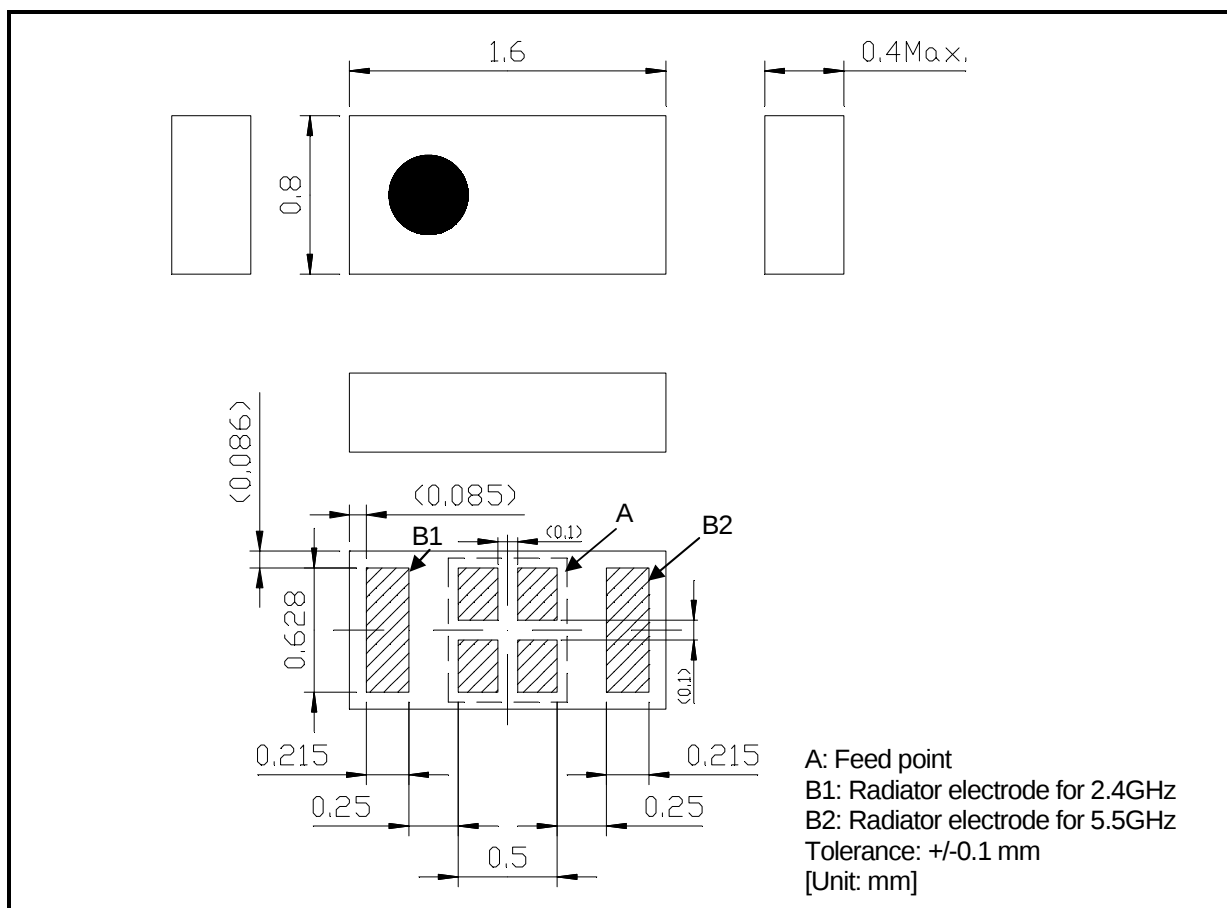


CHIP MULTILAYER ANTENNA FOR IEEE802.11a/b/g/n

SAMPLE P/N: ANT162442DT-2001AM1

[MECHANICAL DIMENSIONS]



[ELECTRICAL CHARACTERISTICS]

