



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

**Part Numbers: 2118907-1 ~ -9,  
1-2118907-1 ~ -5**

## FEATURES & BENEFITS

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

## SPECIFICATIONS (Shown as 2118907-1 : Others can vary with different cable lengths.)

<b>Frequency Range (MHz)</b>	2400-2500	5150-5875	5925-7125
<b>VSWR</b>	< 1.4:1	< 1.6:1	< 1.9:1
<b>Average Efficiency</b>	82%	73%	75%
<b>Peak Gain</b>	3.0 dBi	3.1 dBi	3.5 dBi
<b>Average Gain</b>	-0.9dBi	-1.4dBi	-1.4dBi
<b>Power Handling</b>	10-Watt cw		
<b>Feed Point Impedance</b>	50 ohms unbalanced		
<b>Polarization</b>	Linear		
<b>Size</b>	29.6 mm x 41.2 mm x 0.3 mm		
<b>Weight</b>	< 3.3 g		
<b>Mounting</b>	Adhesive Tape		
<b>Mating Connector</b>	MHF and MHF4-type Refer to page 7		
<b>Cable (Coaxial)</b>	1.37mm and 1.13mm Dia. Refer to page 9		
<b>Operating Temperature</b>	-40 to +85°C		
<b>Storage Temperature</b>	-40 to +85°C		
<b>Hazardous Materials</b>	A certificate of conformance is available from the product page on TE website.		

## RF SPECIFICATIONS FOR DIFFERENT CABLES

P/N	Cable Length (mm)	Connector	Cable OD (mm)	RF DATA	VSWR(MHz)		
					2400-2500	5150-5875	5925-7125
2118907-1	115	MHF	1.37	VSWR	< 1.4:1	< 1.6:1	< 1.9:1
				Aver. Eff.	82 %	73 %	75 %
				Peak Gain (Max)	3.0 dBi	3.1 dBi	3.5 dBi
				Aver. Gain	-0.9 dBi	-1.4 dBi	-1.4 dBi
2118907-2	50	MHF	1.37	VSWR	< 1.3:1	< 1.8:1	< 1.9:1
				Aver. Eff.	85 %	77 %	80 %
				Peak Gain (Max)	3.2 dBi	3.3 dBi	3.8 dBi
				Aver. Gain	-0.7 dBi	-1.2 dBi	-1.1 dBi
2118907-3	100	MHF	1.37	VSWR	< 1.4:1	< 1.9:1	< 2.0:1
				Aver. Eff.	83 %	74 %	76 %
				Peak Gain (Max)	3.0 dBi	3.2 dBi	3.6 dBi
				Aver. Gain	-0.9 dBi	-1.3 dBi	-1.3 dBi
2118907-4	150	MHF	1.37	VSWR	< 1.3:1	< 1.6:1	< 2.2:1
				Aver. Eff.	80 %	71 %	73 %
				Peak Gain (Max)	2.9 dBi	3.0 dBi	3.4 dBi
				Aver. Gain	-1.0 dBi	-1.5 dBi	-1.5 dBi
2118907-5	200	MHF	1.37	VSWR	< 1.2:1	< 1.6:1	< 2.0:1
				Aver. Eff.	78 %	68 %	69 %
				Peak Gain (Max)	2.8 dBi	2.8 dBi	3.2 dBi
				Aver. Gain	-1.1 dBi	-1.7 dBi	-1.7 dBi

## CABLE LOSS

OD 1.37mm (P/N: 1-1569222-0)			
Freq. Range (MHz)	2400-2500	5150-5875	5925-7125
Cable attenuation (dB/m)	< 2.4	< 3.7	< 4.1

