



## Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

Part Numbers: 2108857-1, 2108857-2  
 2108857-3, 2108857-4  
 2108857-5, 2118857-6  
 2108857-7, 2108857-8

### FEATURES & BENEFITS

- WiFi 6, also including WiFi 6E new 6GHz band, Bluetooth, ZigBee
- Adhesive backing on the PCB simplifies mounting within the device
- Global Frequency coverage
- PCB antenna assembly
- Wide selection of micro-coaxial cable lengths

### SPECIFICATIONS (Shown as 2108857-1 : Others can vary with different cable lengths.)

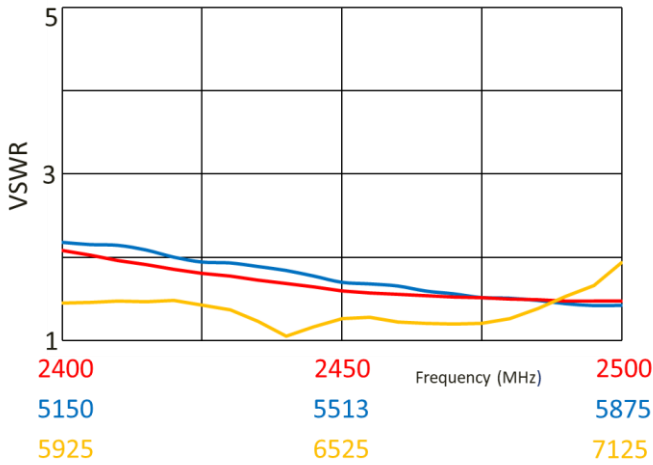
|                       |   |           |           |
|-----------------------|---|-----------|-----------|
| Frequency Range (MHz) | 2400-2500   | 5150-5875 | 5925-7125 |
| VSWR                  | < 2.0:1   | < 2.2:1   | < 2.0:1   |
| Average Efficiency    | 71%   | 71%       | 77%       |
| Peak Gain             | 2.5dBi  | 4.6dBi    | 5.0dBi    |
| Average Gain          | -1.5dBi   | -1.5dBi   | -1.2dBi   |
| Power Handling        | 10 Watt cw  |           |           |
| Feed Point Impedance  | 50 ohms unbalanced  |           |           |
| Polarization          | Linear  |           |           |
| Size                  | 30.0 mm x 7.0 mm x 0.78 mm  |           |           |
| Weight                | < 0.8 g   |           |           |
| Mounting              | Adhesive Tape   |           |           |
| Mating Connectors     | MHF-type receptacle (TE PN 2337019-1),<br>MHF4-type receptacle (TE PN: 2344884-1) |           |           |
| Cable                 | Coaxial Cable : 1.13mm Dia.   |           |           |
| 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.    |           |           |

# Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

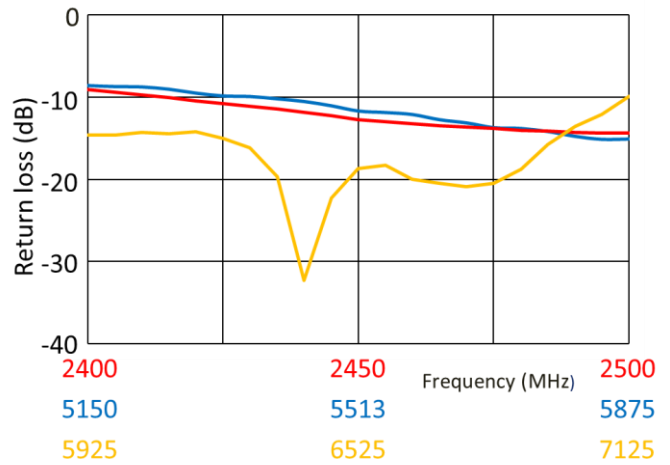
Standard Antenna Solutions

## RF DATA (Shown as 2108857-1 : Others can vary with different cable lengths.)

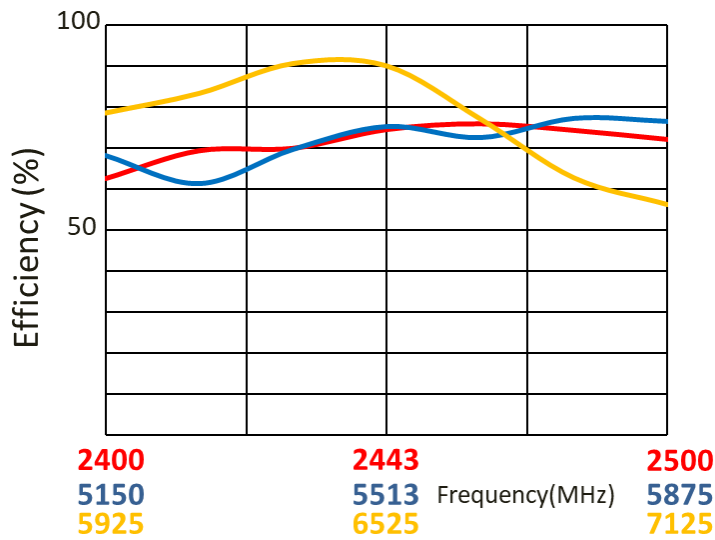
### VSWR



### Return Loss



### Efficiency

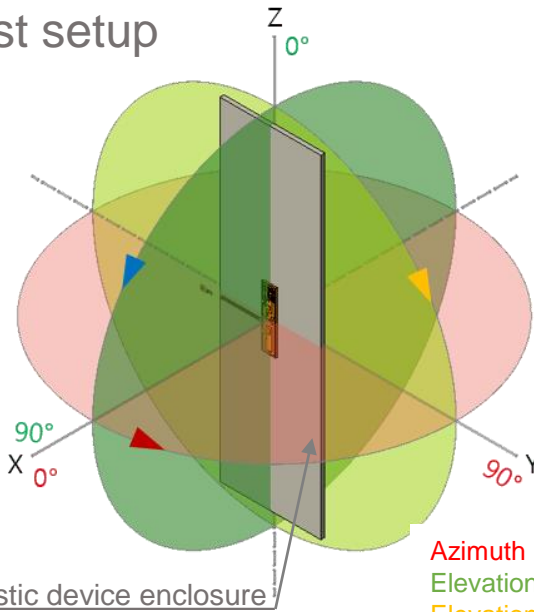


Data measured in free space and on plastic device enclosure

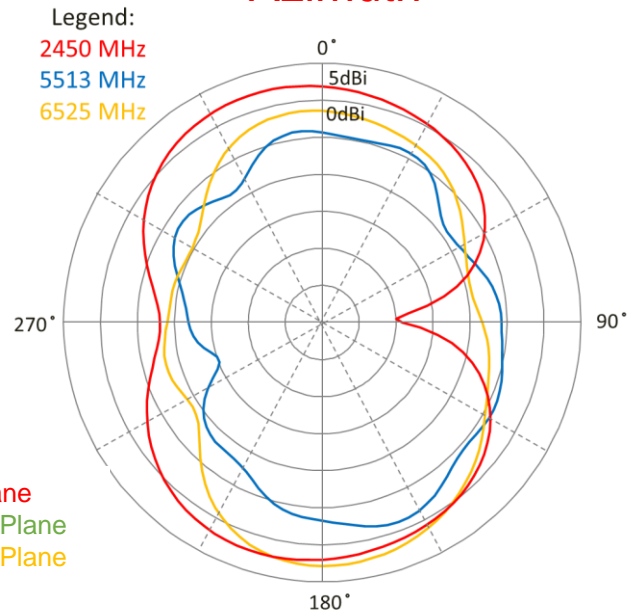
# RADIATION PATTERN

(Shown as 2108857-1 : Others can vary with different cable lengths.)

