



5G/4G/3G/2G, NB-IoT, Cat-M, GNSS, Wi-Fi 6E WORLD BAND ANTENNA

**Part Numbers: 2195846-1, 2195846-2
2195846-3, 2195846-4
2195846-5, 2195846-6
2195846-7, 2195846-8**

FEATURES & BENEFITS

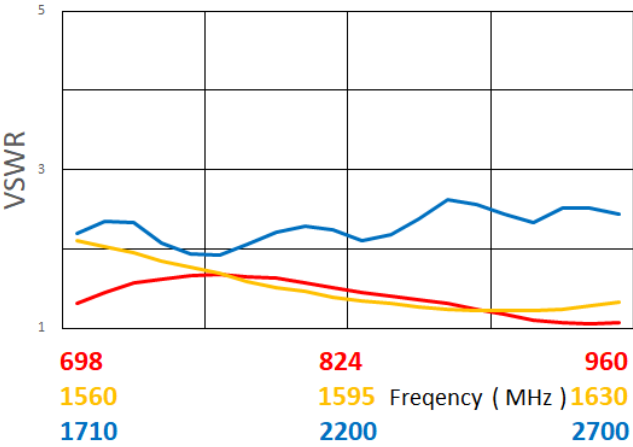
- Omnidirectional coverage
- Cabled FPC antenna
- Uses MetaSpan technology for World band coverage for 3G, 4G, 5G, NB-IoT and Cat-M
- Wi-Fi 6E triple band, Bluetooth, Zigbee and GNSS L1 included
- Adhesive backing on the FPC simplifies mounting within the device
- Different cable length and connector options available

SPECIFICATIONS (Shown as 2195846-4 : Others can vary with different cable lengths.)

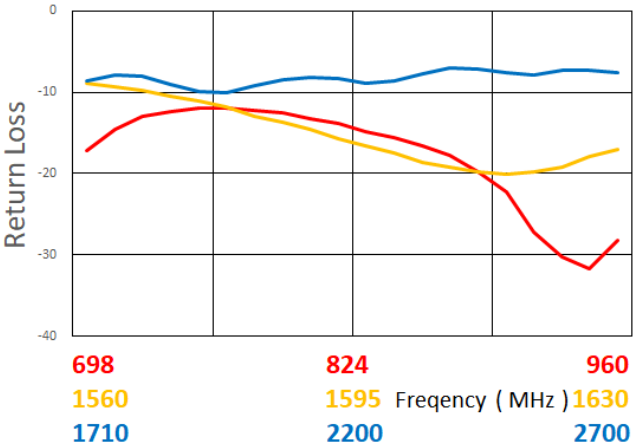
Frequency Range (MHz)	698-960	1560-1630	1710-2700	3200-3800	4400-5000	5150-5875	5925-7125
VSWR	< 1.7 : 1	< 2.1 : 1	< 2.6 : 1	< 1.9 : 1	< 1.8 : 1	< 1.5 : 1	< 2.3 : 1
Average Efficiency	49%	54%	57%	71%	71%	72%	59%
Peak Gain	-1.7 dBi	4.0 dBi	3.2 dBi	3.7 dBi	4.7 dBi	4.2 dBi	6.7 dBi
Average Gain	-3.1 dBi	-2.7 dBi	-2.4 dBi	-1.5 dBi	-1.5 dBi	-1.4 dBi	-2.3 dBi
Power Handling	10 Watt cw						
Feed Point Impedance	50 ohms unbalanced						
Polarization	Linear						
Size	80.0 mm x 15.0 mm x 0.2 mm						
Weight	< 1.5 g						
Mounting	Adhesive Tape						
Mating Connector	MHF and MHF4L type, Refer to page 9						
Cable (coaxial)	1.13 mm Dia. & 1.37 mm Dia. Refer to page 9						
Operating Temperature	-40 to +85°C						
Storage Temperature	-40 to +85°C						
Hazardous Materials	A certificate of conformance is available from the product page on TE website.						

RF DATA (Shown as 2195846-4 : Others can vary with different cable lengths.)

