

## NT1612SA

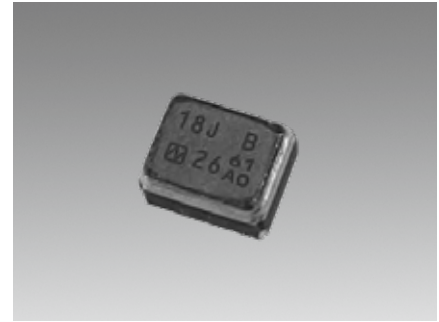
Temperature Compensated Crystal Oscillator(TCXO)  
for high-precision GPS

### Main Application

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

### Features

- A crystal oscillator with highly stable frequency / temperature characteristics best suited for GPS.
- Supports low power supply voltage.  
(Supports DC +1.68V to +3.63V. Standard specification : +1.8V)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 0.55 mm, 0.0011 cm<sup>3</sup>, and 0.004 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 an AFC (Automatic Frequency Control) function. (Option)



Pb Free

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

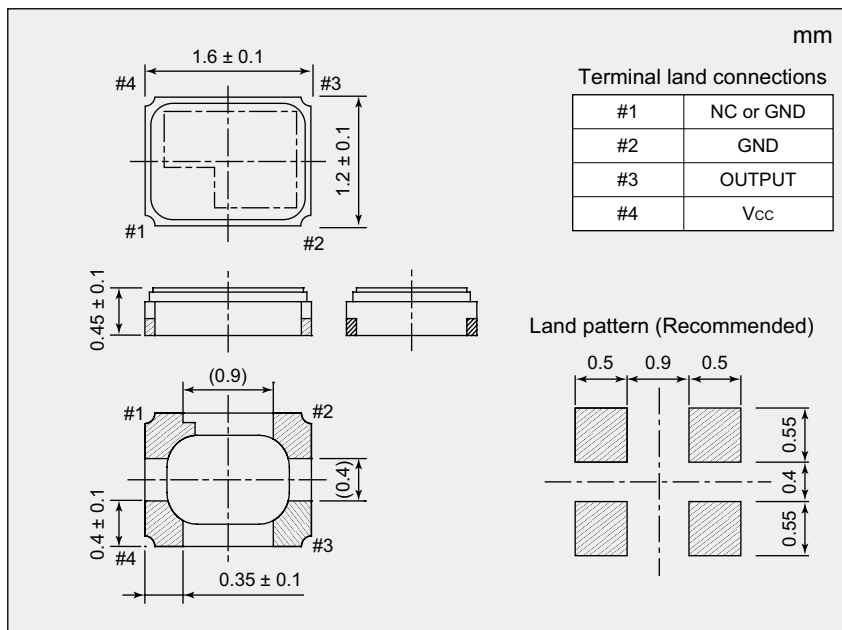
### Specifications

| Item                                  | Model | NT1612SA   |          |
|---------------------------------------|-------|--|----------|
| Nominal Frequency Range (MHz)         |       | 26 to 52   |          |
| Standard Frequency (MHz)              |       | 26   | 52       |
| Supply Voltage [V <sub>cc</sub> ] (V) |       | +1.8   |          |
| Load Impedance                        |       | 10 kΩ//10 pF                                     |          |
| Current Consumption (mA)              |       | Max. 1.5   | Max. 2.0 |
| Output Voltage                        |       | Min. 0.8 V(p-p) (DC Coupling *1)                 |          |
| Frequency/Temperature Characteristics |       | Max. ±0.5×10 <sup>-6</sup>                       |          |
| Operating Temperature Range (°C)      |       | -30 to +85                                       |          |
| Storage Temperature Range (°C)        |       | -40 to +85                                       |          |
| Frequency/Voltage Coefficient         |       | Max. ±0.2×10 <sup>-6</sup> /+1.8 V±5 %           |          |
| Frequency/Load Coefficient            |       | Max. ±0.2×10 <sup>-6</sup> /(10 kΩ//10 pF) ±10 % |          |
| Long-term Frequency Stability         |       | Max. ±1.0×10 <sup>-6</sup> /year                 |          |
| Specification Number                  |       | NSC5332A   | NSC5332B |

• 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.