

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

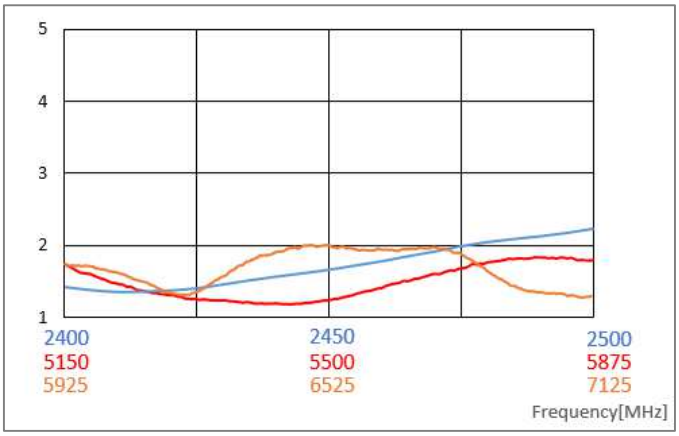
P/N	Cable Length (mm)	Connector	RF DATA	VSWR(MHz)		
				2400-2500	5150-5875	5925-7125
2344657-1	50	MHF	VSWR	< 2.7:1	< 2.1:1	< 2.1:1
			Aver. Eff.	61%	72%	66%
			Peak Gain	1.1dBi	4.9dBi	5.3dBi
			Aver. Gain	-2.2dB	-1.4dB	-1.8dB
2344657-2	100	MHF	VSWR	< 1.3:1	< 1.8:1	< 1.9:1
			Aver. Eff.	58	69	62
			Peak 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

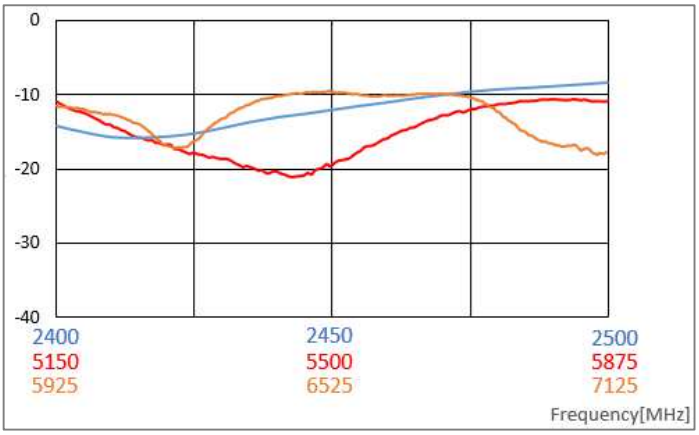
P/N	Cable Length (mm)	Connector	RF DATA	VSWR(MHz)		
				2400-2500	5150-5875	5925-7125
2344657-5	50	MHF4	VSWR	< 1.2:1	< 1.5:1	< 2.1:1
			Aver. Eff.	60	71	65
			Peak Gain	1.1	4.8	5.2
			Aver. Gain	-2.2	-1.5	-1.9
2344657-6	100	MHF4	VSWR	< 1.4:1	< 1.7:1	< 2.1:1
			Aver. Eff.	57	67	60
			Peak Gain	0.9	4.5	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.)