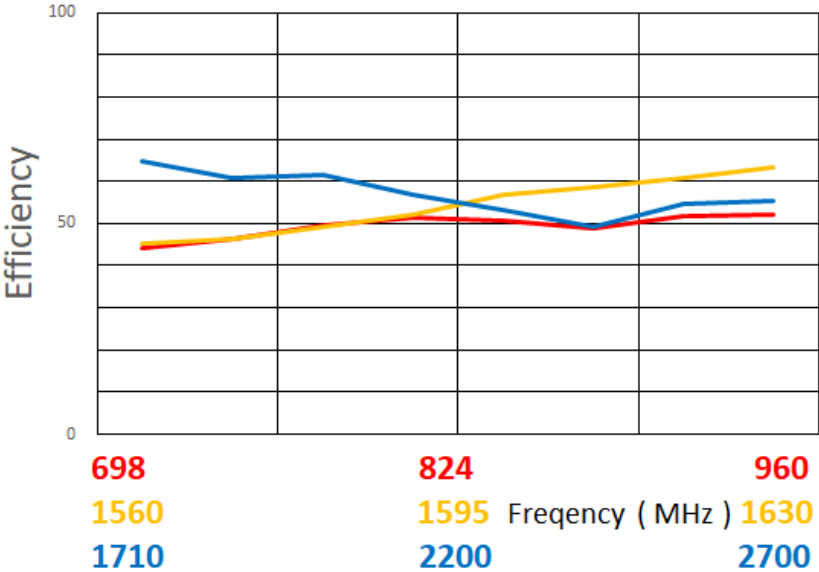
VSWR



Return Loss

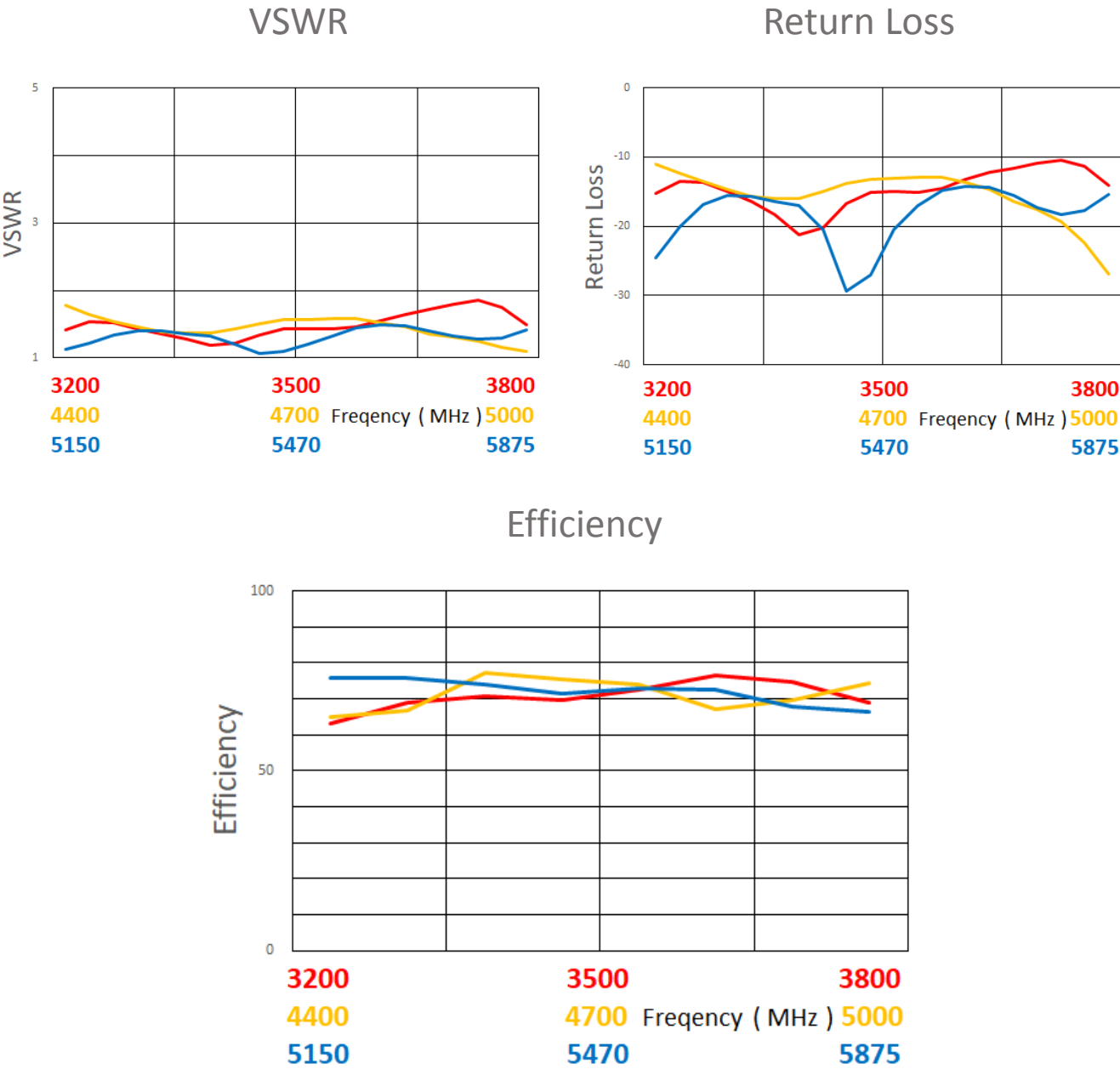


Efficiency



Data measured in free space and on plastic device enclosure

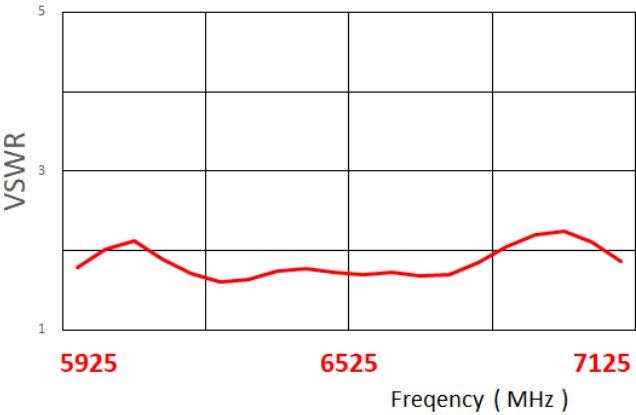
RF DATA (Shown as 2195846-4 : Others can vary with different cable lengths.)



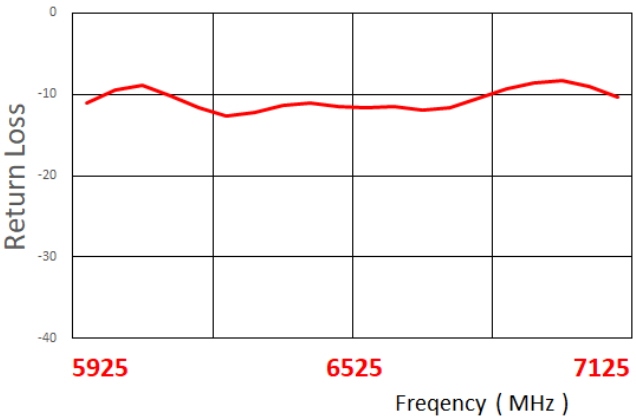
Data measured in free space and on plastic device enclosure

RF DATA (Shown as 2195846-4 : Others can vary with different cable lengths.)

