

Antenna specification

The antenna used has the part number 430.0000.02 and its specifications are summarized in the following table, extracted from the datasheet [1]. It is made be TE with the part number 2344657-1. The pocket unit does not support simultaneous transmission.

SPECIFICATIONS ANTENNA		
ELECTRICAL CHARACTERISTICS	ANTENNA OPERATION	PASSIVE
	VSWR (MAX)	<2.7:1
	IMPEDANCE	50 Ω
SIGNAL CHARACTERISTICS	GAIN (MAX)	2.2 DB
	FREQUENCY BAND	2400 – 2500 MHZ, 5150 – 5875 MHZ, 5925 – 7125 MHZ
	NOMINAL FREQUENCY RANGE	2400 – 7125
	PEAK GAIN	1.1 < 5.3 DBI
OPERATION / APPLICATION	WIRELESS STANDARD	802.11 A/B/G/N/AC/AD/AX, BLUETOOTH, ZIGBEE & WI-FI
	POLARIZATION	LINEAR



Wi-Fi 6/6E TRIPLE BAND EMBEDDED ANTENNA

Part Numbers: 2344657-1, 2344657-2
2344657-3, 2344657-4
2344657-5, 2344657-6
2344657-7, 2344657-8
2344657-9.1-2344657-1

FEATURES & BENEFITS

- Wi-Fi 6, also including Wi-Fi 6E new 6GHz band, Bluetooth, ZigBee
- Adhesive backing on FPC simplifies mounting within the device
- Omnidirectional coverage
- No matching components required
- Different cable length and connector options available

SPECIFICATIONS (Shown as 2344657-1 : Others can vary with different cable lengths.)

Frequency Range (MHz)	2400-2500	5150-5875	5925-7125
VSWR	< 2.7:1	< 2.1:1	< 2.1:1
Average Efficiency	61%	72%	66%
Peak Gain	1.1dBi	4.9dBi	5.3dBi
Average Gain	-2.2dB	-1.4dB	-1.8dB
Power Handling	10 Watt cw		
Feed Point Impedance	50 ohms unbalanced		
Polarization	Linear		
Size	35 mm x 8.0 mm x 0.2 mm		
Weight	< 0.8 g		
Mounting	Adhesive Tape		
Mating Connectors	MHF and MHF4-type, Refer to page 5		
Cable (Coaxial)	0.81mm and 1.13mm Dia., Refer to page 5		
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 for each P/N

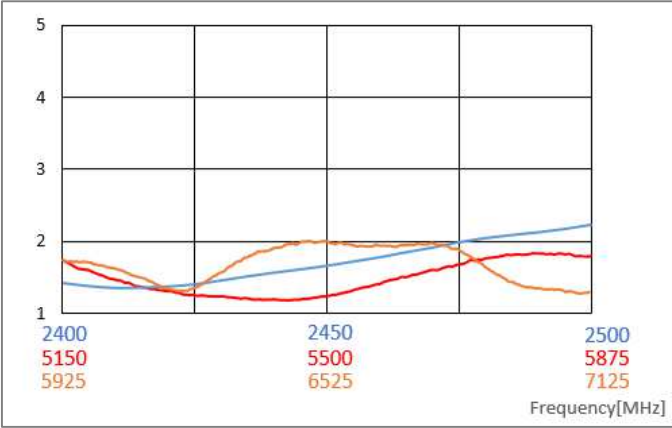
P/N	Cable Length (mm)	Connector	RF DATA	VSWR(MHz)		
				2400-2500	5150-5875	5925-7125
2344657-1	50	MHF	VSWR	< 2.7:1	< 2.1:1	< 2.1:1
			Aver. Eff.	61%	72%	66%
			Peak Gain	1.1dBi	4.9dBi	5.3dBi
			Aver. Gain	-2.2dB	-1.4dB	-1.8dB
2344657-2	100	MHF	VSWR	< 1.3:1	< 1.8:1	< 1.9:1
			Aver. Eff.	58	69	62
			Peak Gain	1.0	4.7	5.1
			Aver. Gain	-2.3	-1.6	-2.1
2344657-3	150	MHF	VSWR	< 1.4:1	< 1.9:1	< 2.0:1
			Aver. Eff.	56	65	59
			Peak Gain	0.8	4.5	4.8
			Aver. Gain	-2.5	-1.8	-2.3
2344657-4	200	MHF	VSWR	< 1.3:1	< 1.6:1	< 2.2:1
			Aver. Eff.	55	62	56
			Peak Gain	0.7	4.2	4.6
			Aver. Gain	-2.6	-2.1	-2.6

