



# 5G Vertically Polarized Omni Antenna



Part Number: L-5RA2

184 mm  
RoHS/RoHS II Compliant

## Features

- Operates in 617-960 MHz ,1427-2690Mhz,3300-5000Mhz and 5150~5925 MHz
- Rugged, lightweight, and water-resistant
- Vertical polarization
- High gain of 3 dBi
- VSWR 1.6
- Omni-directional pattern

## Applications

- 5G/4G/LTE radios
- Gateways
- Set-Top Boxes
- Security
- IoT
- M2M
- Transportation
- Smart agriculture

## Electrical Specifications

Electrical												
Frequency (MHz)	5G NR Band 71	LTE 700	GSM 850/900	5G Band 74,75, 76	DCS	PCS	UMTS1	LTE 2600	5G Band 77,78,79	5G Mid	Japan 5G	LTE5200/Wi-Fi5800
	617-698	698-824	824-960	1427-1518	1710-1880	1850-1990	1920-2170	2300-2690	3300-3500	3400-3800	3600-4600	5150-5925
Efficiency (%)												
Bent Free Space	58	67	68	45	50	50	47	54	25	28	28	27
Straight Free Space	56	63	65	37	48	47	41	45	23	25	26	24
Average Gain(dB)												
Bent Free Space	-2.3	-1.8	-1.8	-3.9	-2.5	-3.0	-3.1	-2.7	-6.3	-5.6	-5.7	-5.5
Straight Free Space	-2.4	-2.1	-2.0	-4.5	-2.9	-3.2	-3.7	-3.6	-6.6	-6.5	-6.2	-6.1
Peak Gain(dB)												
Bent Free Space	2.8	3.3	4.2	2.7	4.4	3.5	3.4	4.8	0.9	0.9	2.1	2.5
Straight Free Space	2.0	2.4	3.0	2.0	3.5	2.4	2.0	3.4	0.6	0.3	1.2	1.4
Impedance	50Ω											
Polarization	Linear											
Max. input Power	5W											



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## Mechanical Specifications

	Description	Note
Connector	SMA-RP	
Cable Type	RG-178	Inside the enclosure, 50 $\Omega$
Radiator	Cuprum	
Enclosure	TPE	
Base	PBT + PC	
Radom Color	Black	

## Environmental Characteristics

Parameters	Description	Note
RoHS Compliant	Yes	
MSL	N/A	
Storage temperature	-40 °C to + 85 °C	
Operating temperature	-40 °C to +85 °C	



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### Product Image

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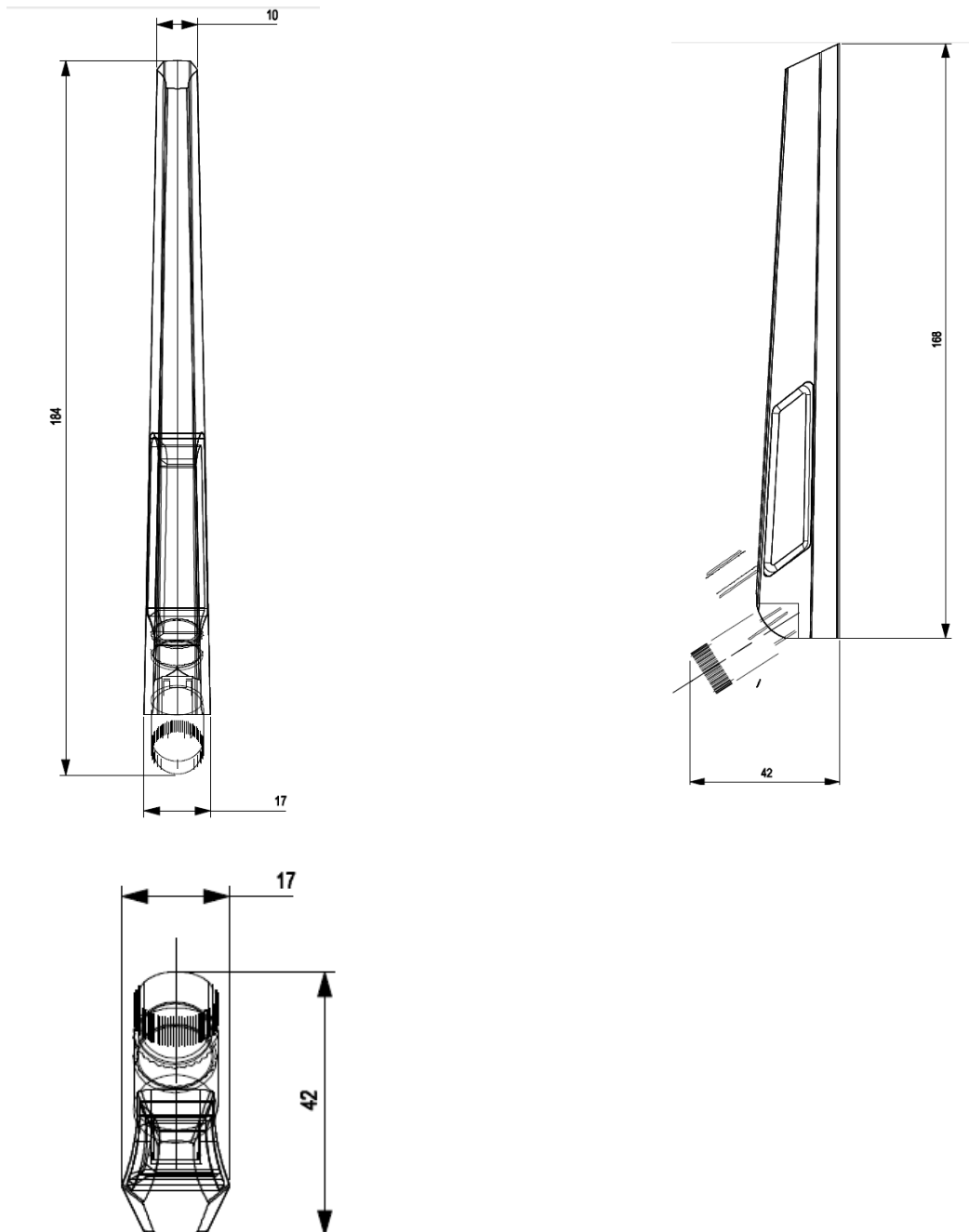
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## Dimensions (mm)





