# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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## **Crystal Units**

### NX3225GD

#### Features

A small surface-mount type crystal unit, ideal for an engine control CPU clock; delivering the high reliability that is particularly demanded by automotive.

Compatible with low frequency range starting from 7.98 MHz.

- •Compact and thin. (3.2x2.5mm typ., t1.0mm max.)
- High resistance to solder cracking.
- Stable start-up characteristics even under extremely severe environmental conditions.
- •Excellent environment-resistant performance, including heat, vibration and shock resistance.
- •Meets the requirements for re-flow profiling using lead-free solder.
- •Conforms to AEC-Q200.



RoHS Compliant Directive 2011/65/EU

#### Specifications

Item Model	NX3225GD
Nominal frequency	7.98 to 12 MHz
Overtone order	Fundamental
Frequency tolerance (25 ±3 °C)	±50 × 10⁻6
Frequency versus temperature characteristics (with reference to +25 °C)	±150 × 10 <sup>-6</sup>
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. 200 μW)
Load capacitance	8 pF

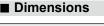
The above specifications are standard for this NDK product. Custom-made specifications such as load capacitance and temperature characteristics are also available. Please contact NDK sales with your enquiries.

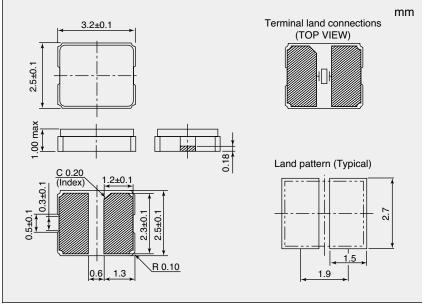
#### ■ How to Specify an Order

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

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/).





#### \*1 Equivalent Series Resistance

Nominal frequency (MHz)	Equivalent Series Resistance max. [Ω]
7.98 to 9.8	500
9.8 to 12	300

Example NX3225GD-8.000M-STD-CRA-3

### For Automotive