

Crystal Clock Oscillator

NZ2520SD

Low Phase Noise Type

Application

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

Features

- 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: 1.5 to 80 MHz.
- 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

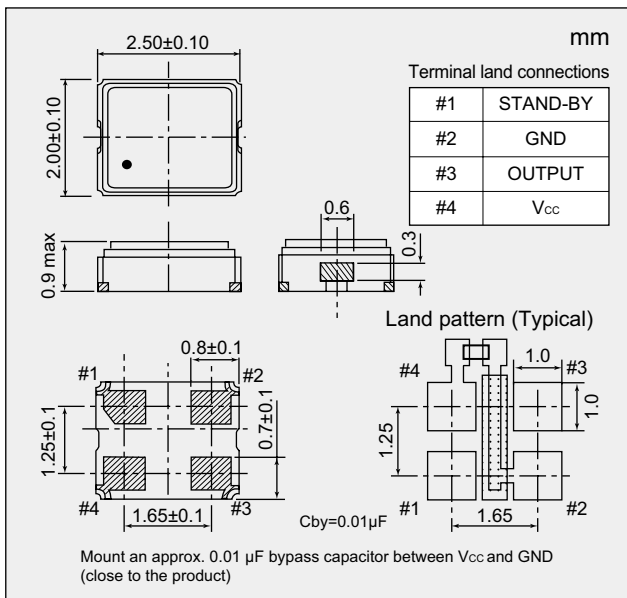
Specifications

Item	Model	NZ2520SD		
Output Specification		CMOS		
Nominal Frequency Range	(MHz)	1.5 ≤ F ≤ 80		
Overall Frequency Tolerance	(×10 ⁻⁶)	±50	±30	±20
Operating Temperature Range	(°C)	-40 to +85	-10 to +70	-10 to +60
Supply Voltage	(V)	+1.8 to +3.3		
Current Consumption Max.	During Operation	+25 °C	(mA)	
	During Standby	+25 °C	(μA)	
			1.8 to 8.5	
			10	
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.	(%)	45 to 55		
Load (C _L) Max.	(pF)	15		
Start-up Time Max.	(ms)	4		
Standby function		Available (Three-state)		

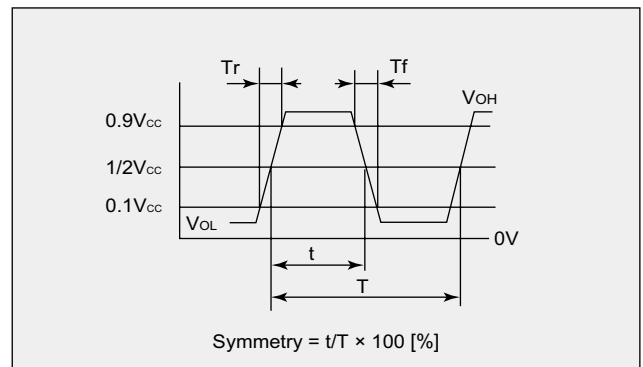
Characteristics

		F=20MHz	F=40MHz	F=60MHz	F=80MHz
+1.8V, +25 °C	F _{out} ±1 kHz (Typ.)	-147	-143	-139	-136
	F _{out} ±100 kHz (Typ.)	-156	-154	-150	-150
+2.5 to +3.3V, +25 °C	F _{out} ±1 kHz (Typ.)	-151	-148	-142	-136
	F _{out} ±100 kHz (Typ.)	-157	-156	-156	-154

Dimensions



Output Waveform <CMOS>



Standby Function

#1 Input	#3 Output
Level H (0.7 V _{CC} ≤ V _{IH} ≤ V _{CC}) or OPEN is selected.	Oscillation output ON
Level L (V _{IL} ≤ 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	+2.8±0.28	+3.3±0.33
±50 × 10 ⁻⁶	-40 to +85	NSA3446E	NSA3447E	NSA3448E	NSA3449E
±30 × 10 ⁻⁶	-10 to +70	NSA3446C	NSA3447C	NSA3448C	NSA3449C
±20 × 10 ⁻⁶	-10 to +60	NSA3446D	NSA3447D	NSA3448D	NSA3449D

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

End of Life

Mar-2021