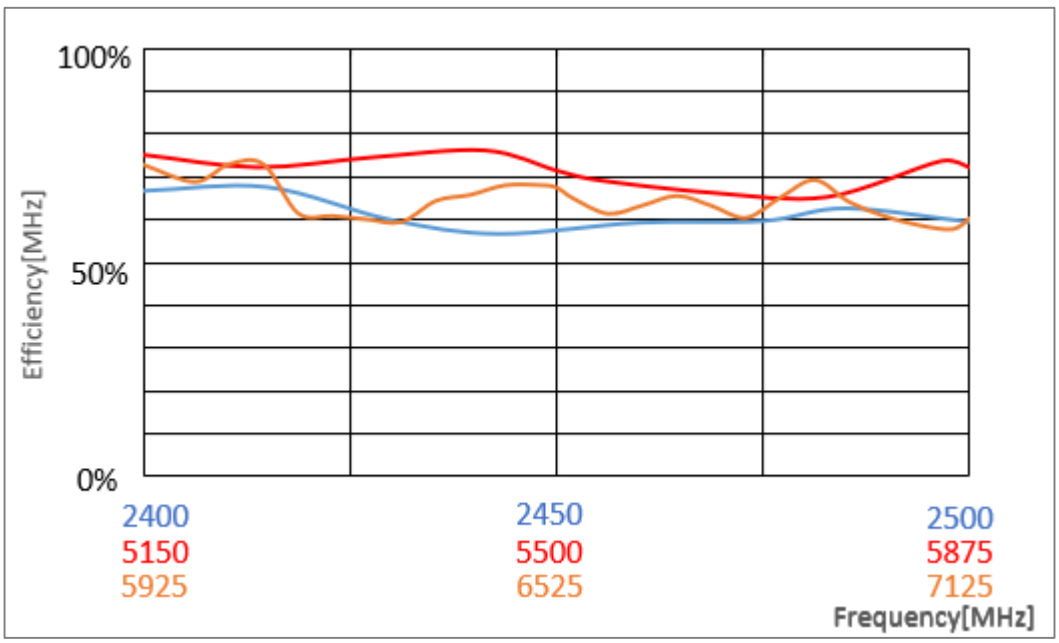
VSWR



Return Loss



Efficiency

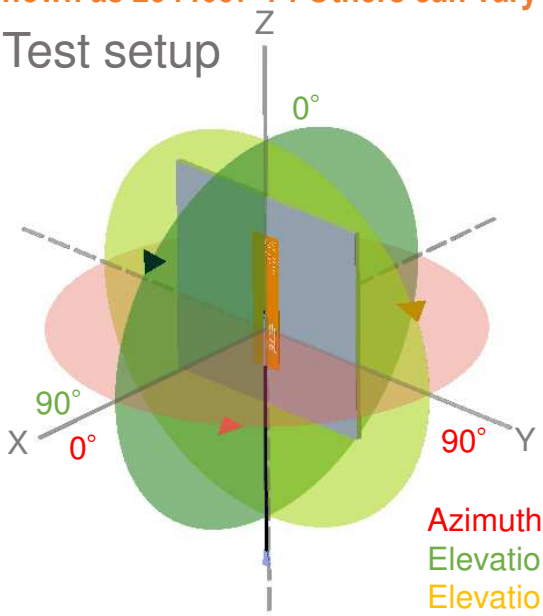


Data measured in free space and on plastic device enclosure

RADIATION PATTERN

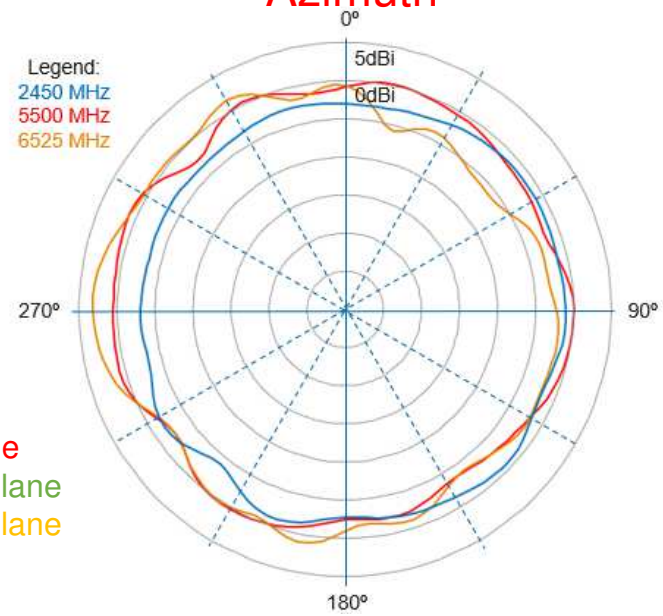
(Shown as 2344657-1 : Others can vary with different cable lengths.)

