Crystal Oscillator

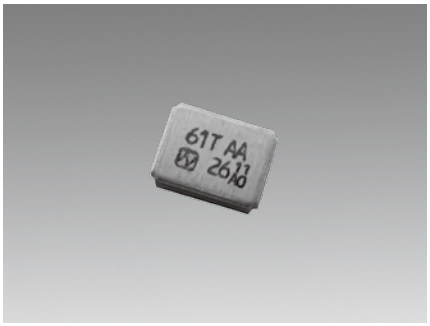
NDK Crystal Bridge to the Future

NT1612AA

Temperature Compensated Crystal Oscillator(TCXO) for high-precision GPS

■ Main Application

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



Pb Free

RoHS Compliant
Directive 2011/65/EU

■ Features

- A crystal oscillator with highly stable frequency / temperature characteristics best suited for GPS.
- Supports low power supply voltage. (Supports DC +1.68 V to +3.63 V.)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 0.55 mm, 0.0011 cm^3, and 0.004 g, respectively.
- A surface-mount crystal oscillator. (Reflow soldering is possible.)
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.
- With an AFC (Automatic Frequency Control) function. (Option)

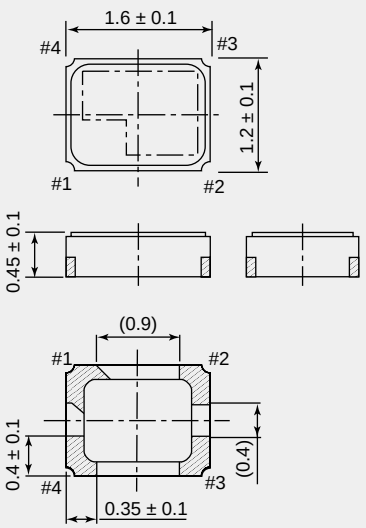
■ Specifications

Item \ Model	NT1612AA	
Nominal Frequency Range (MHz)	26 to 52	
Standard Frequency (MHz)	26	52
Supply Voltage [V_{CC}] (V)	+1.8	
Load Impedance	10 kΩ//10 pF	
Current Consumption (mA)	Max. 1.5	Max. 2.0
Output Voltage	Min. 0.8 V(p-p) (DC Coupling *1)	
Frequency/Temperature Characteristics	Max. $\pm0.5\times10^{-6}$	
Operating Temperature Range (°C)	–30 to +85	
Storage Temperature Range (°C)	–40 to +85	
Frequency/Voltage Coefficient	Max. $\pm0.1\times10^{-6}$/+1.8 V±5 %	
Frequency/Load Coefficient	Max. $\pm0.1\times10^{-6}$/(10 kΩ//10 pF) ±10 %	
Long-term Frequency Stability	Max. $\pm1.0\times10^{-6}$/year	
Specification Number	NSC5075A	NSC5075B

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

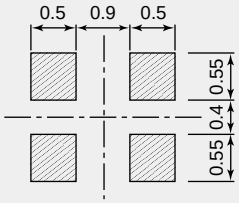
mm



Terminal land connections

#1	NC or GND
#2	GND
#3	OUTPUT
#4	V_{CC}

Land pattern (Typical)



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