Crystal Oscillator

NDK — 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.

■ 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^3, 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_{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 *2)
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 (*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.
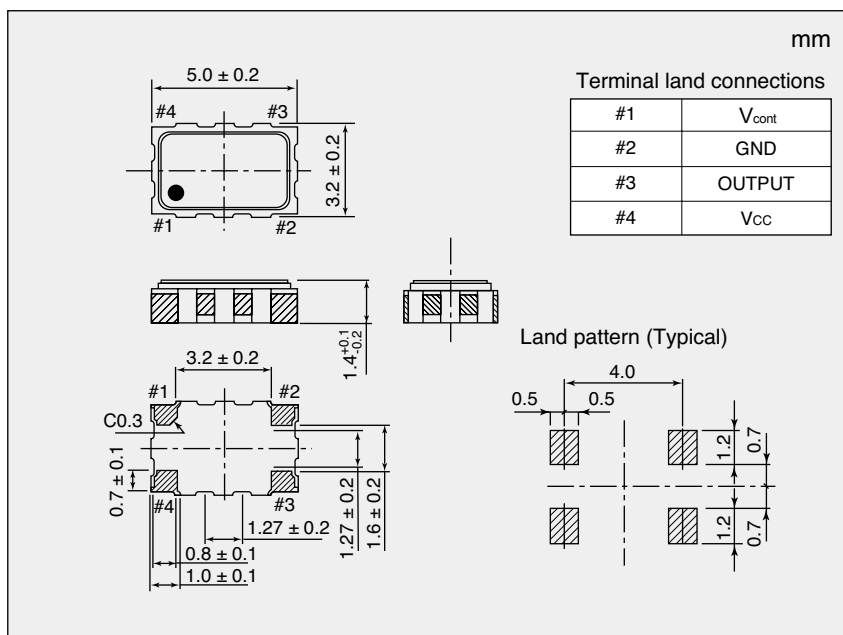• If you require a product with a different frequency, power supply voltage, frequency control range, etc. to the standard specifications, please contact us with your enquiries.

*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

mm

Terminal land connections

#1	V_{cont}
#2	GND
#3	OUTPUT
#4	V_{CC}

Land pattern (Typical)

■ 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.

NIHON DEMPA KOGYO CO.,LTD.

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