

Crystal Clock Oscillator NEW

NZ2520S Series

Wide Operating Temperature Range Type

Model name

NZ2520SH Overall frequency tolerance of $\pm 100 \times 10^{-6}$.

Application

For Automotive navigation system, automotive audio equipment, and more



Pb Free

RoHS Compliant
Directive 2011/65/EU

Features

- Supports a wide temperature range from -40 to $+125^{\circ}\text{C}$.
- Compact and light. Dimensions : $2.5 \times 2.0 \times 0.9$ mm, weight : 0.02 g.
- This crystal clock oscillator can support low frequencies (from 1.5MHz) not easily achieved with crystal units of the same size.
- Taped units enable automatic mounting IR Reflow (lead free) is possible.
- Lead-free.
- Conforms to AEC-Q200.

Absolute maximum rating
Supply voltage (V_{CC}) -0.5 to $+4.0$ V
Storage temperature range -55 to $+125^{\circ}\text{C}$

Specifications

Item		Model	NZ2520SH							
Output level			CMOS							
Nominal 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		($^{\circ}\text{C}$)	-40 to $+125$							
Overall frequency tolerance		($\times 10^{-6}$)	± 100							
Current consumption max	During operation	+1.8 V, 25°C	2.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5
		+2.5 V, 25°C	3.0	4.0	4.5	5.0	5.5	6.0	6.5	7.0
+2.8 V, 25°C		3.5	4.5	5.0	5.5	6.0	6.5	7.5	8.5	
+3.3 V, 25°C		3.5	4.5	5.0	5.5	6.0	7.0	8.0	9.0	
	During standby	+1.8 V to +3.3 V, 25°C	20							
$V_{OL\ max}/V_{OH\ min}$		(V)	$0.1 V_{CC}/0.9 V_{CC}$							
$T_r\ max/T_f\ max$		(ns)	6/6							
Symmetry min. to max.		(%)	45 to 55							
Load (C_L) max		(pF)	15							
Start-up time max		(ms)	4							
Standby function			Available (Three-state)							

*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.

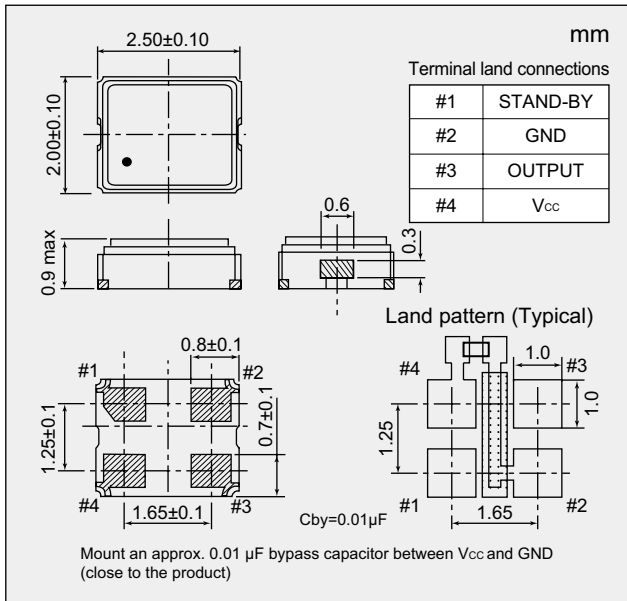
List of Codes for Placing an Order

Supply voltage (V_{CC})	(V)	+1.8 \pm 0.18	+2.5 \pm 0.25	+3.0 \pm 0.3	+3.3 \pm 0.33
List of Codes for Placing an Order		NSA3579A	NSA3579B	NSA3579C	NSA3579D

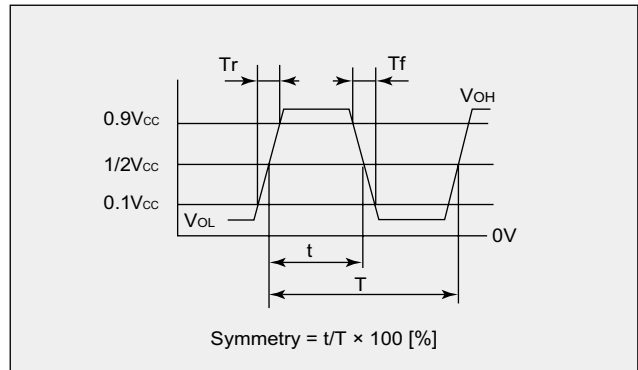
NZ2520S Series

Wide Operating Temperature Range Type

■ 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

■ 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: NZ2520SH, frequency: 40MHz, overall frequency tolerance: $\pm 100 \times 10^{-6}$, and supply voltage: +1.8 V

Ordering Code: NZ2520SH – 40.000000M – NSA3579A

Example 2: When ordering a product with model name: NZ2520SH, frequency: 40MHz, overall frequency tolerance: $\pm 100 \times 10^{-6}$, and supply voltage: +3.3 V

Ordering Code: NZ2520SH – 40.000000M – NSA3579D

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/>).