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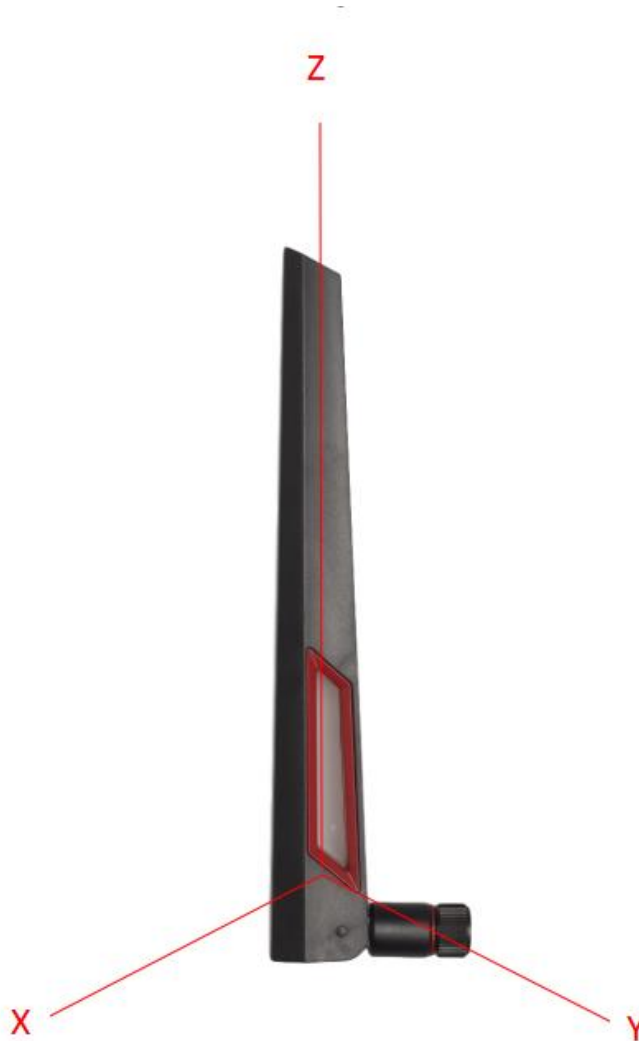
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### Radiation Patterns