## RF SPECIFICATIONS FOR DIFFERENT CABLES

P/N	Cable Length (mm)	Connector	Cable OD (mm)	RF DATA	VSWR(MHz)		
					2400-2500	5150-5875	5925-7125
1-2118907-1	250	MHF	1.37	VSWR	< 2.2:1	< 2.4:1	< 2.0:1
				Aver. Eff.	76 %	65 %	66 %
				Peak Gain (Max)	2.7 dBi	2.6 dBi	2.9 dBi
				Aver. Gain	-1.2 dBi	-1.9 dBi	-2.0 dBi
1-2118907-2	300	MHF	1.37	VSWR	< 2.1:1	< 2.3:1	< 2.0:1
				Aver. Eff.	74 %	62 %	63 %
				Peak Gain (Max)	2.6 dBi	2.4 dBi	2.7 dBi
				Aver. Gain	-1.3 dBi	-2.1 dBi	-2.2 dBi
1-2118907-5	400	MHF	1.37	VSWR	< 2.1:1	< 2.3:1	< 1.9:1
				Aver. Eff.	70 %	57 %	57 %
				Peak Gain (Max)	2.3 dBi	2.0 dBi	2.3 dBi
				Aver. Gain	-1.6 dBi	-2.5 dBi	-2.6 dBi

## CABLE LOSS

OD 1.37mm (P/N: 1-1569222-0)			
Freq. Range (MHz)	2400-2500	5150-5875	5925-7125
Cable attenuation (dB/m)	< 2.4	< 3.7	< 4.1

## RF SPECIFICATIONS FOR DIFFERENT CABLES

P/N	Cable Length (mm)	Connector	Cable OD (mm)	RF DATA	VSWR(MHz)		
					2400-2500	5150-5875	5925-7125
2118907-6	50	MHF4L	1.13	VSWR	< 1.2:1	< 1.5:1	< 2.1:1
				Aver. Eff.	85 %	77 %	79 %
				Peak Gain (Max)	3.1 dBi	3.3 dBi	3.7 dBi
				Aver. Gain	-0.8 dBi	-1.2 dBi	-1.2 dBi
2118907-7	100	MHF4L	1.13	VSWR	< 1.4:1	< 1.7:1	< 2.1:1
				Aver. Eff.	82 %	73 %	75 %
				Peak Gain (Max)	3.0 dBi	3.1 dBi	3.5 dBi
				Aver. Gain	-0.9 dBi	-1.4 dBi	-1.4 dBi
2118907-8	150	MHF4L	1.13	VSWR	< 1.4:1	< 1.5:1	< 2.1:1
				Aver. Eff.	79 %	69 %	71 %
				Peak Gain (Max)	2.9 dBi	2.9 dBi	3.2 dBi
				Aver. Gain	-1.0 dBi	-1.6 dBi	-1.7 dBi
2118907-9	200	MHF4L	1.13	VSWR	< 1.3:1	< 1.5:1	< 2.1:1
				Aver. Eff.	77 %	66 %	67 %
				Peak Gain (Max)	2.7 dBi	2.6 dBi	3.0 dBi
				Aver. Gain	-1.2 dBi	-1.9 dBi	-1.9 dBi

## CABLE LOSS

OD 1.13mm (P/N: 6-1569498-7)			
Freq. Range (MHz)	2400-2500	5150-5875	5925-7125
Cable attenuation (dB/m)	< 2.8	< 4.4	< 4.9

## RF SPECIFICATIONS FOR DIFFERENT CABLES

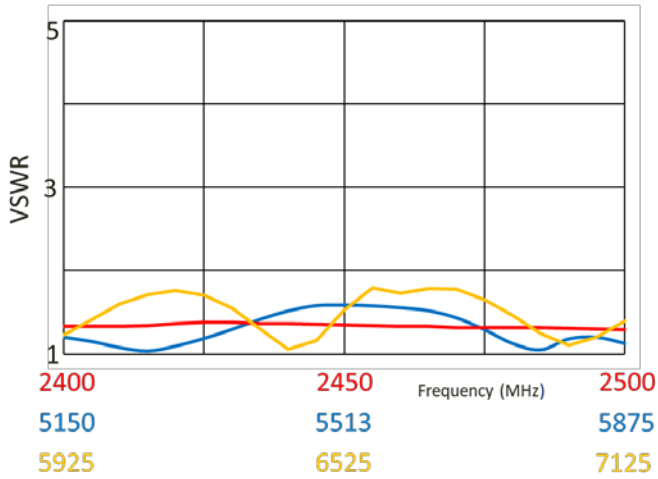
P/N	Cable Length (mm)	Connector	Cable OD (mm)	RF DATA	VSWR(MHz)		
					2400-2500	5150-5875	5925-7125
1-2118907-3	250	MHF4L	1.13	VSWR	< 1.6:1	< 1.6:1	< 2.0:1
				Aver. Eff.	74 %	62 %	63 %
				Peak Gain (Max)	2.6 dBi	2.4 dBi	2.7 dBi
				Aver. Gain	-1.3 dBi	-2.1 dBi	-2.2 dBi
1-2118907-4	300	MHF4L	1.13	VSWR	< 1.5:1	< 1.7:1	< 2.0:1
				Aver. Eff.	72 %	59 %	60 %
				Peak Gain (Max)	2.4 dBi	2.2 dBi	2.5 dBi
				Aver. Gain	-1.5 dBi	-2.3 dBi	-2.4 dBi