AEC-Q200 (-40 ~ 85°C)
qualified component family

PARAMETER		UNIT
Center Frequency ($F_{11b/g/n}$, F_{11a})	$F_{11b/g/n}$: 2442, F_{11a} : 5500	MHz
Band Width ($F_{11b/g/n}$, F_{11a})	$F_{11b/g/n}$: +/-42, F_{11a} : +/-350	MHz
VSWR at BW ($F_{11b/g/n}$, F_{11a})	$F_{11b/g/n}$: 6.5 (Max.), F_{11a} : 4 (Max.)	
Polarization	Linear	
Impedance	50	ohm
PCB size	120 x 65 x 1.0	mm

* This is typical antenna performance with the standard PCB.

Operating temperature	-40	+85	°C
Storage temperature	-40	+85	°C

All specifications are subject to change without notice and are not guaranteed.

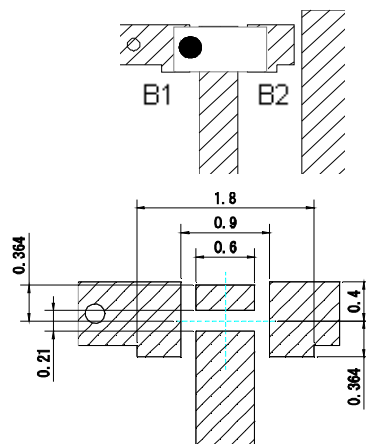
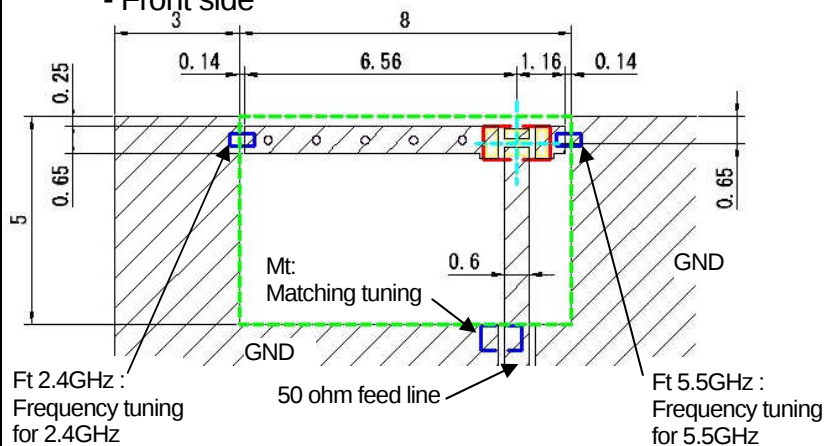
Manufacturer: TDK (Suzhou) Electronics Co., Ltd

Address: No. 224 and 226 Xinghai Street, Suzhou Industrial Park, Suzhou City, Jiangsu Province, China, and No. 189 Suhong West Road, China

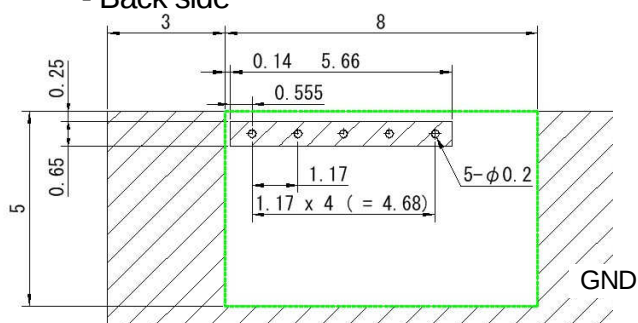
[RECOMMENDED PCB PATTERN]

