

NP7050S[]

Multi Mode Simple Packaged Crystal Oscillator (SPXO)

Main Application

Base-stations, GbEthernet, Optical transmission device, and Server

Features

- Supports a wide frequency range. (15 to 2100MHz (Frequency tuning resolution 2×10^{-9}))
- Frequency selection function (Dual, Quad, Any Rate)
- Low jitter : Typ. 130fs rms (@622.08MHz)
- Five types of output levels : CMOS, LVPECL, LVDS, CML, HCSL
- Supports low power supply voltage : +1.8V, +2.5V, +3.3V



Pb Free

RoHS Compliant
Directive 2011/65/EU

Specifications

Item	Model	NP7050S[]				
Frequency Selection Function		Single (No selection function) Dual (Select from 2 frequencies) Quad (Select from 4 frequencies) Any Rate (Setable desired frequency by I2C)				
Nominal Frequency Range (MHz)		15 ≤ f ≤ 2100				
		15 ≤ f ≤ 2100	15 ≤ f ≤ 2100	15 ≤ f ≤ 2100	15 ≤ f ≤ 700	15 ≤ f ≤ 200
Output Voltage		LVPECL	LVDS	CML	HCSL	CMOS
Current Consumption (mA)		Max. 95	Max. 85	Max. 80	Max. 100	Max. 85
Output Load Condition		50Ω(V _{CC} -2.0V)	100Ω	50Ω(V _{CC})	50Ω	15pF
Supply Voltage [V _{CC}] (V)		+1.8V±5% +2.5V±5% +3.3V±10%				
Enable/Disable function		Enable Low Enable High None				
Operating Temperature Range (°C)		-40 to +85				
Storage Temperature Range (°C)		-55 to +125				
Overall Frequency Tolerance (*)		Narrow stability		Standard stability		
		Max. ±10×10 ⁻⁶ Max. ±20×10 ⁻⁶		Max. ±50×10 ⁻⁶		
Phase Jitter (fs) (12kHz to 20MHz)		Narrow stability			Standard stability	
	V _{CC} +3.3V, LVPECL 156.25MHz	Typ. 177			Typ. 148	

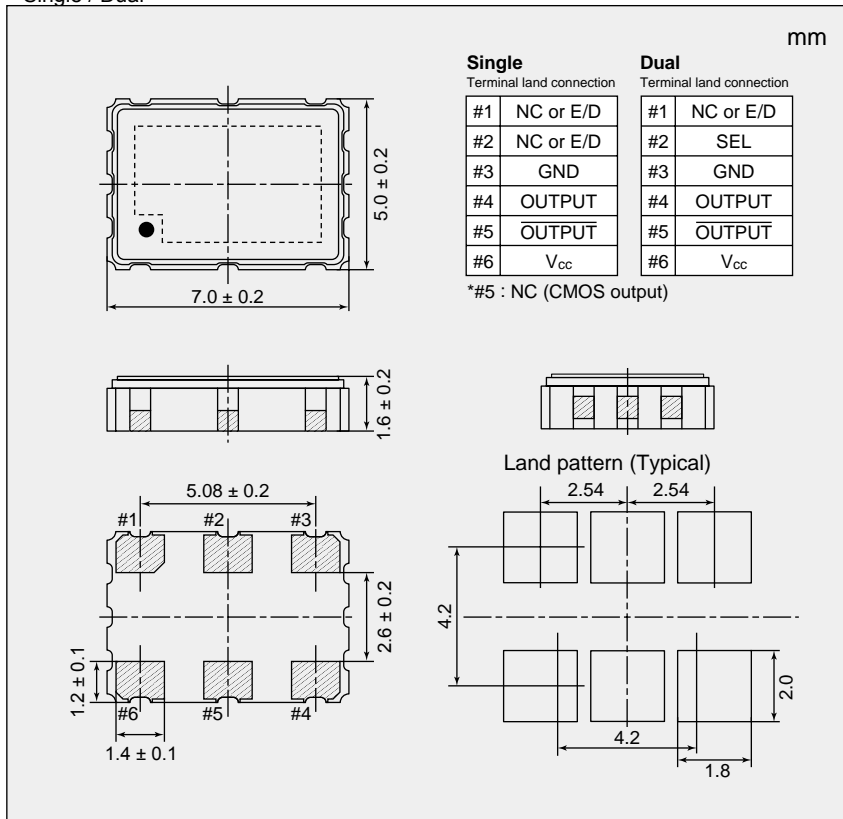
(*1) Overall frequency tolerance includes "Frequency/temperature characteristics", "Initial frequency tolerance", "Frequency/voltage coefficient", and "Long-term frequency stability(10 year)".

