

Crystal Clock Oscillator

NZ3225SD

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 : 3.2 x 2.5 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



Absolute maximum rating
Supply Voltage (V_{CC}) -0.6 to $+6.0$ V
Storage Temperature Range -55 to $+125$ °C

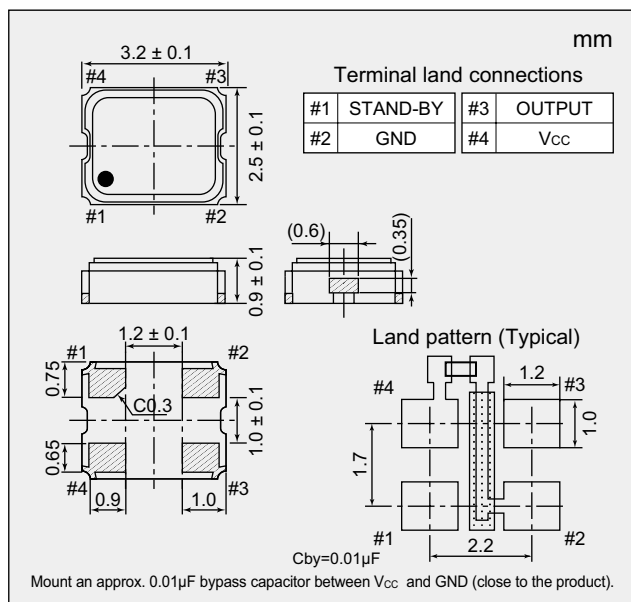
■ Specifications

Item			Model	NZ3225SD		
Output Level				CMOS		
Nominal Frequency Range			(MHz)	1.5 to 80		
Overall Frequency Tolerance			($\times 10^{-6}$)	± 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)	1.8 to 8.5		
	During Standby	$+25$ °C	(μ A)	10		
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)		

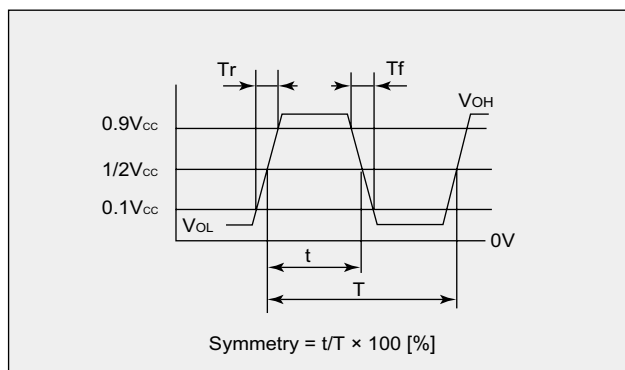
■ Characteristics

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

■ 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

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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	NSC5032A	NSC5032B	NSC5032C	NSC5032D
±30 × 10 ⁻⁶	-10 to +70	NSC5034A	NSC5034B	NSC5034C	NSC5034D
±20 × 10 ⁻⁶	-10 to +60	NSC5035A	NSC5035B	NSC5035C	NSC5035D

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.