Crystal Units

NDK — Crystal Bridge to the Future

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

■ 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.

Pb Free

RoHS Compliant
Directive 2011/65/EU
Directive (EU) 2015/863

■ Specifications

Item \ Model	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^{-6}	±10 × 10^{-6}	±8×10^{-6} (16 ≤ F ≤ 40MHz) ±12×10^{-6} (40 < F ≤ 80MHz)
Frequency versus Temperature Characteristics (with reference to +25 °C)	±25 × 10^{-6}	±10 × 10^{-6}	±10 × 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^{-6} / year *1
Specifications Number	STD-CSW-6	STD-CSX-1	Refer to *4

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.

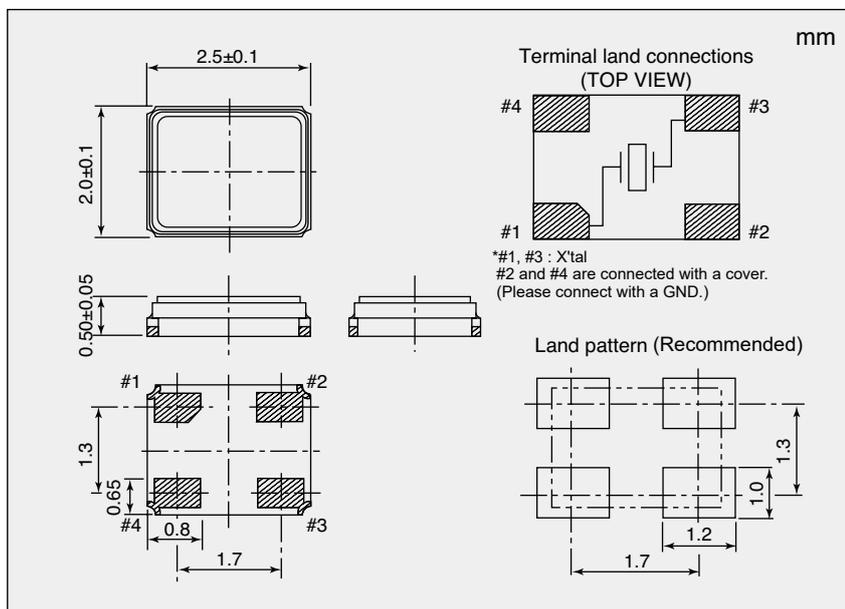　Ex. Model, Frequency (24.000000MHz 6digits), S1: Fundamental or S3 : 3rd overtone

　　− Operating Temperature Range (−40 to +85°C) − Frequency versus Temperature Characteristics (±25 × 10^{-6})

　　− Frequency Tolerance (±10 × 10^{-6}) − Load Capacitance (8pF)

　NX2520SA

　24.000000MHz

　S1-4085-25-10-8

■ Dimensions

mm

2.5±0.1

2.0±0.1

0.50±0.05

#1 #2 #3 #4

1.3　0.65　0.8　1.7

Terminal land connections (TOP VIEW)

#4 #3 #1 #2

*#1, #3 : X'tal
#2 and #4 are connected with a cover.
(Please connect with a GND.)

Land pattern (Recommended)

1.3　1.0　1.2　1.7

*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.

NIHON DEMPA KOGYO CO.,LTD.