

NX3225SC

For Automotive

■ Features

A small surface-mount type crystal unit, ideal for the special requirements of automotive, such as TPMS (Tire Pressure Monitoring System). The crystal unit is ideally suited for the clock signal generating source of the transmission unit in a tire wheel that is subject to strong centrifugal force.

- •Compact and thin. (3.2 x 2.5 x 0.6 mm typ.)
- Stable frequency characteristics even with a powerful centrifugal force of 2,000 G, as found in the transmission side of TPMS applications.
- •High resistance to solder cracking.
- •Excellent environmental characteristics, including heat, vibration and shock resistance.
- •Lead-free. Meets the requirements for re-flow profiling using lead-free solder.
- •Conforms to AEC-Q200.







■ Specifications

| Item Model | NX3225SC | |
|---|------------------------|--------------------------------------|
| Standard | Standard | Optional |
| Nominal Frequency (MHz) | 9.8433 ≤ F ≤ 50 | 9.8433 ≤ F ≤ 50 |
| Overtone Order | Fundamental | Fundamental |
| Frequency Tolerance (25 ±3 °C) | ±15 × 10 ⁻⁶ | ±15 × 10 ⁻⁶ |
| Frequency versus Temperature Characteristics (with reference to +25 °C) | ±50 × 10⁻ ⁶ | ±50 × 10⁻ ⁶ |
| Operating Temperature Range (°C) | -40 to +125 | -40 to +125 |
| Storage Temperature Range (°C) | -40 to +125 | -40 to +125 |
| Equivalent Series Resistance | Refer to *1 | Refer to *1 |
| Level of Drive (µW) | 10 (Max. 200) | 10 (Max. 200) |
| Load Capacitance (pF) | 8 | 6 to 32 |
| Frequency Aging (+25 °C) | | Max. ±3 × 10 ⁻⁶ / year *2 |
| Specifications Number | STD-CRS-1 | Refer to *3 |

Please specify the model name, frequency, and specification number when you order products.

For futher questions regarding specifications, please feel free to contact us.

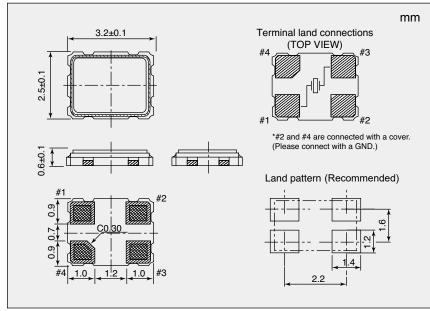
- Ex. Model, Frequency (38.400000MHz 6digits), S1:Fundamental or S3:3rd Overtone
 - Operating Temperature Range (-40 to +125°C) Frequency versus Temperature Characteristics (±50×10-6)
 - Frequency Tolerance (±15×10-6) Load Capacitance (8pF)

NX3225SC

38.400000MHz

S1-40125-50-15-8

■ Dimensions



*1 Equivalent Series Resistance

| Nominal Frequency (MHz) | Equivalent Series Resistance Max. (Ω) |
|----------------------------|--|
| 9.8433 ≤ F < 12 | 300 |
| 12 ≤ F < 20 | 120 |
| 20 ≤ F ≤ 50 | 100 |

If you have any other requests, NDK will study it.

^{*2} If you have any other requests, NDK will study it.

^{*3} Ordering information: Overtone Order Fundamental / 3rd Overtone, the Operating Temperature Range, Frequency versus Temperature Characteristics, Frequency Tolerance, and Load Capacitance.