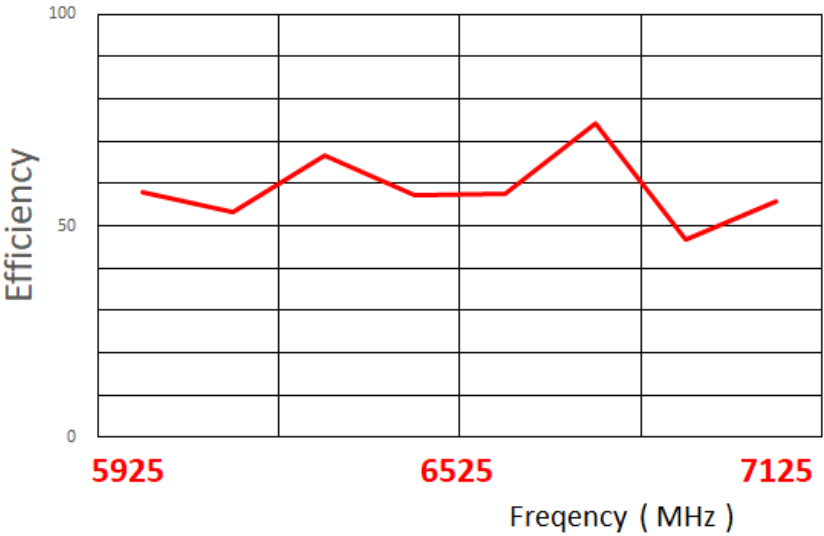
VSWR



Return Loss



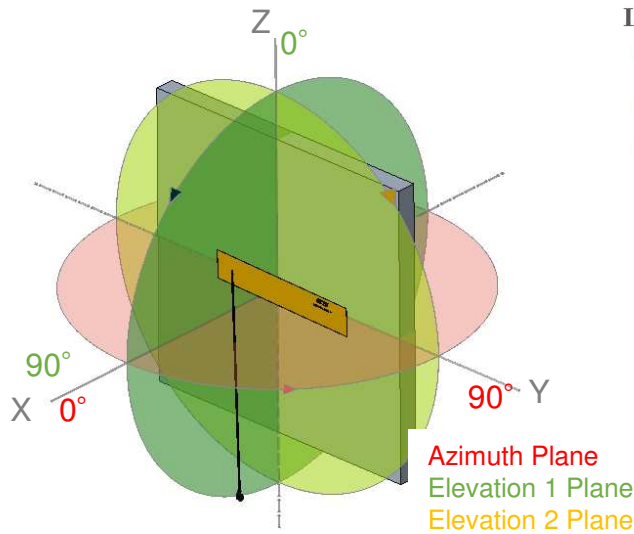
Efficiency



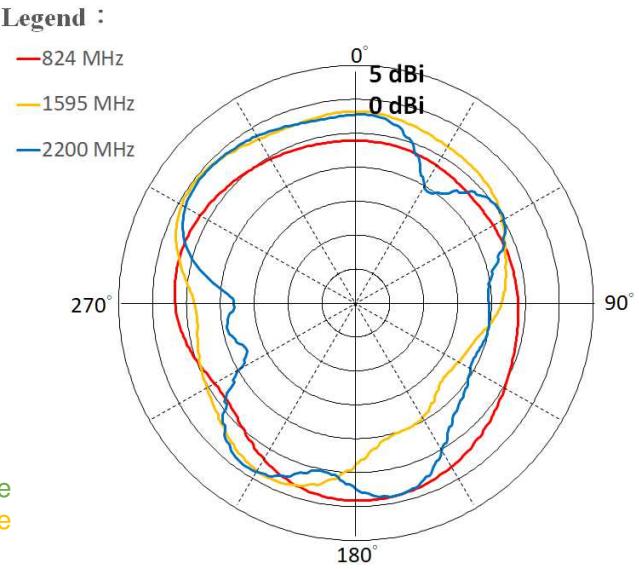
Data measured in free space and on plastic device enclosure

RADIATION PATTERN (Shown as 2195846-4 : Others can vary with different cable lengths)

