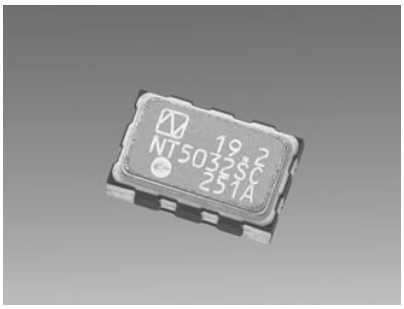
Crystal Oscillator

Crystal Bridge to the Future

Model Name NT5032SC Temperature-Compensated Crystal Oscillator with AFC Function (VC-TCXO) NT5032S Series

■ Main Application

For mobile phones, etc.



Pb Free

RoHS Compliant
Directive 2002/95/EC

■ Features

- Supports low power supply voltage. (Supports DC +2.4 V±0.1 V to +3.3 V±5 %.)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 1.5mm, 0.022 cm^3, and 0.06 g, respectively.
- With an AFC (Automatic Frequency Control) function.
- 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

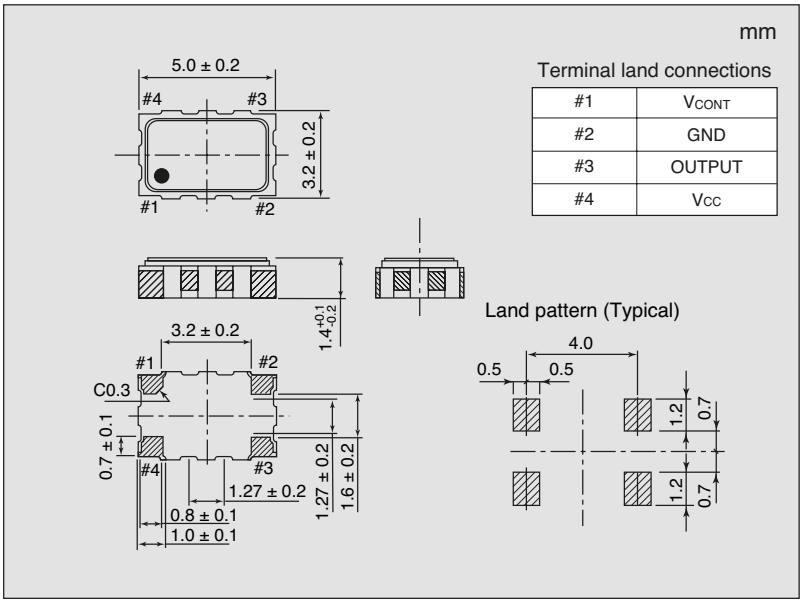
Item \ Model	NT5032SC
Nominal frequency range (MHz)	12.6 to 26
Supply voltage [V_{CC}] (V)	+3.0
Load impedance	10 kΩ//10 pF
Current consumption (mA)	Max. 1.5
Output voltage	Min. 0.8 V(P-P) (DC Coupling *1)
Frequency/Temperature characteristics	Max. ±2.5×10^{-6}
Operating temperature range (°C)	–30 to +75
Storage temperature range (°C)	–40 to +85
Frequency/Voltage coefficient	Max. ±0.3×10^{-6}/+3.0 V±5 %
Frequency/Load coefficient	Max. ±0.2×10^{-6}/(10 kΩ//10 pF) ±10 %
Long-term frequency stability	Max. ±1.0×10^{-6}/year
Frequency control range	±9.0×10^{-6} to ±15.0×10^{-6}/+1.5 V±1 V *2

- Frequency setting conditions
  1. Frequencies are set at normal temperatures (+25±2 °C).
  2. Frequencies are set with a printed board that has 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.
- Products with the AFC (Automatic Frequency Control) function are available. If you require such a product, please contact us.

*1. 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.

*2. 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.