

# Crystal Oscillator

## Model Name NV11M09YA

Voltage-Controlled Crystal Oscillator (VCXO) NV11M09Y Series

### Main Application

For , SDH-, and SONET-related equipment.

### Features

- Frequency range : 60 to 800MHz. A wide frequency band. (PECL)
- Fundamental crystal units are designed.(Frequency Multiplying Model from 210MHz)
- Low jitter(Max. 1ps)
- Enable/Disable function is optional.
- Low power supply voltage(+3.3 V)

Pb Free

RoHS Compliant  
Directive 2011/65/EU



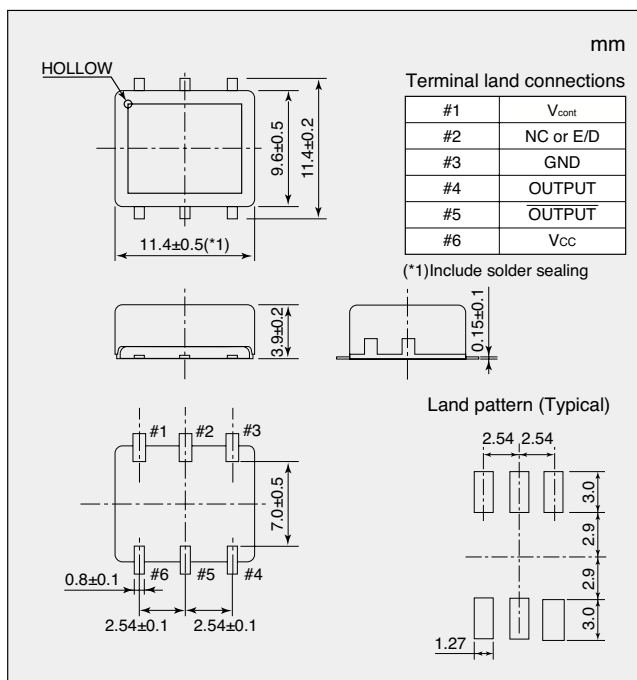
### Specifications

Item	Model	NV11M09YA
Nominal frequency range (MHz)		60 to 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 (TTL)		50Ω(V <sub>CC</sub> - 2V)
Operating temperature Range (°C)		-40 to +85
Storage temperature range (°C)		-55 to +125
Overall frequency tolerance (*1)		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 20MHz)

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

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

### Dimensions



### List of Enable / Disable function.

Input (#2)	Output (#4, #5)
Low (V <sub>IL</sub> ≤ V <sub>CC</sub> -1.475) or NC	Nominal frequency Output
High (V <sub>IH</sub> ≥ V <sub>CC</sub> -1.165)	High Z

### ■ List of Ordering Codes

Ordering Code depends on with or without Enable/Disable function.

Frequency (MHz)	Ordering Code	
	Without Enable/Disable function	With Enable/Disable function
100	NV11M09YA-100M-NSA3475A	NV11M09YA-100M-NSA3475C
106.25	NV11M09YA-106.25M-NSA3475A	NV11M09YA-106.25M-NSA3475C
122.88	NV11M09YA-122.88M-NSA3475A	NV11M09YA-122.88M-NSA3475C
125	NV11M09YA-125M-NSA3475A	NV11M09YA-125M-NSA3475C
155.52	NV11M09YA-155.52M-NSA3475A	NV11M09YA-155.52M-NSA3475C
156.25	NV11M09YA-156.25M-NSA3475A	NV11M09YA-156.25M-NSA3475C
167.3316	NV11M09YA-167.3316M-NSA3475A	NV11M09YA-167.3316M-NSA3475C
184.32	NV11M09YA-184.32M-NSA3475A	NV11M09YA-184.32M-NSA3475C
200	NV11M09YA-200M-NSA3475A	NV11M09YA-200M-NSA3475C
245.76	NV11M09YA-245.76M-NSA3475B	NV11M09YA-245.76M-NSA3475D
368.64	NV11M09YA-368.64M-NSA3475B	NV11M09YA-368.64M-NSA3475D
491.52	NV11M09YA-491.52M-NSA3475B	NV11M09YA-491.52M-NSA3475D
622.08	NV11M09YA-622.08M-NSA3475B	NV11M09YA-622.08M-NSA3475D
644.5313	NV11M09YA-644.5313M-NSA3475B	NV11M09YA-644.5313M-NSA3475D
666.5143	NV11M09YA-666.5143M-NSA3475B	NV11M09YA-666.5143M-NSA3475D
669.3266	NV11M09YA-669.3266M-NSA3475B	NV11M09YA-669.3266M-NSA3475D
693.483	NV11M09YA-693.483M-NSA3475B	NV11M09YA-693.483M-NSA3475D
777.6	NV11M09YA-777.6M-NSA3475B	NV11M09YA-777.6M-NSA3475D
800	NV11M09YA-800M-NSA3475B	NV11M09YA-800M-NSA3475D

The above frequencies are NDK's standard frequencies.  
 Frequencies other than the above are available.  
 Feel free to contact our sales representatives.