Crystal Oscillator

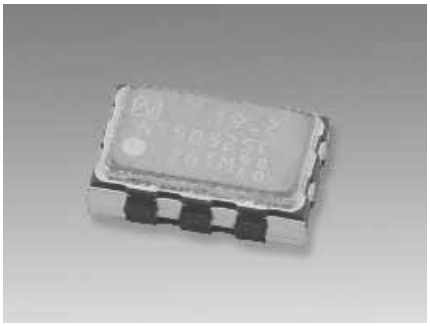
Crystal Bridge to the Future

NT5032SC

Temperature Compensated Crystal Oscillator with AFC function(VC-TCXO)

■ Main Application

Smartphone / Mobile phone, Wireless module, and GPS / GNSS module, etc.



Pb Free

RoHS Compliant Directive 2011/65/EU

■ Features

- Supports low power supply voltage.
  (Supports DC +2.4V±0.1V to +3.3V±5%. Standard specification : +3.0V)
- 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.

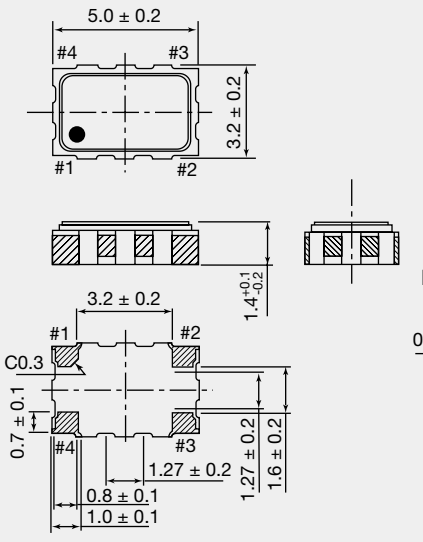
■ Specifications

Item \ Model	NT5032SC
Nominal Frequency Range (MHz)	12 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. $\pm2.5\times10^{-6}$
Operating Temperature Range (°C)	–30 to +75
Storage Temperature Range (°C)	–40 to +85
Frequency/Voltage Coefficient	Max. $\pm0.3\times10^{-6}$/+3.0 V±5 %
Frequency/Load Coefficient	Max. $\pm0.2\times10^{-6}$/(10 kΩ//10 pF) ±10 %
Long-term Frequency Stability	Max. $\pm1.0\times10^{-6}$/year
Frequency Control Range	$\pm9.0\times10^{-6}$ to $\pm15.0\times10^{-6}$/+1.5 V±1 V

• Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).
Frequencies are assumed using of a ground pattern attached to the underside of an oscillator.
• Products without 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.

■ Dimensions

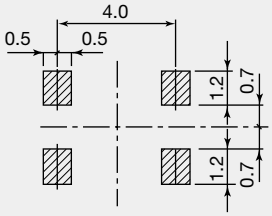
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Terminal land connections

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

Land pattern (Typical)



■ Specification Number

Frequency (MHz)	Specification Number
12.6	NSA3341C
12.8	NSA3341A
13	NSA3341A
14.4	NSA3341A
14.7456	NSA3341A
15.36	NSA3341C
16	NSA3341A
16.384	NSA3341C
19.2	NSA3341A
19.44	NSA3341A
19.6608	NSA3341C
19.68	NSA3341C
19.8	NSA3341C
20	NSA3341A
20.48	NSA3341C
21.25	NSA3341A
24.576	NSA3341C
25	NSA3341C
26	NSA3341C

Please specify the model name, frequency, and specification number when you order products.
For further questions regarding specifications, please feel free to contact us.