

## NV13M09WN

Voltage Controlled Crystal Oscillator (VCXO)

### Main Application

For basestation

### Features

- SMD crystal oscillator with a glass epoxy circuit board and a metal lid.
- Frequency range : 75 to 800MHz. A wide frequency band. (PECL)
- Low jitter(Max. 1ps)
- Fundamental crystal units are designed. (Frequency Multiplying Model from 210MHz)
- Enable/Disable function is optional.
- Low power supply voltage (+3.3 V)

Pb Free

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

### Specifications

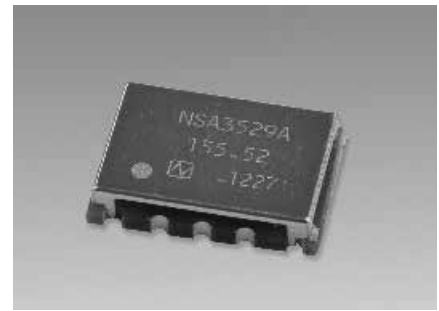
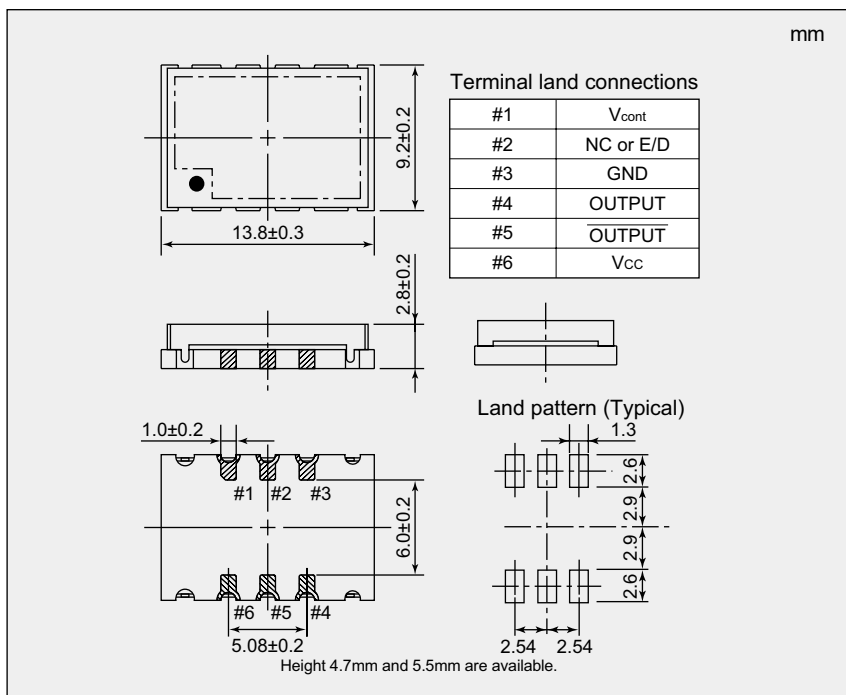
Item	Model	NV13M09WN
Nominal Frequency Range (MHz)		75 ≤ f < 800
Supply Voltage [V <sub>CC</sub> ](V)		+3.3V±10%
Control Voltage [V <sub>cont</sub> ](V)		+1.65±1.5
Current Consumption (mA)		Max. 65
Output Voltage		V <sub>OH</sub> : Min. V <sub>CC</sub> -1.02 V , V <sub>OL</sub> : Max. V <sub>CC</sub> -1.60 V
Symmetry (%)		45 to 55 (at 50%V <sub>out</sub> )
Rise Time / Decay (Fall) Time		Max.1ns (20% to 80%)
Output Load Condition (PECL)		50Ω (V <sub>CC</sub> -2V)
Operating Temperature Range (°C)		-40 to +85
Storage Temperature Range (°C)		-40 to +85
Overall Frequency Tolerance (*)		Max. ±50×10 <sup>-6</sup>
Frequency Control Range		Min. ±100×10 <sup>-6</sup>
Frequency Change Polarity		Positive
Linearity of Frequency Modulation Deviation		Max. 5%
Input Impedance		Min. 100kΩ
Phase Jitter		Max. 1ps (12kHz to 200MHz)

(\*) Overall frequency tolerance includes "frequency/temperature characteristics", "Frequency tolerance", "Frequency/voltage coefficient", "Frequency/load coefficient" and "Long-term frequency stability(1 year)".

\* Please specify products with or without Enable/Disable function.

\* Please do not reflect the board upside down after mounting this product.  
(The product itself or the cover may fall off.)

### Dimensions



### List of Enable / Disable function

Input (#2)
Low (V <sub>IL</sub> ≤ V <sub>CC</sub> -1.5V) or NC
High (V <sub>IH</sub> ≥ V <sub>CC</sub> -1.1V)
Output (#4, #5)
Nominal frequency Output
High Z

### Specification Number

Frequency (MHz)	Specification Number	
	Without Enable/Disable function	With Enable/Disable function
100	NSA3529A	NSA3529C
106.25		
122.88		
125		
155.52		
156.25		
160		
167.3336		
167.33		
200		
245.76		
320		
368.64		
491.52		
622.08		
640		
644.5313		
666.5143		
669.3266		
672.1627		
693.483		
696.4215		
698.8123		
764.4203		
777.6		
792.0087		
794.728		
800		

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