Electrode

- Front side



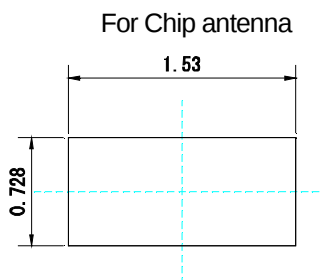
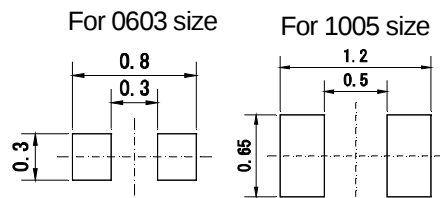
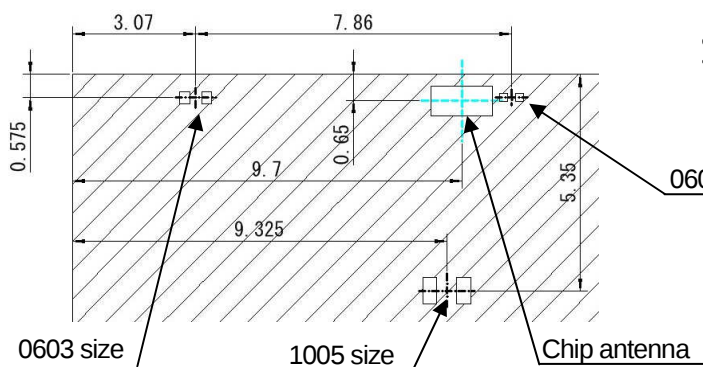
- Back side



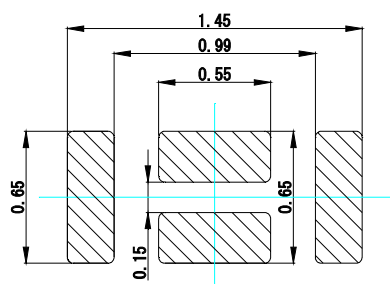
- Center line of chip antenna
- Chip antenna
- Matching component
- GND clearance
- Via

Solder Resist

- Front side



Recommend aperture size of metal mask for solder printing



Aperture of metal mask

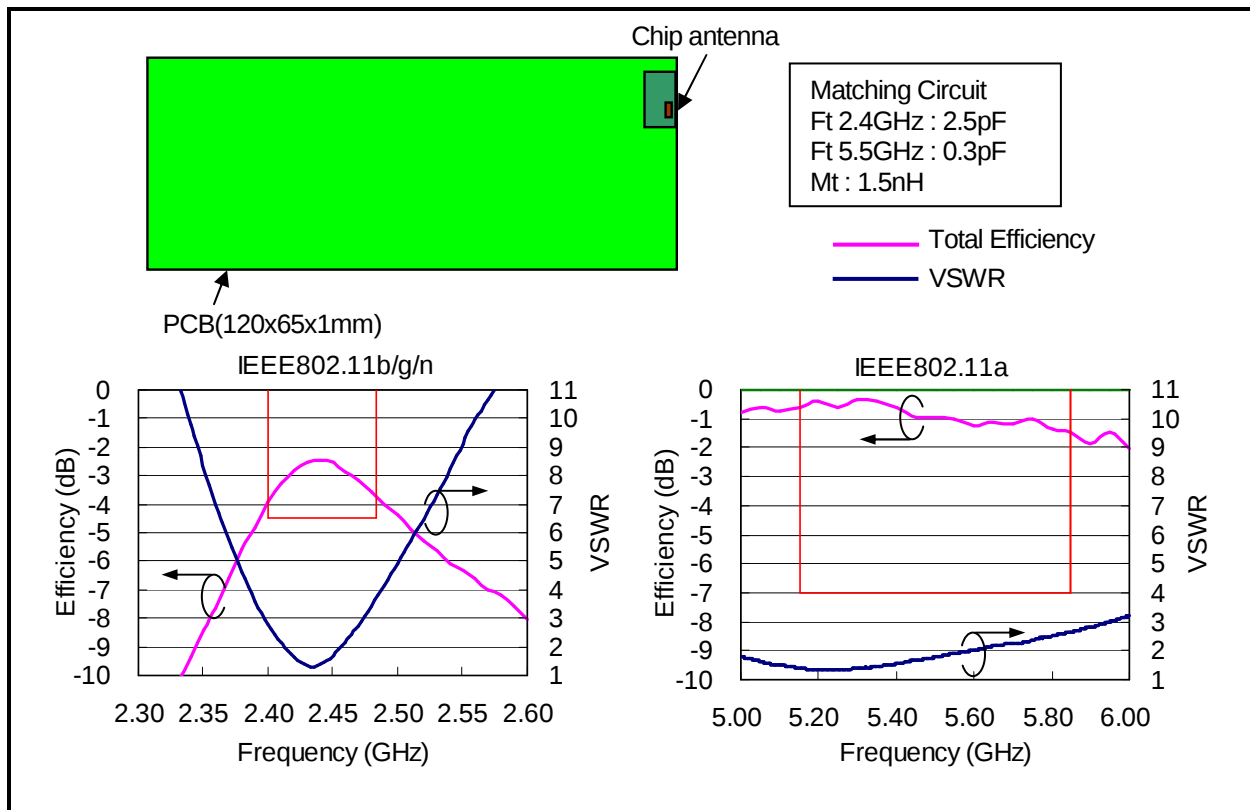
[Unit: mm]

