



Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

Part Number: 2504615-1 (ϕ 1.37 cable 50mm with MHF4L)
 2504615-2 (ϕ 1.37 cable 100mm with MHF4L)
 2504615-3 (ϕ 1.37 cable 150mm with MHF4L)
 2504615-4 (ϕ 1.37 cable 200mm with MHF4L)

FEATURES & BENEFITS

- WiFi 6, also including WiFi 6E new 6GHz band, Bluetooth, ZigBee.
- Adhesive backing on the FPC simplifies mounting within the device.
- Global Frequency coverage.
- FPC antenna assembly.
- Different cable length and connector options available.

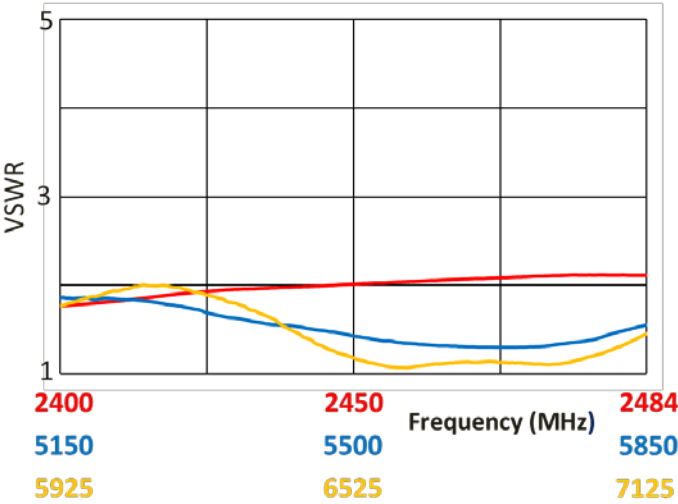
SPECIFICATIONS

Frequency Range (MHz)	2400-2500	5150-5875	5925-7125
VSWR (Max.)	< 2.2 :1	< 1.9 :1	< 2.1 :1
Antenna Efficiency (Max.)	61 %	61 %	64 %
Average Gain (Max.)	-2.15 dB	-2.15 dB	-1.9 dB
Peak Gain (Max.)	1.05 dBi	1.6 dBi	1.8 dBi
Feed Point Impedance	50 ohms		
Polarization	Linear		
Dimensions (Length x Width x Height)	40.0 mm x 10.0 mm x 0.12 mm		
Weight	< 1.2 g		
Mounting	Adhesive Tape		
Mating Connector	MHF 4L-type connector		
Cable	1.37mm Dia. Refer to page 5		
Power Handling	2 Watt cw		
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.		

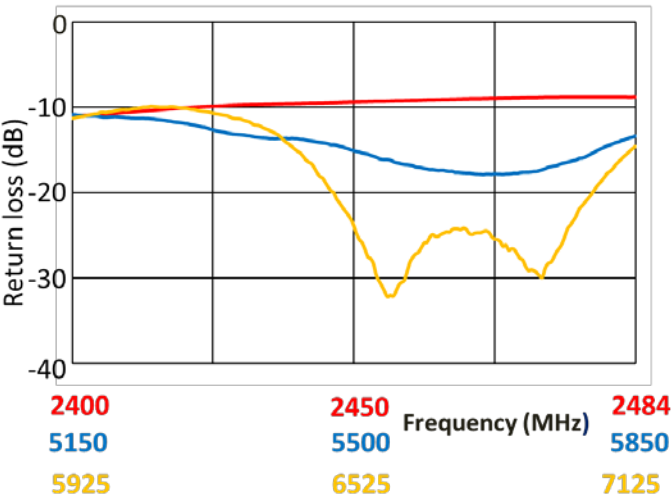
RF DATA

(Shown as 2504615-2 : Others can vary with different cable lengths and connector.)

