Crystal Clock Oscillator NEW



NZ2520S Series

■ Model name

NZ2520SB Frequency stability of ±50 x 10⁻⁶.

Application

• For compact mobile information equipment, such as DVC, DSC, notebook PC, and PDA

■ Features

- Size: A minimum-size crystal clock oscillator with dimensions of 2.5 x 2.0 mm.
- Thickness: Ultra-thin with a thickness of 0.9 mm.
- Weight: Weighs only 0.02 g, giving unparalleled light-weight.
- This crystal clock oscillator can support low frequencies (from 1.5 MHz); an achievement not easy for other crystal oscillators of the same size to equal.
 Automatic mounting by taping and IR reflow (lead-free) are possible.
- Lead-free.





Pb

Free

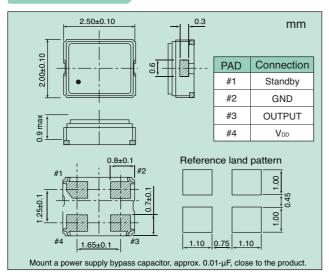
Absolute maximum rating Power supply voltage (VDD)-0.5 to +4.0V DC Storage temperature range -55 to +125°C

■ Specifications

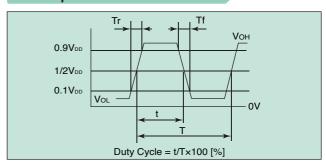
Item Model				NZ2520SB						
Output level				C-MOS						
Frequency range *1 ((MHz)	1.5 ≤ F < 10	10 ≤ F <	20	20 ≤ F < 30	30 ≤ F < 40	40 ≤ F < 50	50 ≤ F ≤ 60
Operating temperature range *2 (°C			(°C)	-10 to +70						
Frequency Stability (×10 ⁻⁶)			(×10 ⁻⁶)	±50						
Power supply voltage			(V)	+1.8±0.1			-2.5±0.1	+3.0±0.	1	+3.3±0.1
Consumption current	During operation	+1.8V, 25°C	(mA)	2.5	3.5		4.0	4.5	5.0	5.5
		+2.5V, 25°C		3.0	4.0		4.5	5.0	5.5	6.0
		+3.0V, 25°C		3.5	4.5		5.0	5.5	6.0	6.5
		+3.3V, 25°C		3.5	4.5		5.0	5.5	6.0	7.0
	During standby	+1.8V, 25°C	(μ A)	10						
		+2.5V, 25°C								
		+3.0V, 25°C								
		+3.3V, 25°C								
V _{OL} max/V _{OH} min (V)			(V)	0. 1V _{DD} /0. 9V _{DD}						
Tr max/Tf max (ns)				5/5						
Duty Cycle min. to max. (%)				45 to 55						
Load (CL) max (pF)				15						
Oscillation start time max (ms)				10						
Standby function				Available (tristate)						
Number for specifying an order				NSA341	2B	NS	SA3413B	NSA3414	4B	NSA3415B

^{*1:} If you require a product with a frequency not given above, please contact us. *2: If you require a product with an operating temperature range not given above, please contact us.

Dimensions



■ Output Waveform <C-MOS>



■ Standby Function

#1 Input	#3 Output
Level H (0.7 V _{DD} ≤ V _{IH} ≤ V _{DD}) or OPEN is selected.	Oscillation output ON
Level L (V∟ ≤ 0.3 Vpp) is selected.	High impedance

■ How to Specify an Order

When ordering our products, specify them with an "Ordering Code" that consists of the following:

Model name - Frequency (up to 9 digits) M- Number for specifying an order

Example 1: When ordering a product with model name: NZ2520SB, frequency: 20 MHz, frequency stability: ±50 x 10⁻⁶, and power supply voltage: 1.8 V Ordering Code: NZ2520SB – 20.00000M – NSA3412B Example 2: When ordering a product with model name: NZ2520SB, frequency: 20 MHZ, frequency stability: ±50 x 10⁻⁶, and power supply voltage: 3.3 V Ordering Code: NZ2520SB – 20.000000M – NSA3415B

If you have any queries concerning our standard frequencies and numbers for specifying orders, please contact our sales representatives or visit our homepage (http://www.ndk.com/).