# **Crystal Oscillator**

http://www.jinluodz.com



## Model Name NT5032SC

### Main Application

For mobile phones, etc.

#### Features

- Supports low power supply voltage. (Supports DC +2.4 V±0.1 V to +3.3 V±5 %.)
- Compact and light with a height, cubic volume, and weight of Max. 1.5mm, 0.022 cm3, and 0.06 g, respectively.
- With an AFC (Automatic Frequency Control) function. (\*1)
- Low power consumption.
- A surface-mount crystal oscillator. (Reflow soldering is possible.)
- · Lead-free. Meets the requirements for re-flow profiling using lead-free solder.

#### Specifications

| Item Model                            | NT5032SC   |
|---------------------------------------|--|
| Nominal frequency range (MHz)         | 12 to 26   |
| Supply voltage [Vcc] (V)              | +3.0   |
| Load impedance                        | 10 kΩ//10 pF   |
| Current consumption (mA)              | Max. 1.5   |
| Output voltage                        | Min. 0.8 V(p-p) (DC Coupling *2)                                 |
| Frequency/Temperature characteristics | Max. ±2.5×10 <sup>-6</sup>                                       |
| Operating temperature range (°C)      | -30 to +75   |
| Storage temperature range (°C)        | -40 to +85   |
| Frequency/Voltage coefficient         | Max. ±0.3×10 <sup>-6</sup> /+3.0 V±5 %                           |
| Frequency/Load coefficient            | Max. ±0.2×10 <sup>-6</sup> /(10 kΩ//10 pF) ±10 %                 |
| Long-term frequency stability         | Max. ±1.0×10⁻ <sup>6</sup> /year                                 |
| Frequency control range               | ±9.0×10 <sup>-6</sup> to ±15.0×10 <sup>-6</sup> /+1.5 V±1 V (*3) |



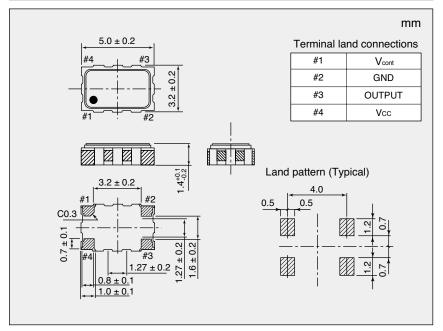
Temperature Compensated Crystal Oscillator with AFC Function (VC-TCXO) NT5032S Series

Directive 2011/65/EU

• Frequency setting conditions

- 1. Frequencies are set at normal temperatures (+25±2 °C).
- 2. Frequencies are assumed using of a ground pattern attached to the underside of an oscillator.
- · If you require a product with a different frequency, power supply voltage, frequency control range, etc. to the standard specifications, please contact us with your enquiries.
- \*1. Products without the AFC (Automatic Frequency Control) function are available. If you require such a product, please contact us.
- \*2. A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (1,000 pF) to the line-out terminal of the oscillator.
- \*3. This is a representative specification. The specifications may change according to the frequency that you request.

#### Dimensions



| Frequency<br>(MHz)                                   | Ordering Code              |
|--|----------------------------|
| 12.6   | NT5032SC-12.6M-NSA3341C    |
| 12.8   | NT5032SC-12.8M-NSA3341A    |
| 13   | NT5032SC-13M-NSA3341A      |
| 14.4   | NT5032SC-14.4M-NSA3341A    |
| 14.7456  | NT5032SC-14.7456M-NSA3341A |
| 15.36  | NT5032SC-15.36M-NSA3341C   |
| 16   | NT5032SC-16M-NSA3341A      |
| 16.384   | NT5032SC-16.384M-NSA3341C  |
| 19.2   | NT5032SC-19.2M-NSA3341A    |
| 19.44  | NT5032SC-19.44M-NSA3341A   |
| 19.6608  | NT5032SC-19.6608M-NSA3341C |
| 19.68  | NT5032SC-19.68M-NSA3341C   |
| 19.8   | NT5032SC-19.8M-NSA3341C    |
| 20   | NT5032SC-20M-NSA3341A      |
| 20.48  | NT5032SC-20.48M-NSA3341C   |
| 21.25  | NT5032SC-21.25M-NSA3341A   |
| 24.576   | NT5032SC-24.576M-NSA3341C  |
| 25   | NT5032SC-25M-NSA3341C      |
| 26   | NT5032SC-26M-NSA3341C      |
| The above frequencies are NDK's standard frequencies |                            |

The above frequencies are NDK's standard frequencies. Frequencies other than the above are available. Feel free to contact our sales representatives.

#### List of Ordering Codes