



## 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  
1-2344657-2, 1-2344657-3  
1-2344657-4

### 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 7                                             |           |           |
| Cable (Coaxial)       | 0.81mm and 1.13mm Dia., Refer to page 7                                        |           |           |
| 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      |
| 2344657-9   | 250               | MHF       | VSWR       | < 1.3:1   | < 1.5:1   | < 2.1:1   |
|             |                   |           | Aver. Eff. | 53        | 59        | 52        |
|             |                   |           | Peak Gain  | 0.5       | 4.0       | 4.3       |
|             |                   |           | Aver. Gain | -2.8      | -2.3      | -2.8      |
| 1-2344657-3 | 300               | MHF       | VSWR       | < 1.4:1   | < 1.6:1   | < 2.2:1   |
|             |                   |           | Aver. Eff. | 51        | 56        | 50        |
|             |                   |           | Peak Gain  | 0.4       | 3.8       | 4.1       |
|             |                   |           | Aver. Gain | -2.9      | -2.5      | -3.1      |

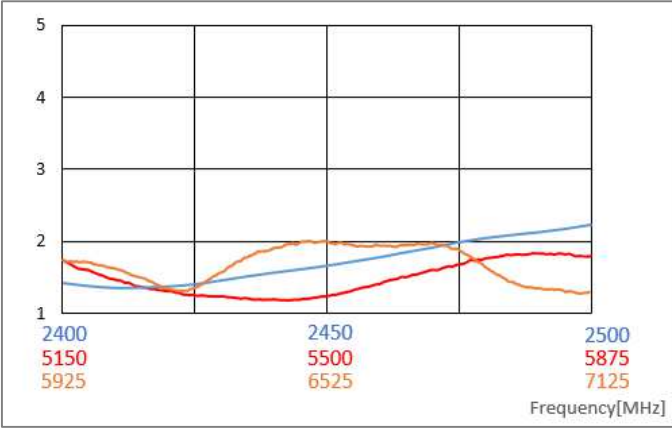


RF data for each P/N

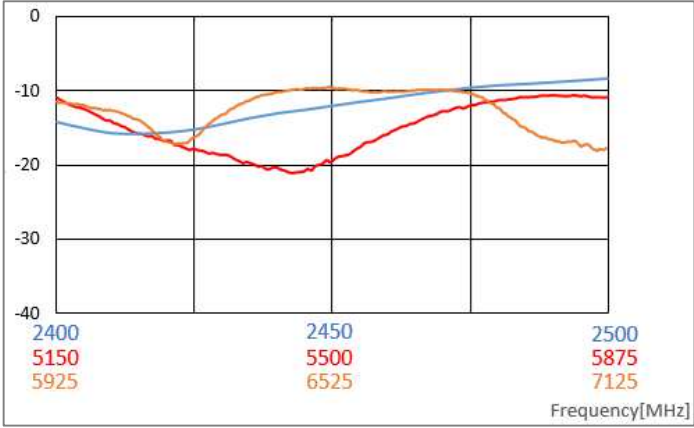
| P/N         | Cable Length (mm) | Connector | RF DATA    | VSWR(MHz) |           |           |
|-------------|-------------------|-----------|------------|-----------|-----------|-----------|
|             |                   |           |            | 2400-2500 | 5150-5875 | 5925-7125 |
| 2344657-5   | 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      |
| 1-2344657-1 | 300               | MHF4      | VSWR       | < 1.4:1   | < 1.6:1   | < 2.2:1   |
|             |                   |           | Aver. Eff. | 49        | 51        | 44        |
|             |                   |           | Peak Gain  | 0.2       | 3.4       | 3.6       |
|             |                   |           | Aver. Gain | -3.1      | -2.9      | -3.5      |
| 1-2344657-2 | 250               | MHF4      | VSWR       | < 1.5:1   | < 1.6:1   | < 2.2:1   |
|             |                   |           | Aver. Eff. | 51        | 55        | 48        |
|             |                   |           | Peak Gain  | 0.4       | 3.7       | 3.9       |
|             |                   |           | Aver. Gain | -2.9      | -2.6      | -3.2      |
| 1-2344657-4 | 330               | MHF4      | VSWR       | < 1.4:1   | < 1.6:1   | < 2.1:1   |
|             |                   |           | Aver. Eff. | 48        | 49        | 42        |
|             |                   |           | Peak Gain  | 0.1       | 3.2       | 3.4       |
|             |                   |           | Aver. Gain | -3.2      | -3.1      | -3.7      |