## CABLE LOSS

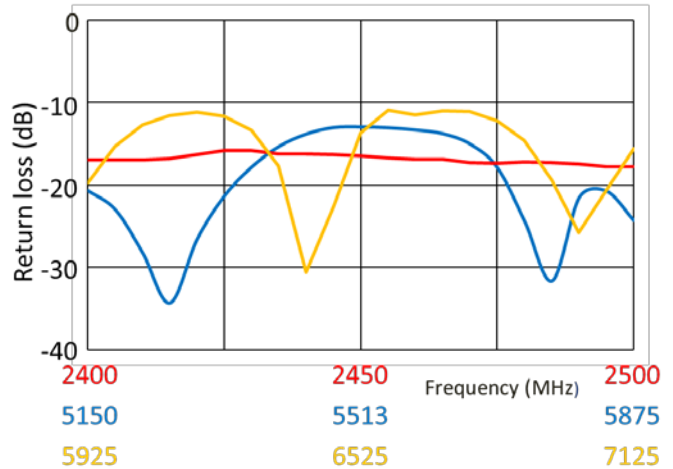
OD 1.13mm (P/N: 6-1569498-7)			
Freq. Range (MHz)	2400-2500	5150-5875	5925-7125
Cable attenuation (dB/m)	< 2.8	< 4.4	< 4.9

RF DATA (Shown as 2118907-1 : Others can vary with different cable lengths.)