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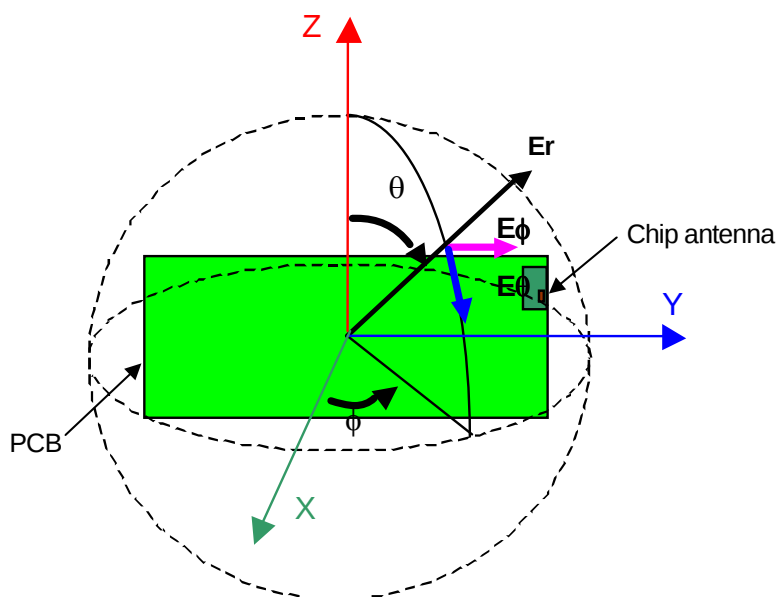
[EFFICIENCY AND VSWR]



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

[RADIATION PATTERN]

