

# Crystal Oscillator

## NT2016SJA

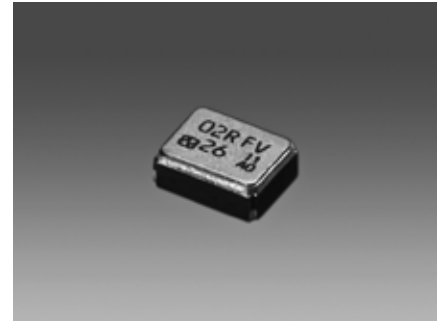
Temperature Compensated Crystal Oscillator(TCXO)  
with ultra-low phase noise characteristics and E/D function for high-precision GPS

### Main Application

Smartphone / Mobile phone, Wireless module, GPS / GNSS module, 5th Generation, Wi-Fi 6 (IEEE 802.11ax), and SONET / SDH, etc.

### Features

- Crystal oscillator with ultra-low phase noise characteristics.  
(-170dBc/Hz @100kHz offset, 26MHz)
- 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 Enable/Disable (Stand-by) function.
- 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

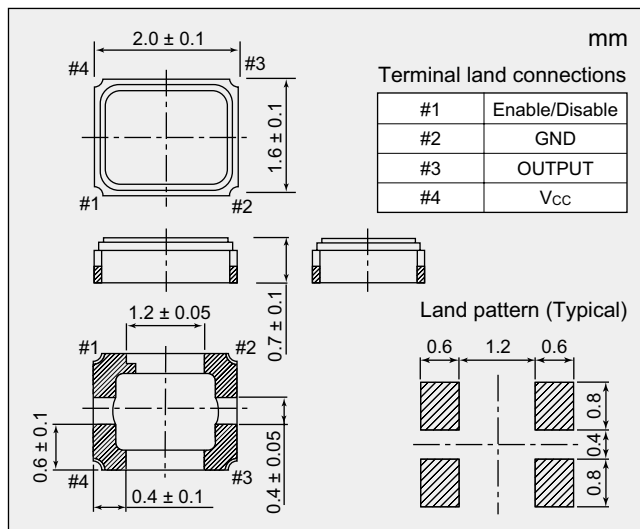
### Specifications

Item	Model	NT2016SJA	
Nominal Frequency (MHz)		13 to 52	
Standard Frequency (MHz)	26		52
Supply Voltage [V <sub>CC</sub> ] (V)		+1.8	
Load Impedance		10 kΩ//10 pF	
Current Consumption	Enable (mA)	Max. 2.5	Max. 3.0
	Disable (μA)	Max. 4.0	
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. ±0.1×10 <sup>-6</sup> /+1.8 V±5 %	
Frequency/Load Coefficient		Max. ±0.1×10 <sup>-6</sup> /(10 kΩ//10 pF) ±10 %	
Long-term Frequency Stability		Max. ±1.0×10 <sup>-6</sup> /year	
Enable/Disable Function		Enable : 80%V <sub>CC</sub> to V <sub>CC</sub> ,	Disable : 0V to 20%V <sub>CC</sub>
Specification Number		NSC5227B	NSC5227D

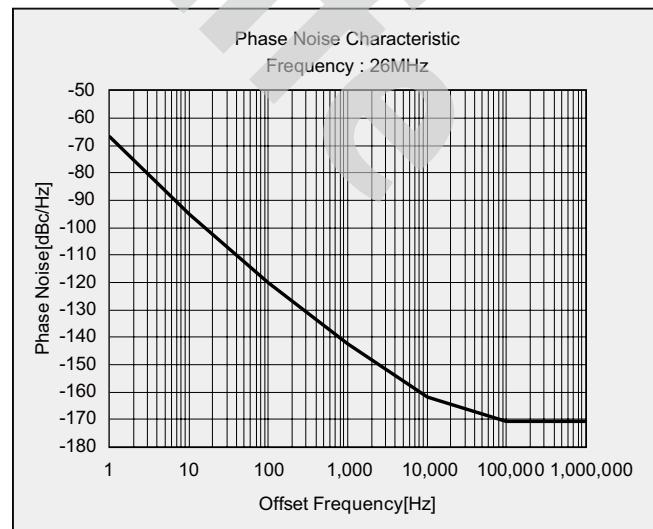
\* Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).

\*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



### Phase noise characteristics



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