

NP3225SB

Simple Packaged Crystal Oscillator (SPXO)

■ Main Application

For Automotive CCD camera, Image processing, Memory, FPGA, Ground equipment for satellite communication and Digital terrestrial television broadcasting equipment

■ Features

- Differential Output SPXO
- Compact dimension $3.2 \times 2.5 \times 0.9$ mm
- Supply Voltage : +2.5V or +3.3V
- Output Specification : LVDS
- Excellent low phase jitter (Typ. 120fs @156.25MHz)

Pb
Free

RoHS Compliant
Directive 2011/65/EU



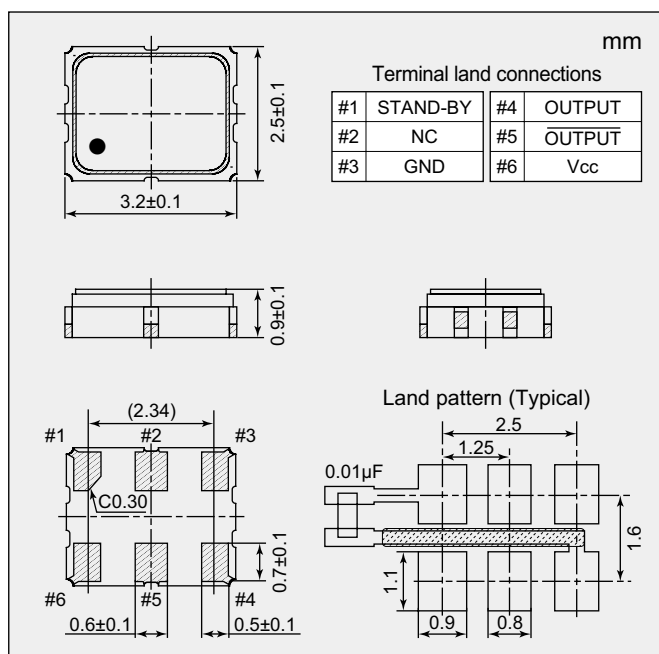
Absolute maximum rating
Supply Voltage (V_{CC}) -0.3 to +4.0 V
Storage Temperature Range -55 to +125 °C

■ Specifications

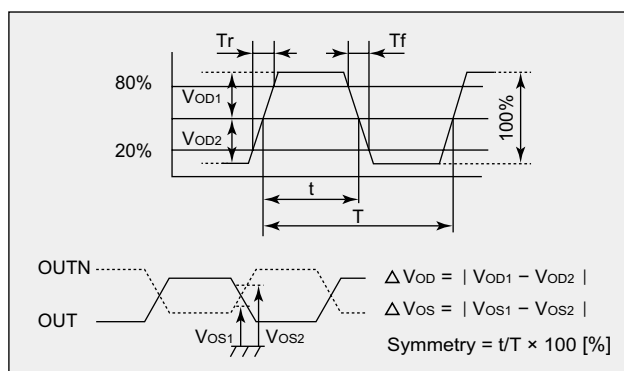
Item	Model	NP3225SB
Output Specification		LVDS
Nominal Frequency Range (MHz)		100 to 170
Overall Frequency Tolerance *1		Max. $\pm 50 \times 10^{-6}$
Operating Temperature Range (°C)		-40 to +85
Supply Voltage [V_{CC}] (V)		+2.5 $\pm$ 5 % +3.3 $\pm$ 10 %
Current Consumption	Enable (mA)	Max. 40 (STAND-BY= V_{CC} or OPEN, $R_L=100\Omega$)
	Stand-by (μ A)	Max. 15 (STAND-BY=GND)
Output Voltage (V)		$V_{OD1} : V_{OD2} : +0.247$ to $+0.454$ V (Differential output voltage) $\Delta V_{OD} : \text{Max. } 50\text{mV}$ (Differential output voltage) $V_{OS1}, V_{OS2} : +1.125$ to $+1.375$ V (Differential output voltage) $\Delta V_{OS} : \text{Max. } 50\text{mV}$ (Differential output voltage)
Rise Time / Fall Time (ns)		Max. 0.4 (20 to 80% Waveform)
Symmetry (%)		45 to 55 (at 50% Waveform)
Output Load [R_L] (Ω)		100 (Differential output voltage)
Start-up Time (ms)		Max. 10
Phase Jitter (ps)		Max. 1 (Offset Frequency : 12kHz to 20MHz)
Specification Number		NSC5081A NSC5081B

*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 ($V_{IH} \geq 0.7 V_{CC}$) or OPEN	Oscillation output ON
Level L ($V_{IL} \leq 0.3 V_{CC}$)	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.