# **Quartz Crystal Units**



## For Automotive

#### Features

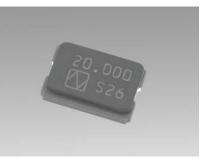
A small surface-mount type crystal unit, ideal for Automotive.

Compatible with an engine control CPU clock delivering the high reliability that is particularly demanded, and compatible with low frequencies starting from 8 MHz.

•Compact and thin. (5.0 × 3.2 × 1.3 mm typ.)

•Stable start-up characteristic even under extremely severe environmental conditions.

- Excellent environmental characteristics, including heat, vibration and shock resistance.
- •Meets the requirements for re-flow profiling using lead-free solder.
- Conforms to AEC-Q200.



RoHS Compliant Directive 2002/95/EC

### Specifications

Item	NX5032GA
Nominal frequency	8 to 40 MHz
Overtone order	Fundamental
Frequency tolerance (25 ±3 °C)	±50 × 10 <sup>-6</sup>
Frequency versus temperature characteristics (with reference to +25 °C)	$\pm 150 \times 10^{-6}$
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. 500 μW)
Load capacitance	8 pF

NX5032GA

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

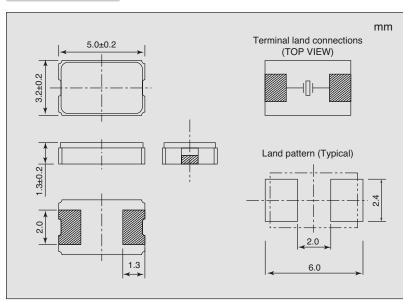
When ordering our products, specify them with an "Ordering Code" that consists of the following :

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

Example NX5032GA-16.000M-STD-CSU-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]
8 to 9.5	300
9.5 to 10	220
10 to 15	150
15 to 20	120
20 to 24	100
24 to 30	80
30 to 40	50