Crystal Oscillator

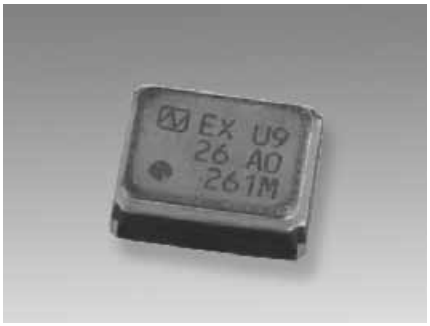
Crystal Bridge to the Future

NT2520SB

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 +1.7 V to +3.3 V.)
- Compact and light with a height, cubic volume, and weight of Max. 0.9 mm, 0.004 cm^3, and 0.014 g, respectively.
- 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.
- With an AFC (Automatic Frequency Control) function.

Pb Free

RoHS Compliant Directive 2011/65/EU

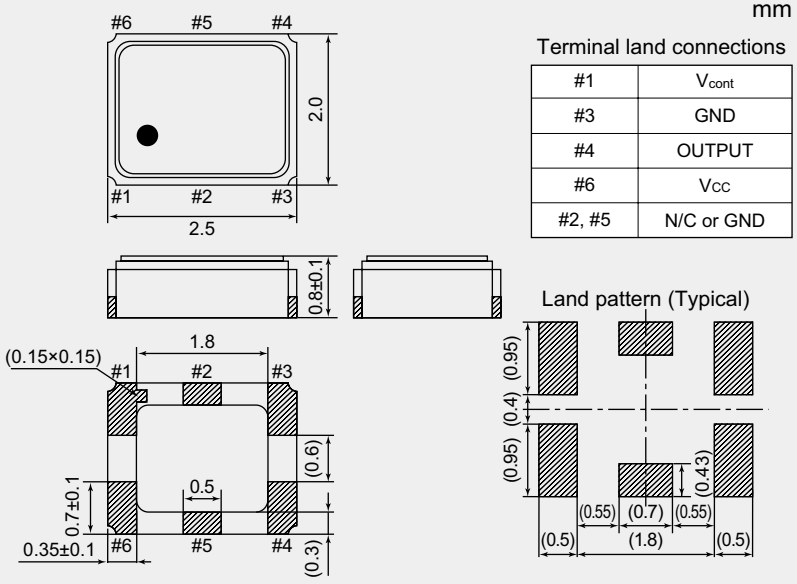
■ Specifications

Item \ Model	NT2520SB						
Nominal Frequency (MHz)	10 to 52						
Standard Frequency (MHz)	16.368	16.369	19.2	26	33.6	38.4	52
Supply Voltage [V_{CC}] (V)	+1.8, +2.8						
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. $\pm2.0\times10^{-6}$						
Operating Temperature Range (°C)	–30 to +85						
Storage Temperature Tange (°C)	–40 to +85						
Frequency/Voltage Coefficient	Max. $\pm0.2\times10^{-6}/V_{CC}\pm5$ %						
Frequency/Load Coefficient	Max. $\pm0.2\times10^{-6}$/(10 kΩ//10 pF) ±10 %						
Long-term Frequency Stability	Max. $\pm1.0\times10^{-6}$/year						
Frequency Control Range	±8.0 to $\pm13.0\times10^{-6}$/+0.9 V ± 0.8 V (Supply voltage : +1.8V) ±9.0 to $\pm15.0\times10^{-6}$/+1.4 V ± 1.0 V (Supply voltage : +2.8V)						

•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



Terminal land connections

#1	V_{cont}
#3	GND
#4	OUTPUT
#6	V_{CC}
#2, #5	N/C or GND

■ List of Ordering Codes

Frequency (MHz)	Ordering Code	
	+1.8V	+2.8V
16.368	NSA3638A	NSA3637A
16.369	NSA3638A	NSA3637A
19.2	NSA3638A	NSA3637A
26	NSA3638B	NSA3637B
33.6	NSA3638B	NSA3637B
38.4	NSA3638C	NSA3637C
52	NSA3638D	NSA3637D

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