

# Crystal Oscillator

## Model Name NT5032SC

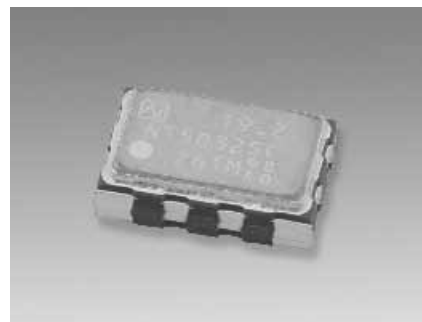
Temperature Compensated Crystal Oscillator  
with AFC Function (VC-TCXO) NT5032S Series

### ■ 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 cm<sup>3</sup>, 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.



Pb  
Free

RoHS Compliant  
Directive 2011/65/EU

### ■ Specifications

Item	Model	NT5032SC
Nominal frequency range (MHz)		12 to 26
Supply voltage [V <sub>CC</sub> ] (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)

#### • 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.

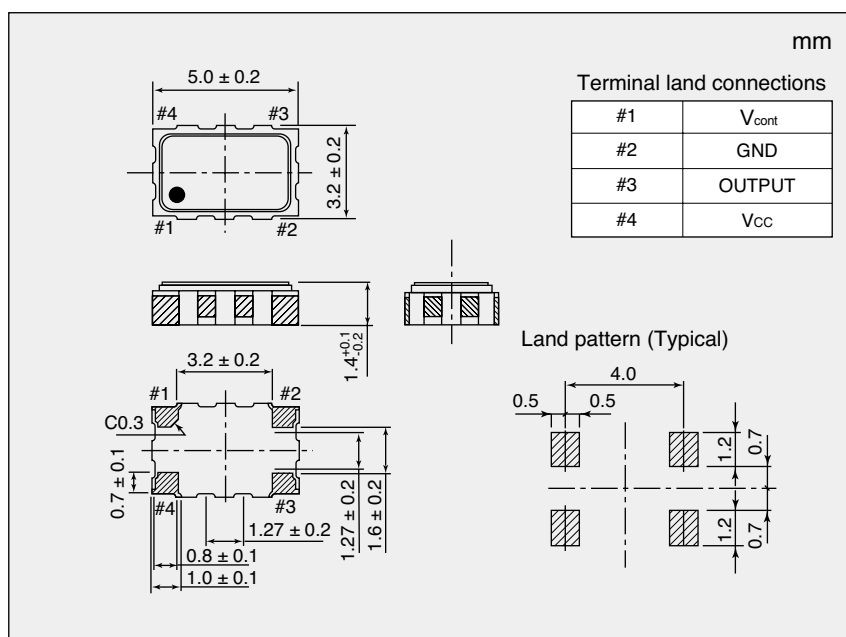
• If you require a product with a different frequency, power supply voltage, frequency control range, etc. to the standard specifications, please contact us with your enquiries.

\*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



### ■ List of Ordering Codes

Frequency (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. Frequencies other than the above are available. Feel free to contact our sales representatives.