RF data for each P/N

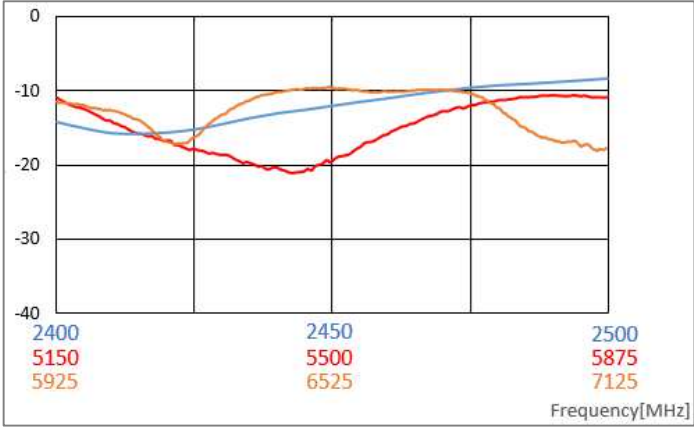
P/N	Cable Length (mm)	Connector	RF DATA	VSWR(MHz)		
				2400-2500	5150-5875	5925-7125
2344657-5	50	MHF4	VSWR	< 1.2:1	< 1.5:1	< 2.1:1
			Aver. Eff.	60	71	65
			Peak Gain	1.1	4.8	5.2
			Aver. Gain	-2.2	-1.5	-1.9
2344657-6	100	MHF4	VSWR	< 1.4:1	< 1.7:1	< 2.1:1
			Aver. Eff.	57	67	60
			Peak Gain	0.9	4.5	4.9
			Aver. Gain	-2.4	-1.8	-2.2
2344657-7	150	MHF4	VSWR	< 1.4:1	< 1.5:1	< 2.1:1
			Aver. Eff.	55	62	56
			Peak Gain	0.7	4.3	4.6
			Aver. Gain	-2.6	-2.1	-2.5
2344657-8	200	MHF4	VSWR	< 1.3:1	< 1.5:1	< 2.1:1
			Aver. Eff.	53	58	52
			Peak Gain	0.5	4.0	4.2
			Aver. Gain	-2.8	-2.3	-2.9
2344657-9	250	MHF	VSWR	< 1.3:1	< 1.5:1	< 2.1:1
			Aver. Eff.	53	59	52
			Peak Gain	0.3	3.7	4.0
			Aver. Gain	-2.8	-2.3	-2.8
1-2344657-1	300	MHF4	VSWR	< 2.7:1	< 2.0:1	< 2.0:1
			Aver. Eff.	47	31	24
			Peak Gain	0.9	1.2	-1.8
			Aver. Gain	-3.3	-5.1	-6.2

RF DATA (Shown as 2344657-1 : Others can vary with different cable lengths.)

