

Crystal Clock Oscillator **NEW**

NZ2520S Series

Model name

NZ2520SB Frequency stability of $\pm 50 \times 10^{-6}$.

Application

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



**Pb
Free**

RoHS Compliant
Directive 2002/95/EC

Features

- Compact and light. Dimensions and weight: 2.5 x 2.0 mm, 0.9 mm, and 0.02 g.
- 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.

Absolute maximum rating
Power supply voltage (V_{DD}) -0.5 to $+4.0$ V
Storage temperature range -55 to $+125$ °C

Specifications

Item			Model							
			NZ2520SB							
Output level			C-MOS							
Frequency range ^{*1}		(MHz)	$1.5 \leq F < 10$	$10 \leq F < 20$	$20 \leq F < 30$	$30 \leq F < 40$	$40 \leq F < 50$	$50 \leq F < 60$	$60 \leq F < 70$	$70 \leq F \leq 80$
Operating temperature range ^{*2}		(°C)	-40 to $+85$							
Frequency Stability		($\times 10^{-6}$)	± 50							
Current consumption max	During operation	+3.3 V, 25 °C (mA)	3.5	4.5	5.0	5.5	6.0	7.0	8.0	9.0
	During standby	+3.3 V, 25 °C (μ A)	10							
V_{OL} max/ V_{OH} min		(V)	$0.1 V_{DD}/0.9 V_{DD}$							
T_r max/ T_f max		(ns)	5/5							
Duty Cycle min. to max.		(%)	45 to 55							
Load (C_L) max		(pF)	15							
Oscillation start time max		(ms)	4							
Standby function			Available (tristate)							

*1: If you require a product with a frequency not given above, please contact us.

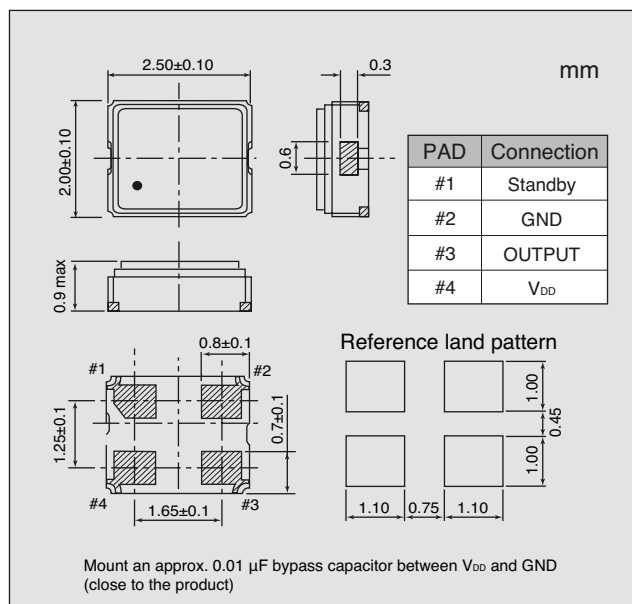
*2: If you require a product with an operating temperature range not given above, please contact us.

List of Codes for Placing an Order

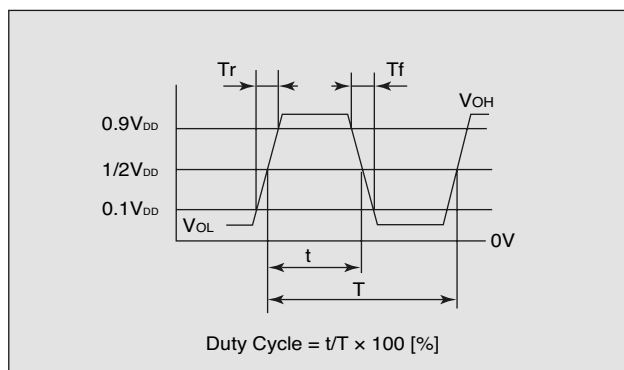
List of Codes for Placing an Order		NSA3415E
Power supply voltage [V_{DD}]	(V)	$+3.3 \pm 0.33$

NZ2520S Series

■ Dimensions



■ Output Waveform <C-MOS>



■ Standby Function

#1 Input	#3 Output
Level H ($0.7 V_{DD} \leq V_{IH} \leq V_{DD}$) or OPEN is selected.	Oscillation output ON
Level L ($V_{IL} \leq 0.3 V_{DD}$) 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 : When ordering a product with model name: NZ2520SB, frequency: 20 MHz, frequency stability: $\pm 50 \times 10^{-6}$, and power supply voltage: 3.3 V
Ordering Code: NZ2520SB – 20.000000M – NSA3415E

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/>).