Crystal Units

NDK
Crystal Bridge to the Future

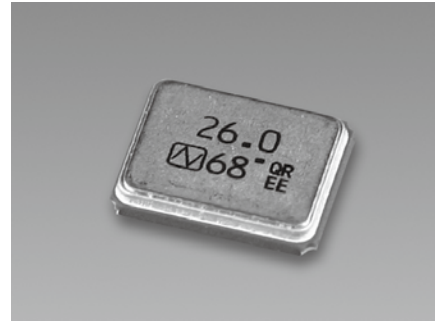## NX3225SA   For OA / AV Mobile Communications/ Short-range Wireless

■ 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.

Pb
Free

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

■ Specifications

Item \ Model	NX3225SA	
Standard	Standard	Optional
Nominal Frequency (MHz)	12 ≤ F ≤ 64	12 ≤ F ≤ 64
Overtone Order	Fundamental	Fundamental
Frequency Tolerance (25 ±3 °C)	$\pm 15 \times 10^{-6}$	$\pm 10 \times 10^{-6}$
Frequency versus Temperature Characteristics (with reference to +25 °C)	$\pm 25 \times 10^{-6}$	$\pm 25 \times 10^{-6}$ (Temp extended case, *1)
Operating Temperature Range (°C)	−40 to +85	−40 to +85 *1
Storage Temperature Range	−40 to +85	−40 to +85
Equivalent Series Resistance	Refer to *2	Refer to *1
Level of Drive (µW)	10 (Max. 200)	10 (Max. 200)
Load Capacitance (pF)	8	6 to 32
Frequency Aging (+25°C)	---	Max. $\pm 3 \times 10^{-6}$ / year *1
Specifications Number	STD-CQR-1	Refer to *3

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.

*3 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 ($\pm 25 \times 10^{-6}$)
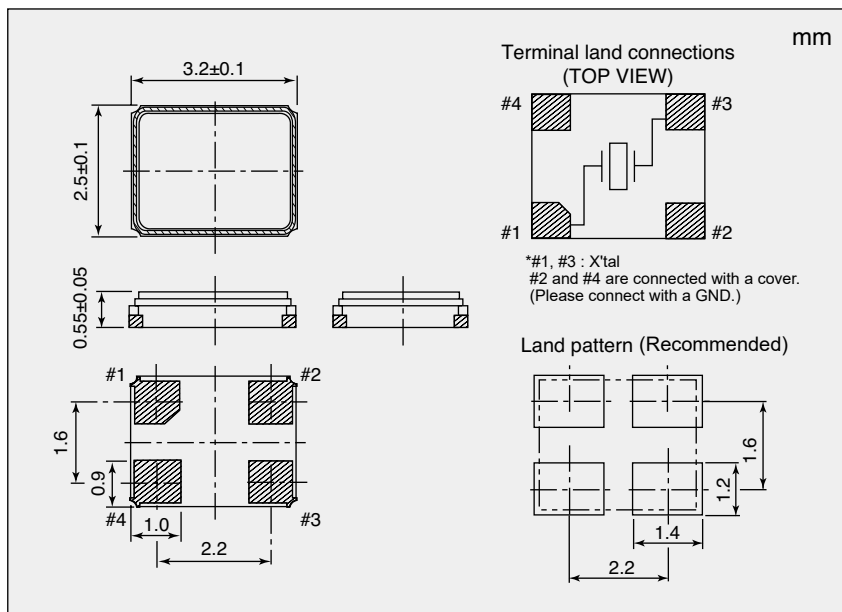
　　 − Frequency Tolerance ($\pm 10 \times 10^{-6}$) − Load Capacitance (8pF)

　NX3225SA

　24.000000MHz

　S1-4085-25-10-8

■ Dimensions

mm

Terminal land connections (TOP VIEW)

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

Land pattern (Recommended)

Equivalent Series Resistance

	Overtone Order	Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)
*2	Fundamental	12 ≤ F < 13	100
		13 ≤ F < 20	80
		20 ≤ F ≤ 64	50

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

NIHON DEMPA KOGYO CO., LTD.