

Crystal Clock Oscillator

NZ2520SDA

Ultra Low Phase Noise Type

■ Application

- For High-quality-audio, Smartphone, Tablet computers, Wireless module, Notebook PC and DSC

■ Features

- Ultra low phase noise make this product ideal for High quality audio.
- Compact and light. Dimensions : 2.5 x 2.0 x 0.9 mm, weight : 0.02 g.
- Wide frequency range: 20 to 50 MHz.
- Low phase jitter (Typ. 43fs (Frequency Offset to 12kHz to 20MHz)@49.152MHz, 3.3V)
- Automatic mounting by taping and IR reflow (lead-free) are possible.
- Lead-free.

Pb
Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863



Absolute maximum rating
Supply Voltage (V_{CC}) -0.6 to +6.0 V
Storage Temperature Range -55 to +125 °C

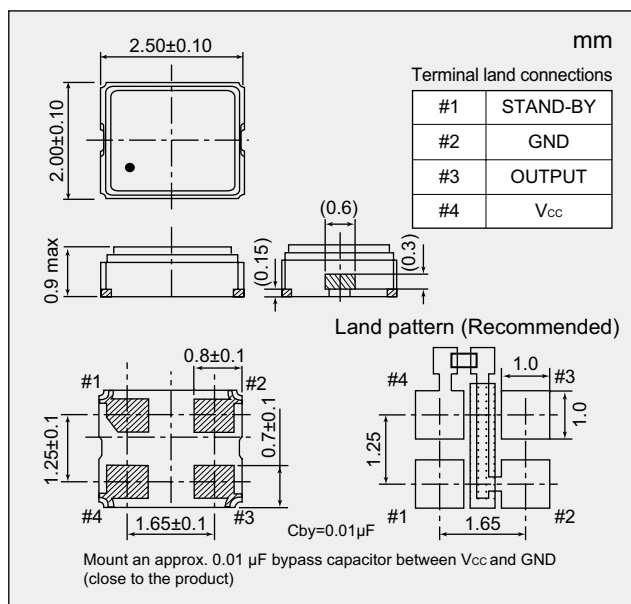
■ Specifications

Item			Model	NZ2520SDA
Output Specification				CMOS
Nominal Frequency Range		(MHz)		20 ≤ F ≤ 50
Overall Frequency Tolerance		(×10 ⁻⁶)		±50
Operating Temperature Range		(°C)		-40 to +85
Supply Voltage		(V)		+1.8 to +3.3
Current Consumption Max.	During Operation	+25 °C	(mA)	15
	During Standby	+25 °C	(μA)	35
V _{OL} Max. / V _{OH} Min.		(V)		0.1 V _{CC} / 0.9 V _{CC}
Tr Max. / Tf Max.		(ns)		6 / 6
Symmetry Min. to Max.		(%)		40 to 60
Load (C _L) Max.		(pF)		15
Start-up Time Max.		(ms)		4
Standby function				Available (Three-state)

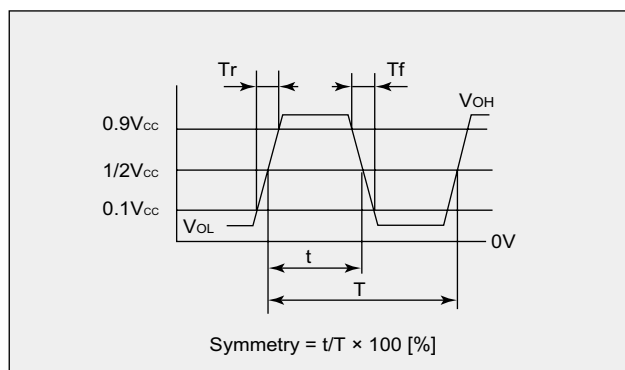
■ Characteristics

			F=22.5792MHz	F=49.152MHz
+1.8V, +25 °C	Fout±1 kHz (Typ.)	(dBc/Hz)	-158	-152
	Fout±100 kHz (Typ.)		-163	-164
+3.3V, +25 °C	Fout±1 kHz (Typ.)		-164	-158
	Fout±100 kHz (Typ.)		-169	-172

■ Dimensions



■ Output Waveform <CMOS>



■ Standby Function

#1 Input	#3 Output
Level H ($0.7 V_{CC} \leq V_{IH} \leq V_{CC}$) or OPEN is selected.	Oscillation output ON
Level L ($V_{IL} \leq 0.3 V_{CC}$) is selected.	High impedance

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■ Specification Number

Overall Frequency Tolerance	Operating Temperature Range(°C)	Supply Voltage (V)			
		+1.8±0.18	+2.5±0.25	+3.0±0.30	+3.3±0.33
±50 × 10 ⁻⁶	-40 to +85	NSC5083A	NSC5083B	NSC5083C	NSC5083D

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.