

Crystal Oscillator

NT2520SB

Temperature Compensated Crystal Oscillator
with AFC function(VC-TCXO)

Main Application

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

Features

- Supports low power supply voltage.
(Supports DC +1.7V to +3.3V. Standard specification : +1.8V and +2.8V)
- Compact and light with a height, cubic volume, and weight of Max. 0.9 mm, 0.004 cm³, and 0.014 g, respectively.
- 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.
- With an AFC (Automatic Frequency Control) function.



Pb Free

RoHS Compliant
Directive 2011/65/EU

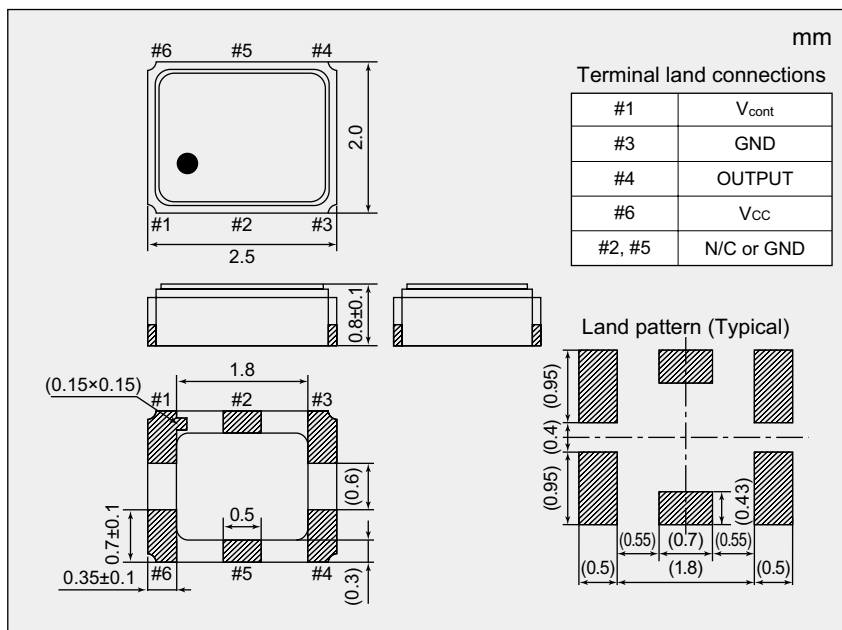
Specifications

Item	Model	NT2520SB						
Nominal Frequency (MHz)		10 to 52						
Standard Frequency (MHz)		16.368	16.369	19.2	26	33.6	38.4	52
Supply Voltage [V _{cc}] (V)		+1.8, +2.8						
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. $\pm 2.0 \times 10^{-6}$						
Operating Temperature Range (°C)		-30 to +85						
Storage Temperature Range (°C)		-40 to +85						
Frequency/Voltage Coefficient		Max. $\pm 0.2 \times 10^{-6}/V_{cc} \pm 5\%$						
Frequency/Load Coefficient		Max. $\pm 0.2 \times 10^{-6}/(10 \text{ k}\Omega//10 \text{ pF}) \pm 10\%$						
Long-term Frequency Stability		Max. $\pm 1.0 \times 10^{-6}/\text{year}$						
Frequency Control Range		± 8.0 to $\pm 13.0 \times 10^{-6}/+0.9 \text{ V} \pm 0.8 \text{ V}$ (Supply Voltage : +1.8V) ± 9.0 to $\pm 15.0 \times 10^{-6}/+1.4 \text{ V} \pm 1.0 \text{ V}$ (Supply Voltage : +2.8V)						

*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



List of Ordering Codes

Frequency (MHz)	Ordering Code	
	+1.8V	+2.8V
16.368	NSA3638A	NSA3637A
16.369	NSA3638A	NSA3637A
19.2	NSA3638A	NSA3637A
26	NSA3638B	NSA3637B
33.6	NSA3638B	NSA3637B
38.4	NSA3638C	NSA3637C
52	NSA3638D	NSA3637D

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