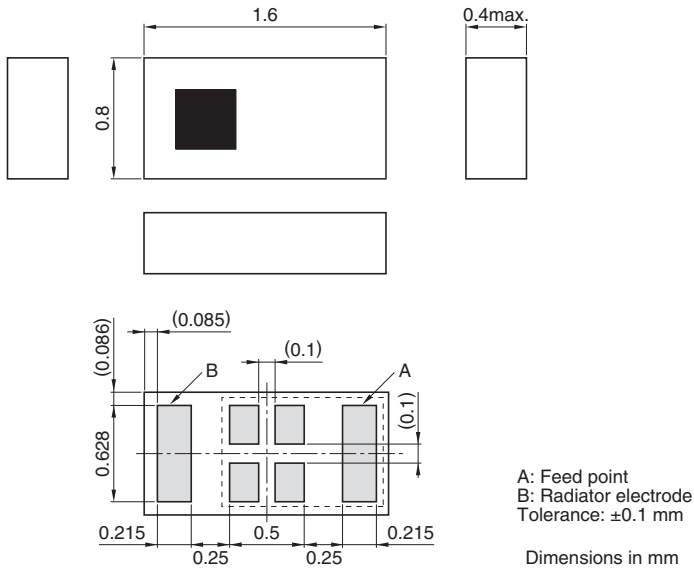


Multilayer Chip Antennas For 2.4GHz band

Conformity to RoHS Directive
Halogen-free

ANT Series ANT016008LCS2442MA2

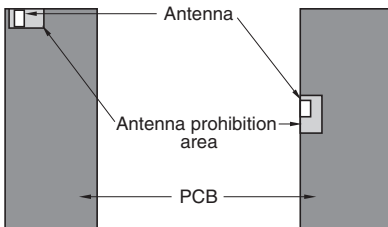
SHAPES AND DIMENSIONS



STANDARD MOUNTING POSITIONS FOR ANT016008LCS2442 PRODUCTS

MA2 (This product)

MA1



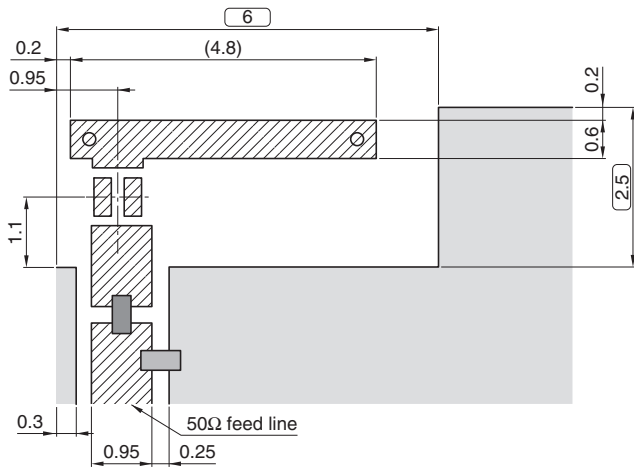
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Halogen-free: Indicates that Cl content is less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

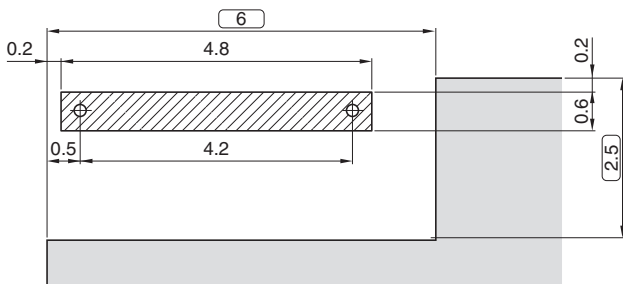
Top side



- Center line of chip antenna
- Antenna keep out area (GND off)
- Ft : Frequency tuning component
- Mt : Impedance matching component
- ▨ Antenna Pattern
- Via : $\phi 0.2\text{mm}$
- GND

Dimensions in mm

Bottom side

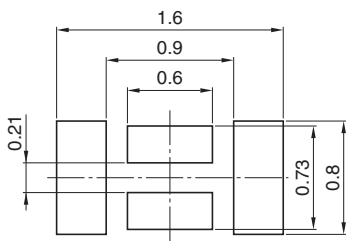


- Antenna keep out area (GND off)
- ▨ Antenna Pattern
- Via : $\phi 0.2\text{mm}$
- GND