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

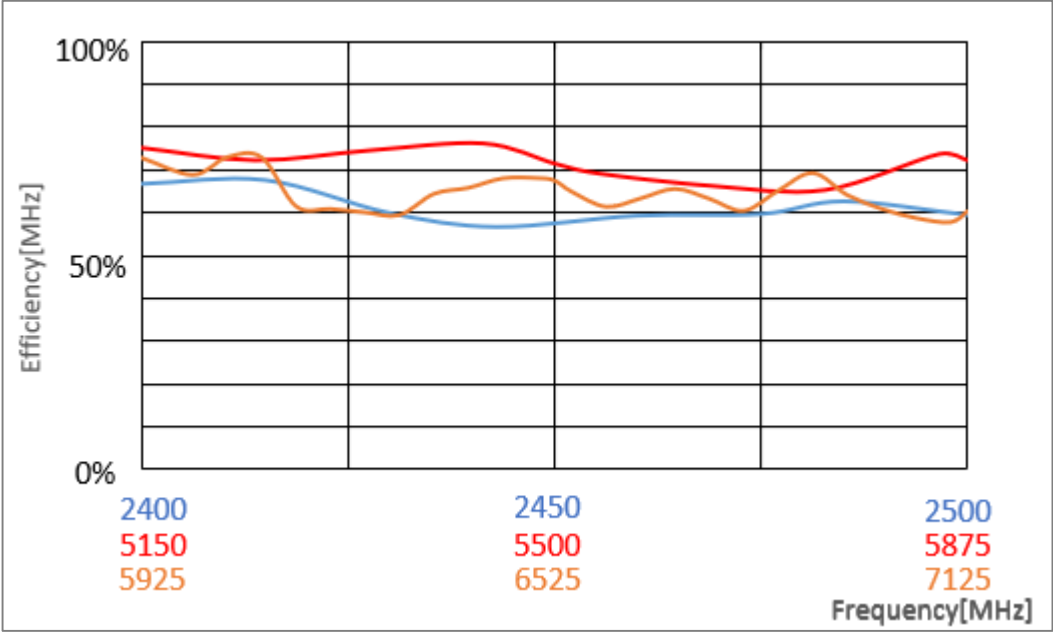
VSWR



Return Loss



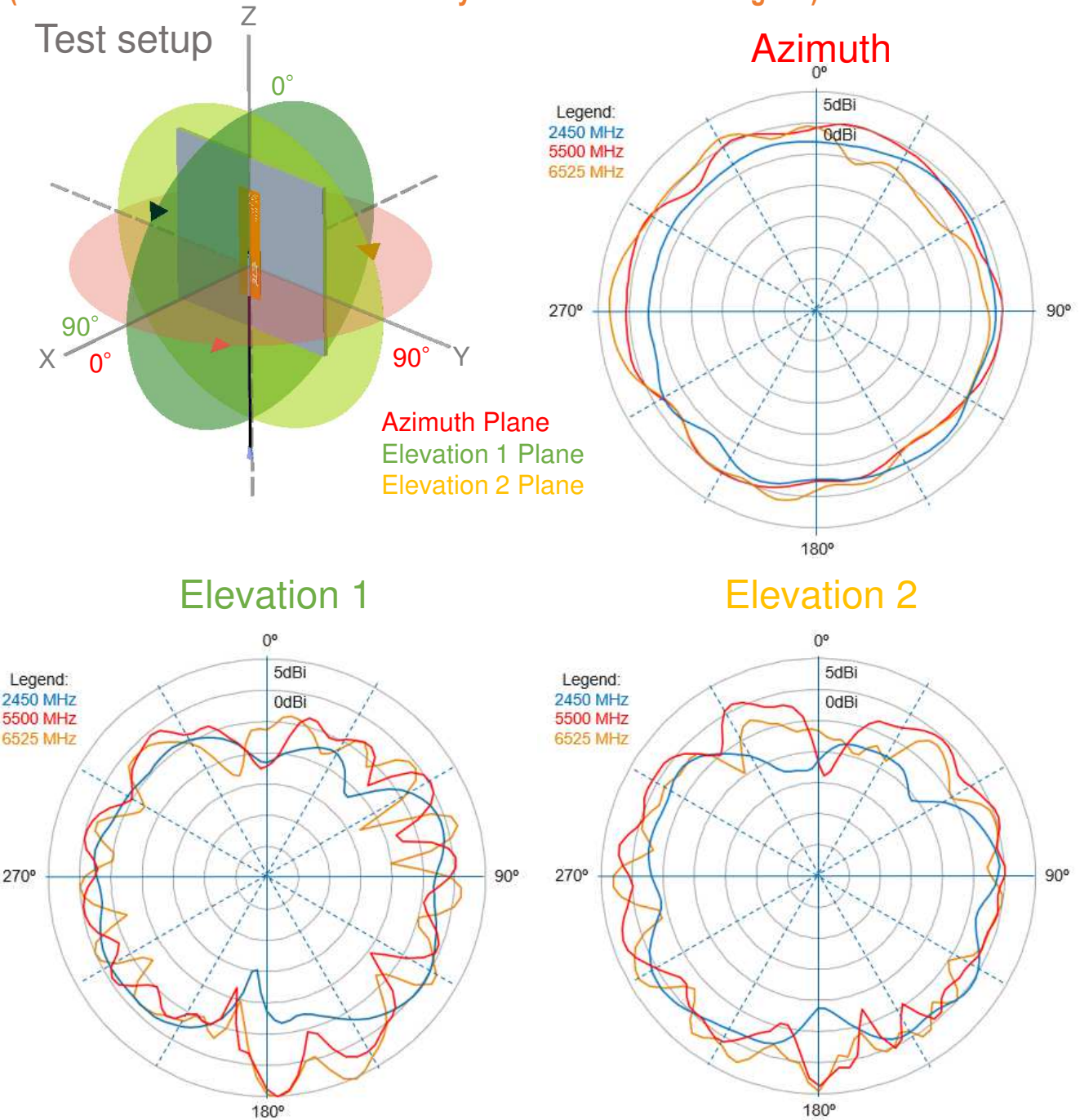
Efficiency