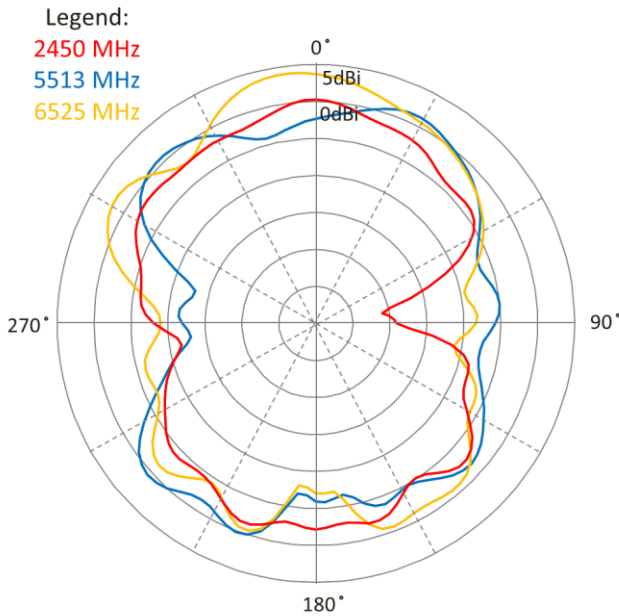
Test setup



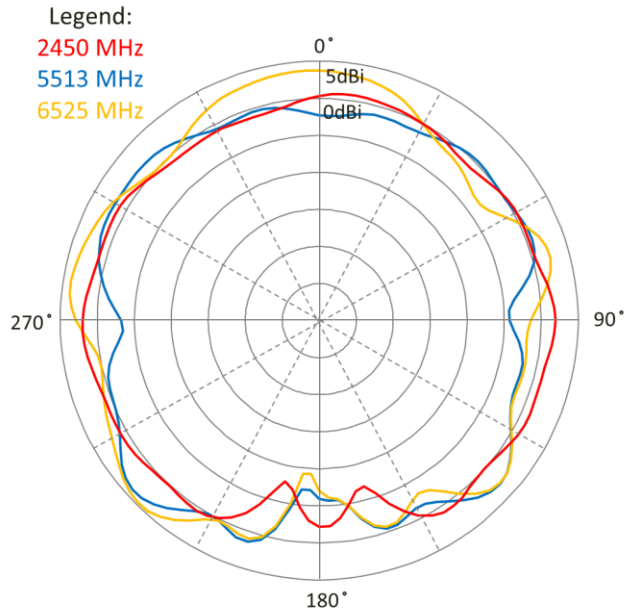
Azimuth



Elevation 1



Elevation 2

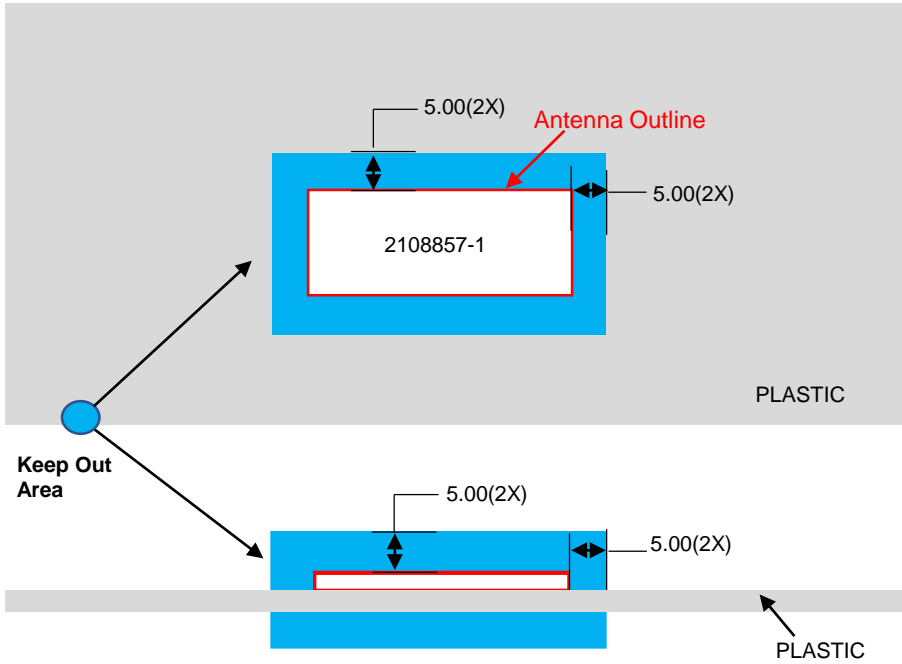


Data measured in free space and on plastic device enclosure

# Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

Standard Antenna Solutions

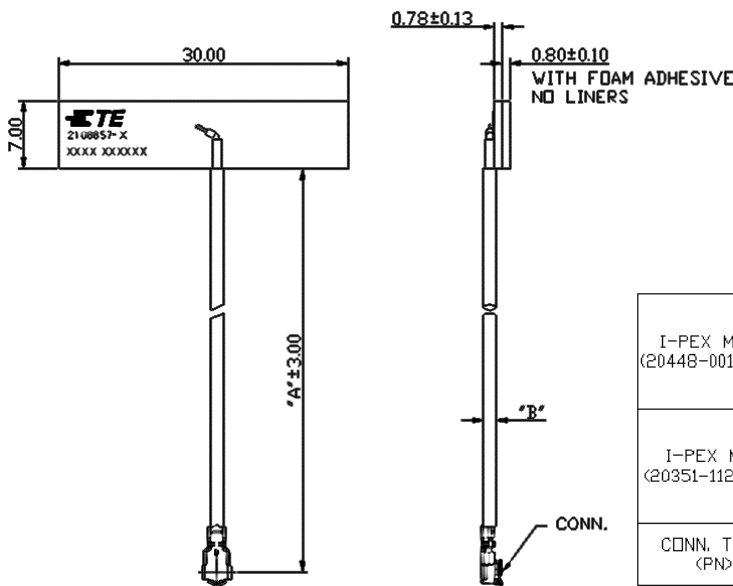
## KEEP OUT AREA



- 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





|                                |        |        |                |
|--------------------------------|--------|--------|----------------|
| I-PEX MHF4<br>(20448-001R-081) | 0.81mm | 200.00 | 2108857-8      |
|                                |        | 150.00 | 2108857-7      |
|                                |        | 100.00 | 2108857-6      |
|                                |        | 50.00  | 2108857-5      |
| I-PEX MHF<br>(20351-112R-37)   | 1.37mm | 200.00 | 2108857-4      |
|                                |        | 150.00 | 2108857-3      |
|                                |        | 100.00 | 2108857-2      |
|                                |        | 50.00  | 2108857-1      |
| CONN. TYPE<br>(PN)             | *B*    | *A*    | PART<br>NUMBER |

Dimensions: mm  
 Diagram is not to scale

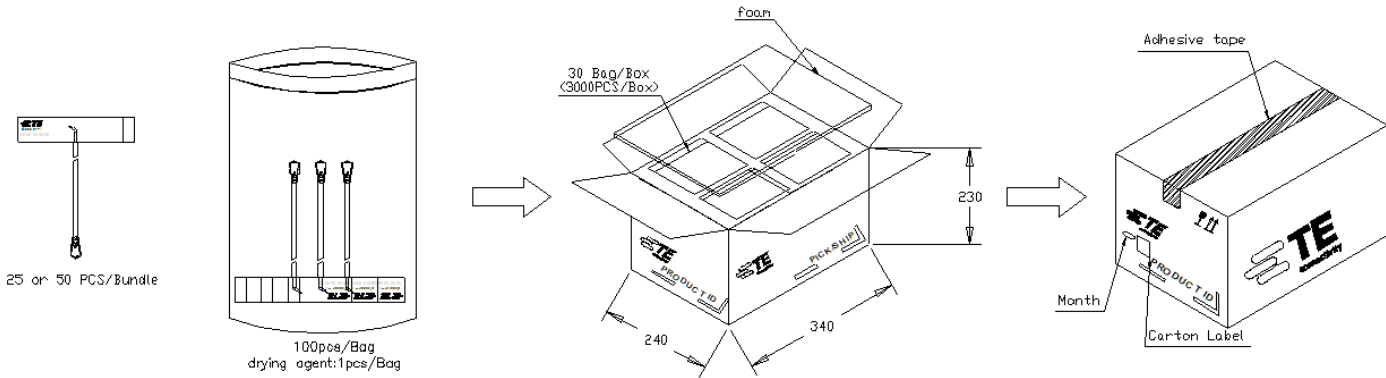
# Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

Standard Antenna Solutions

## MATING COMPONENTS

| 2108857-1   | 50.0            | 1.968 | MHF-TYPE PLUG                | RECEPTACLE (TE PN: 2337019-1) |  |
