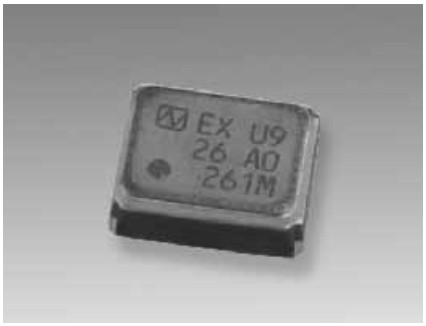
Crystal Oscillator

NT2520SB

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

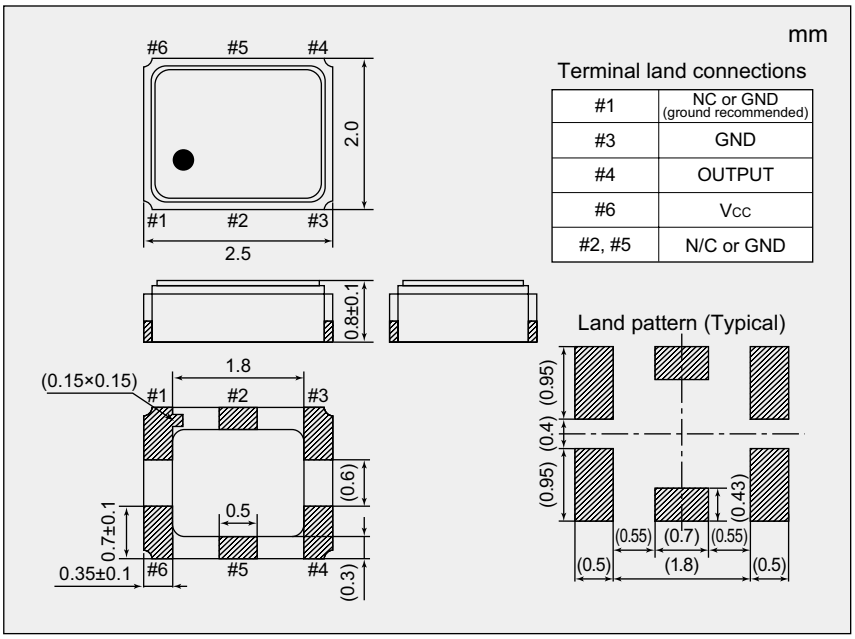
- A crystal oscillator with highly stable frequency / temperature characteristics best suited for GPS.
- Supports low power supply voltage. (Supports DC +1.7 V to +3.3 V.)
- Compact and light with a height, cubic volume, and weight of Max. 0.9 mm, 0.004 cm^3, and 0.014 g, respectively.
- A surface-mount crystal oscillator. (Reflow soldering is possible.)
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.
- Products with the AFC (Automatic Frequency Control) function is available.
- Conforms to AEC-Q100/200.

■ 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. $\pm0.5\times10^{-6}$						
Operating Temperature Range (°C)	–30 to +85						
Storage Temperature Range (°C)	–40 to +85						
Frequency/Voltage Coefficient	Max. $\pm0.2\times10^{-6}/V_{CC}\pm5$ %						
Frequency/Load Coefficient	Max. $\pm0.2\times10^{-6}$/(10 kΩ//10 pF) ±10 %						
Long-term Frequency Stability	Max. $\pm1.0\times10^{-6}$/year						

• Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).
Connect the #1 terminal of the oscillator to the ground that comes with the oscillator.
*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



■ Specification Number

Frequency (MHz)	Supply Voltage	
	+1.8V	+2.8V
16.368	NSA3557A	NSA3556A
16.369	NSA3557A	NSA3556A
19.2	NSA3557A	NSA3556A
26	NSA3557B	NSA3556B
33.6	NSA3557B	NSA3556B
38.4	NSA3557C	NSA3556C
52	NSA3557D	NSA3556D

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