## NX3225SA

## Features

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

- Compact and thin. ( $3.2 \times 2.5 \times 0.55 \mathrm{~mm}$ 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 <br> Free

Specifications

| Item Model | NX3225SA |  |
| :---: | :---: | :---: |
| Nominal frequency | 12 to 60 MHz | 40 to 150 MHz |
| Overtone order | Fundamental | 3rd overtone |
| Frequency tolerance ( $25 \pm 3^{\circ} \mathrm{C}$ ) | $\pm 15 \times 10^{-6}$ | $\pm 20 \times 10^{-6}$ |
| Frequency versus temperature characteristics (with reference to $+25^{\circ} \mathrm{C}$ ) | $\pm 25 \times 10^{-6}$ |  |
| Operating temperature range | -40 to $+85^{\circ} \mathrm{C}$ |  |
| Storage temperature range | -40 to $+85^{\circ} \mathrm{C}$ |  |
| Equivalent series resistance | Refer to *1 |  |
| Level of drive | $10 \mu \mathrm{~W}$ (Max. $200 \mu \mathrm{~W}$ ) |  |
| Load capacitance | 8 pF | Series resonance |

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 :

$$
\begin{array}{|l|}
\hline \text { Model name }- \text { Frequency (Max : } 9 \text { digits) }
\end{array} \text { M - Number for specifying an order }
$$

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. $[\Omega]$ |$|$| Fundamental | 12 to 13 | 100 |
| :---: | :---: | :---: |
|  | 13 to 20 | 80 |
|  | 20 to 60 | 50 |
|  | 40 to 100 | 140 |