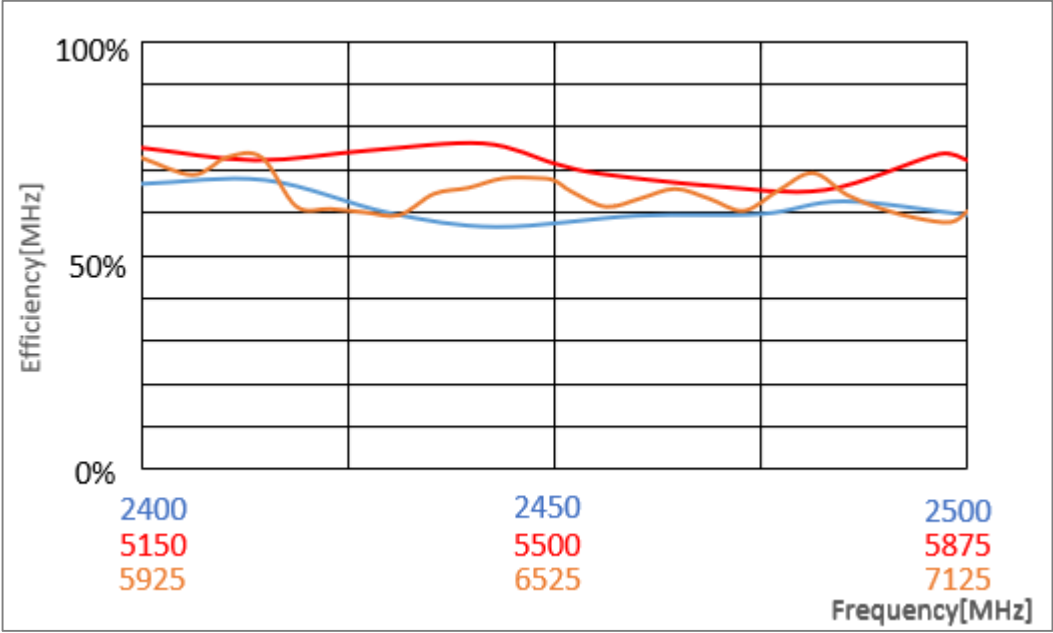
VSWR



Return Loss



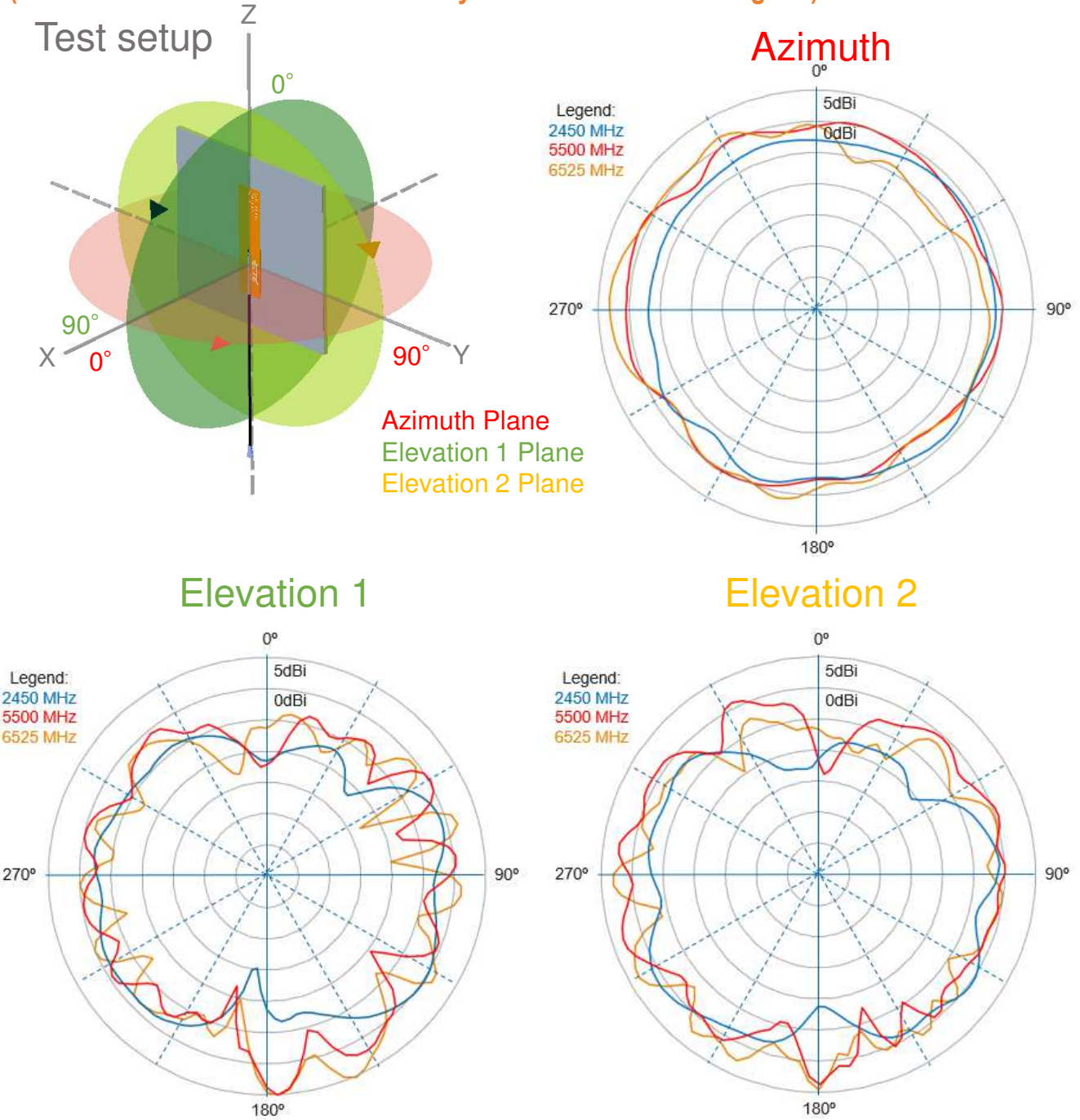
Efficiency



Data measured in free space and on plastic device enclosure

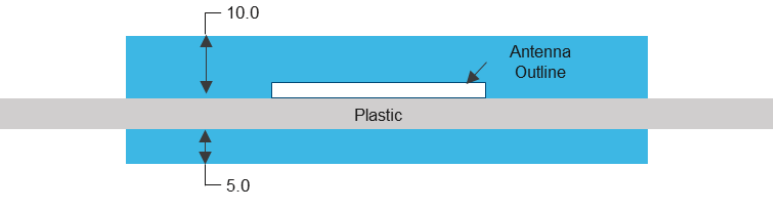
RADIATION PATTERN

(Shown as 2344657-1 : Others can vary with different cable lengths.)



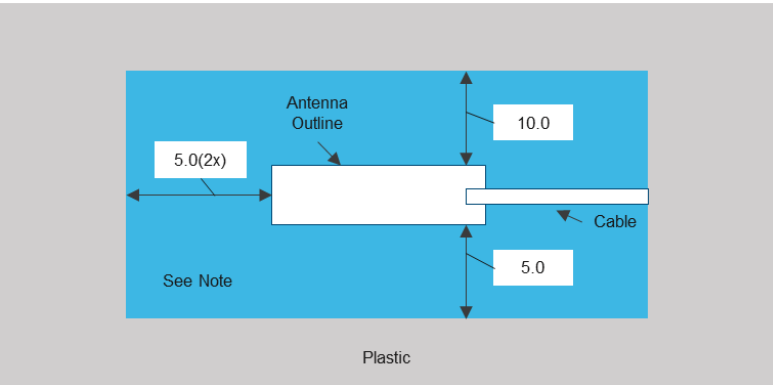
Data measured in free space and on plastic device enclosure