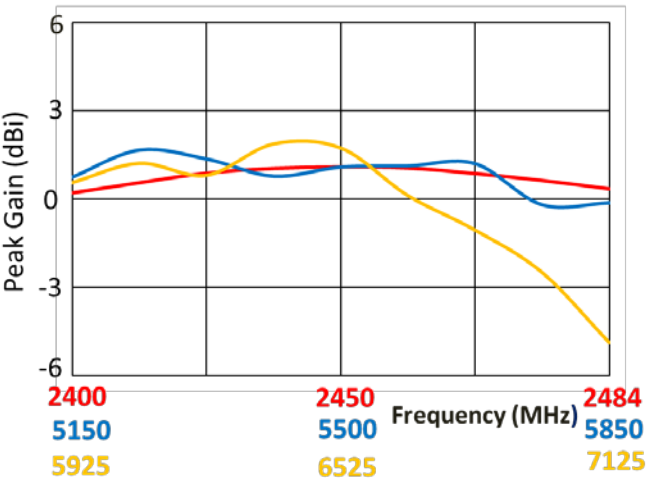
VSWR



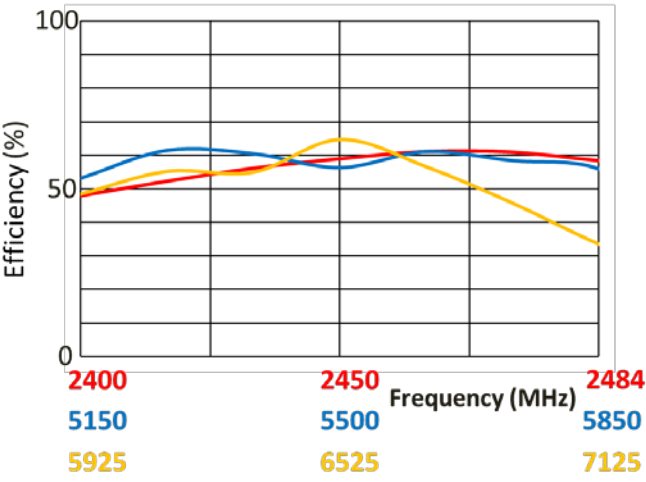
Return Loss



Peak Gain



Efficiency

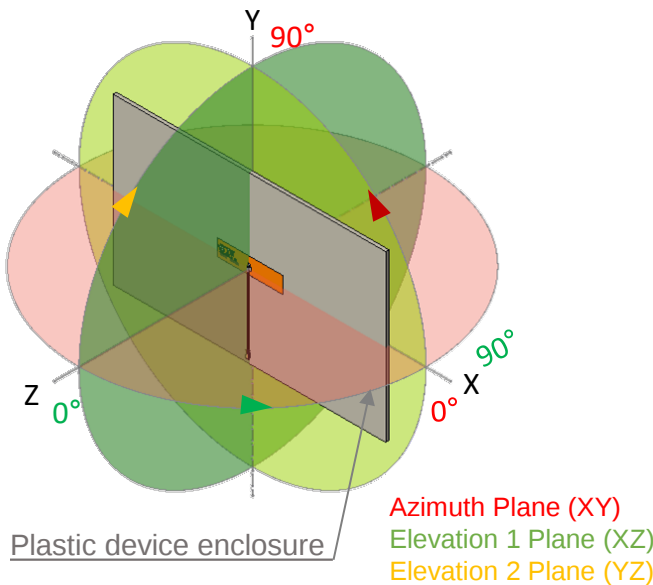


Data measured in free space and on 150 x 150 x 2.0 mm PC plastic

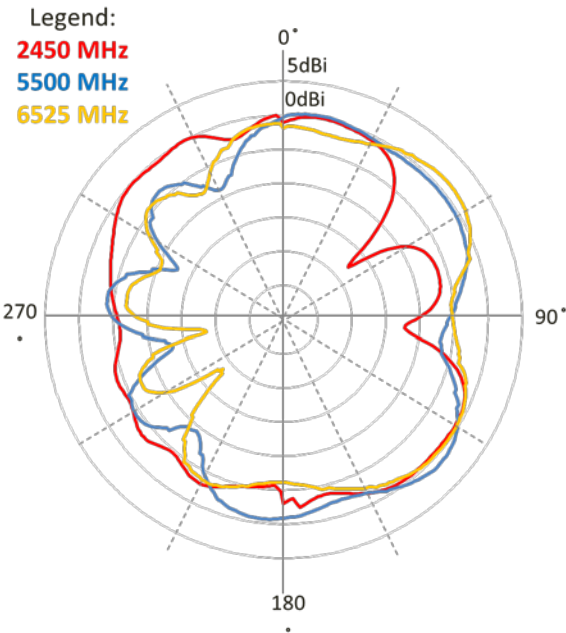
RADIATION PATTERN

(Shown as 2504615-2 : Others can vary with different cable lengths and connector.)