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3D – Pattern



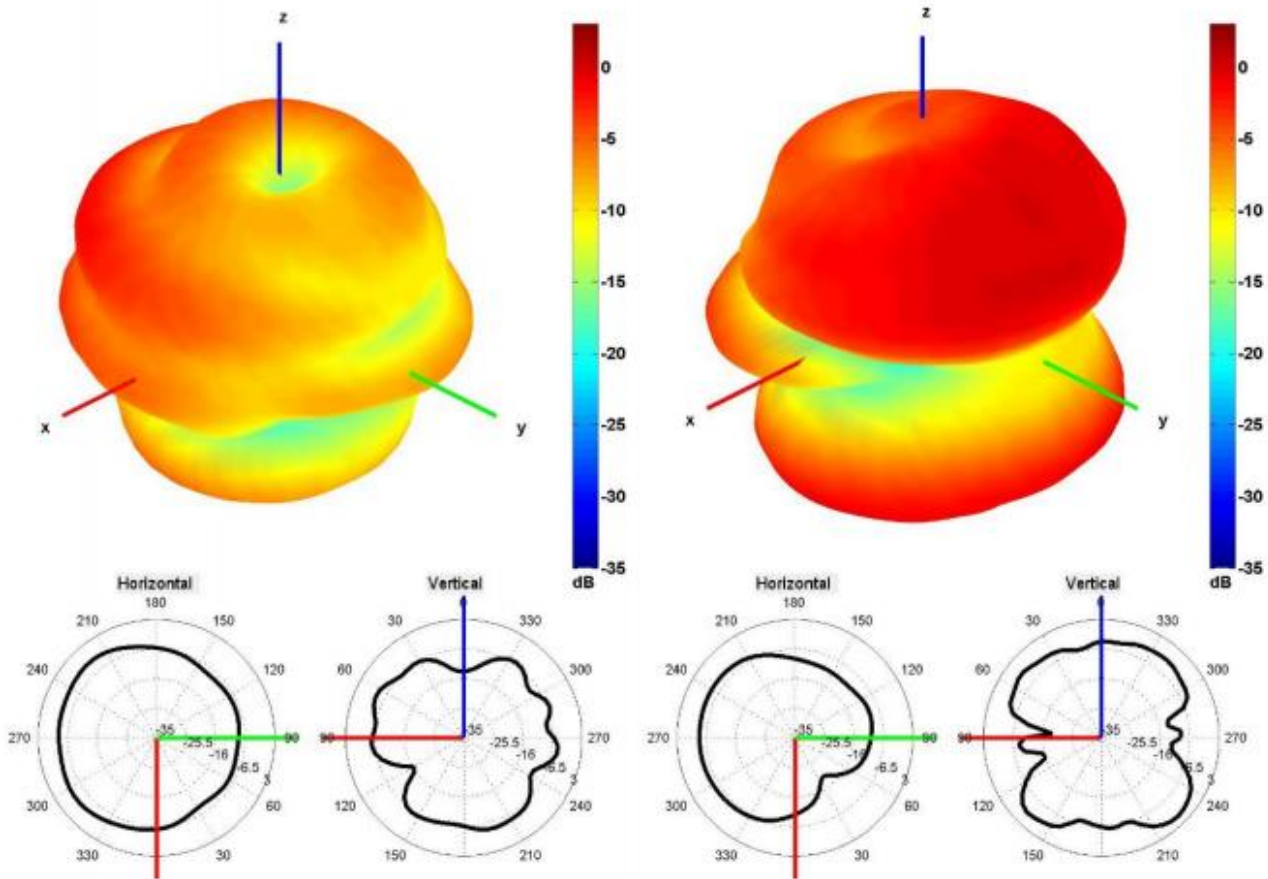


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4500 and 5500 MHz Radiation pattern