Measurement Method



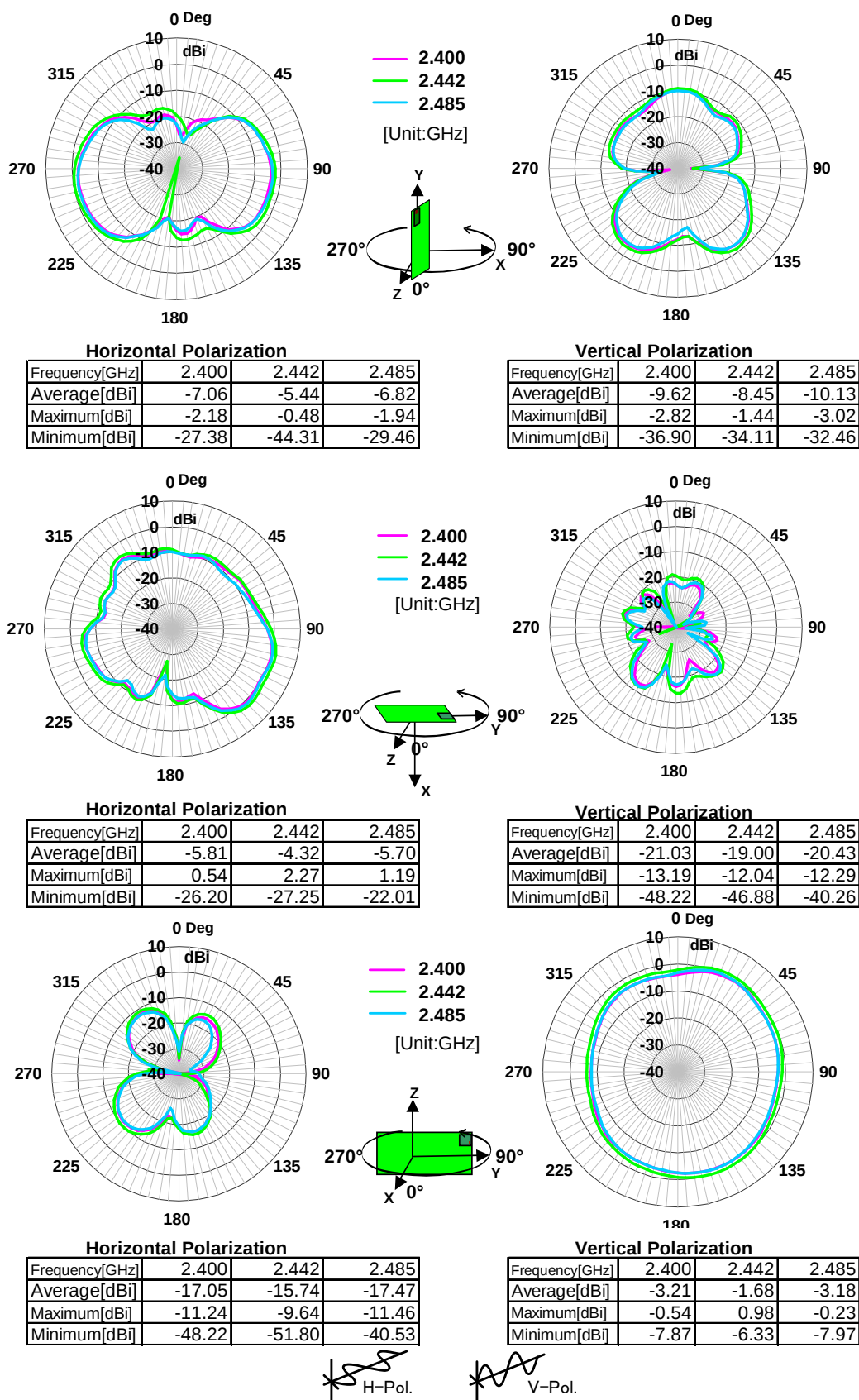
Note: Tested antenna has been soldered. Evaluation board size is 120x65x1 mm

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[RADIATION PATTERN - IEEE802.11b/g/n -]