Data measured in free space and on plastic device enclosure

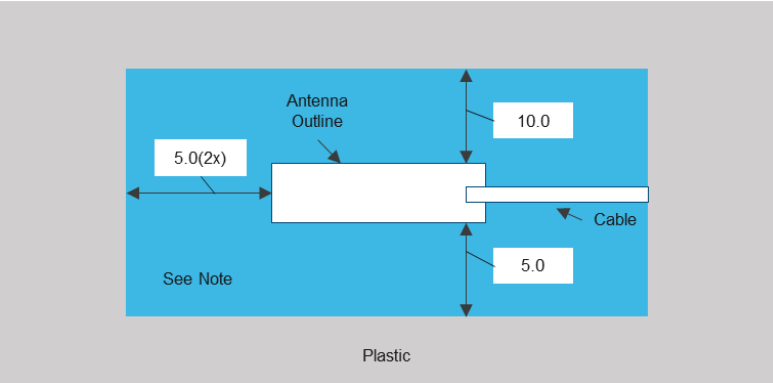
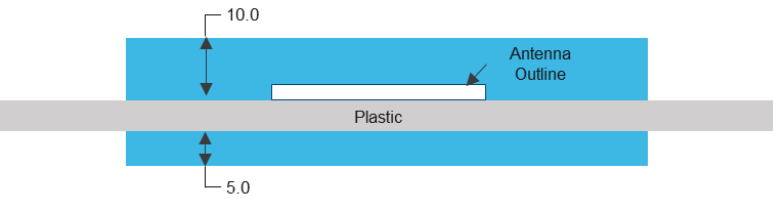
# RADIATION PATTERN