|-------------|-----------------|-------|------------------------------|-------------------------------|---|
| 2108857-2   | 100.0           | 3.937 | MHF-TYPE PLUG                | RECEPTACLE (TE PN: 2337019-1) |   |
| 2108857-3   | 150.0           | 5.905 | MHF-TYPE PLUG                | RECEPTACLE (TE PN: 2337019-1) |   |
| 2108857-4   | 200.0           | 7.784 | MHF-TYPE PLUG                | RECEPTACLE (TE PN: 2337019-1) |   |
| 2108857-5   | 50.0            | 1.968 | MHF4-TYPE PLUG               | RECEPTACLE (TE PN: 2334884-1) |  |
| 2108857-6   | 100.0           | 3.937 | MHF4-TYPE PLUG               | RECEPTACLE (TE PN: 2334884-1) |   |
| 2108857-7   | 150.0           | 5.905 | MHF4-TYPE PLUG               | RECEPTACLE (TE PN: 2334884-1) |   |
| 2108857-8   | 200.0           | 7.784 | MHF4-TYPE PLUG               | RECEPTACLE (TE PN: 2334884-1) |   |
| PART NUMBER | MM              | INCH  | CONNECTOR TYPE<br>(ON CABLE) | PART NUMBER                   | IMAGE   |
|             | CABLE LENGTH(A) |       |                              | MATING COMPONENTS             |   |

## PACKAGING



# Wi-Fi 6/ 6E TRIPLE BAND EMBEDDED ANTENNA

Standard Antenna Solutions

---

## 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](https://te.com/support-center)

### te.com

TE Connectivity, TE Connectivity (logo) are trademarks. All other logos, products and/or company names referred to herein might 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.

© 2020 TE Connectivity Ltd. family of companies All Rights Reserved.

12/2020

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[2108857-8](#)