Test setup

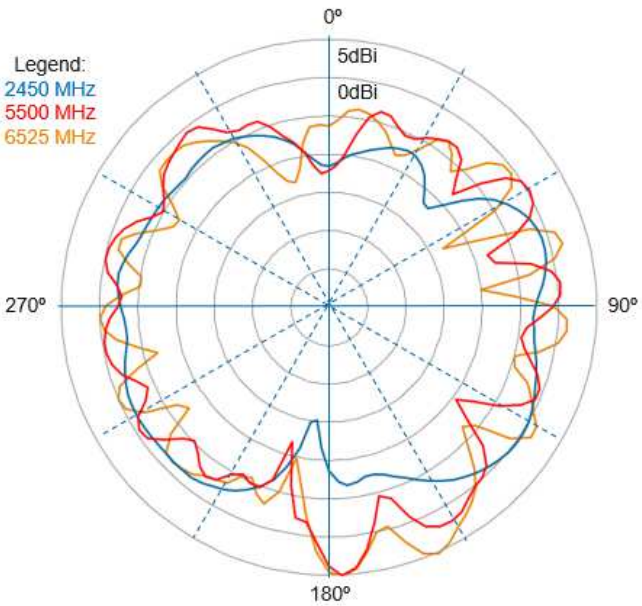


Azimuth Plane
Elevation 1 Plane
Elevation 2 Plane

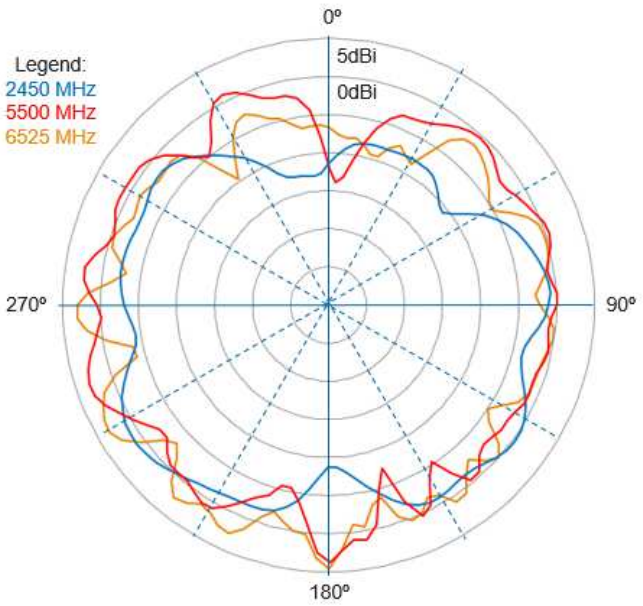
Azimuth



Elevation 1

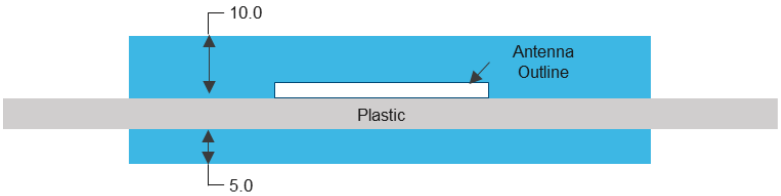


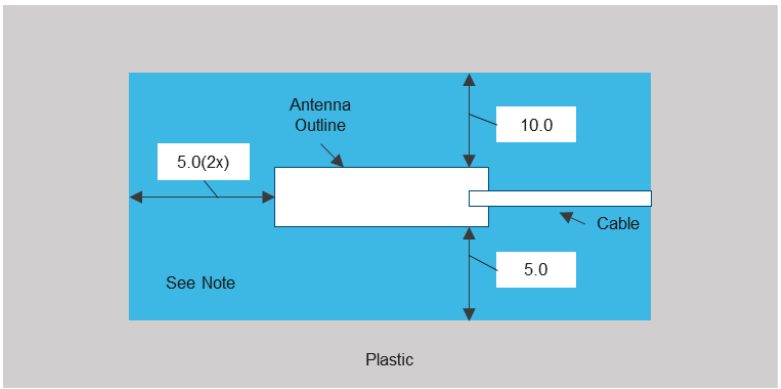
Elevation 2



Data measured in free space and on plastic device enclosure

KEEP OUT AREA