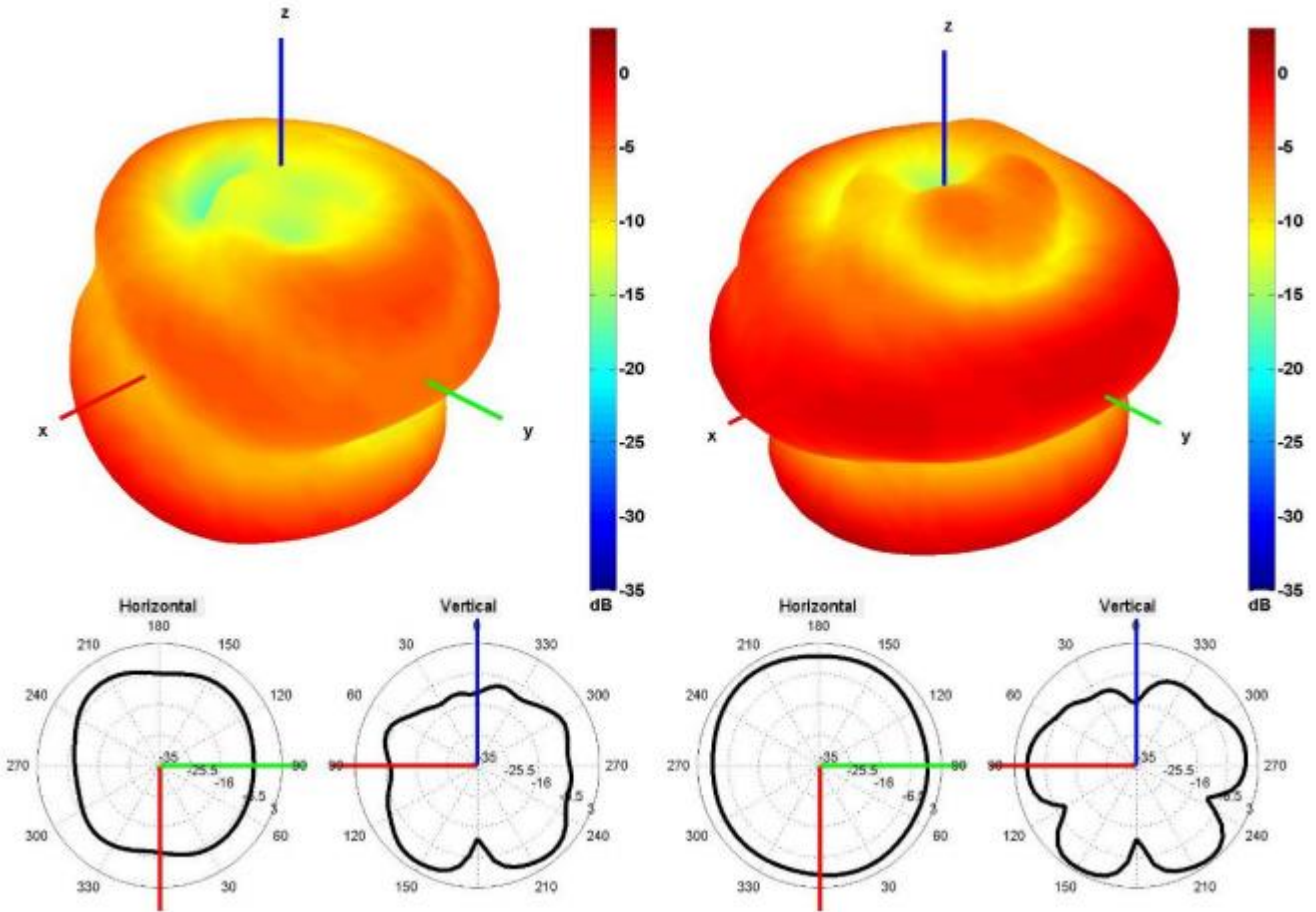


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2350 and 2600 MHz Radiation pattern