KEEP OUT AREA



NOTES

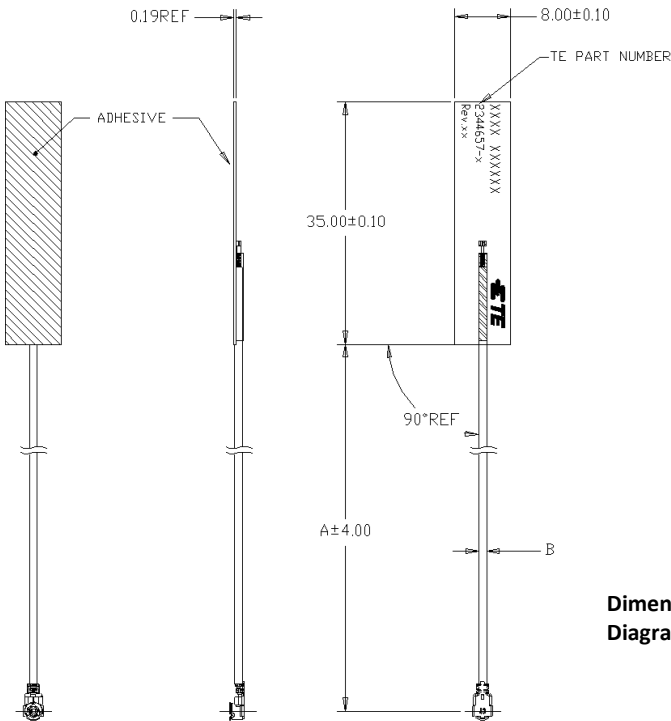
- 1. Antenna designed to be mounted on plastic cover.
- 2. Area in blue indicates Keep Out Area
- 3. Contact TE if keep out zone cannot be guaranteed.



Dimension: mm
Diagrams is not into scale

DIMENSIONS

(Refer to Page5 for dimension “A” and “B”)

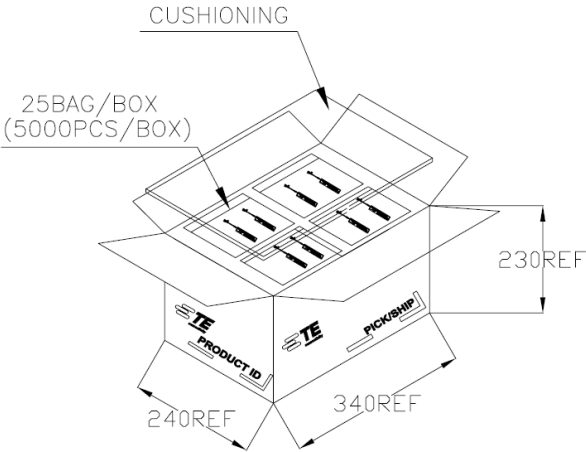
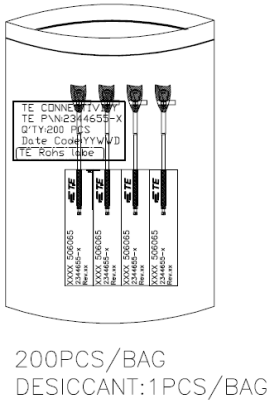
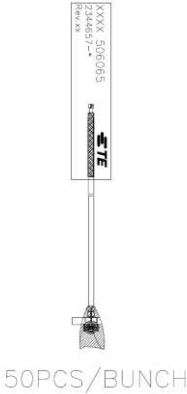


Dimension: mm
Diagrams is not into scale

MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

2344657-1	50	1.97	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2344657-2	100	3.94	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2344657-3	150	5.91	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2344657-4	200	7.87	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2344657-9	250	9.84	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2344657-5	50	1.97	0.81	MHF4-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2344657-6	100	3.94	0.81	MHF4-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2344657-7	150	5.91	0.81	MHF4-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2344657-8	200	7.87	0.81	MHF4-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
1-2344657-1	300	11.81	0.81	MHF4-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
PART NUMBER	MM	INCH	CABLE O.D(B), MM	CONNECTOR TYPE (ON CABLE)	PART NUMBER	IMAGE
	CABLE LENGTH ("A")				MATING COMPONENTS	

PACKAGING



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