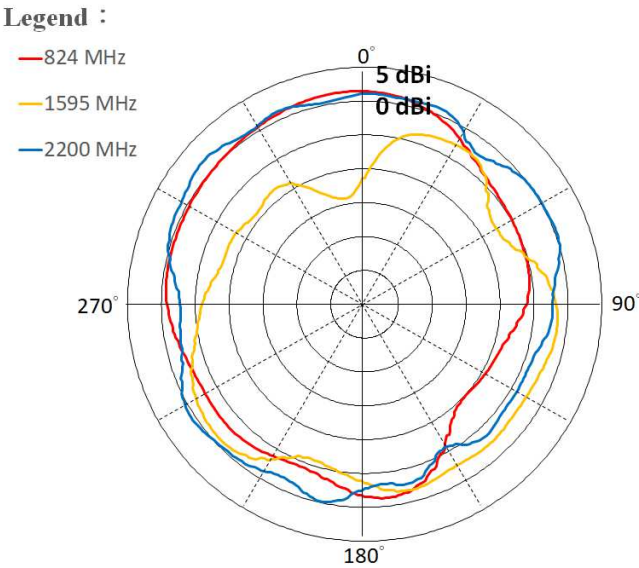
Test setup



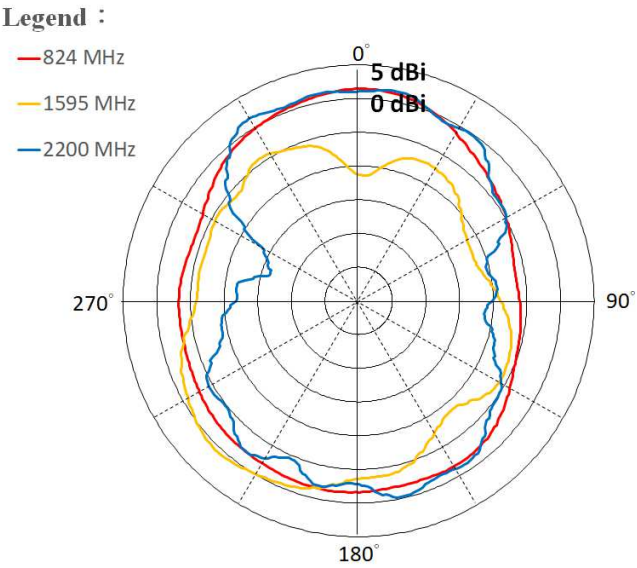
Azimuth



Elevation 1



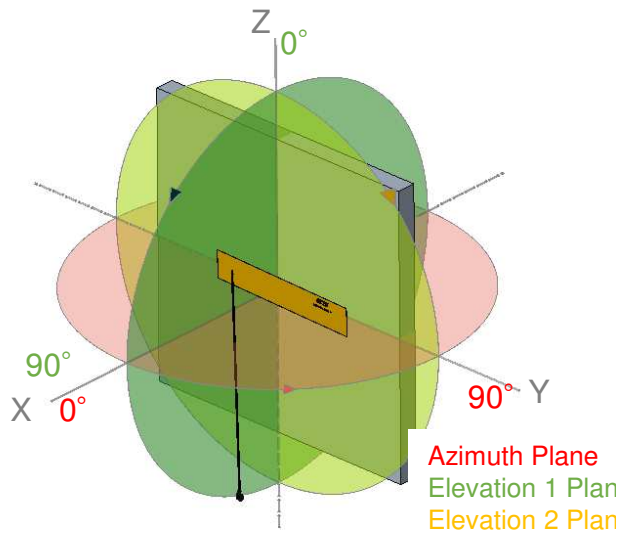
Elevation 2



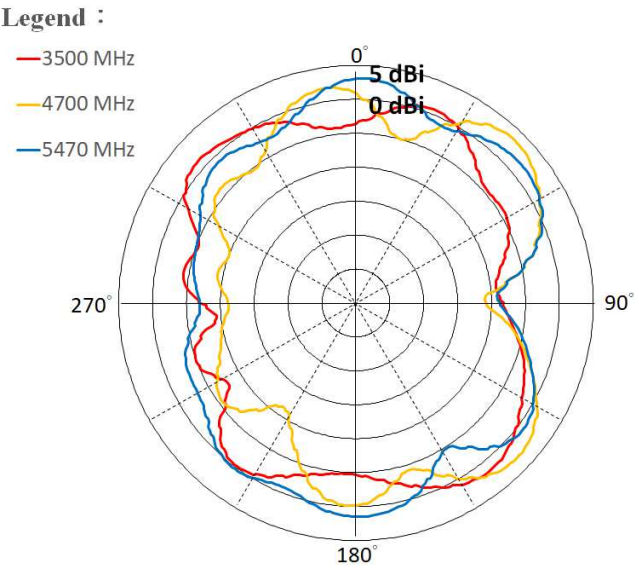
Data measured in free space and on plastic device enclosure

RADIATION PATTERN (Shown as 2195846-4 : Others can vary with different cable lengths)

