

Crystal Clock Oscillator

NZ2520SH

Standard Type

Application

For Automotive navigation system, Automotive audio equipment and Camera
 For Smartphone, Tablet computers, Notebook PC, PC card, etc.
 For Audioequipment and Wireless module
 For Communication equipment for SDH/SONET, WiMAX, LTE, etc. and Base station

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.



Pb Free

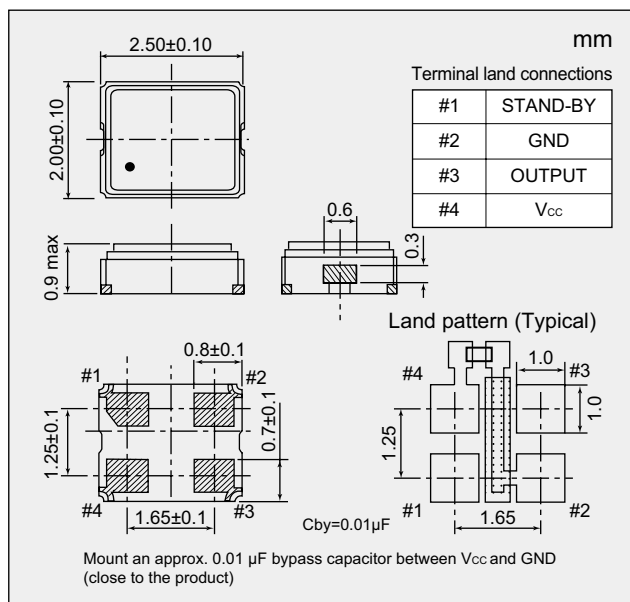
RoHS Compliant
Directive 2011/65/EU

Absolute maximum rating
 Supply Voltage (V_{CC}) -0.3 to $+4.0$ V
 Storage Temperature Range -55 to $+125^{\circ}\text{C}$

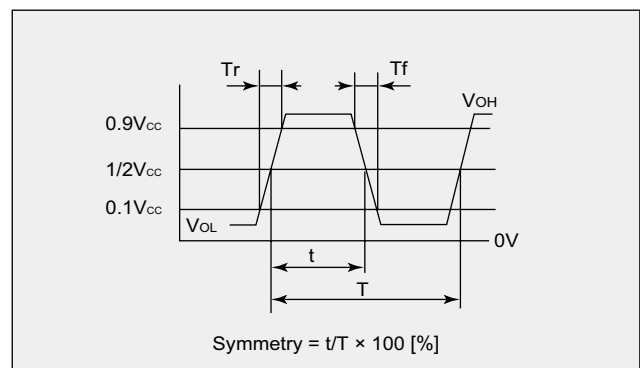
Specifications

Item	Model	NZ2520SH			
Output Level		CMOS			
Nominal Frequency Range	(MHz)	1.5 to 80			
Overall Frequency Tolerance	($\times 10^{-6}$)	± 100	± 50	± 30	± 20
Operating Temperature Range	($^{\circ}\text{C}$)	-40 to $+125$	-40 to $+105$	-10 to $+70$	-10 to $+60$
Supply Voltage	(V)	$+1.8$ to $+3.3$			
Current Consumption Max.	During Operation	$+25^{\circ}\text{C}$	(mA)		
	During Standby	$+25^{\circ}\text{C}$	20 (μA)		
V_{OL} Max. / V_{OH} Min.	(V)	$0.1 V_{CC}$ / $0.9 V_{CC}$			
Tr Max. / Tf Max.	$+1.8$ V	(ns)			
	$+2.5$ to $+3.3$ V	$6 / 6$ (at $0.1 V_{CC}$ to $0.9 V_{CC}$) $5 / 5$ (at $0.1 V_{CC}$ to $0.9 V_{CC}$)			
Symmetry Min. to Max.	(%)	45 to 55			
Load (C_L) Max.	(pF)	15			
Start-up Time Max.	(ms)	4			
Standby function		Available (Three-state)			

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

Crystal Clock Oscillator



NZ2520SH

Standard Type

Overall Frequency Tolerance	Operating Temperature Range (°C)	Supply Voltage (V)			
		+1.8±0.18	+2.5±0.25	+3.0±0.3	+3.3±0.33
$\pm 100 \times 10^{-6}$	-40 to +125	NSA3579A	NSA3579B	NSA3579C	NSA3579D
$\pm 50 \times 10^{-6}$	-40 to +105	NSC5004A	NSC5004B	NSC5004C	NSC5004D
$\pm 30 \times 10^{-6}$	-10 to +70	NSC5007A	NSC5007B	NSC5007C	NSC5007D
$\pm 20 \times 10^{-6}$	-10 to +60	NSC5008A	NSC5008B	NSC5008C	NSC5008D

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