Crystal Oscillator

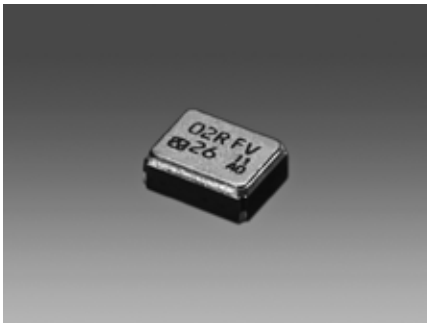
NDK Crystal Bridge to the Future

NT2016SC

Temperature Compensated Crystal Oscillator(TCXO) with two outputs of same frequency and E/D function

■ 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 +1.7 V to +3.3 V.)
- 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.
- A surface-mount crystal oscillator. (Reflow soldering is possible.)
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.
- With Enable / Disable function (This function can be used for both output1 and 2).
- It is possible to choose the AFC function instead of the Enable/Disable function for output 2.

■ Specifications

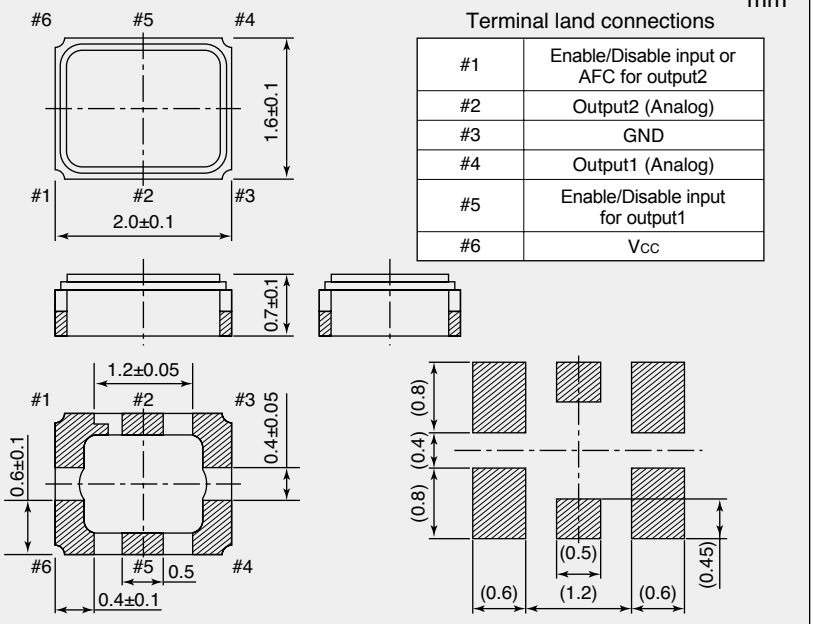
Item \ Model	NT2016SC		
Nominal Frequency Range (MHz)	10 to 52		
Standard Frequency (MHz)	26	38.4	52
Supply Voltage [V_{CC}] (V)	+1.8		
Load Impedance	10 kΩ//10 pF		
Current Consumption (mA) (Two outputs)	Max. 2.0	Max. 2.2	Max. 2.4
Output Voltage	Min. 0.8 V(p-p) (DC Coupling *1)		
Frequency/Temperature Characteristics	Max. ±2.0×10^{-6} (Max. ±0.5×10^{-6} available)		
Operating Temperature Range (°C)	–30 to +85		
Storage Temperature Range (°C)	–40 to +85		
Frequency/Voltage Coefficient	Max. ±0.1×10^{-6}/+1.8 V±5 %		
Frequency/Load Coefficient	Max. ±0.1×10^{-6}/(10 kΩ//10 pF) ±10 %		
Long-term Frequency Stability	Max. ±1.0×10^{-6}/year		
Specification Number	NSA3502B	NSA3502C	NSA3502D

• 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	Enable/Disable input or AFC for output2
#2	Output2 (Analog)
#3	GND
#4	Output1 (Analog)
#5	Enable/Disable input for output1
#6	V_{CC}