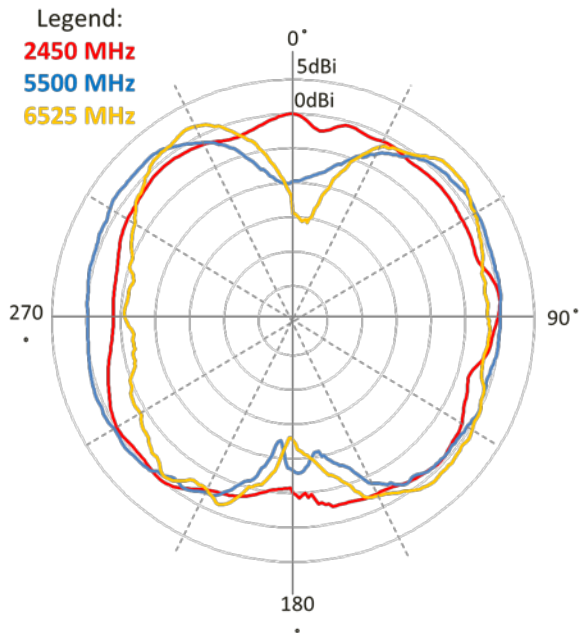
Test setup



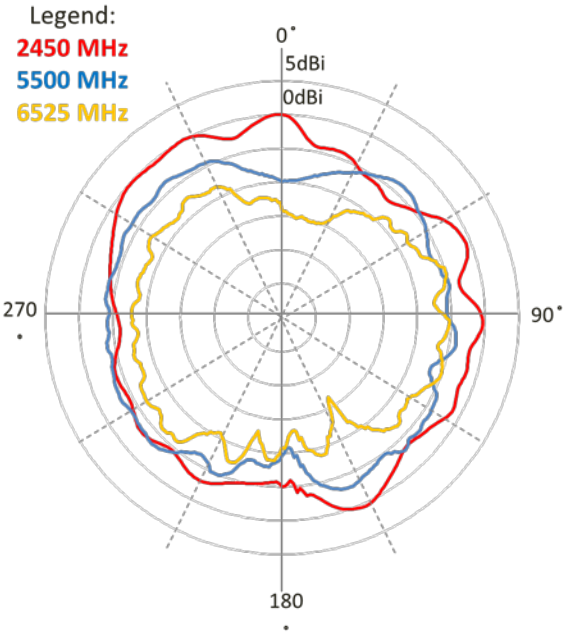
Azimuth (XY)



Elevation 1 (XZ)

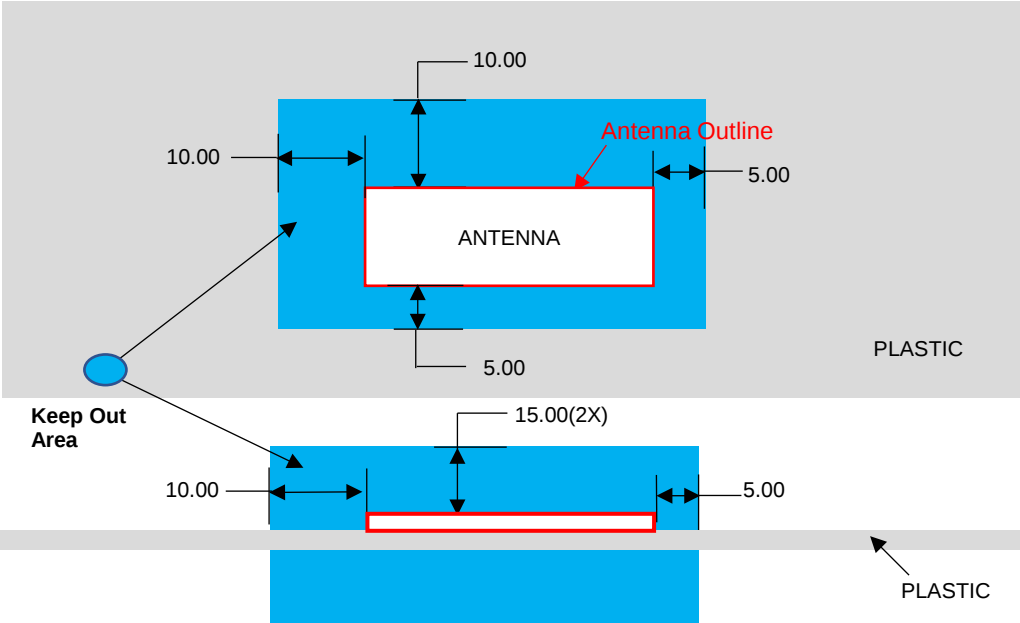


Elevation 2 (YZ)



