Crystal Oscillator



NT1612AJA

Temperature Compensated Crystal Oscillator(TCXO) with ultra-low phase noise characteristics and Stand-by 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.
 (-168dBc/Hz @100kHz offset, 26MHz)
- 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 cm³, and 0.004 g, respectively.
- With 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.





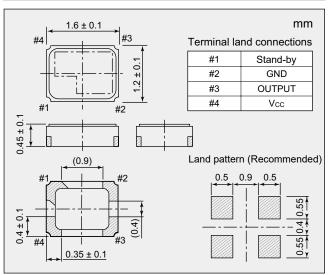


■ Specifications

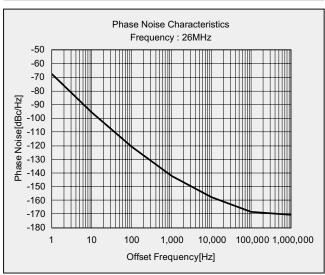
Item Model		NT1612AJA		
Nominal frequency Range (MHz)		24 to 104		
Standard Frequency (MHz)		26	52	76.8
Supply Voltage [Vcc] (V)		+1.8		
Load Impedance		10 kΩ//10 pF		
Current Consumption	During Operation (mA)	Max. 2.5	Max. 3.0	Max. 5.0
	During Standby (µA)	Max. 4.0		Max. 5.0
Output Voltage		Min. 0.8 V(p-p) (DC Coupling *1)		
Frequency/Temperature Characteristics		Max. ±0.5×10 ⁻⁶		
Operating Temperature Range (°C)		-30 to +85		
Storage Temperature Range (°C)		-40 to +85		
Frequency/Voltage Coefficient		Max. ±0.2×10 ⁻⁶ /+1.8 V±5 %		
Frequency/Load Coefficient		Max. ±0.2×10 ⁻⁶ /(10 kΩ//10 pF) ±10 %		
Long-term Frequency Stability		Max. ±1.0×10⁻⁶/year		Max. ±2.0×10⁻⁶/year
Standby Function		Oscillation output ON: 80%Vcc to Vcc, High impedance: 0V to 20% Vcc		ance : 0V to 20% Vcc
Specification Number		NSC5228A	NSC5228B	NSC5228C

[•] Frequency setting conditions : Frequencies are set at normal temperatures (+25±2 °C).

■ 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.

^{*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.