

NX2016SF

For Automotive

■ Features

- Crystal Unit with built-in Thermistor construction for automotive.
- Placing temperature sensor(Thermistor) close to Crystal blank in one airtight housing can detect more precise crystal blank temperature. Improvement on frequency temperature compensation compared to present Crystal unit.
- It is ideal for applications such as vehicle communication equipment and car navigation systems.
- Meets the requirements for re-flow profiling using lead-free solder.
- Conforms to AEC-Q200.

Pb Free

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



■ Specifications

Item	Model	NX2016SF	
		Standard	Optional
Standard		Standard	Optional
Nominal Frequency (MHz)		$19.2 \leq F \leq 55.2$	$19.2 \leq F \leq 55.2$
Overtone Order		Fundamental	Fundamental
Frequency Tolerance (25°C)		$\pm 10 \times 10^{-6}$	$\pm 10 \times 10^{-6}$
Frequency versus Temperature Characteristics (with reference to +25°C)		$\pm 25 \times 10^{-6}$	Please contact us about temp extended case, *1
Operating Temperature Range (°C)		-40 to +105	Please contact us about temp extended case, *1
Storage Temperature Range (°C)		-40 to +105	-40 to +105
Equivalent Series Resistance		Refer to *2	Refer to *2
Level of Drive (µW)		10 (Max. 100)	10 (Max. 100)
Load Capacitance (pF)		7	6 to 18
Frequency Aging (+25°C)		---	Max. $\pm 3 \times 10^{-6}$ / year *1
Specifications Number		---	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.

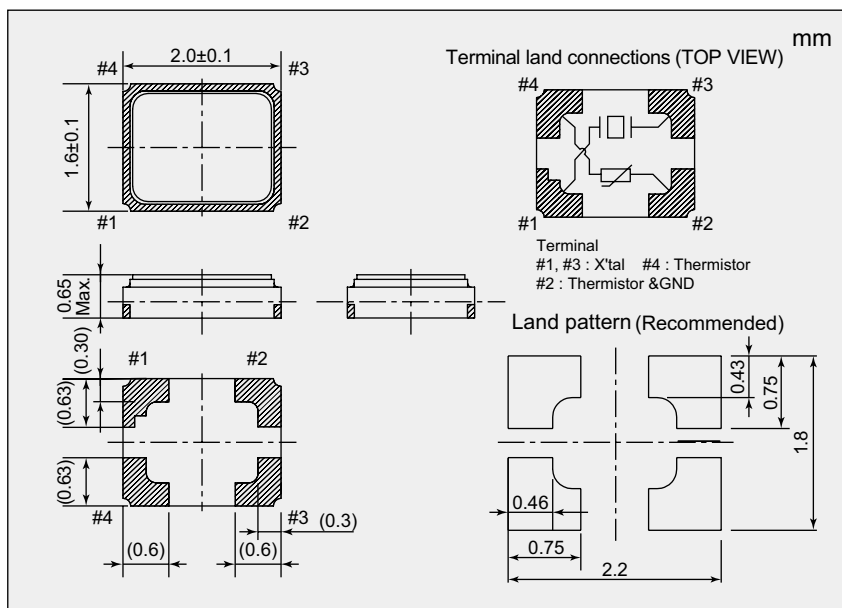
*3 Ordering information: Overtone Order Fundamental / 3rd Overtone, the Operating Temperature Range, Frequency versus Temperature Characteristics, Frequency Tolerance, and Load Capacitance.

Ex. Model, Frequency (38.400000MHz 6digits), S1:Fundamental or S3:3rd Overtone

- Operating Temperature Range (-40 to +105°C) - Frequency versus Temperature Characteristics ($\pm 25 \times 10^{-6}$)
- Frequency Tolerance ($\pm 12 \times 10^{-6}$) - Load Capacitance (7pF)

NX2016SF
38.400000MHz
S1-40105-25-12-7

■ Dimensions



*2 Equivalent Series Resistance

Nominal Frequency (MHz)	Equivalent Series Resistance Max. (Ω)
$19.2 \leq F < 20$	70
$20 \leq F < 40$	50
$40 \leq F \leq 55.2$	40

NTC Thermistor for Temperature Sensor

Resistance (R25)	100k Ω ± 1 %
B-Constant (B25-50)	4250K ± 1 %