Crystal Oscillator

NDK Crystal Bridge to the Future

NP5032SA

Simple Packaged Crystal Oscillator (SPXO)

■ Main Application

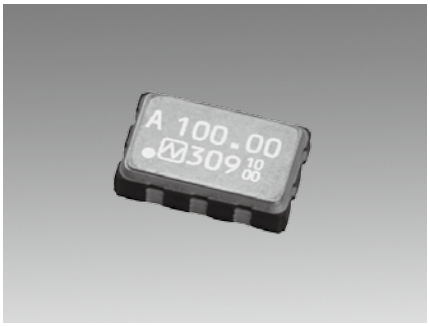
For SONET-, SDH-, and GbEthernet-related equipment

■ Features

- Differential Output SPXO
- Compact dimension : 5.0 × 3.2 × 1.2 mm.
- Supply voltage : +2.5V or +3.3V
- Output Specification : LVPECL
- Excellent low phase jitter.(Typ. 0.08ps @148.5MHz)

Pb Free

RoHS Compliant
Directive 2011/65/EU

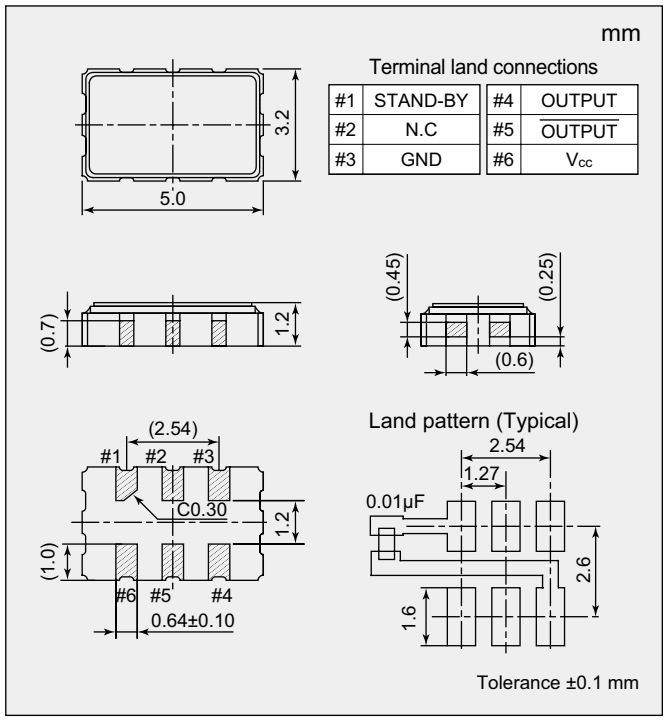


■ Specifications

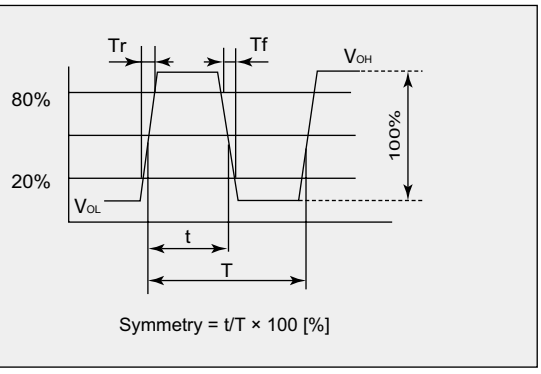
Item \ Model		NP5032SA					
Output Specification		LVPECL					
Nominal Frequency Range (MHz)		100 to 170					
Overall Frequency Tolerance *1		Max. ±25 ×10^{-6}		Max. ±50 ×10^{-6}		Max. ±100 ×10^{-6}	
Operating Temperature Range (°C)		0 to +70		0 to +85		–40 to +85	
Storage Temperature Range (°C)		–55 to +125					
Supply Voltage [V_{CC}] (V)		+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %
Current Consumption	Enable (mA)	Max. 60 (STAND-BY=V_{CC} or OPEN, R_L=50Ω)					
	Stand-by (μA)	Max. 30 (STAND-BY=GND)					
Output Voltage (V)		V_{OL} : V_{CC} –1.81 to V_{CC} –1.62 (DC characteristics)					
		V_{OH} : V_{CC} –1.025 to V_{CC} –0.88 (DC characteristics)					
Rise Time / Fall Time (ns)		Max. 1 (20 to 80% Waveform)					
Symmetry (%)		45 to 55 (at 50% Waveform)					
Output Load (Ω)		50 (Terminated to V_{CC}–2.0V)					
Phase Jitter (ps)		Max. 1 (Offset frequency : 12kHz to 20MHz)					
Specification Number		NSC5105A	NSC5106A	NSC5105B	NSC5106B	NSC5105C	NSC5106C

*1 : The frequency stability includes initial frequency tolerance, temperature variation, and supply variation.

■ Dimensions



■ Output waveform



■ Standby Function Table (Three-state)

#1 Input	#4 and #5 output
Level H (V_{IH} ≥ 0.7 V_{cc}) or OPEN	Oscillation output ON
Level L (V_{IL} ≤ 0.3 V_{cc})	High impedance

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