

## NT2016SA

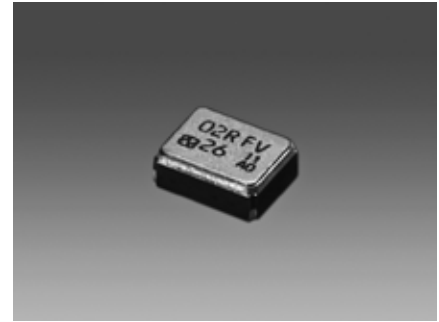
Temperature Compensated Crystal Oscillator  
with AFC function(VC-TCXO)

### 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)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 0.8 mm, 0.0022 cm<sup>3</sup>, and 0.008 g, respectively.
- With an AFC (Automatic Frequency Control) 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.



Pb Free

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

### Specifications

Pb Free

RoHS Compliant  
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Directive (EU) 2015/863

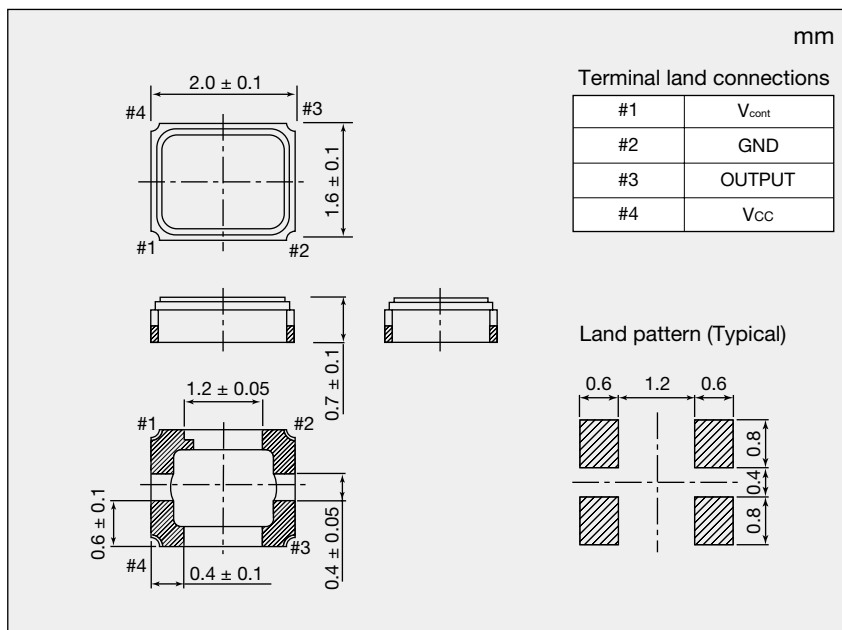
Item	Model	NT2016SA						
Nominal Frequency Range (MHz)		10 to 52						
Standard Frequency (MHz)		16.368	16.369	19.2	26	33.6	38.4	52
Supply Voltage [V <sub>cc</sub> ] (V)		+1.8						
Load Impedance		10 kΩ//10 pF						
Current Consumption (mA)		Max. 1.5				Max. 1.7	Max. 2.0	
Output Voltage		Min. 0.8 V(p-p) (DC Coupling *1)						
Frequency/Temperature Characteristics		Max. ±2.0×10 <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						
Frequency Control Range		±8.0×10 <sup>-6</sup> to ±13.0×10 <sup>-6</sup> /+0.9 V±0.8 V						
Specification Number		NSA3508A	NSA3508A	NSA3508A	NSA3508B	NSA3508B	NSA3508C	NSA3508D

\* Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).

\* Products without the AFC (Automatic Frequency Control) function are available. If you require such a product, please contact us.

\*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.