

NGCM1206JW2R450G1TRF

2.4 GHz WiFi/Bluetooth Chip Antenna



Features

- Stable and reliable performance
- Supports 2.4 GHz Band
- Low Profile, Compact Size
- RoHs Complaint

Applications

- Bluetooth Systems
- Handheld Devices i.e. Smart phones



Specifications

Electrical @ +25°C	
Frequency Range	2450MHz ± 3MHz
Bandwidth in -10dB	100 MHz min
Return Loss	10 dB
Peak Gain	-1.0 dBic
Linear Max Peak Gain	0.5 dBic
Polarization	Linear
Impedance	50Ω
Test Conditions	
Normal Conditions	
Temperature	20°C
Humidity	60% RH
Standard Conditions	
Temperature	5°C to 35°C
Humidity	45% to 85% RH
Operating & Storage Conditions	
Operation Temperature Range	-40°C to 85°C
Operation Humidity Range	5% to 95% RH
Storage Temperature Range	-35°C to 80°C
Storage Periods	12 Months Max.
RoHs Compliant	Yes

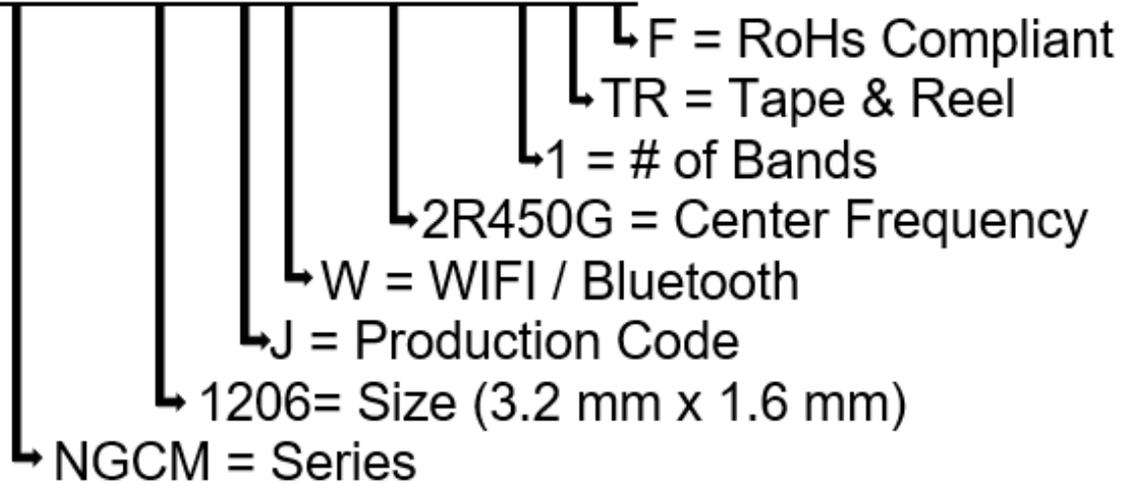
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Part Number Breakdown

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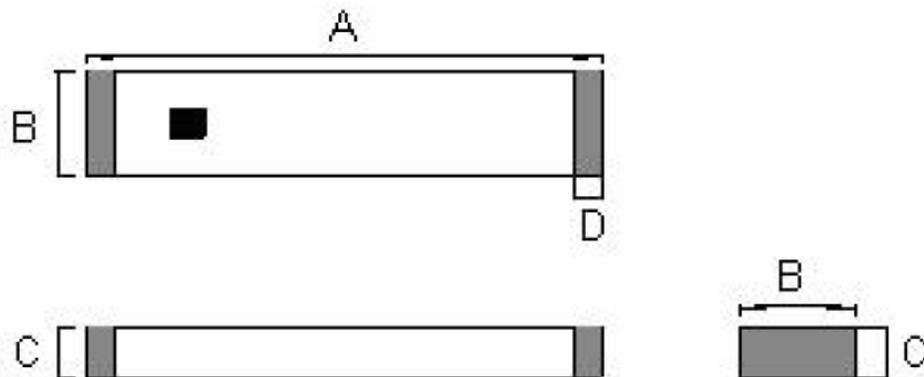