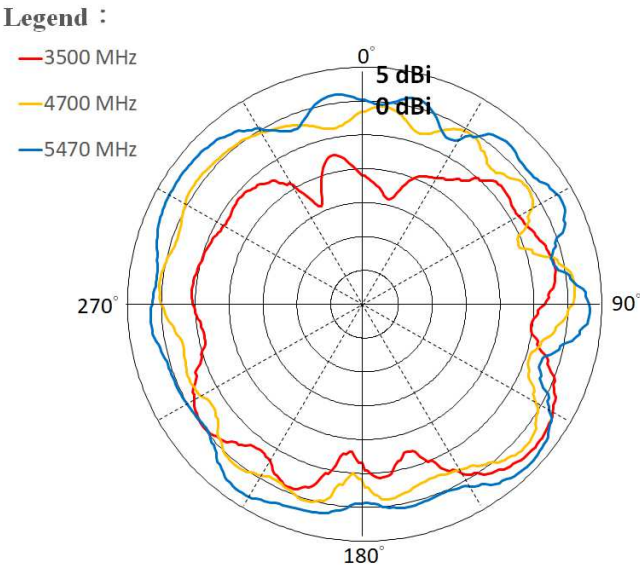
Test setup



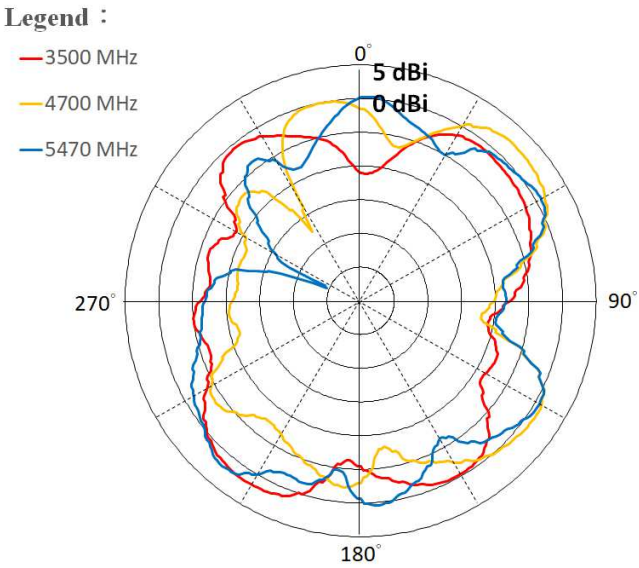
Azimuth



Elevation 1



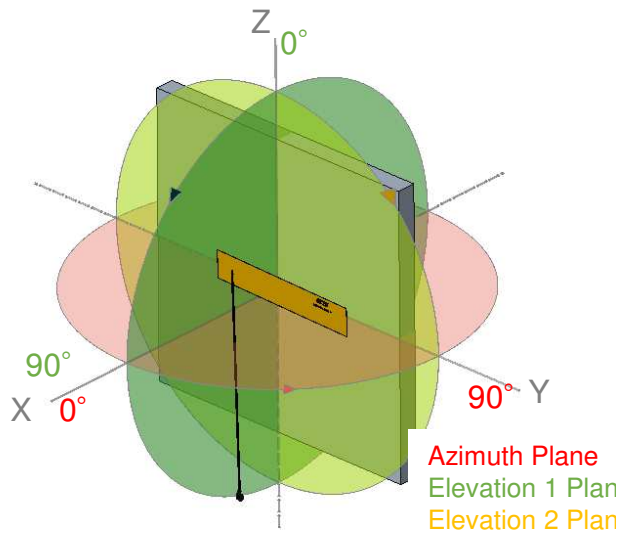
Elevation 2



Data measured in free space and on plastic device enclosure

RADIATION PATTERN (Shown as 2195846-4 : Others can vary with different cable lengths)

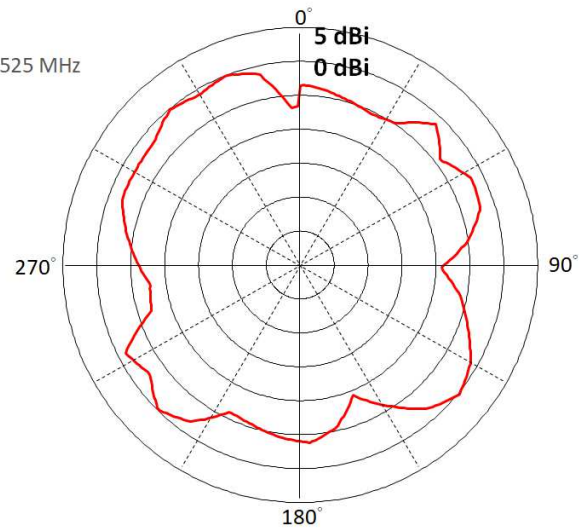
Test setup



Azimuth

Legend :

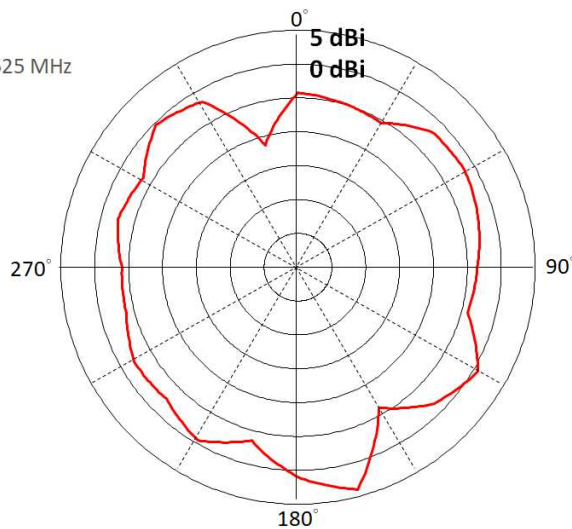
— 6525 MHz



Elevation 1

Legend :