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



Data measured in free space and on plastic device enclosure

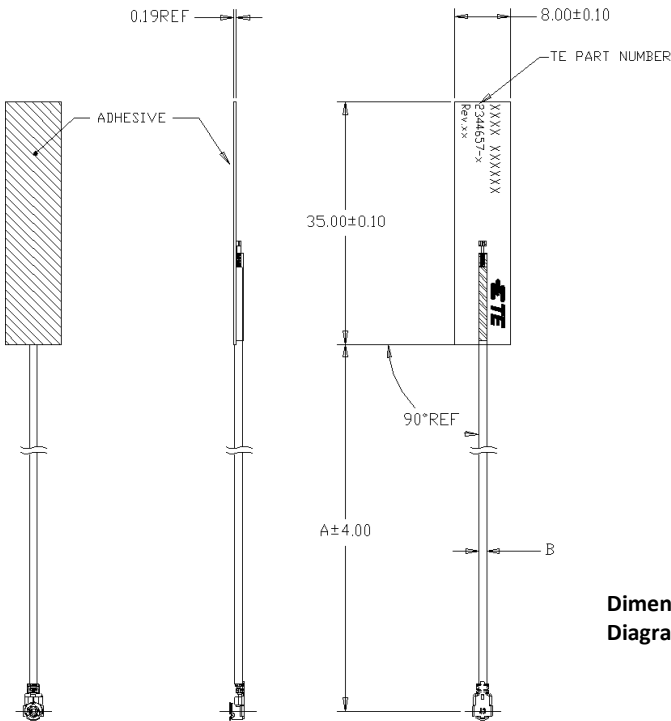
KEEP OUT AREA



- 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 Page7 for dimension “A” and “B”)

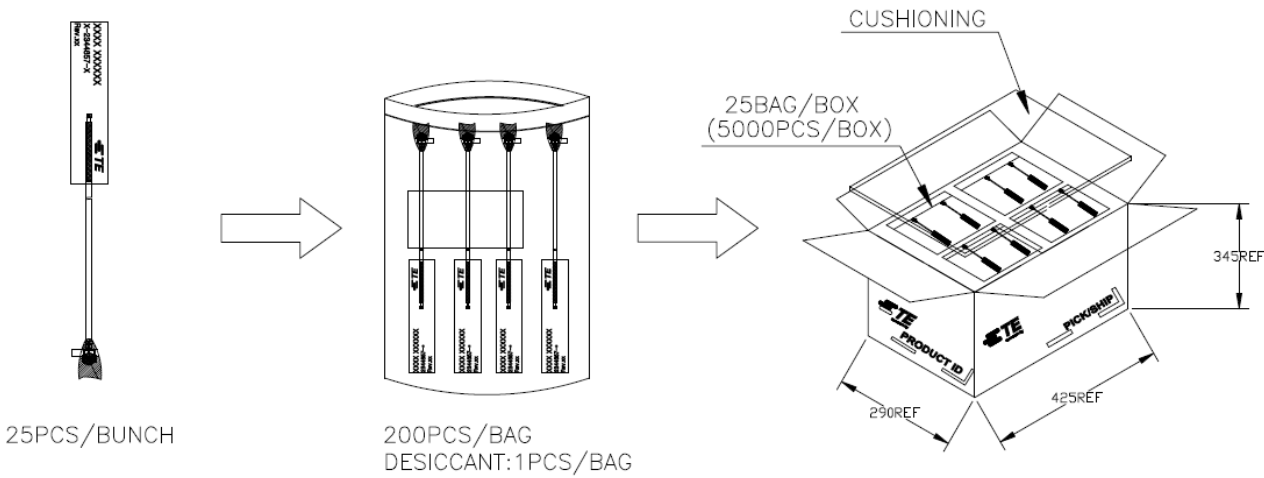


Dimension: mm  
Diagrams is not into scale

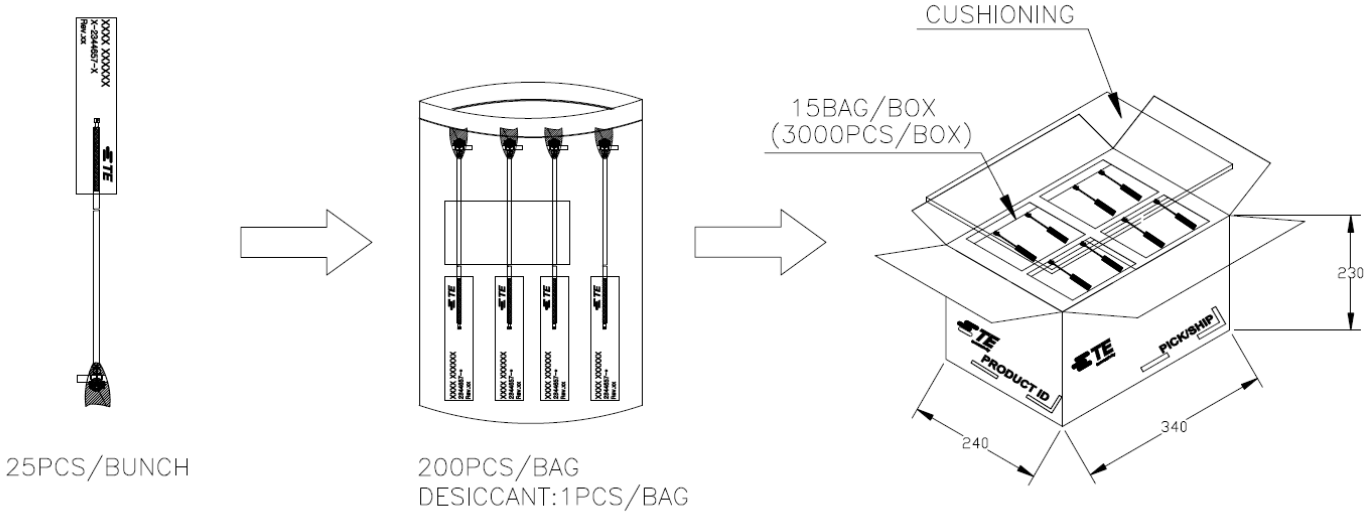
MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

