

## NP5032SB

Simple Packaged Crystal Oscillator (SPXO)

### Main Application

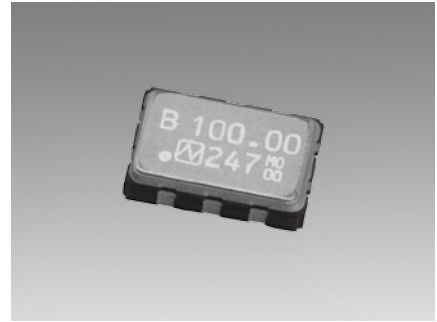
For SONET-, SDH-, and GbEthernet-related equipment

### Features

- Compact dimension : 5.0 × 3.2 × 1.2 mm.
- Supply voltage : +2.5V or +3.3V
- LVDS output level
- Low current consumption (Typ. 36mA)
- Excellent low phase jitter (Typ. 0.15ps @156.25MHz)

Pb Free

RoHS Compliant  
Directive 2011/65/EU

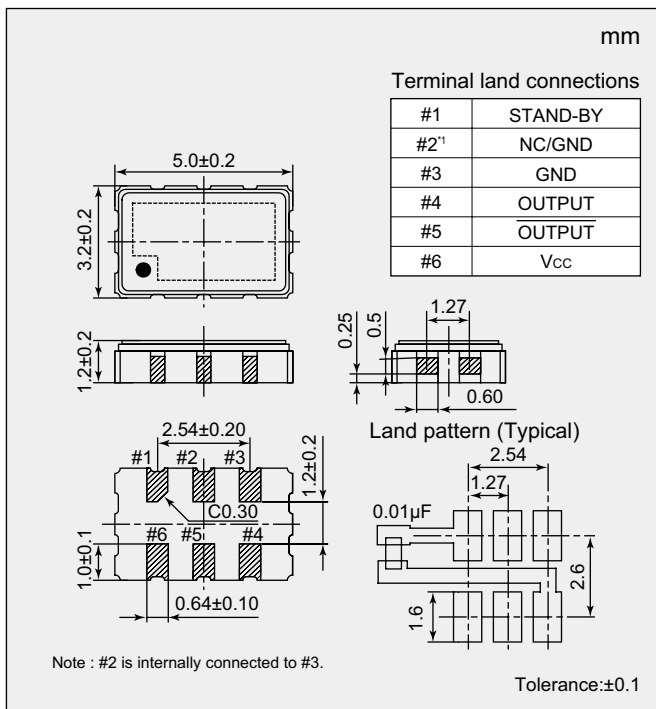


### Specifications

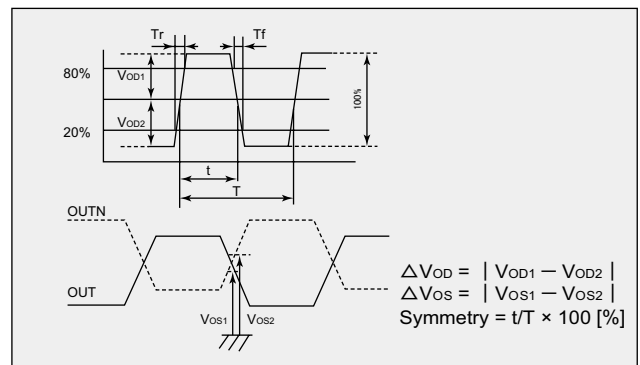
Item	Model	NP5032SB					
Output Type		LVDS					
Nominal Frequency Range (MHz)		100 to 161					
Overall Frequency Tolerance *1		Max. ±25 × 10 <sup>-6</sup>		Max. ±50 × 10 <sup>-6</sup>		Max. ±100 × 10 <sup>-6</sup>	
Operating Temperature Range (°C)		0 to +70		0 to +85		0 to +85	
Storage Temperature Range (°C)		-55 to +125					
Supply Voltage [V <sub>cc</sub> ] (V)		+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %
Current Consumption	Enable (mA)	Max. 40 (Typ. 10) (STAND-BY=V <sub>cc</sub> or OPEN, R <sub>L</sub> =100 Ω)					
	Stand-by (µA)	Max. 30 (STAND-BY=GND)					
Output Voltage		V <sub>OD1</sub> , V <sub>OD2</sub> : 0.247 to 0.454V (Differential output voltage)					
		ΔV <sub>OD</sub> : Max. 50mV (Output change)					
		V <sub>OS1</sub> , V <sub>OS2</sub> : 1.125 to 1.375V (Offset voltage, DC characteristics)					
		ΔV <sub>OS</sub> : Max. 50mV (Offset voltage, DC characteristics)					
Rise Time / Fall Time (ns)		Max. 1 (20 to 80% Waveform)					
Symmetry (%)		45 to 55 (at 50% Waveform)					
Output Load (Ω)		100 (Connected between out and complementary out)					
Phase Jitter (ps)		Max. 1 (Typ. 0.15) (Offset frequency : 12kHz to 20MHz)					
Specification Number		NSA3510E	NSA3510F	NSA3510C	NSA3510D	NSA3510A	NSA3510B

\*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 <sub>IH</sub> ≥ 0.7 V <sub>cc</sub> ) or OPEN	Oscillation output ON
Level L (V <sub>IL</sub> ≤ 0.3 V <sub>cc</sub> )	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.