

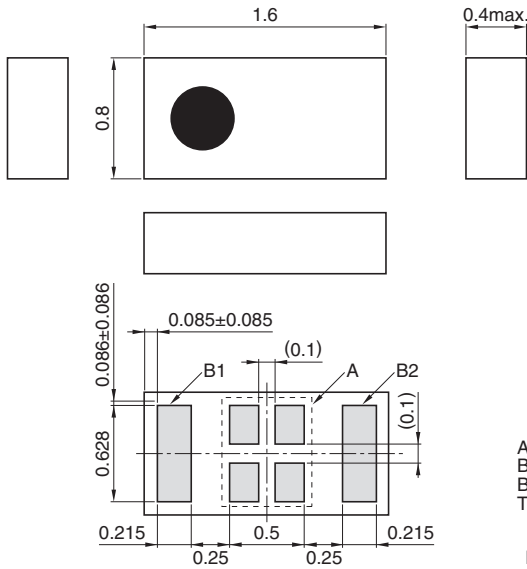
# Multilayer Chip Antennas

## For IEEE802.11a/b/g/n

Conformity to RoHS Directive  
Halogen-free

ANT Series ANT016008LCD2442MA1

### SHAPES AND DIMENSIONS



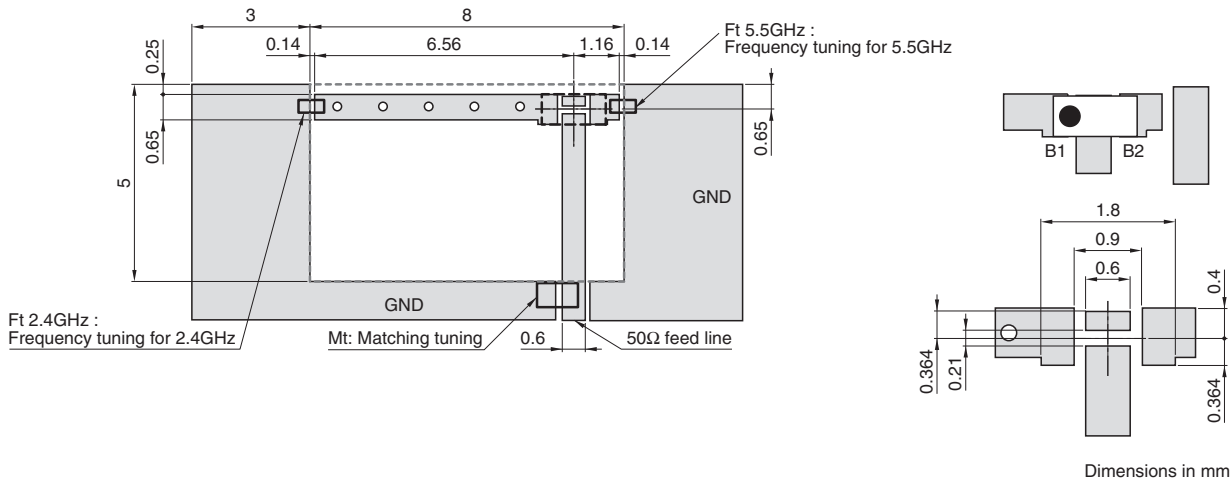
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Halogen-free: Indicates that Cl content is less than 900ppm, Br content is less than 900ppm, and that the total Cl and Br content is less than 1500ppm.

• All specifications are subject to change without notice.

