Crystal Oscillator



Directive 2011/65/EU

Model Name NT2016SB

Temperature-Compensated Crystal Oscillator with Enable/Disable (Stand-by) Function (TCXO) NT2016S Series

Main Application

For mobile phones, etc.

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 cm³, and 0.008 g, respectively.
- With an Enable/Disable (Stand-by) 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		NT2016SB		
Nominal frequency (MHz)		13 to 52		
Standard frequency (MHz)		16.368, 16.369, 19.2, 26, 27.456	38.4	52
Supply voltage [Vcc] (V)		+1.8		
Load impedance		10 kΩ//10 pF		
Current consumption	Enable (mA)	Max. 1.5	Max. 1.7	Max. 2.0
	Disable (µA)	Max. 2		
Output voltage		Min. 0.8 V(p-p) (DC Coupling *1)		
Frequency/Temperature characteristics		Max. ±2.0×10 ⁻⁶		
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		
Enable/Disable function		Enable : 80%Vcc to Vcc, Disable : 0V to 20%Vcc		

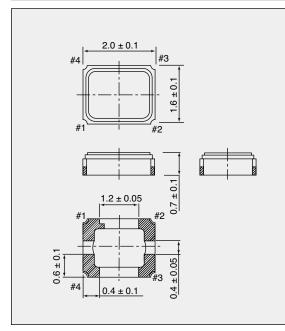
• Frequency setting conditions

1. Frequencies are set at normal temperatures (+25±2 °C).

Free

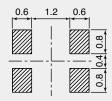
- If you require a product with a different frequency, power supply voltage, frequency control range, etc. to the standard specifications, please contact us with your enquiries.
- *1. A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (1,000 pF) to the line-out terminal of the oscillator.
- *2. This is a representative specification. The specifications may change according to the frequency that you request.

Dimensions



Terminal land connections		
Enable/Disable		
GND		
OUTPUT		
Vcc		
	Enable/Disable GND OUTPUT	

Land pattern (Typical)



■ List of Ordering Codes

Frequency (MHz)	Ordering Code
16.368	NT2016SB-16.368M-NSA3537A
16.369	NT2016SB-16.369M-NSA3537A
19.2	NT2016SB-19.2M-NSA3537A
26	NT2016SB-26M-NSA3537B
27.456	NT2016SB-27.456M-NSA3537B
38.4	NT2016SB-38.4M-NSA3537C
52	NT2016SB-52M-NSA3537D

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

