

Crystal Oscillator

NT2520SE

Temperature Compensated Crystal Oscillator(TCXO)
with wide temperature range for high-precision GPS

Main Application

Automotive communication(e.g., Automotive navigation or Telematics), Wireless module, and GPS / GNSS module, etc.

Features

- Supports $\pm 0.5 \times 10^{-6}$ / -40 to +105°C
- A crystal oscillator with highly stable frequency / temperature characteristics best suited for GPS.
- Compact and light with a height, cubic volume, and weight of Max. 0.9 mm, 0.004 cm³, and 0.014 g, respectively.
- Supports low power supply voltage.
(Supports DC +1.68V to +3.63V. Standard specification : +1.8V)
- 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.
- Conforms to AEC-Q100/Q200.
- Products with the AFC (Automatic Frequency Control) function is available.



Pb Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

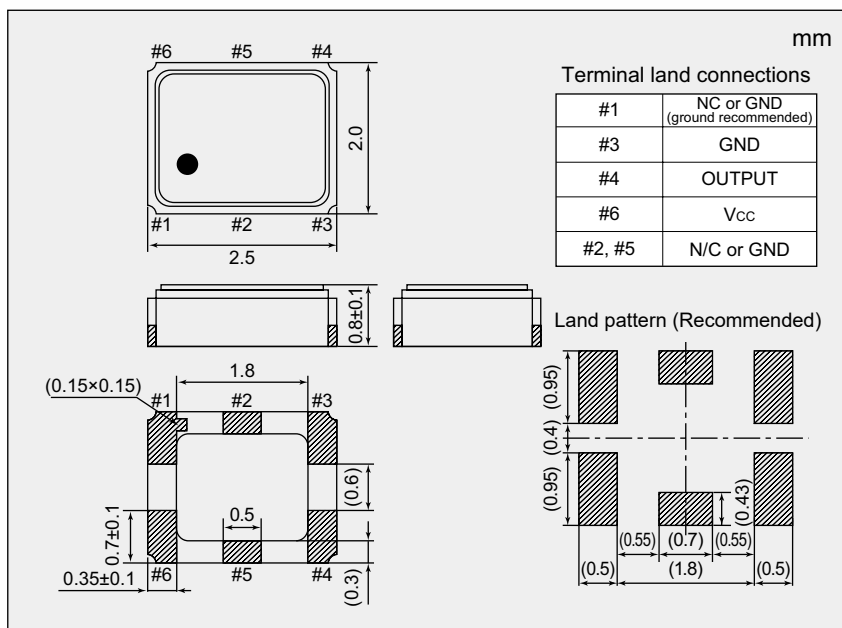
Specifications

Item	Model	NT2520SE					
Nominal Frequency Range (MHz)		10 to 52					
Standard Frequency (MHz)		16.368	16.369	19.2	26	38.4	52
Supply Voltage [V _{CC}] (V)		+1.8					
Load Impedance		10 kΩ//10 pF					
Current Consumption (mA)		Max. 1.5			Max. 2.0		Max. 2.2
Output Voltage		Min. 0.8 V(p-p) (DC Coupling *1)					
Frequency/Temperature Characteristics		Max. $\pm 0.5 \times 10^{-6}$					
Operating Temperature Range (°C)		-40 to +105					
Storage Temperature Range (°C)		-40 to +105					
Frequency/Voltage Coefficient		Max. $\pm 0.1 \times 10^{-6} / +1.8 \text{ V} \pm 5 \%$					
Frequency/Load Coefficient		Max. $\pm 0.1 \times 10^{-6} / (10 \text{ k}\Omega // 10 \text{ pF}) \pm 10 \%$					
Long-term Frequency Stability		Max. $\pm 1.0 \times 10^{-6} / \text{year}$					
Specification Number		NSC5073A	NSC5073A	NSC5073A	NSC5073B	NSC5073C	NSC5073D

* 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



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