|             |                    |       |           |                |                               |                                                                                     |
|-------------|--------------------|-------|-----------|----------------|-------------------------------|-------------------------------------------------------------------------------------|
| 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) |                                                                                     |
| 1-2344657-3 | 300                | 11.81 | 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) |                                                                                     |
| 1-2344657-2 | 250                | 9.84  | 0.81      | MHF4-TYPE PLUG | RECEPTACLE (TE PN: 2334884-1) |                                                                                     |
| 1-2344657-4 | 330                | 12.99 | 0.81      | MHF4-TYPE PLUG | RECEPTACLE (TE PN: 2334884-1) |                                                                                     |
| PART        | MM                 | INCH  | CABLE O.D | CONNECTOR TYPE | PART NUMBER                   | IMAGE                                                                               |
| NUMBER      | CABLE LENGTH ("A") |       | (B)       | (ON CABLE)     | MATING COMPONENTS             |                                                                                     |

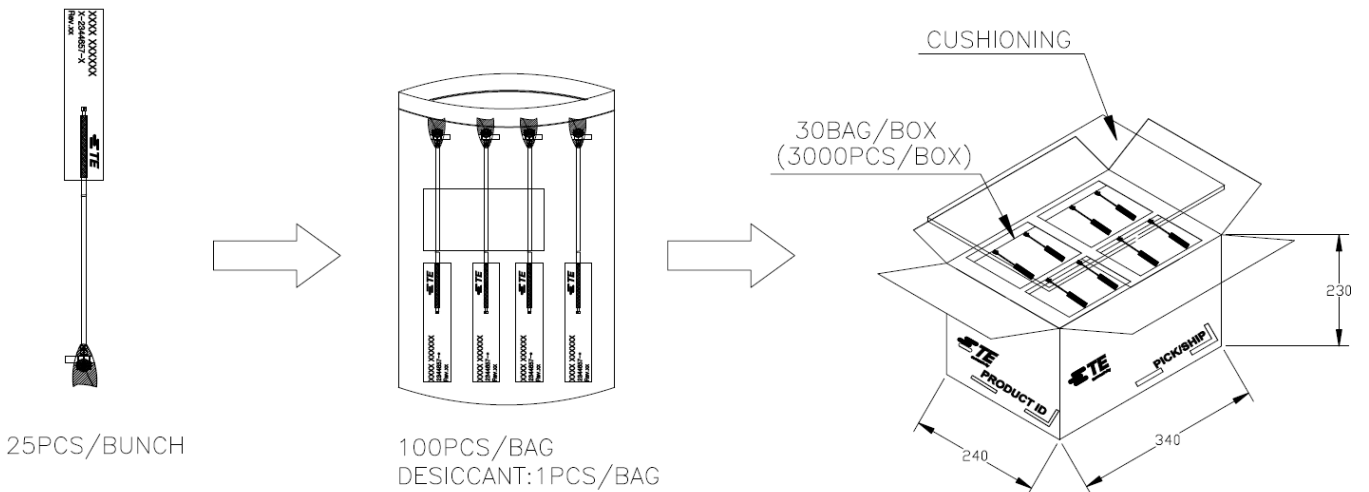
PACKAGING FOR 2344657-1, 2344657-2, 2344657-3, 2344657-4



## PACKAGING FOR 2344657-5, 2344657-6, 2344657-7, 2344657-8



## PACKAGING FOR 2344657-9, 1-2344657-1, 1-2344657-2, 1-2344657-3, 1-2344657-4





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