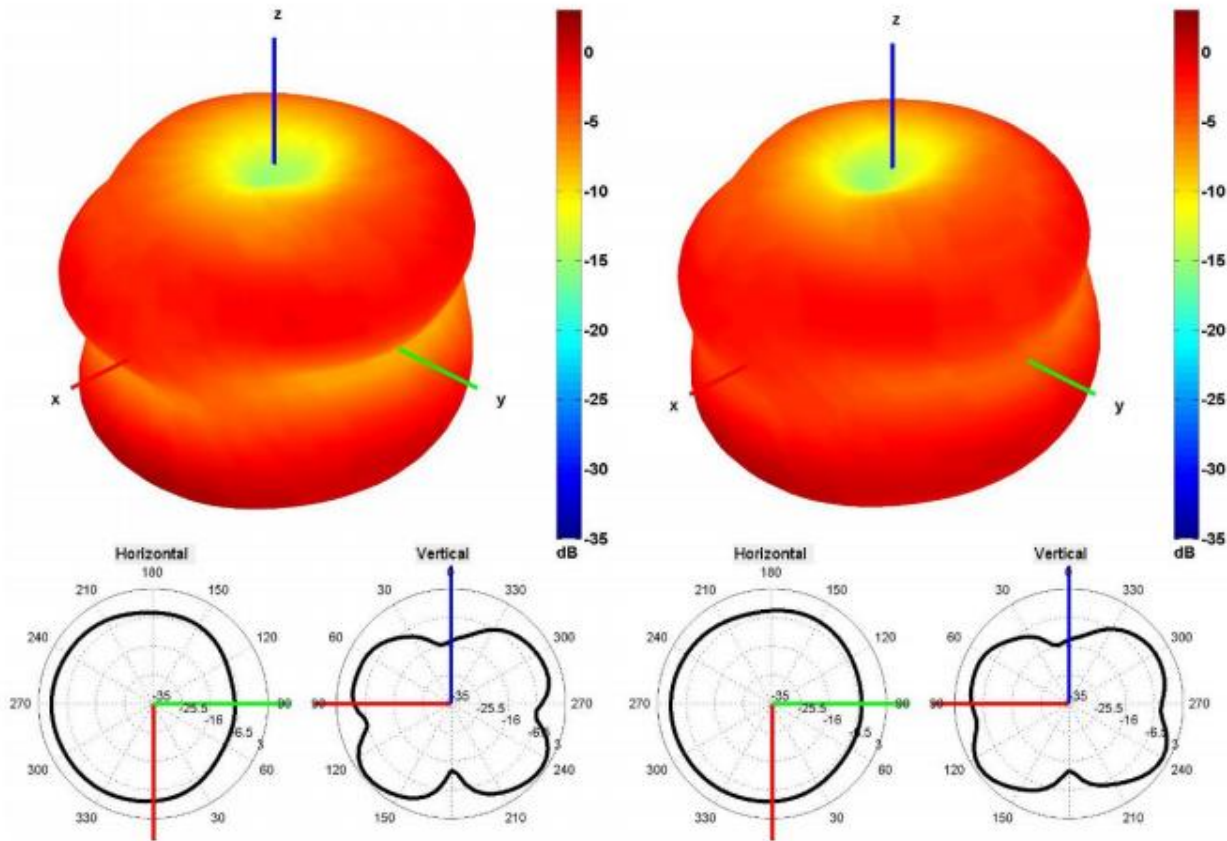


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1950 and 2100 MHz Radiation pattern



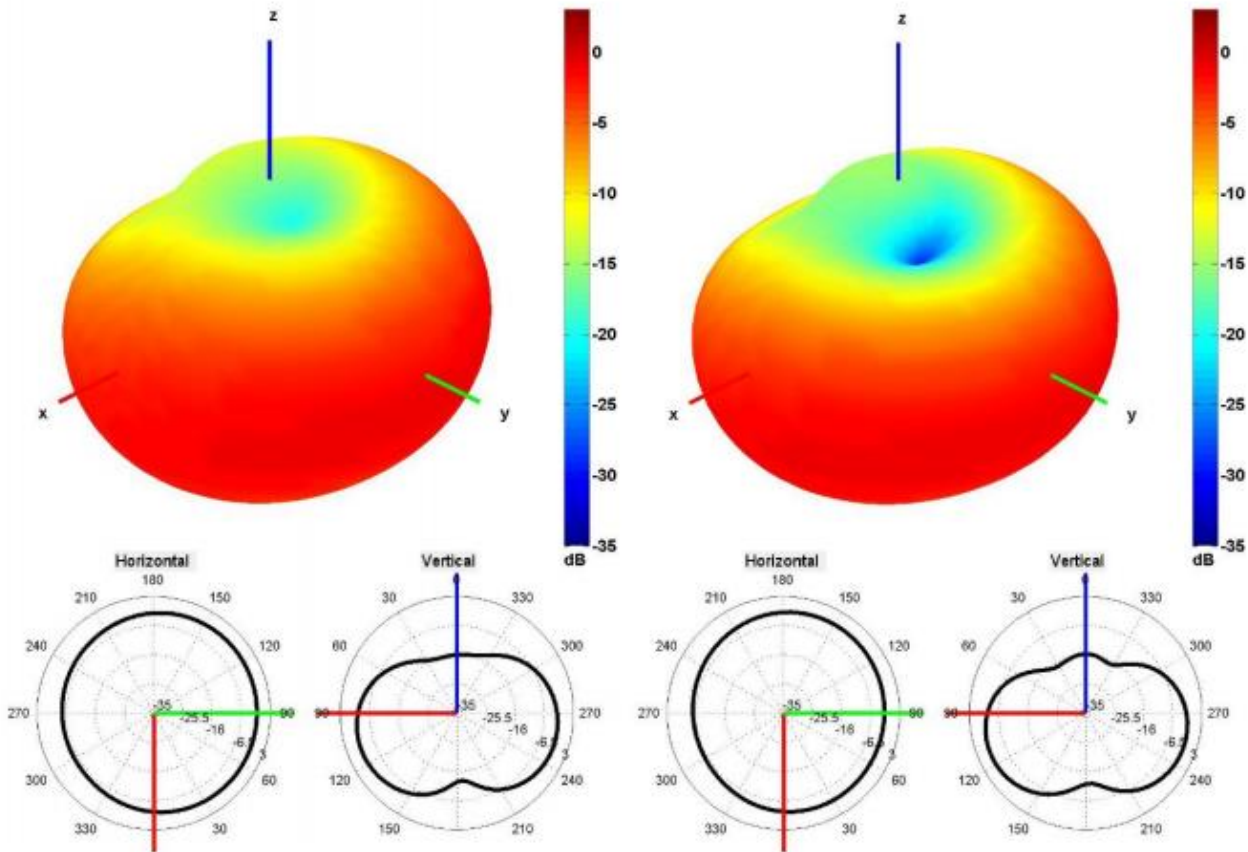


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850 and 940 MHz Radiation pattern



