

NP2520SBB

Simple Packaged Crystal Oscillator (SPXO)

Main Application

For 5G compatible device, Optical Communication, Optical Transceiver, WDM equipment

Features

- Differential Output SPXO
- Compact dimension 2.5 × 2.0 × 0.8 mm
- Supply Voltage : +2.5V or +3.3V
- Output Specification : LVDS
- Excellent low phase jitter
(Max. 60fs @156.25MHz)

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

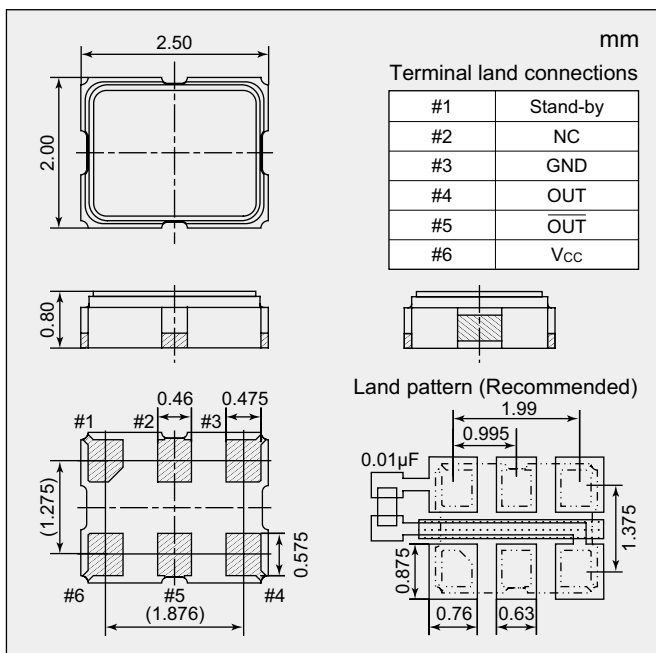


Specifications

Item	Model	NP2520SBB
Output Specification		LVDS
Nominal Frequency Range (MHz)		100 to 170
Standard Frequency(MHz)		156.25
Overall Frequency Tolerance *1		Max. ±50 ×10 ⁻⁶
Operating Temperature Range (°C)		-40 to +85
Supply Voltage [V _{CC}] (V)		+2.5 ± 5 % +3.3 ± 10 %
Current Consumption	Enable (mA) +25°C	Max. 40 (STAND-BY=V _{CC} or OPEN, R _L =100Ω)
	Stand-by (µA) +25°C	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 (fs)	+3.3V, +25°C	Max. 60 (156.25MHz) (Offset Frequency : 12kHz to 20MHz)
Specification Number		NSC5327A NSC5327B

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

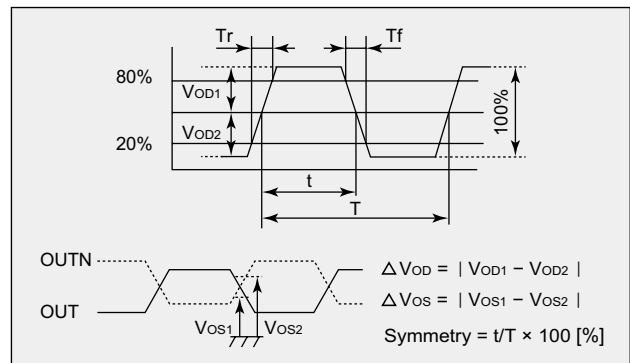
Dimensions



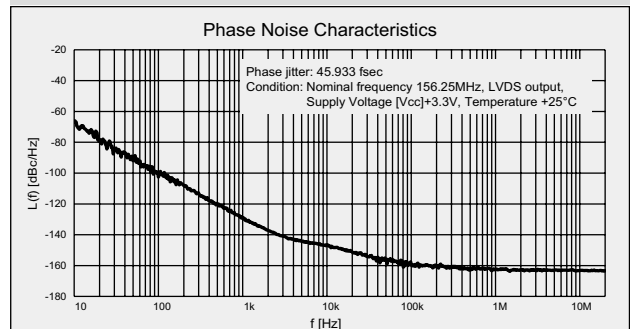
Standby Function Table (Three-state)

#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

Output waveform



Phase Noise Characteristics



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