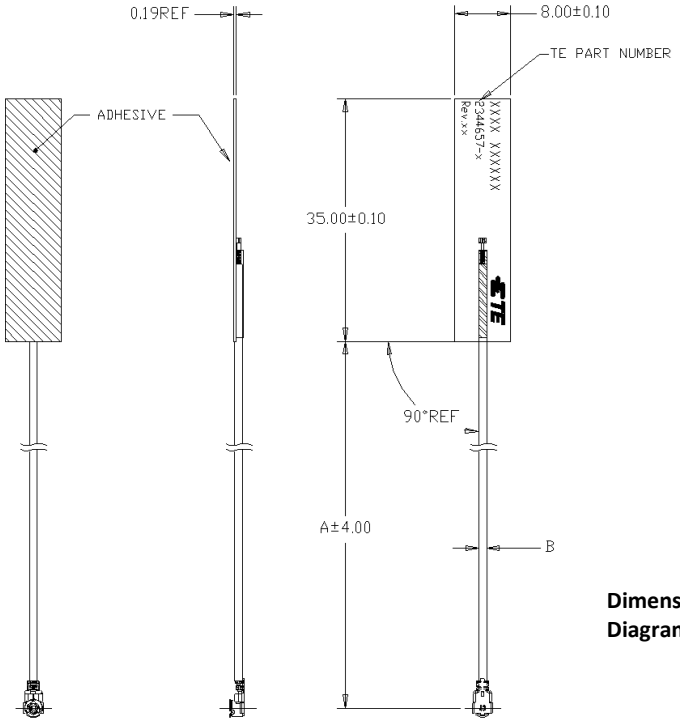
NOTES

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”)

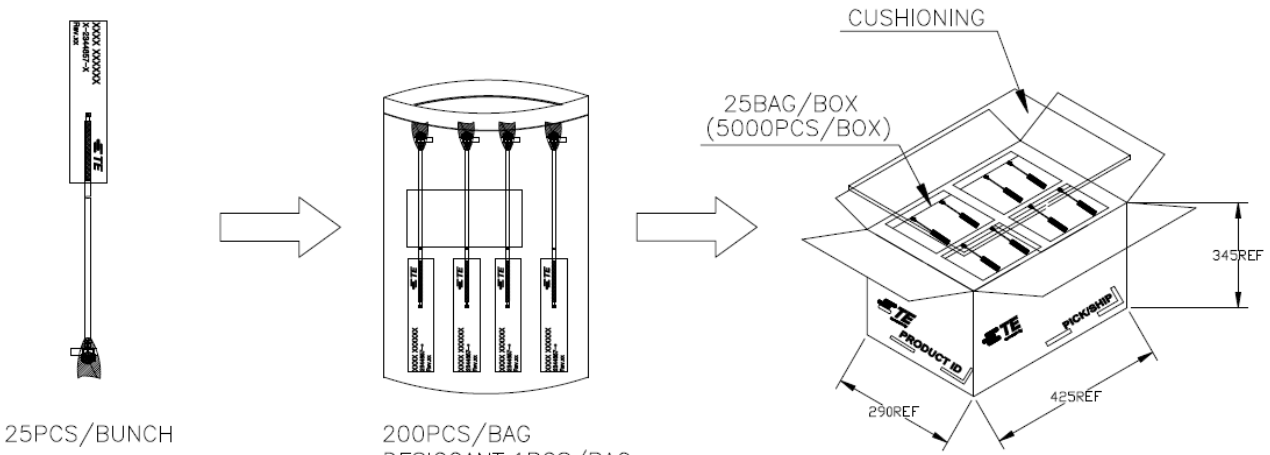


Dimension: mm
Diagrams is not into scale

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 (B)	CONNECTOR TYPE	PART NUMBER	IMAGE
NUMBER	CABLE LENGTH ("A")			(ON CABLE)	MATING COMPONENTS	