Data measured in free space and on 150 x 150 x 2.0 mm PC plastic

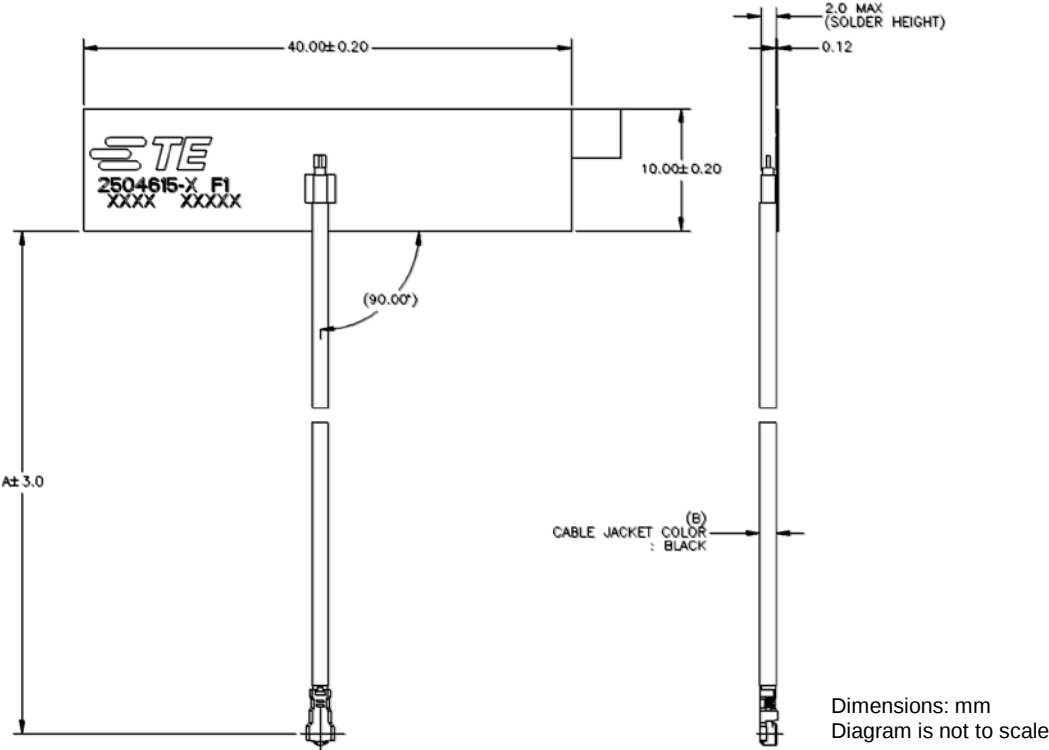
KEEP OUT AREA



NOTES:1. Antenna designed to be mounted on plastic cover.
2. Area in blue above indicates Keep Out Area.
3. For more information please call TE.

Dimensions: mm
Diagram is not to scale

DIMENSIONS

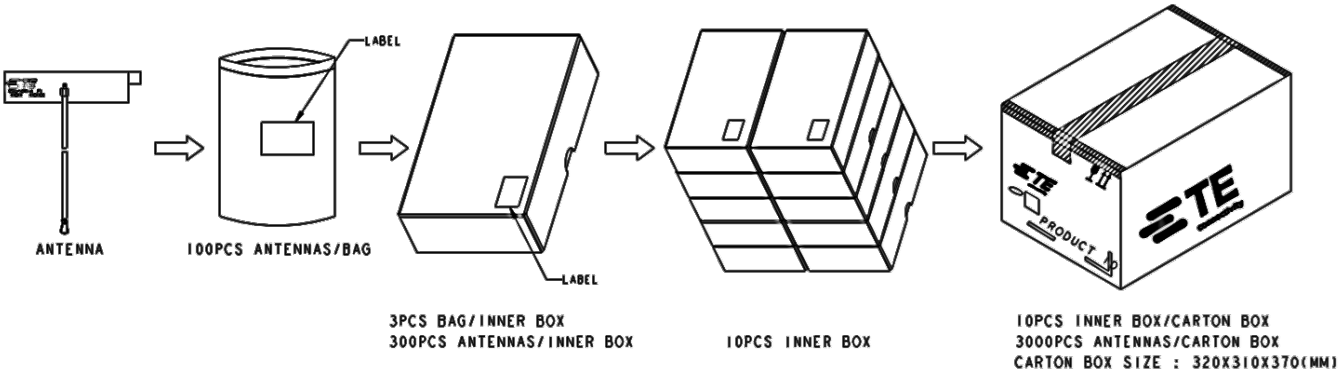


Dimensions: mm
Diagram is not to scale

MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

2504615-1	50.0	1.968	1.37	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2504615-2	100.0	3.937	1.37	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2504615-3	150.0	5.905	1.37	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2504615-4	200.0	7.784	1.37	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
PART NUMBER	MM	INCH	MM	CONNECTOR TYPE	PART NUMBER	IMAGE
	CABLE LENGTH(A)		CABLE O.D(B)	(ON CABLE)	MATING COMPONENTS	

PACKAGING



TE TECHNICAL SUPPORT CENTER

USA: +1 (800) 522-6752
Canada: +1 (905) 475-6222
Mexico: +52 (0) 55-1106-0800
Latin/S. America: +54 (0) 11-4733-2200
Germany: +49 (0) 6251-133-1999
UK: +44 (0) 800-267666
France: +33 (0) 1-3420-8686
Netherlands: +31 (0) 73-6246-999
China: +86 (0) 400-820-6015

For phone numbers in other countries, go to te.com/support-center

te.com

TE, TE Connectivity and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application. Antenna performance may vary. TE is a component manufacturer, and customer and/or end-user is responsible for all end-use compliance and regulatory requirements.

© 2025 TE Connectivity. All Rights Reserved.

Published 01-25