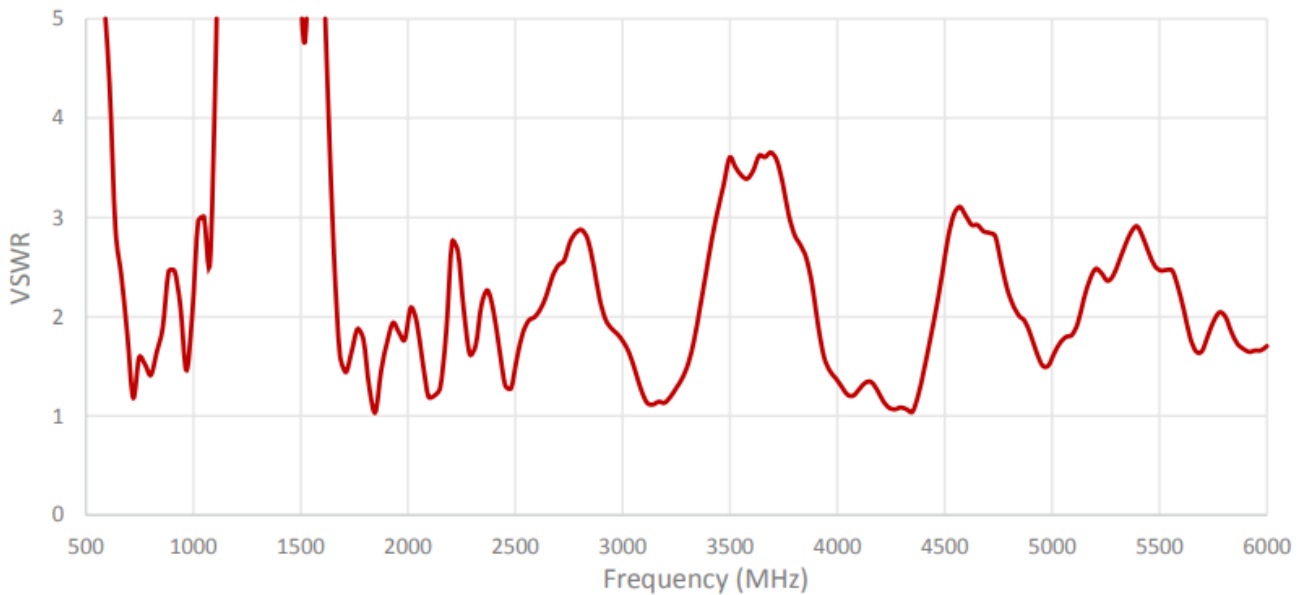
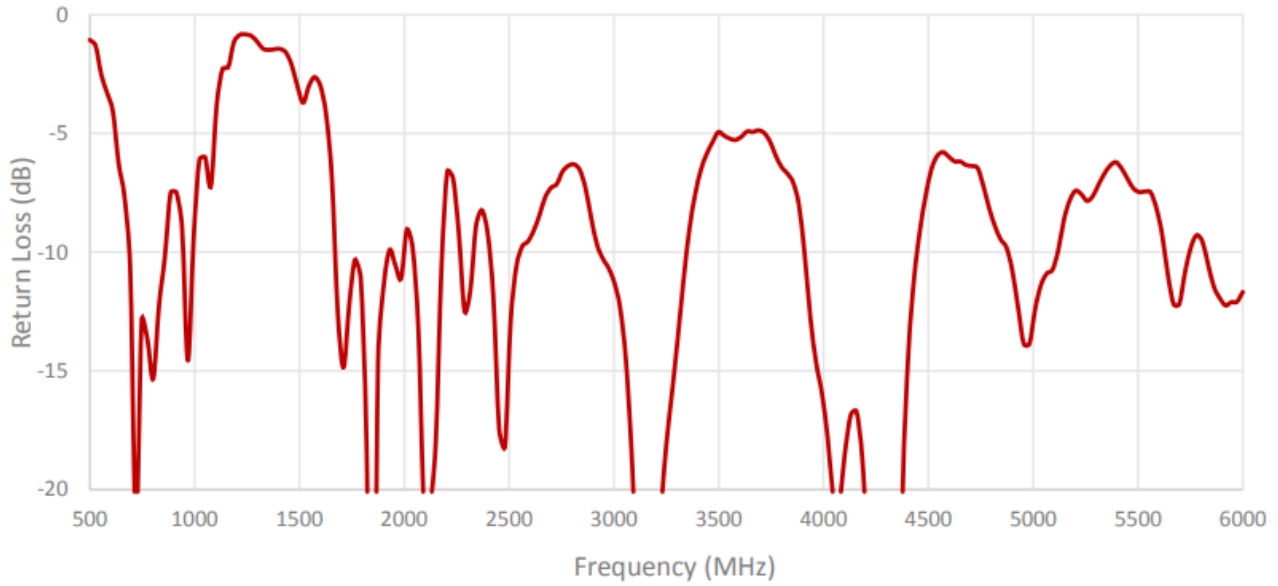
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## Antenna parameters