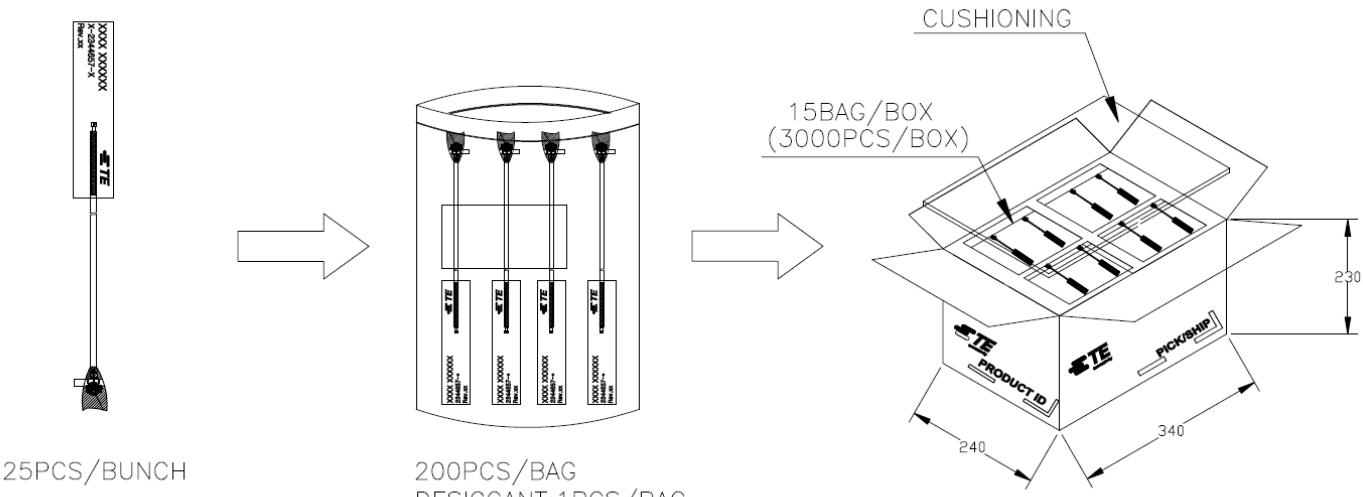
PACKAGING FOR 2344657-1, 2344657-2, 2344657-3, 2344657-4



25PCS/BUNCH

200PCS/BAG
DESICCANT:1PCS/BAG

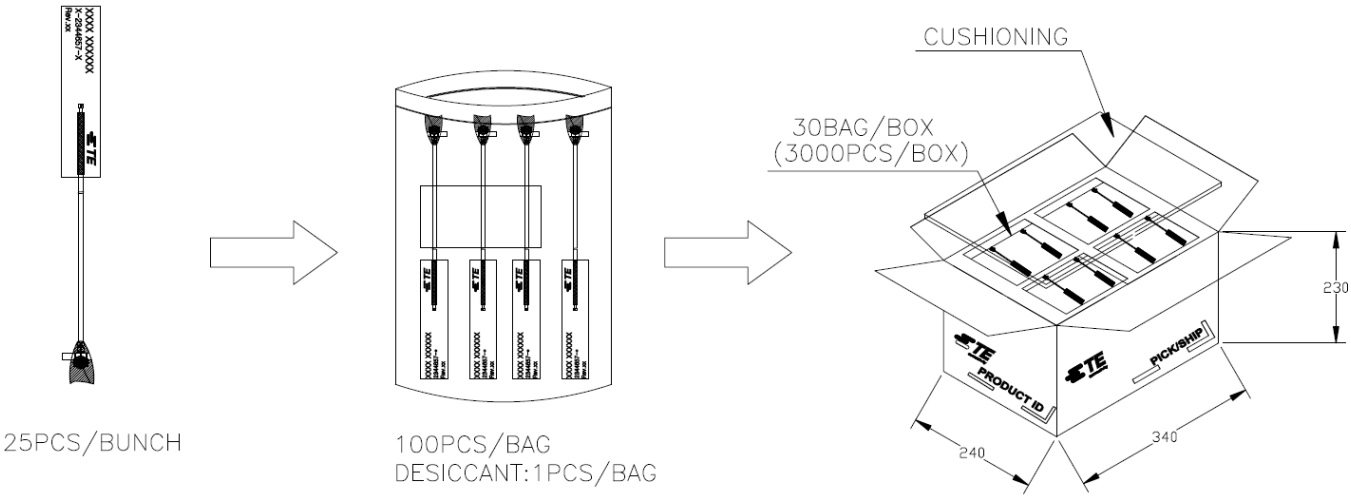
PACKAGING FOR 2344657-5, 2344657-6, 2344657-7, 2344657-8



25PCS/BUNCH

200PCS/BAG
DESICCANT:1PCS/BAG

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



25PCS/BUNCH

100PCS/BAG
DESICCANT:1PCS/BAG

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
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