

## Model Name NV7050SA

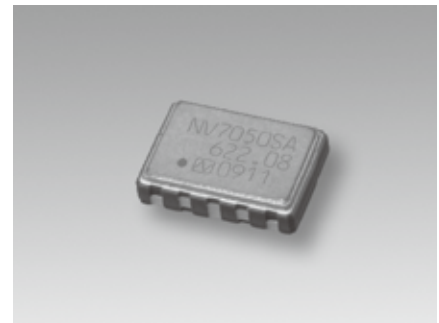
## Voltage-Controlled Crystal Oscillator (VCXO)

### ■ Main Application

For SONET-, SDH-, and GbEthernet-related equipment

### ■ Features

- A ceramics-package(Dimensions : 7.0×5.0mm). Frequency up to 700 MHz .
- Wide Pull Range: Absolute Pull Range(APR): Min.  $\pm 100 \times 10^{-6}$
- Low power supply voltage(+3.3 V)



Pb Free

RoHS Compliant  
Directive 2011/65/EU

### ■ Specifications

Item	Model	NV7050SA	
Nominal frequency range [f] (MHz)		$170 \leq F < 400$	$400 \leq F \leq 700$
Supply voltage [V <sub>CC</sub> ] (V)		+3.3 ±10%	
Current consumption (mA)		Max. 100	
Output level		LVPECL	
Symmetry (%)		40 to 60 (at 50 % V <sub>out</sub> )	
Output load condition		50Ω ( V <sub>CC</sub> - 2.0V)	
Operating temperature range (°C)		-40 to +85	
Storage temperature range (°C)		-55 to +125	
Overall frequency tolerance		Max. $\pm 50 \times 10^{-6}$	
Absolute Pull Range(APR) / Control voltage		Min. $\pm 100 \times 10^{-6}$ / +1.65±1.65V	
Frequency change polarity		Positive	
Input impedance		Min. 100kΩ	
		Max. 100fs (12kHz to 20MHz)	Max. 150fs (12kHz to 20MHz)

### ■ List of Stand-by function

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

### ■ List of Ordering Codes

Frequency (MHz)	Ordering Code
200	NV7050SA-200M-NSA3459B
204.8	NV7050SA-204.8M-NSA3459B
245.76	NV7050SA-245.76M-NSA3459B
311.04	NV7050SA-311.04M-NSA3459B
368.64	NV7050SA-368.64M-NSA3459B
400	NV7050SA-400M-NSA3459A
409.6	NV7050SA-409.6M-NSA3459A
491.52	NV7050SA-491.52M-NSA3459A
614.4	NV7050SA-614.4M-NSA3459A
622.08	NV7050SA-622.08M-NSA3459A
644.5313	NV7050SA-644.5313M-NSA3459A
666.5143	NV7050SA-666.5143M-NSA3459A
669.3266	NV7050SA-669.3266M-NSA3459A
672.1627	NV7050SA-672.1627M-NSA3459A
690.5692	NV7050SA-690.5692M-NSA3459A
693.483	NV7050SA-693.483M-NSA3459A
696.4215	NV7050SA-696.4215M-NSA3459A
700	NV7050SA-700M-NSA3459A

### ■ Reference Value

Phase noise	Offset Frequency	Typ. (622.08 MHz)
	10 Hz	-44 dBc/Hz
	100 Hz	-73 dBc/Hz
	1 kHz	-101 dBc/Hz
	10 kHz	-123 dBc/Hz
	100 kHz	-142 dBc/Hz
	1 MHz	-151 dBc/Hz

The value of phase noise changes when the frequency changes.

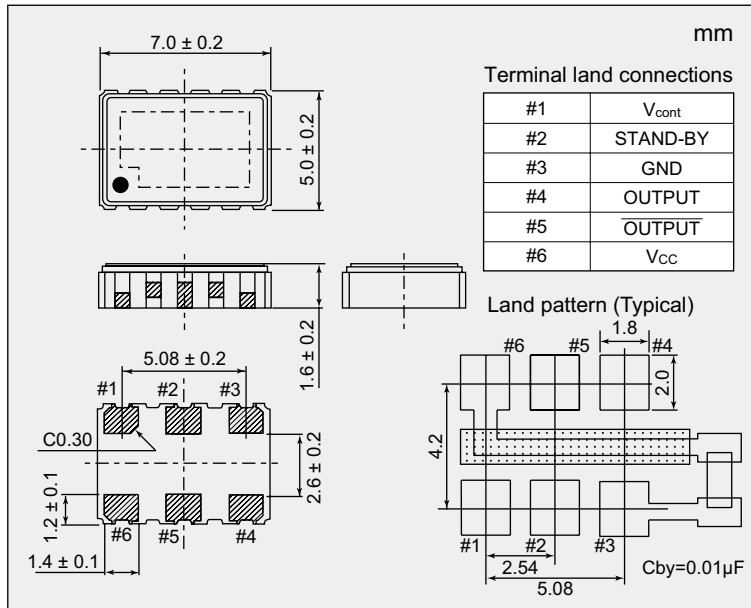
The above frequencies are NDK's standard frequencies.  
Frequencies other than the above are available.  
Feel free to contact our sales representatives.

# Crystal Oscillator

## Model Name NV7050SA

Voltage-Controlled Crystal Oscillator (VCXO)

### ■ Dimensions



### ■ Phase noise characteristic

