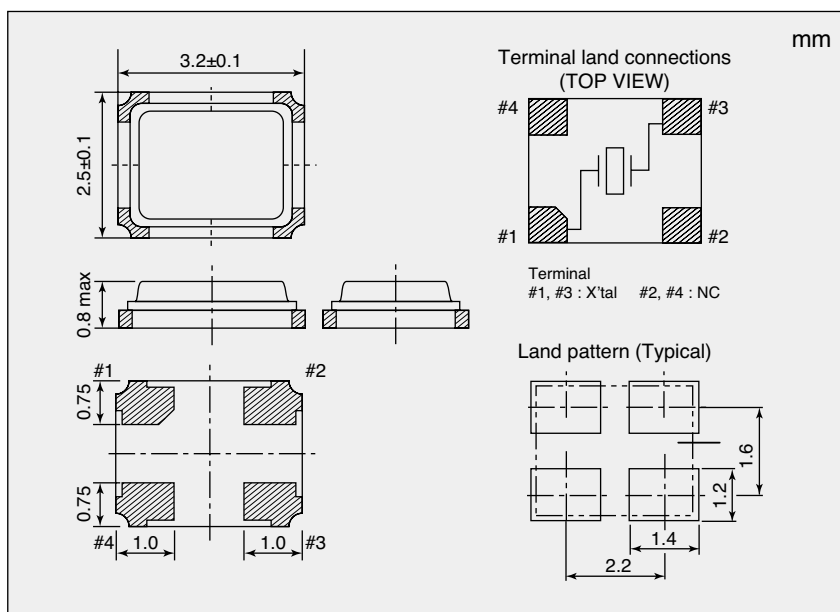
### ■ How to Specify an Order

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 NX3225HA-24.000M-STD-CRO-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



### \*2 Equivalent Series Resistance

Nominal frequency (MHz)	Equivalent Series Resistance max. [ $\Omega$ ]
12 to 13	120
13 to 20	80
20 to 50	50