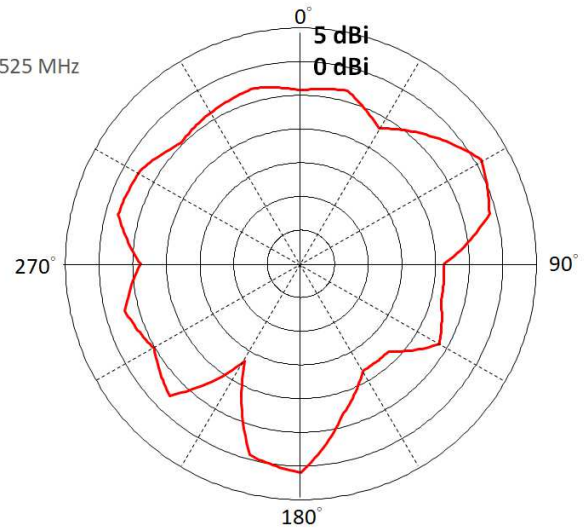
— 6525 MHz



Elevation 2

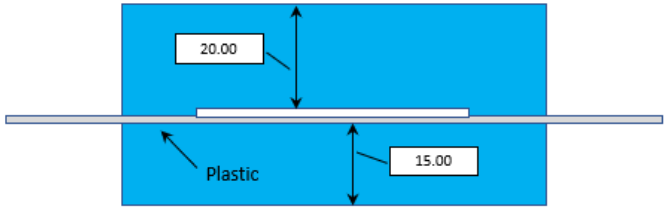
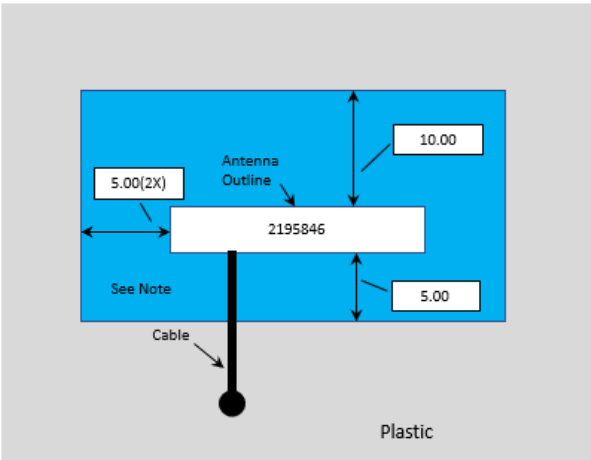
Legend :

