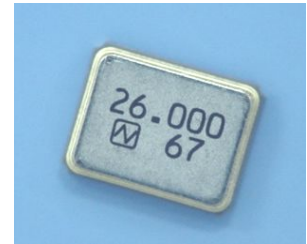


This is ultra small surface mount type crystal unit.

Features

- * Ultra compact, thin and light weight (3.2 x 2.5 x 0.55 mm typ., 17mg typ.).
- * Excellent heat resistance and environmental characteristics.
- * Excellent electric performance optimum for OA (office automation), AV (audio & Visual) and Bluetooth applications are exhibited.
- * Products are lead-free. These can meet the requirements of re-flow profiling using lead-free solder.



RoHS Compliant
Directive 2002/95/EC

Specifications

Item	Type	NX3225SA	
Application		For OA, AV	For Bluetooth
Frequency Range		12 ~ 55 MHz	
Overtone		Fundamental	
Freq. Tolerance (25±3°C)		±15 ~ 50 X 10 ⁻⁶	±10 X 10 ⁻⁶
Temp. Characteristics (in reference to +25°C)		±15 ~ 50 X 10 ⁻⁶	±10 X 10 ⁻⁶ ±15 X 10 ⁻⁶
Operating Temp. Range		-10 ~ +75°C	-20 ~ +70°C -30 ~ +85°C
Equivalent Series Resist.		* See Table	
Drive Level		50 μW (200 μW max)	10 μW (100 μW max)
Std. Load Capacitance		8 pF	10 pF
Operable Temp. Range		-40 ~ +85°C	

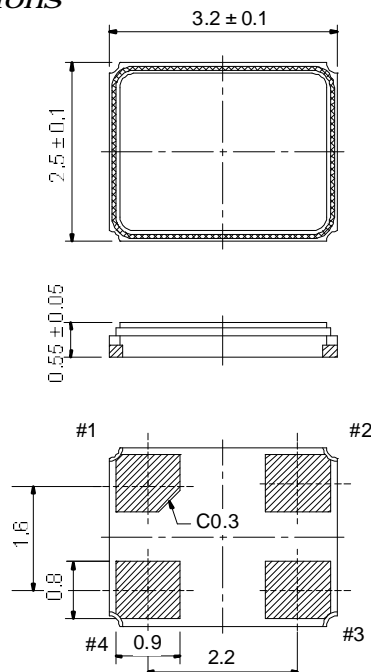
***Table**
Equivalent Series Resistance

Frequency (MHz)	ESR [Ω]
12 ~ 13	120 max
13 ~ 16	100 max
16 ~ 20	80 max
20 ~ 30	70 max
30 ~ 55	50 max

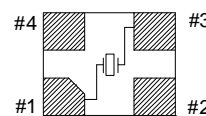
Typical Frequency (MHz)

OA, AV	12.0	12.288	13.56	14.31818	14.7456	15.36	16.0	16.384	16.9344	18.0	18.432	20.0	20.48	20.5	22.0
	22.5792	24.0	24.576	25.0	25.4	26.0	27.0	27.12	28.63636	30.0	32.0	33.8688	36.0	40.0	48.0
Bluetooth	13.0	16.0	20.0	24.0	26.0	32.0									

Dimensions

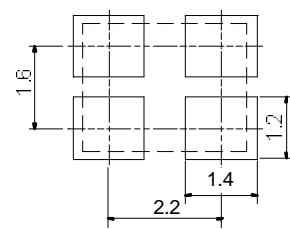


* Internal connections (Top View)



Note) #2, #4 is connected with a cover.
(Please connect with a GND or a power supply)

* Reference Land Pattern



[Unit ; mm]

Note: Specifications described in this brochure are subject to change without notice for improvement.