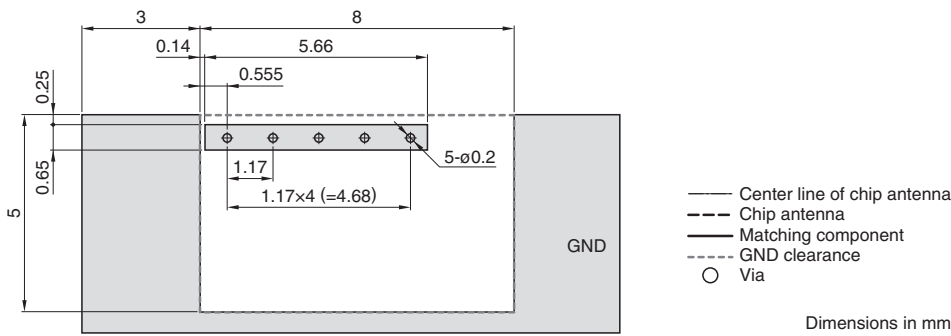
### RECOMMENDED PC BOARD PATTERNS

#### ELECTRODE

##### Front side

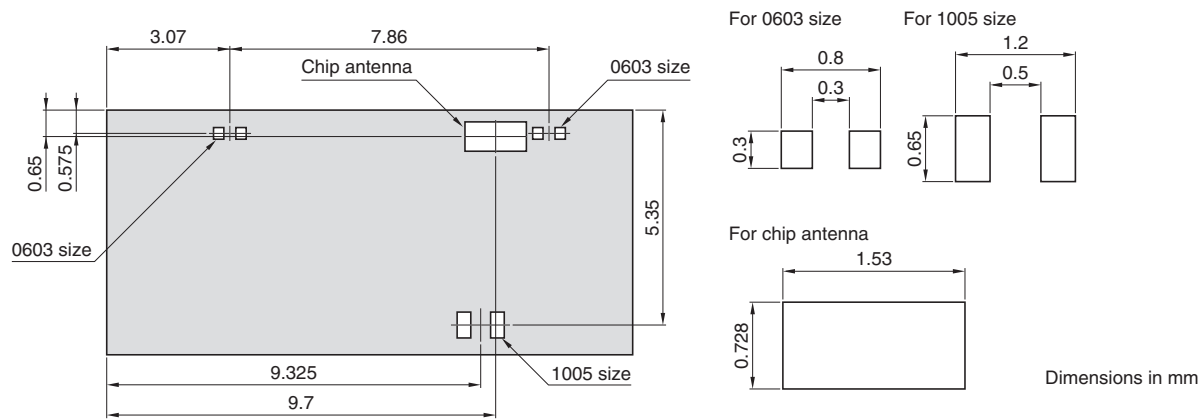


##### Back side

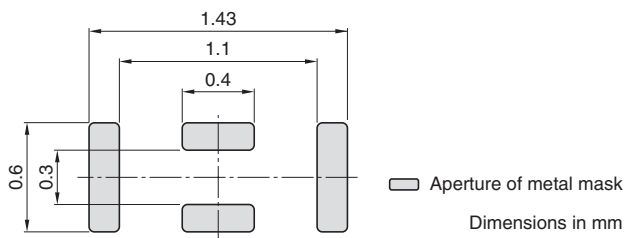


#### SOLDER RESIST

##### Front side



#### RECOMMEND APERTURE SIZE OF METAL MASK FOR SOLDER PRINTING



• All specifications are subject to change without notice.

## ELECTRICAL CHARACTERISTICS

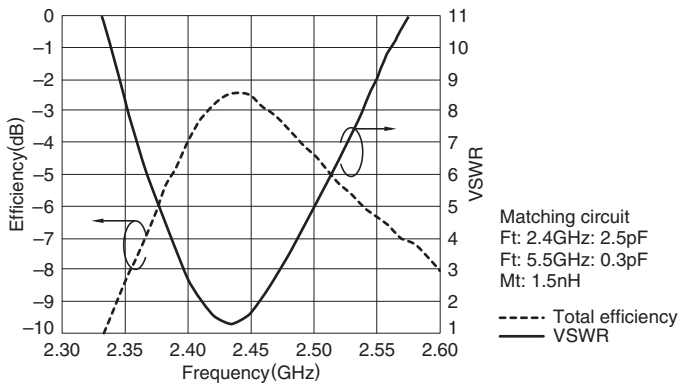
Center frequency (F <sub>11b/g/n</sub> , F <sub>11a</sub> )	F <sub>11b/g/n</sub> 2442MHz, F <sub>11a</sub> 5500MHz	
Band width(BW) (F <sub>11b/g/n</sub> , F <sub>11a</sub> )	F <sub>11b/g/n</sub> ±42MHz, F <sub>11a</sub> ±350MHz	
VSWR (at BW) (F <sub>11b/g/n</sub> , F <sub>11a</sub> )	F <sub>11b/g/n</sub> 6.5max. F <sub>11a</sub> 4max.	
Polarization	Linear	
Impedance	50Ω	
PCB size	120×65×1.0mm	
Temperature range	Operating	-40 to +85°C
	Storage	-40 to +85°C

• This is typical antenna performance with the standard PCB.