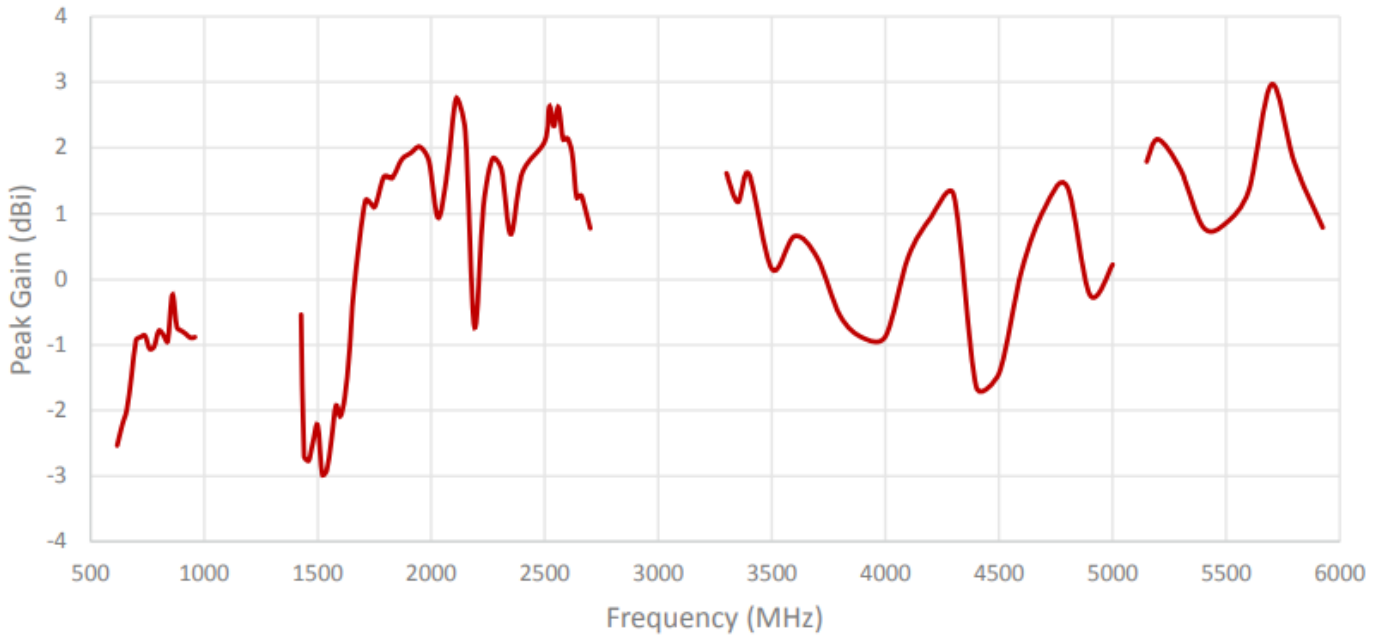
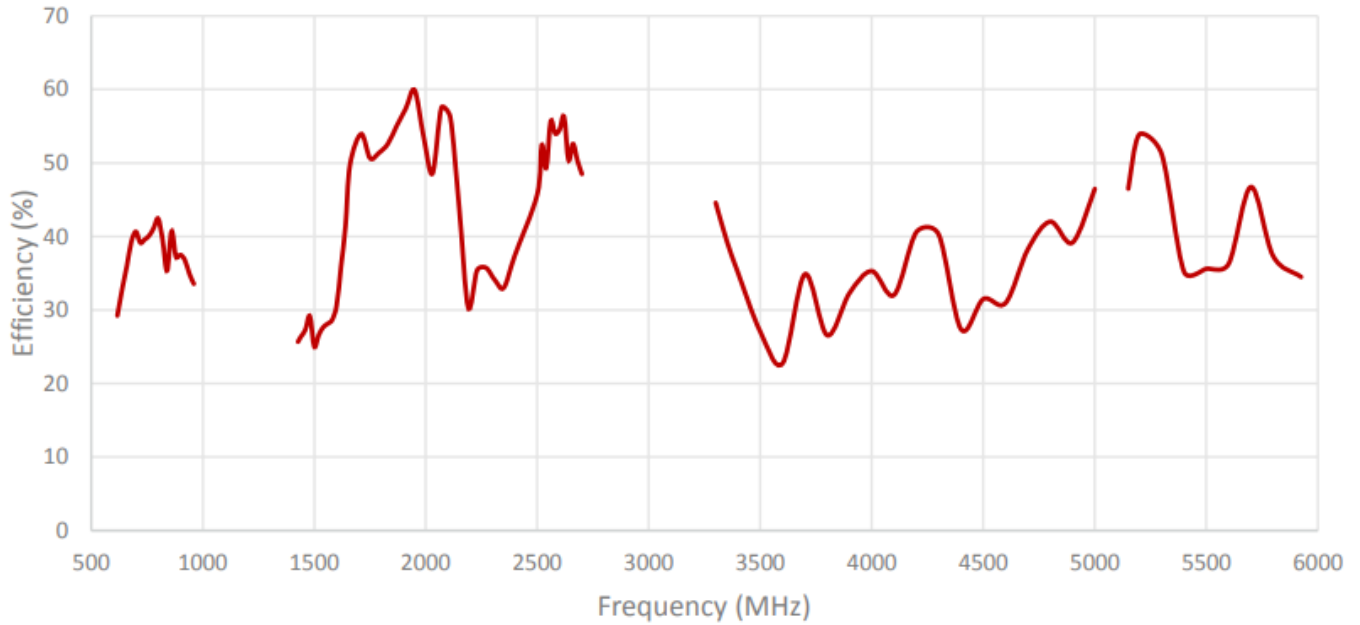