Pin Definition



No.	Terminal Name	No.	Terminal Name
(1)	Feeding Point	(2)	NC

Dimension Drawing



Dimensions (mm) & Mechanical

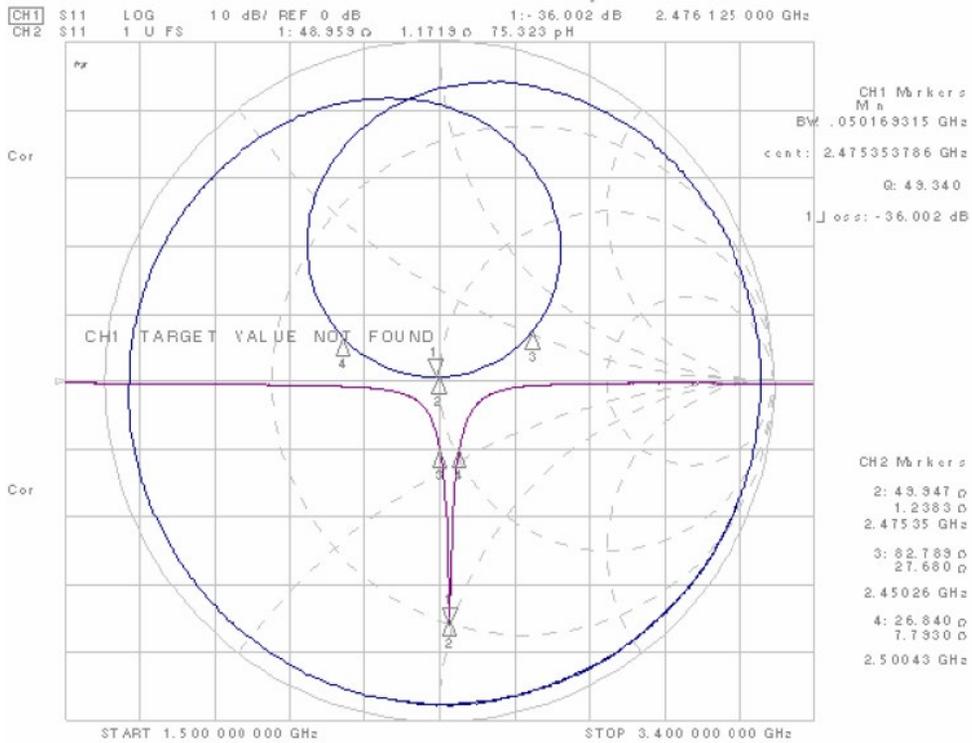
Body Length (A)	3.2 ± 0.2
Width (B)	1.6 ± 0.2
Thickness (C)	1.2 ± 0.2
Termination (D)	0.5 ± 0.2
Connection Type	SMT
Material	Ceramic
Electrode	Silver

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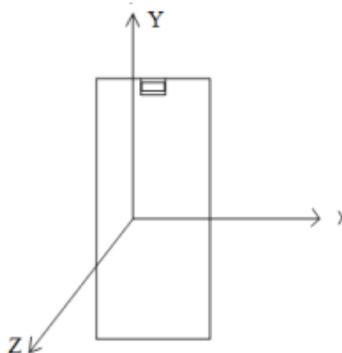


Return Loss



Test Fixture

- Electrical Characteristics depend on test board size and antenna positioning on Ground Plane and ground clearance area size
- Ant position: Middle



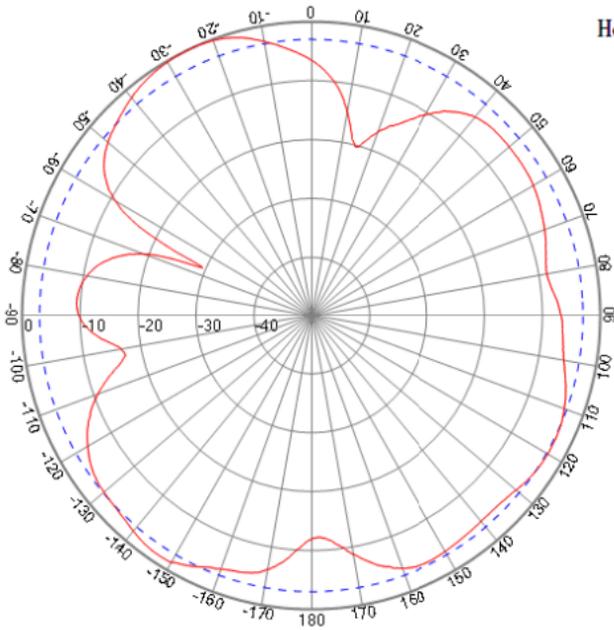
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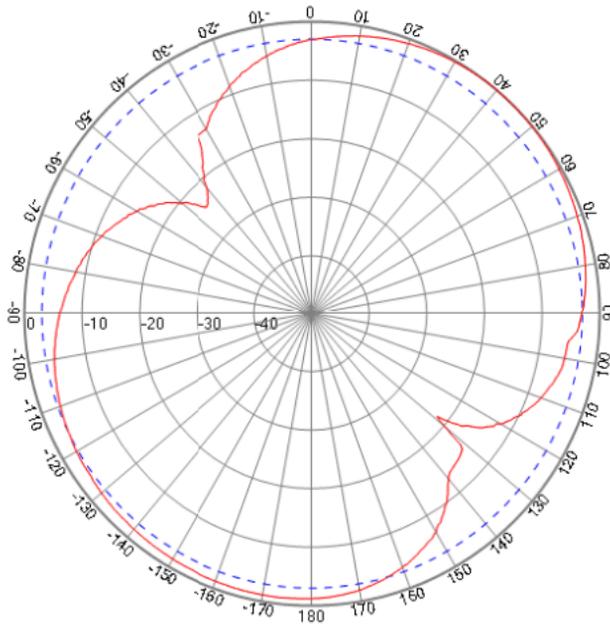