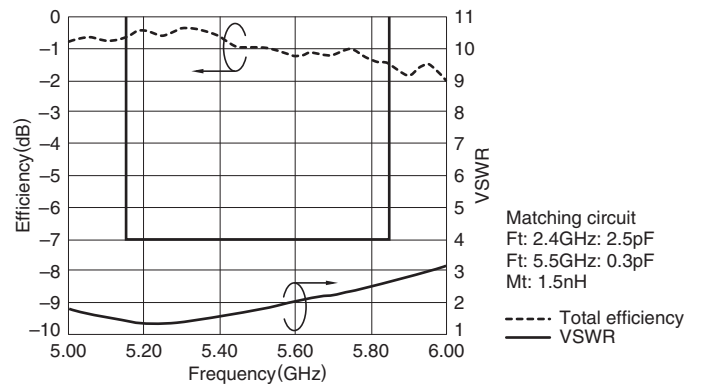
## FREQUENCY CHARACTERISTICS

### EFFICIENCY AND VSWR

#### IEEE802.11b/g/n



#### IEEE802.11a



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### RADIATION PATTERNS

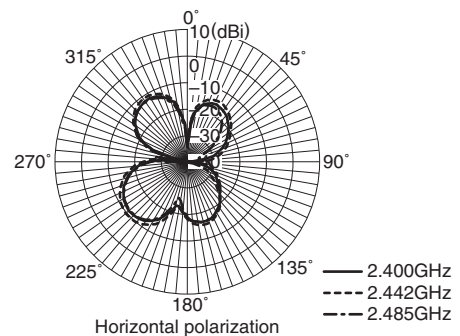
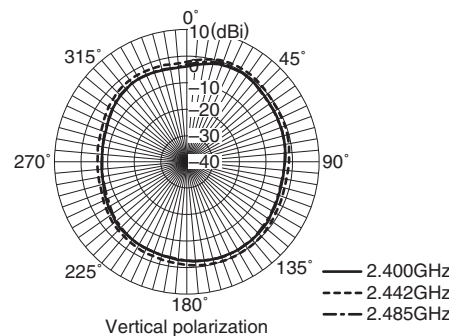
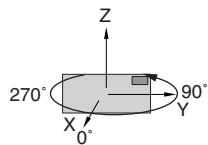
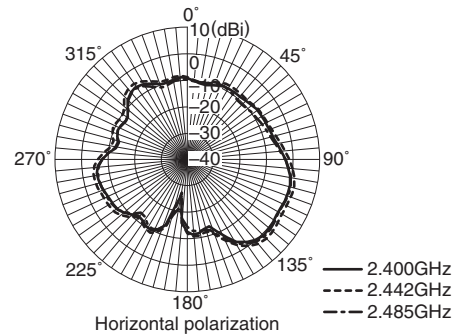
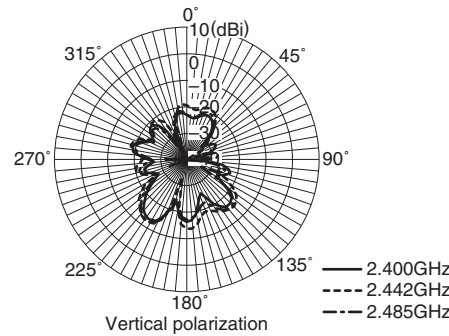
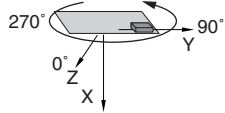
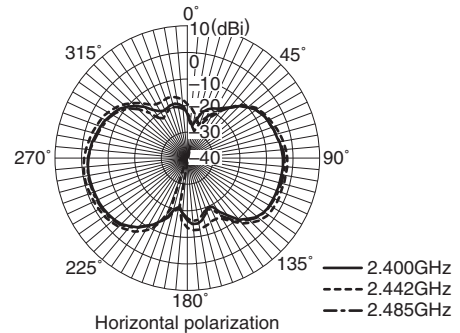
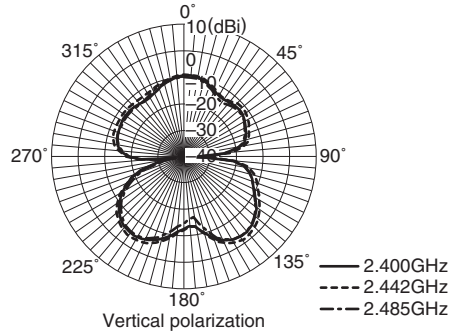
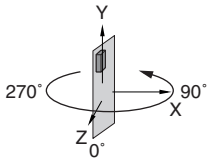
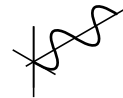
#### IEEE802.11b/g/n

Directivity angle

Vertical polarization



Horizontal polarization



• Tested antenna has been soldered. Evaluation board size is 120x65x1 mm.