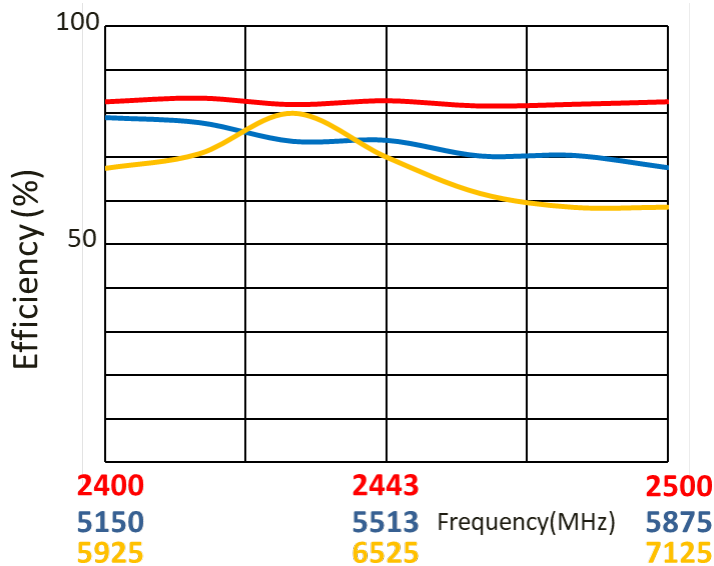
VSWR



Return Loss



Efficiency

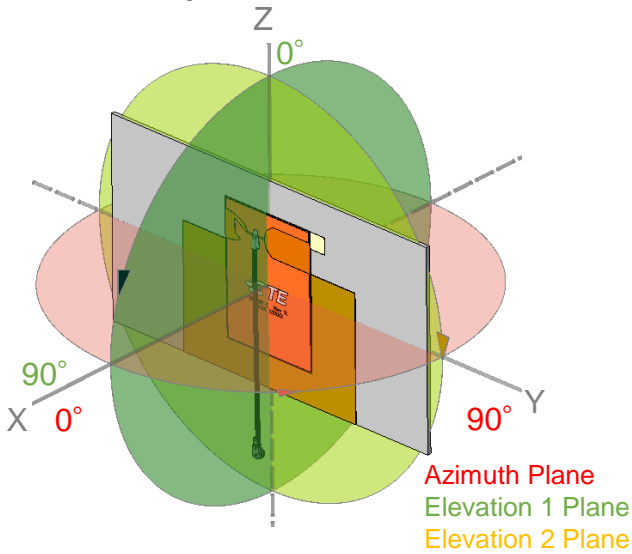


Data measured in free space and on plastic device enclosure

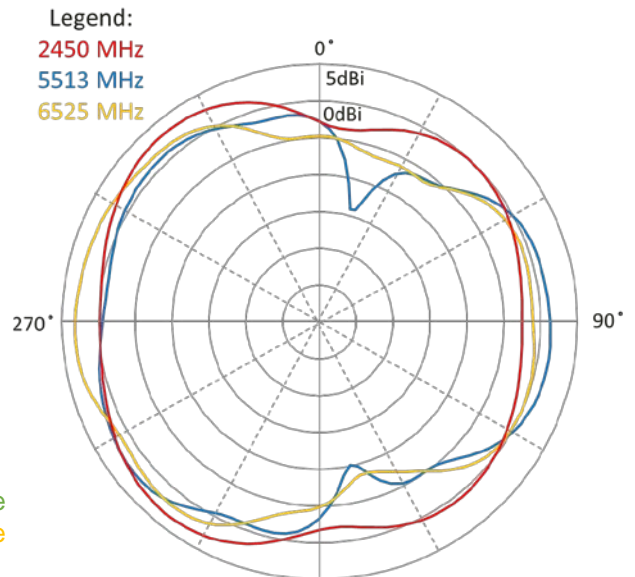
# RADIATION PATTERN

(Shown as 2118907-1 : Others can vary with different cable lengths.)