Radiation Patterns

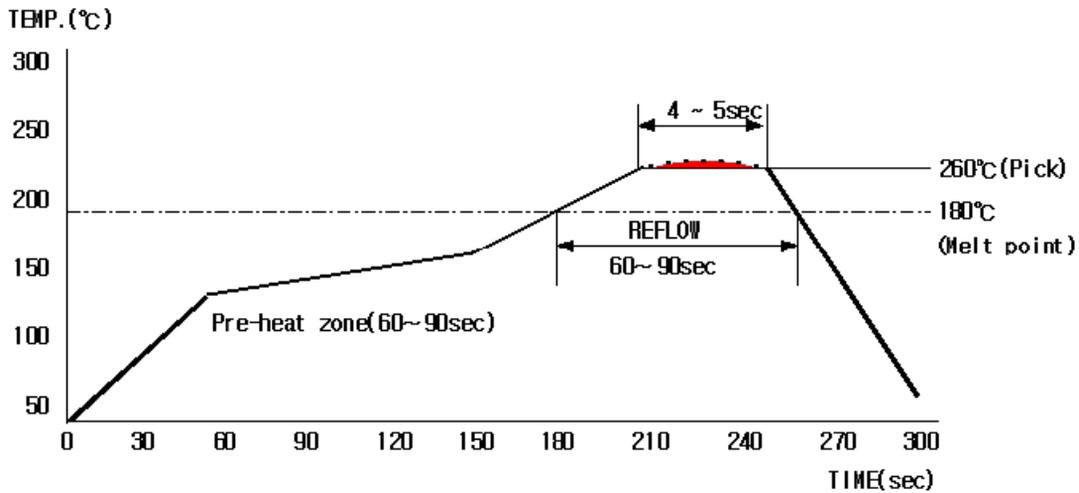
Horizontal PLANE



Vertical PLANE



Reflow Soldering Conditions



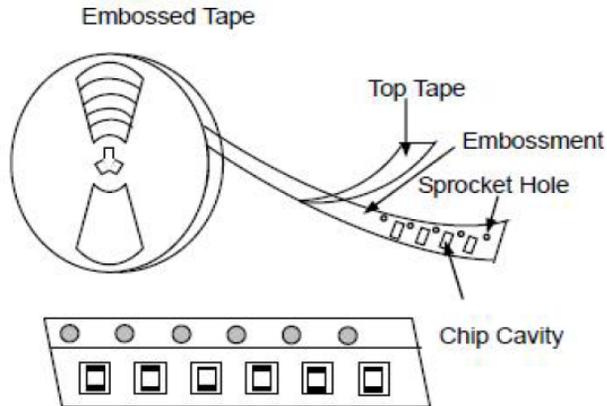
Solder: Sn/3.0Ag/0.5 Cu

Mechanical Performance

ITEMS	CONDITIONS	SPECIFICATIONS
VIBRATION TEST	Freq. : 10 ~ 55 Hz Amplitude : 1.5 mm Duration : X、Y、Z 2 hours per each axis of X,Y and Z crossing axes.	①Electrical performance requirements must be satisfied for clause No.6. ② No excessive changes in Appearance may be observed.
DROP SHOCK	3 times non-accelerated natural drops from 70cm above a wood board.	
CONDUCTOR THICKNESS	Conductor electrode : Silver Silver thickness : 5 ~ 20 μm	
TENSILE STRENGTH (PULL OUT)	Adhesion strength : 4kgf/cm ² Min. Measurement M/C : FORCE GAUGE Method : After attaching lead pin on the surface of antenna, using the tensile test M/C pull out each other side.	

Packing

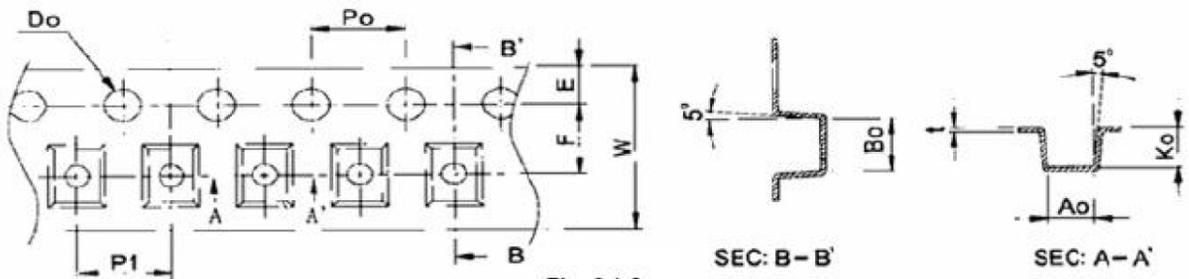
- (1) Quantity/Reel: 3K
- (2) Tape: Embossed



c. Reel Drawing

Taping Dimensions (Unit: mm)

Tape Dimensions (unit: mm)



Type	W	P1	E	F	D0	P0	K0	A0	B0	t
Tolerance	±0.1	±0.1	±0.1	±0.15	+0.1/ -0.0	±0.1	±0.1	±0.1	±0.1	±0.05
Chip	8.00	4.00	1.75	3.5	1.5	4.0	1.50	1.80	3.50	0.22

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Reel Dimensions (Unit: mm)

