Crystal Oscillator

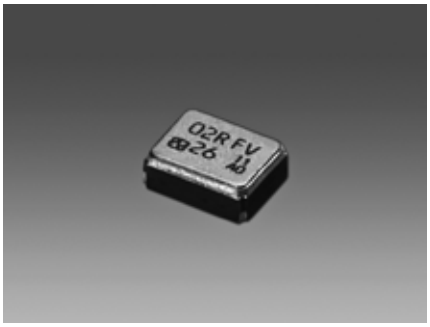
Crystal Bridge to the Future

NT2016SA

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
Directive (EU) 2015/863

■ Features

- Supports low power supply voltage.
  (Supports DC +1.7V to +3.3V. Standard specification : +1.8V)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 0.8 mm, 0.0022 cm^3, and 0.008 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.

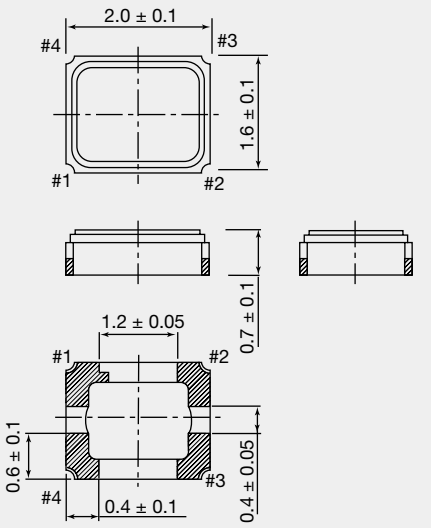
■ Specifications

Item \ Model	NT2016SA						
Nominal Frequency Range (MHz)	10 to 52						
Standard Frequency (MHz)	16.368	16.369	19.2	26	32	38.4	52
Supply Voltage [V_{CC}] (V)	+1.8						
Load Impedance	10 kΩ//10 pF						
Current Consumption (mA)	Max. 1.5				Max. 1.7		Max. 2.0
Output Voltage	Min. 0.8 V(p-p) (DC Coupling *1)						
Frequency/Temperature Characteristics	Max. $\pm2.0\times10^{-6}$						
Operating Temperature Range (°C)	–30 to +85						
Storage Temperature Range (°C)	–40 to +85						
Frequency/Voltage Coefficient	Max. $\pm0.2\times10^{-6}$/+1.8 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	$\pm7.0\times10^{-6}$ to $\pm13.0\times10^{-6}$/+0.9 V±0.8 V						
Specification Number	NSC5320A	NSC5320A	NSC5320A	NSC5320B	NSC5320C	NSC5320C	NSC5320D

• Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).
• 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

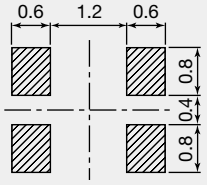
mm



Terminal land connections

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

Land pattern (Recommended)



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