

NP3225SB

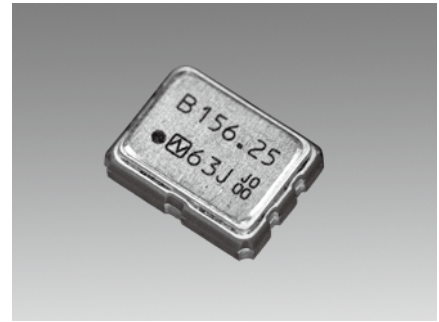
Simple Packaged Crystal Oscillator (SPXO)

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
Directive (EU) 2015/863

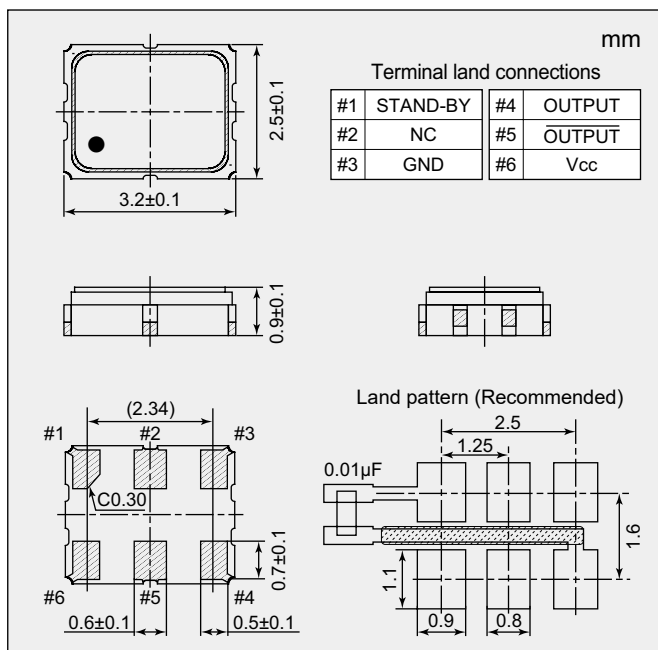
Absolute maximum rating
Supply Voltage (V_{CC}) -0.3 to +4.0 V
Storage Temperature Range -55 to +125 °C

Specifications

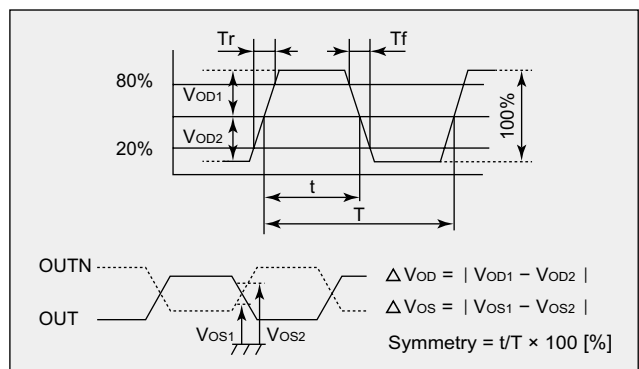
Item	Model	NP3225SB							
Output Specification		LVDS							
Nominal Frequency Range (MHz)		50, 100 to 175				175 to 220			
Overall Frequency Tolerance *1		Max. ±50 × 10 ⁻⁶							
Operating Temperature Range (°C)		-40 to +85		-40 to +105		-40 to +85		-40 to +105	
Supply Voltage [V _{CC}] (V)		+2.5 ± 5 %	+3.3 ± 10 %	+2.5 ± 5 %	+3.3 ± 10 %	+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)		Max. 30 (STAND-BY=GND)		Max. 15 (STAND-BY=GND)		Max. 30 (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		NSC5343A	NSC5343B	NSC5344A	NSC5344B	NSC5236A	NSC5236B	NSC5238A	NSC5238B

*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. Please note that the "specification number" posted is subject to change.