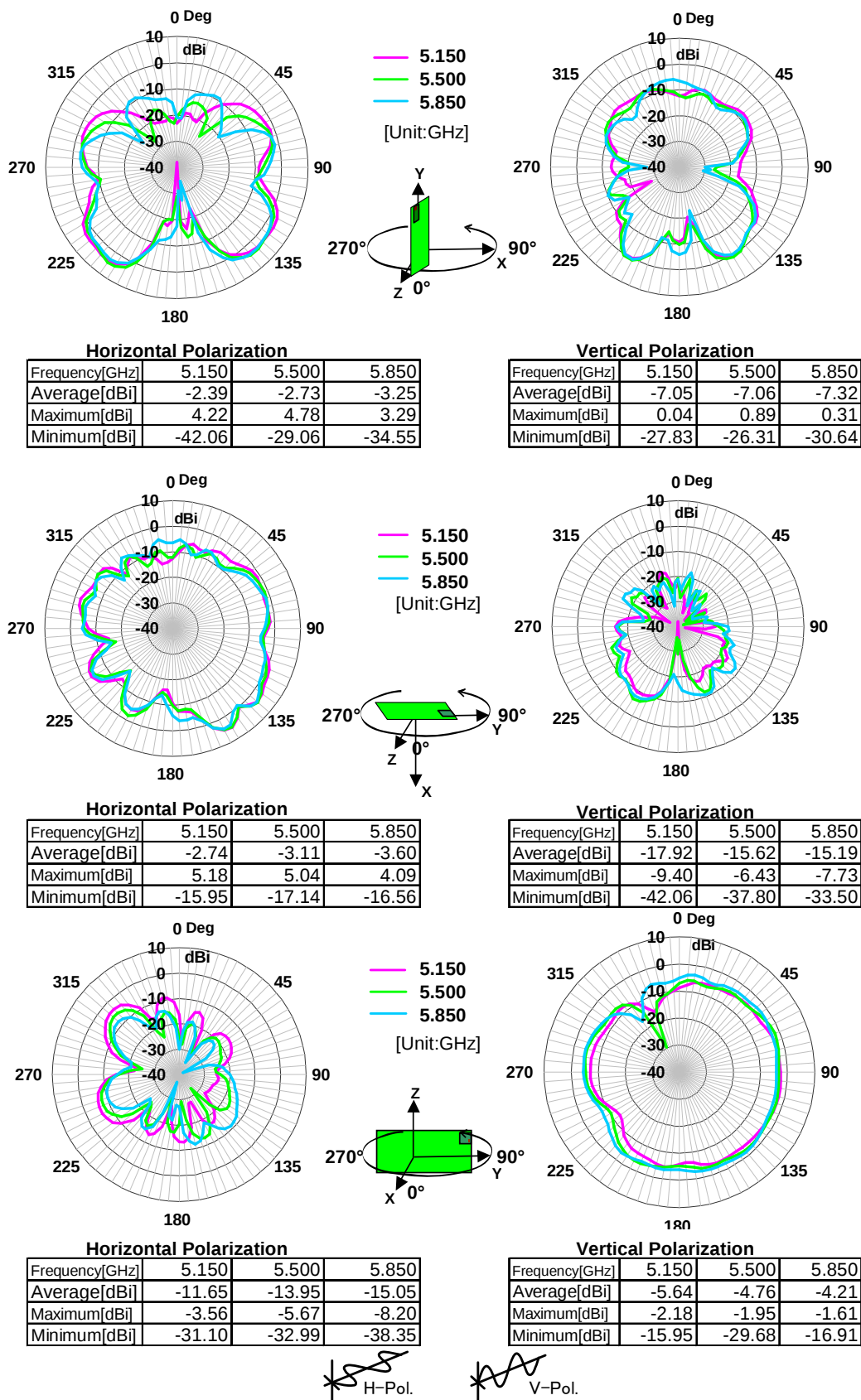
Note: Tested antenna has been soldered. Evaluation board size is 120x65x1 mm

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[RADIATION PATTERN - IEEE802.11a -]



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

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ENVIRONMENT INFORMATION

1. RoHS STATEMENT

ROHS Compliance

2. Non-Use of Halogen (Bromine and Chlorine)

The product does not include Halogens and their compounds based on the following definition.