NP7050S□

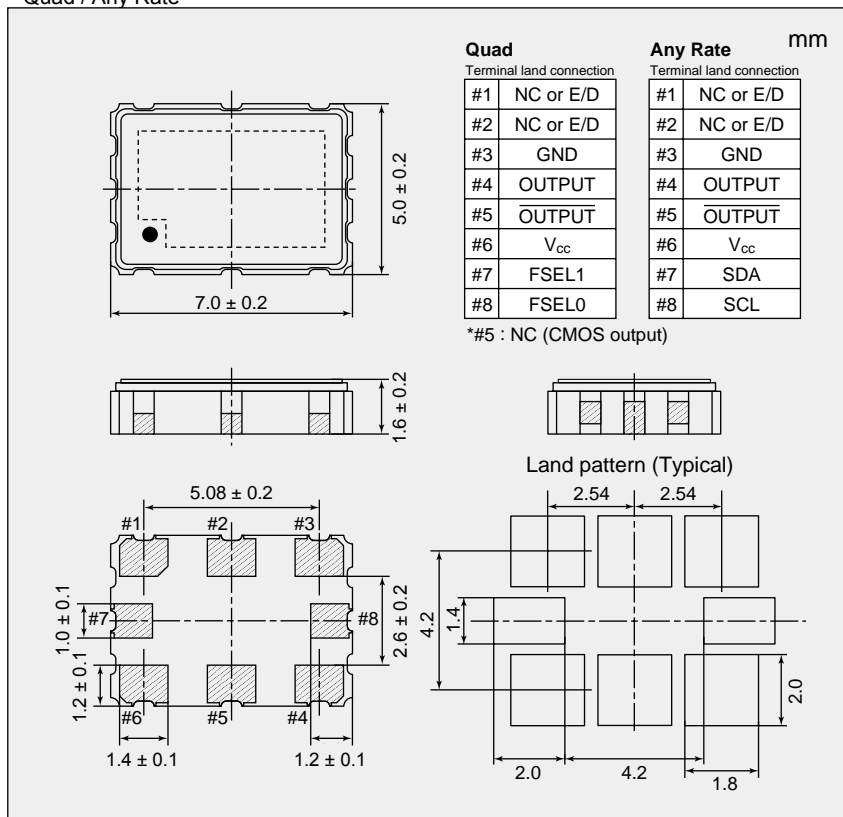
Multi Mode Simple Packaged Crystal Oscillator (SPXO)

■ Dimensions

• Single / Dual



• Quad / Any Rate



■ Necessary information for inquiry

For question or order of this product, please specify following specifications. If you require a product with specifications not given following, please contact NDK sales.

① — ② ③ ④ ⑤ ⑥ ⑦
(e.g.) NP7050SK - 622.08 A P H D C
① ② ③ ④ ⑤ ⑥ ⑦

① Model

NP7050SK	Single
NP7050SL	Dual
NP7050SM	Quad
NP7050SN	Any Rate

② Frequency

In case of Dual or Quad, please specify one frequency and request other frequency separately. In case of Any Rate, please specify one frequency of initial setting.

Frequency is specified in MHz and four decimal places (Max.).

(e.g.) 644.53125MHz : 644.5313

③ Supply Voltage

A	+3.3V
B	+2.5V
C	+1.8V

④ Output Voltage

C	CMOS
P	LVPECL
L	LVDS
M	CML
H	HCSL

⑤ Enable/Disable function

H	Enable High (#1)
L	Enable Low (#1)
N	None
A	Enable High (#2)
B	Enable Low (#2)

⑥ Overall Frequency Tolerance

B	±10×10 ⁻⁶
C	±20×10 ⁻⁶
D	±50×10 ⁻⁶

⑦ Operating Temperature Range

A	-40 to +85°C
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