# **Crystal Units**



## NX3225SA For OA / AV Mobile Communications/ Short-range Wireless

## **■** Features

Ideal for such as bluetooth, Wifi, smartphone and tablet pc.

- •Compact and thin. (3.2 × 2.5 × 0.55 mm typ.)
- •Excellent environmental characteristics, including heat and shock resistance.
- •Lead-free. Meets the requirements for re-flow profiling using lead-free solder.



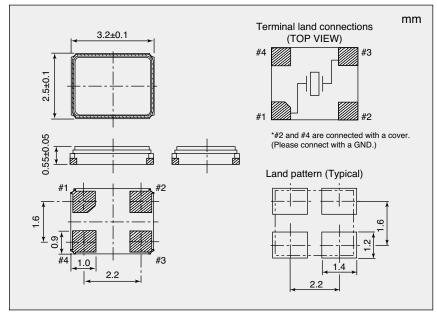




## **■** Specifications

Item Model	NX3225SA		
Nominal Frequency	12 to 64 MHz	16 to 54 MHz	40 to 150 MHz
Overtone Order	Fundamental	Fundamental	3rd overtone
Frequency Tolerance (25 ±3 °C)	±15 × 10⁻ <sup>6</sup>	±10 × 10 <sup>-6</sup>	±20 × 10 <sup>-6</sup>
Frequency versus Temperature Characteristics (with reference to +25 °C)	±25 × 10 <sup>-6</sup>	±10 × 10 <sup>-6</sup>	±25 × 10 <sup>-6</sup>
Operating Temperature Range	−40 to +85 °C	−20 to +75 °C	−40 to +85 °C
Storage Temperature Range	−40 to +85 °C		
Equivalent Series Resistance	Refer to *1	Refer to *2	Refer to *3
Level of Drive	10 μW (Max. 200 μW)		
Load Capacitance	8 pF	10 pF	Series resonance
Specifications Number	STD-CSR-6	STD-CSQ-1	STD-CSR-7

## **■** Dimensions



## \*1 Equivalent Series Resistance

Overtone Order	Nominal frequency (MHz)	Equivalent Series Resistance max. [Ω]
Fundamental	12 to 13	100
	13 to 20	80
	20 to 64	50

#### \*2 Equivalent Series Resistance

Overtone Order	Nominal frequency (MHz)	Equivalent Series Resistance max. [Ω]
Fundamental	16 to 20	80
	20 to 54	50

## \*3 Equivalent Series Resistance

Overtone Order	Nominal frequency (MHz)	Equivalent Series Resistance max. [Ω]
3rd overtone	40 to 100	140
	100 to 150	100

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