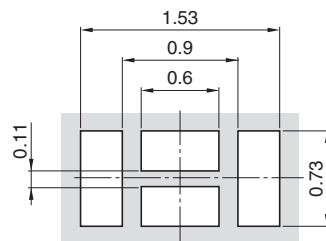
Dimensions in mm

LAND PATTERN/SOLDER RESIST

Land pattern



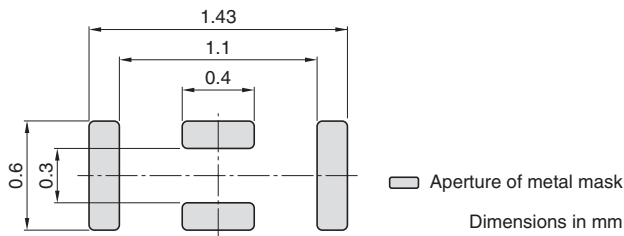
Solder resist



- Center line of chip antenna
- GND

Dimensions in mm

RECOMMEND APERTURE SIZE OF METAL MASK FOR SOLDER PRINTING



- Aperture of metal mask

Dimensions in mm

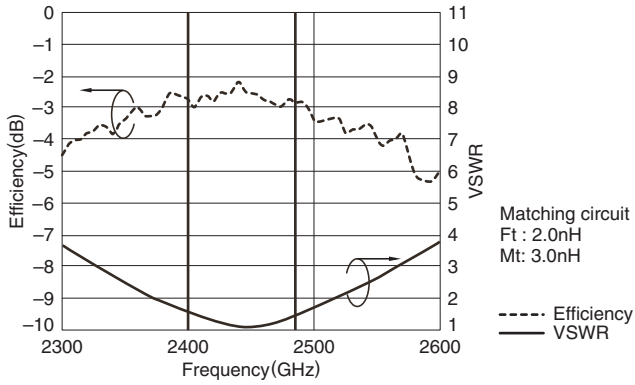
ELECTRICAL CHARACTERISTICS

Center frequency	2442MHz	
Band width(BW)	±42MHz	
VSWR (at BW)	3	
Polarization	Linear	
Impedance	50Ω	
PCB size	50×10×1.0mm ³	
Antenna keep-out area	6×2.5mm ²	
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



• All specifications are subject to change without notice.

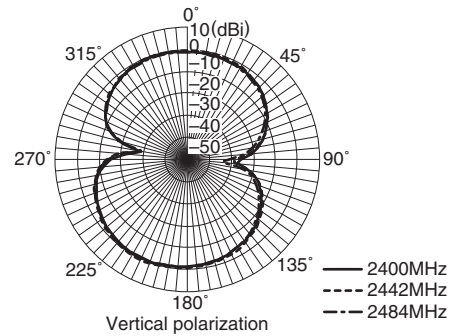
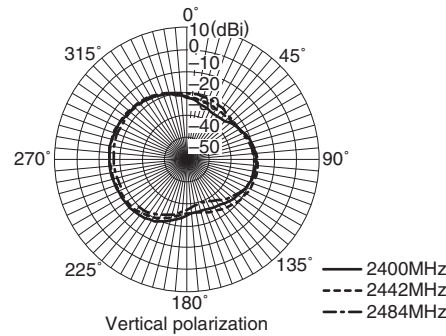
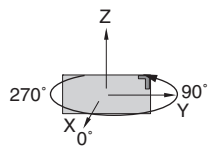
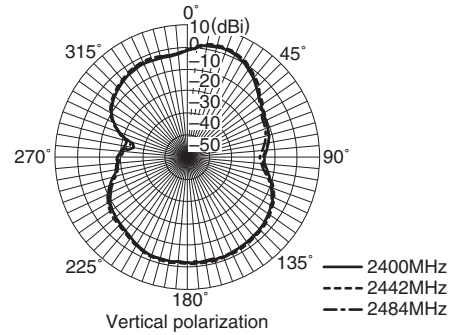
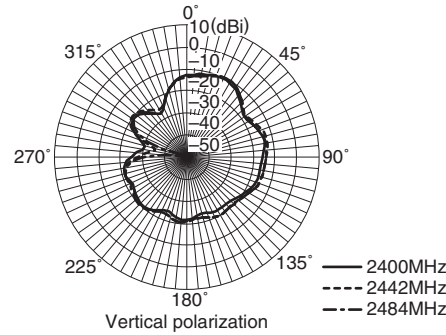
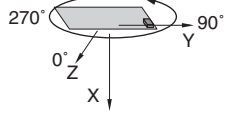
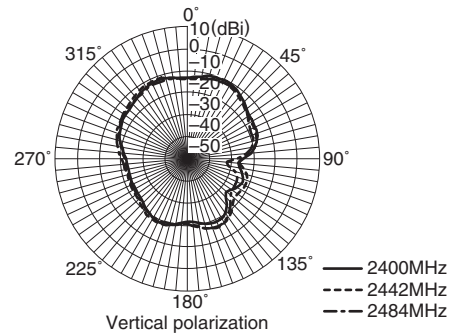
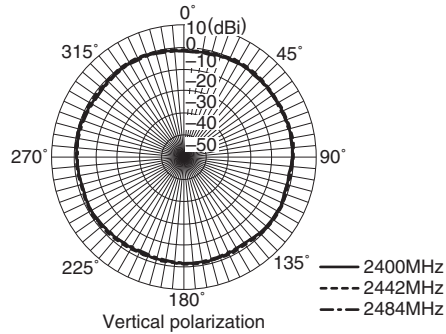
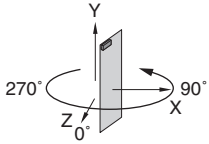
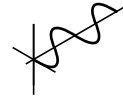
RADIATION PATTERNS

Directivity angle

Vertical polarization



Horizontal polarization



• Tested antenna has been soldered. Evaluation board size is 50x10x1 mm³.

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