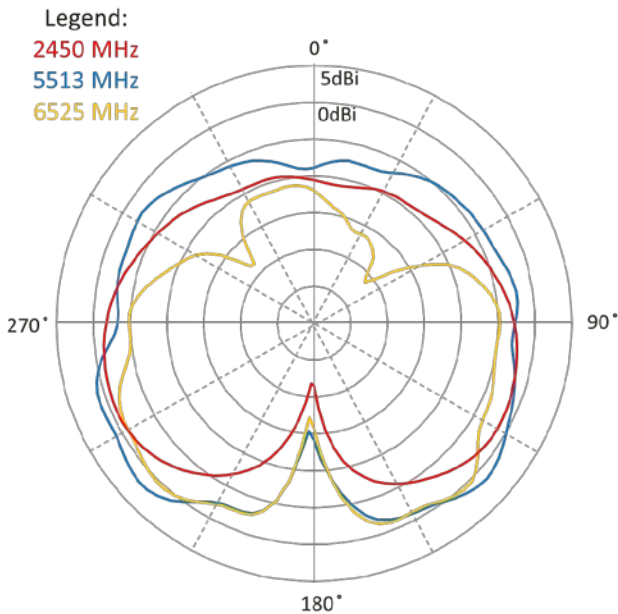
## Test setup



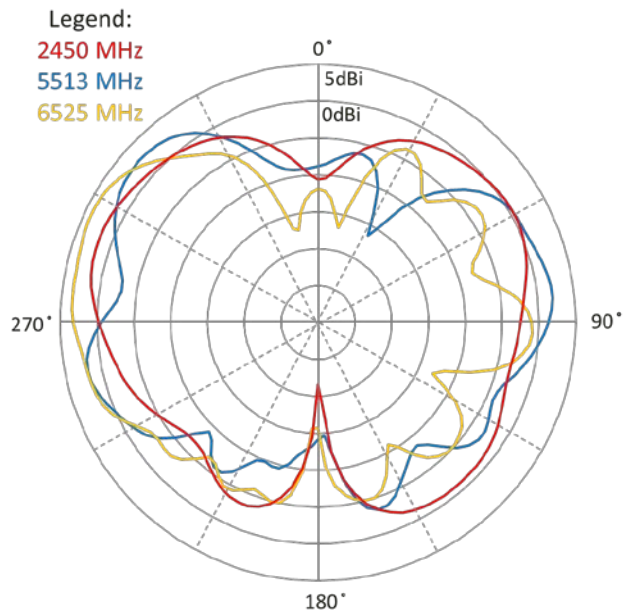
## Azimuth



## Elevation 1

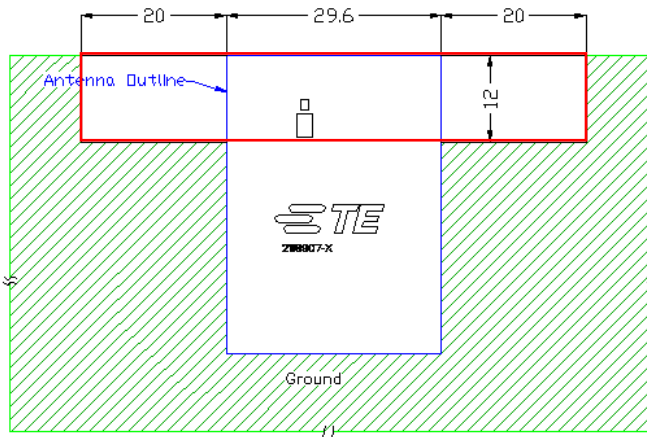


## Elevation 2



Data measured in free space and on plastic device enclosure

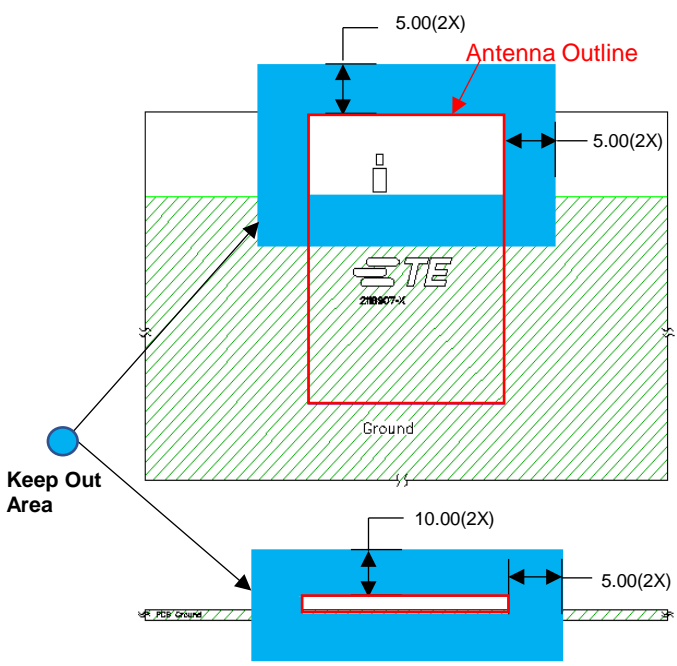
# MOUNTING GUIDE



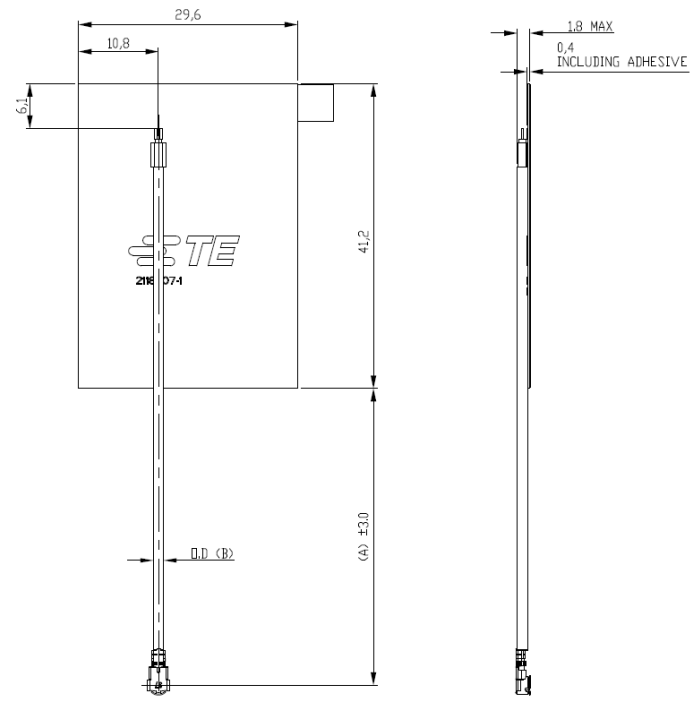
- NOTES: 1. No copper allowed in designated area on all PCB layers –   
 2. For more information please call TE.

Dimensions: mm  
 Diagram is not to scale

## KEEP OUT AREA




## DIMENSIONS

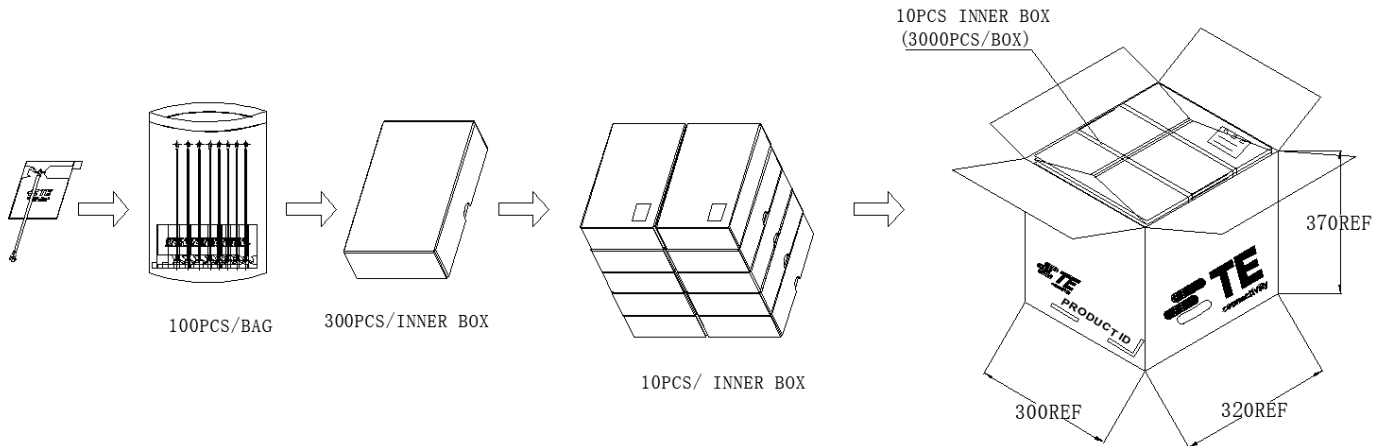


Dimensions: mm  
 Diagram is not to scale

## MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

2118907-1	115	4.53	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2118907-2	50	1.97	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2118907-3	100	3.94	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2118907-4	150	5.91	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2118907-5	200	7.78	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
1-2118907-1	250	9.84	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
1-2118907-2	300	11.81	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
1-2118907-5	400	15.75	1.37	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2118907-6	50	1.97	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2118907-7	100	3.94	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2118907-8	150	5.91	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2118907-9	200	7.78	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
1-2118907-3	250	9.84	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
1-2118907-4	300	11.81	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
1-2118907-5	400	15.75	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
PART NUMBER	MM	INCH	MM	CONNECTOR TYPE (ON CABLE)	PART NUMBER	IMAGE
	CABLE LENGTH(A)		CABLE O.D(B)		MATING COMPONENTS	

## PACKAGING



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