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±0.1 V to +3.3 V±5%.)
- Ultra-compact and light with a height, cubic volume, and weight of 1.5mm max., 0.022 cm³, 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

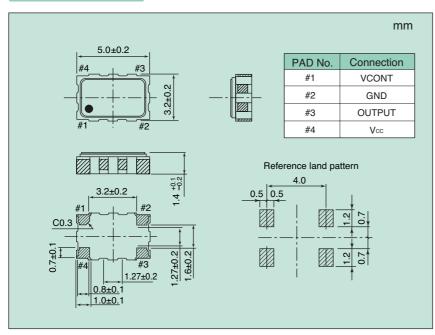
Model	NT5032SC
Standard nominal frequency (MHz)	12.6 to 26 MHz
Power supply voltage	+3.0V DC
Load	10kΩ//10pF
Consumption current	1.5mA max
Output level	0.8V(P-P) min (DC superimposition *1)
Frequency / temperature characteristic	±2.5×10 ⁻⁶ max
	–30 to +75°C
Power supply variation characteristics	±0.3×10 ⁻⁶ max/+3.0V±5%
Load variation characteristics	$\pm 0.2 \times 10^{-6} \text{ max /(10k}\Omega//10pF) \pm 10\%$
Aging	±1.0×10 ⁻⁶ max/year
Frequency control characteristics	±9.0×10 ⁻⁶ to ±15.0×10 ⁻⁶ /+1.5±1V *2



· Frequency setting conditions

- 1. Frequencies are set at normal temperatures (+25 \pm 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 characteristic, 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
12.8	NT5032SC-12.8M-NSA3341A
13	NT5032SC-13M-NSA3341A
14.4	NT5032SC-14.4M-NSA3341A
15.36	NT5032SC-15.36M-NSA3341C
16	NT5032SC-16M-NSA3341A
16.384	NT5032SC-16.384M-NSA3341C
19.2	NT5032SC-19.2M-NSA3341A
19.68	NT5032SC-19.68M-NSA3341C
21.25	NT5032SC-21.25M-NSA3341A
26	NT5032SC-26M-NSA3341A

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