- Bromine(Br) $\leq$ 900ppm*
- Chlorine(Cl) $\leq$ 900ppm*
- (Bromine(Br)+Chlorine(Cl) $\leq$ 1500ppm*)
(*Certain homogeneous materials)

Dual-band antenna

Bottom layer

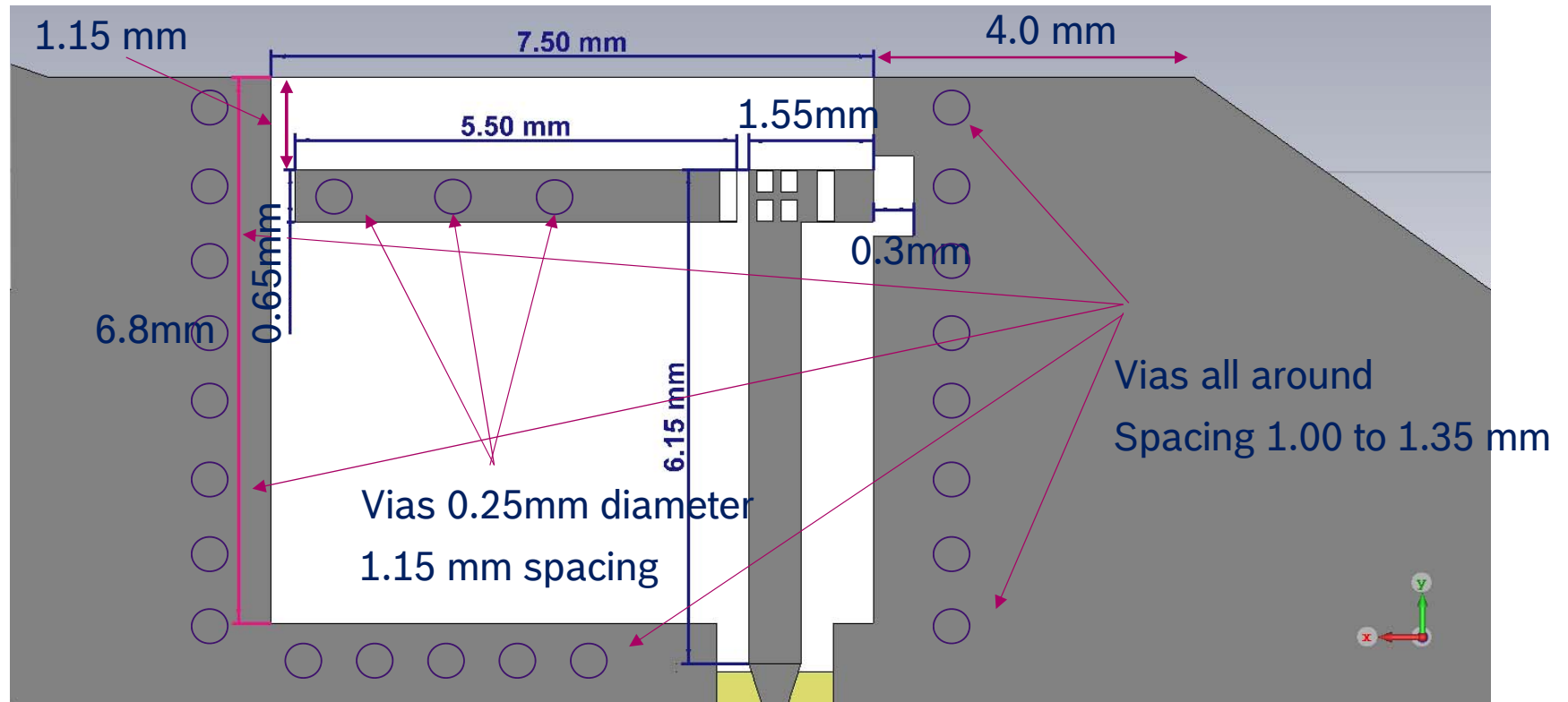
Distance to edge:

Distance to corner:

Gray: copper filled

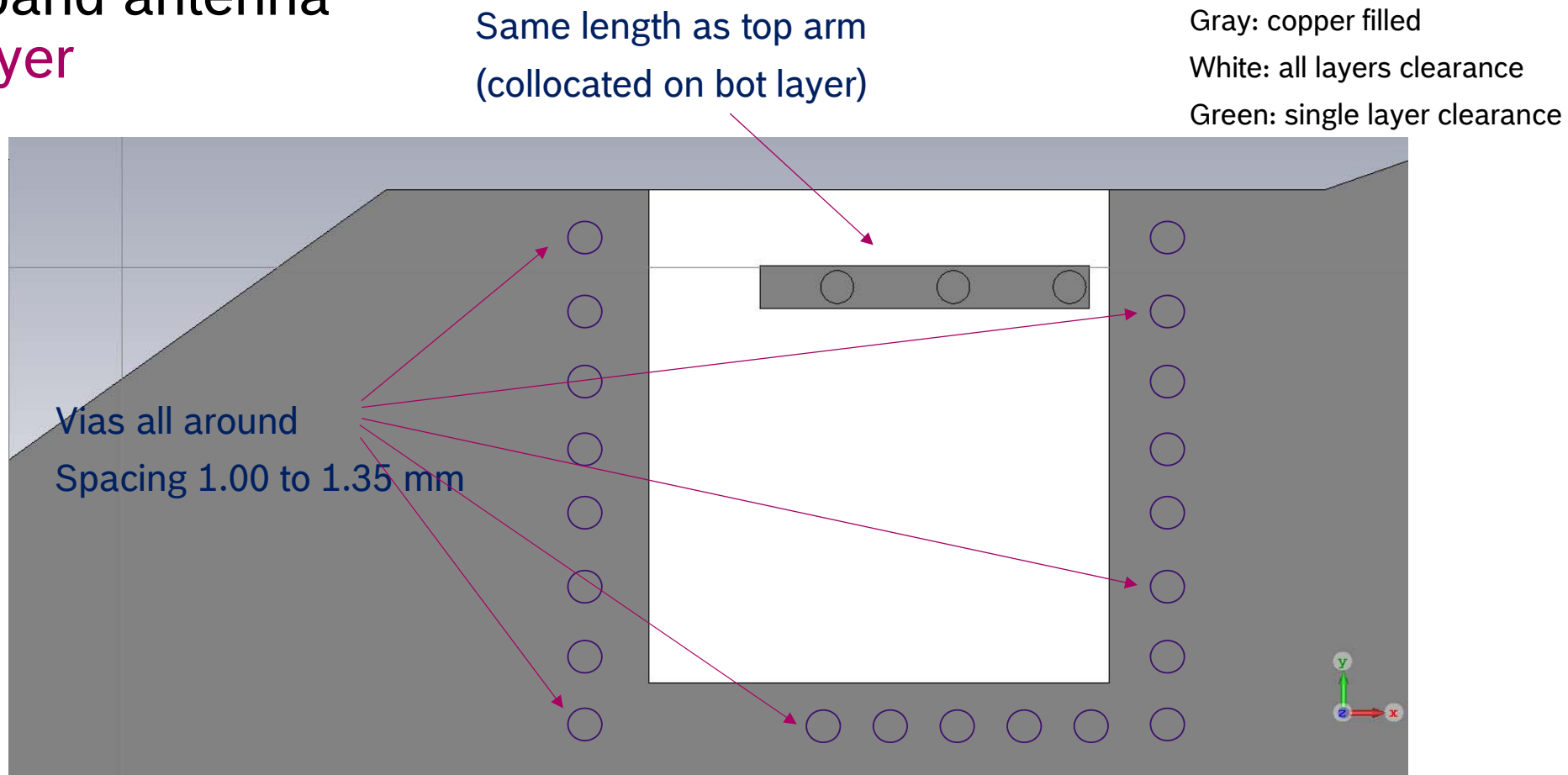
White: all layers clearance

Green: single layer clearance



Dual-band antenna

Top layer



Dual-band antenna

Bottom layer (matching network)

Gray: copper filled

White: all layers clearance

Green: single layer clearance

