

NP3225SB

Simple Packaged Crystal Oscillator (SPXO)

Main Application

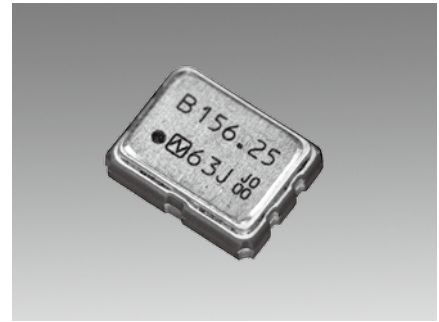
For Automotive CCD camera, Image processing, Memory, FPGA, Ground equipment for satellite communication and Digital terrestrial television broadcasting equipment

Features

- Differential Output SPXO
- Compact dimension 3.2 × 2.5 × 0.9 mm
- Supply Voltage : +2.5V or +3.3V
- Output Specification : LVDS
- Excellent low phase jitter (Typ. 100fs @156.25MHz)
- Conforms to AEC-Q200

Pb Free

RoHS Compliant
Directive 2011/65/EU



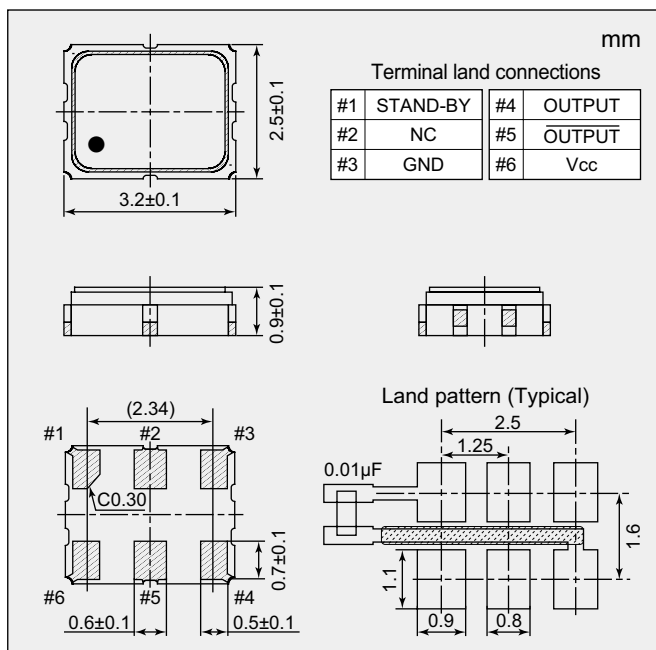
Absolute maximum rating
Supply Voltage (V_{CC}) -0.3 to +4.0 V
Storage Temperature Range -55 to +125 °C

Specifications

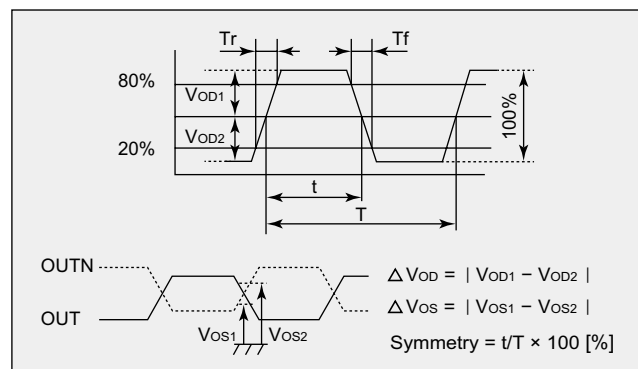
Item	Model	NP3225SB			
Output Specification		LVDS			
Nominal Frequency Range (MHz)		100 to 175			
Overall Frequency Tolerance *1		Max. ±50 × 10 ⁻⁶			
Operating Temperature Range (°C)		-40 to +85		-40 to +105	
Supply Voltage [V _{CC}] (V)		+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %
Current Consumption	Enable (mA)	Max. 40 (STAND-BY=V _{CC} or OPEN, R _L =100Ω)			
	Stand-by (µA)	Max. 15 (STAND-BY=GND)			
Output Voltage		V _{OD1} : V _{OD2} : +0.247 to +0.454V (Differential output voltage)			
		ΔV _{OD} : Max. 50mV (Differential output voltage)			
		V _{OS1} , V _{OS2} : +1.125 to +1.375V (Differential output voltage)			
		ΔV _{OS} : Max. 50mV (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	NSC5190A	NSC5190B

*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.