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### RADIATION PATTERNS

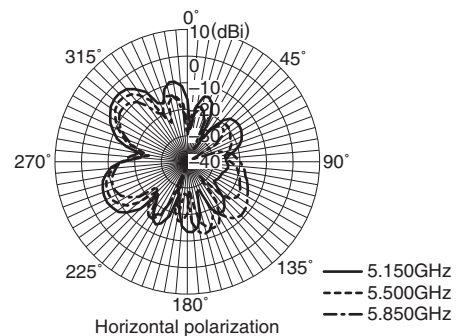
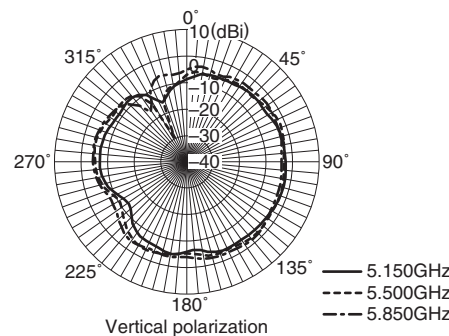
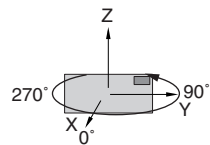
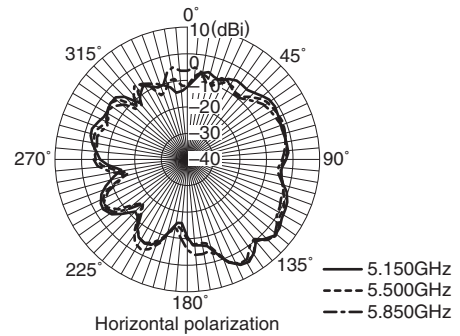
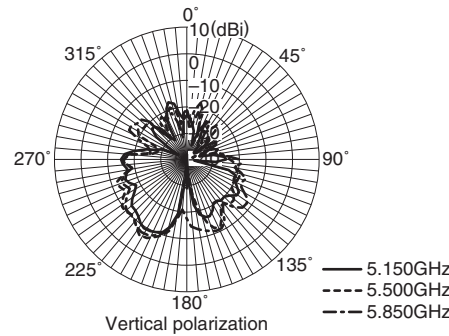
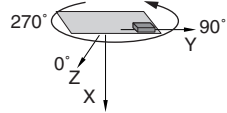
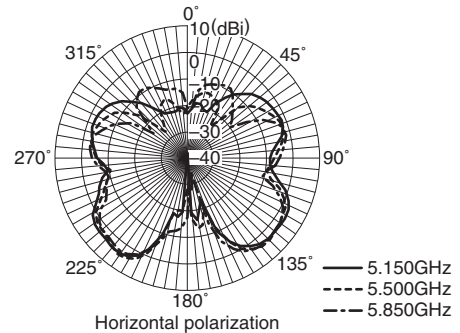
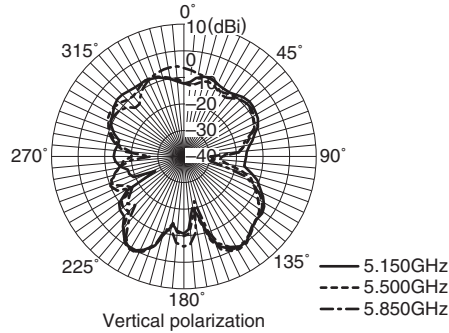
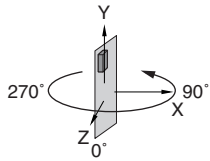
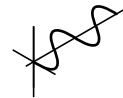
#### IEEE802.11a

Directivity angle

Vertical polarization



Horizontal polarization



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# Mouser Electronics

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