# **Crystal Units**



# NX2520SA For OA / AV Mobile Communications/ Short-range Wireless

RoHS Compliant

ctive 2011/65/EU ive (EU) 2015/86

Dire

# Features

Ideal for such as Bluetooth, Wi-Fi, smartphone and tablet pc.

•Compact and thin. (2.5 × 2.0 × 0.50 mm typ.)

- •Excellent environmental characteristics, including heat and shock resistance.
- •Lead-free. Meets the requirements for re-flow profiling using lead-free solder.



## Specifications

Item	NX2520SA		
Standard	Standard		Optional
Nominal Frequency (MHz)	16 ≤ F ≤ 80	16 ≤ F ≤ 54	16 ≤ F ≤ 80
Overtone Order	Fundamental		
Frequency Tolerance (25 ±3 °C)	±15 × 10⁻⁵	±10 × 10 <sup>-6</sup>	±8×10 <sup>-6</sup> (16 ≤ F ≤ 40MHz) ±12×10 <sup>-6</sup> (40 < F ≤ 80MHz)
Frequency versus Temperature Characteristics (with reference to +25 °C)	±25 × 10⁻6	±10 × 10 <sup>-6</sup>	$\pm 10 \times 10^{-6}$ (Temp extended case, *1)
Operating Temperature Range(°C)	-40 to +85	-20 to +75	-20 to +75 (-40 to +85 °C Extended)
Storage Temperature Range (°C)	-40 to +85		-40 to +125
Equivalent Series Resistance	Refer to *2	Refer to *3	Refer to *2
Level of Drive (µW)	10 (Max. 100)		10 (Max. 200) *1
Load Capacitance (pF)	8		6 to 32
Frequency Aging (+25 °C)			Max. ±3×10 <sup>-6</sup> / year *1
Specifications Number	STD-CSW-6	STD-CSX-1	Refer to *4

Ph

Free

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

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

\*1 If you have any other requests, NDK will study it.

\*4 Ordering information: Overtone Order Fundamental / 3rd Overtone, the Operating Temperature Range, Frequency versus Temperature Characteristics, Frequency Tolerance, and Load Capacitance.

Ex. Model, Frequency (24.000000MHz 6digits), S1: Fundamental or S3 : 3rd overtone

- Operating Temperature Range (-40 to +85°C) - Frequency versus Temperature Characteristics (±25 × 10<sup>-6</sup>)

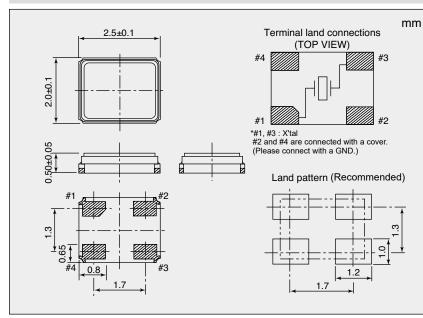
- Frequency Tolerance  $(\pm 10 \times 10^{-6})$  - Load Capacitance (8pF)

NX2520SA

24.000000MHz

S1-4085-25-10-8

### Dimensions



#### \*2 Equivalent Series Resistance

Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)
16 ≤ F < 20	80
20 ≤ F < 30	60
30 ≤ F < 35	50
35 ≤ F ≤ 80	40

If you have any other requests, NDK will study it.

#### \*3 Equivalent Series Resistance

Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)	
16 ≤ F < 20	80	
20 ≤ F < 30	60	
30 ≤ F < 35	50	
35 ≤ F ≤ 54	40	

If you have any other requests, NDK will study it.