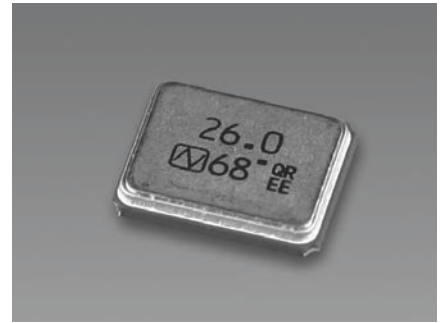


NX3225SA For OA / AV / Short-range Wireless

■ Features

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

- Ultra compact and thin. (3.2 × 2.5 × 0.55 mm typ.)
- Excellent environmental characteristics, including heat and shock resistance.
- Excellent electrical performance, ideal for OA (office automation), AV (audiovisual), Bluetooth and Wireless LAN applications.
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.



Pb Free

RoHS Compliant
Directive 2002/95/EC

■ Specifications

| Item | Model | NX3225SA | |
|---|-------|------------------------|------------------------|
| Nominal frequency | | 12 to 60 MHz | 40 to 150 MHz |
| Overtone order | | Fundamental | 3rd overtone |
| Frequency tolerance (25 ±3 °C) | | ±15 × 10 ⁻⁶ | ±20 × 10 ⁻⁶ |
| Frequency versus temperature characteristics (with reference to +25 °C) | | ±25 × 10 ⁻⁶ | |
| Operating temperature range | | -40 to +85 °C | |
| Storage temperature range | | -40 to +85 °C | |
| Equivalent series resistance | | Refer to *1 | |
| Level of drive | | 10 μW (Max. 200 μW) | |
| Load capacitance | | 8 pF | Series resonance |

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.

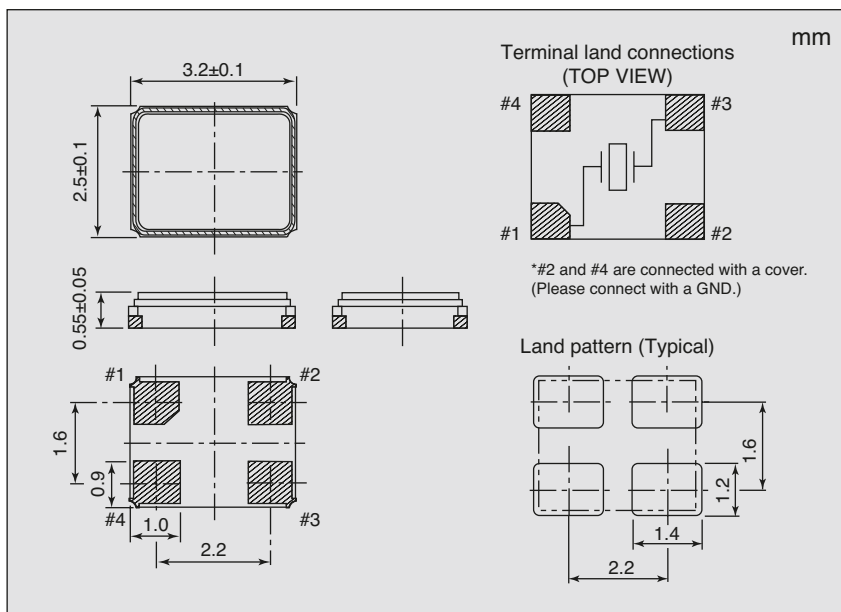
■ How to Specify an Order

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-12.000M-STD-CSR-6

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

| Overtone Order | Nominal frequency (MHz) | Equivalent Series Resistance max. [Ω] |
|----------------|-------------------------|---------------------------------------|
| Fundamental | 12 to 13 | 100 |
| | 13 to 20 | 80 |
| | 20 to 60 | 50 |
| 3rd overtone | 40 to 100 | 140 |
| | 100 to 150 | 100 |