— 6525 MHz



Data measured in free space and on plastic device enclosure

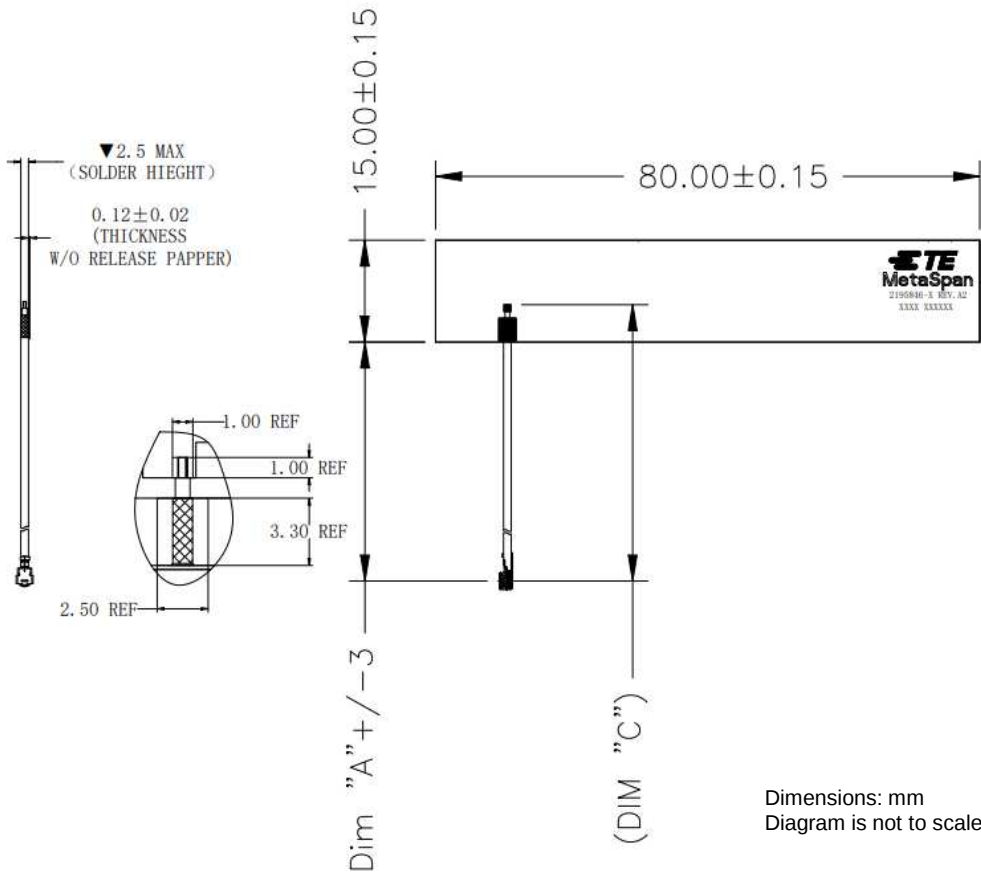
KEEP OUT AREA



- NOTES :
- 1. Antenna designed to be mounted on plastic cover.
 - 2. Area in blue above indicates Keep Out Area. This is base on 60x60mm size metal parts.
 - 3. For more information please call TE.

Dimensions : mm
Diagram is not to scale

DIMENSIONS

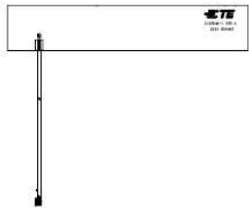


Dimensions: mm
Diagram is not to scale

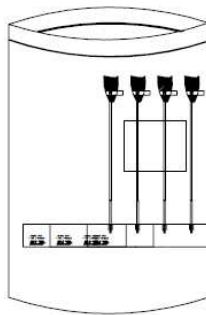
MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

2195846-1	50.0	1.969	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN : 2337019-1)	
2195846-2	100.0	3.937	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN : 2337019-1)	
2195846-3	150.0	5.906	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN : 2337019-1)	
2195846-4	200.0	7.874	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN : 2337019-1)	
2195846-5	50.0	1.969	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN : 2334884-1)	
2195846-6	100.0	3.937	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN : 2334884-1)	
2195846-7	150.0	5.906	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN : 2334884-1)	
2195846-8	200.0	7.874	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN : 2334884-1)	
PART NUMBER	MM	INCH	MM	CONNECTOR TYPE (ON CABLE)	PART NUMBER	IMAGE
	CABLE LENGTH "A"		CABLE DIA.		MATING COMPONENTS	

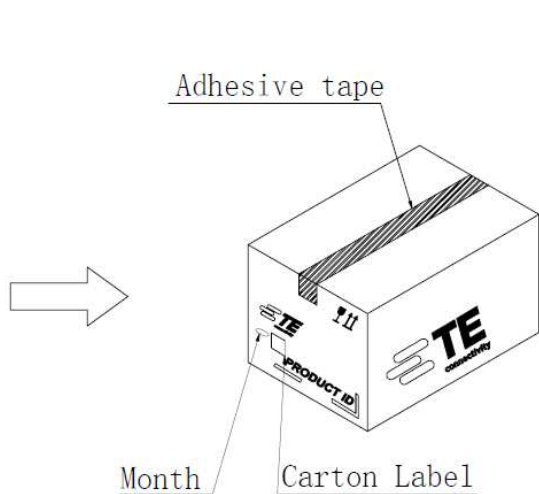
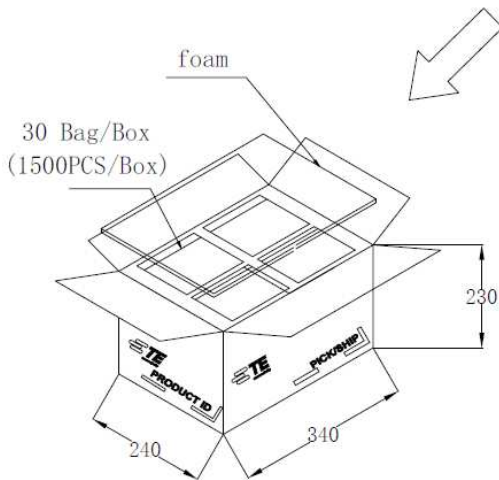
PACKAGING



25 PCS/Bundle



50pcs/Bag
drying agent:1pcs/Bag



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Standard Antenna Solutions

TE TECHNICAL SUPPORT CENTER

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