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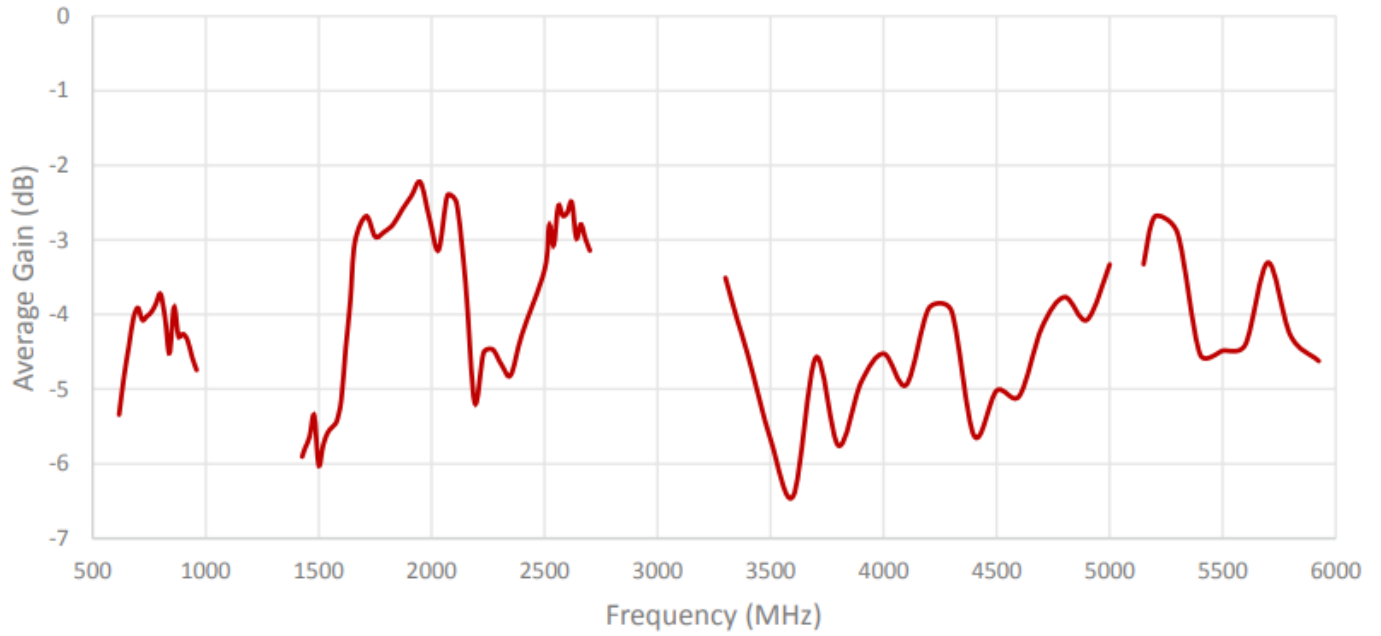


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### Packaging

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**TBD**

### Caution:

- (1) Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
- (2) Do not expose the component to open flame.
- (3) This specification applies to the functionality of the component as a single unit. Please ensure the component is thoroughly evaluated in the application circuit.