



# ISM 868 / 915 MHz ANTENNA

**Part Number: X-2195835-X**

(see page 7 for details)

## FEATURES & BENEFITS

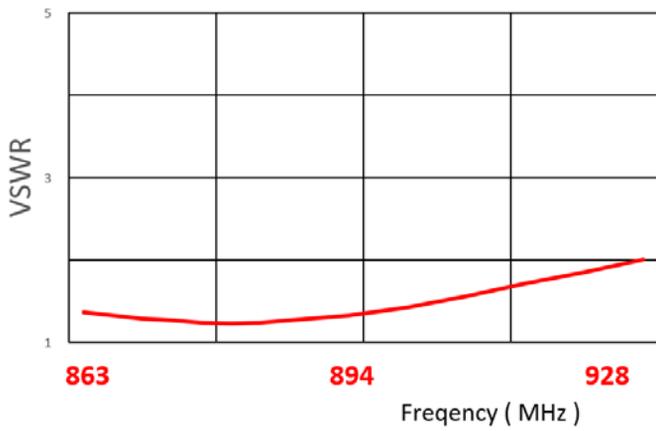
- ISM antenna, including of 868 / 915 ISM and IoT products
- Available cable lengths: 50,100,150,200 mm, custom specific (Different cable lengths having impact on RF performance, see individual RF data)
- Available connectors: MHF, MHF4 or compatible, custom specific
- FPC with double side adhesive tape simplifies mounting within the device even on curved areas
- Omnidirectional coverage

## SPECIFICATIONS

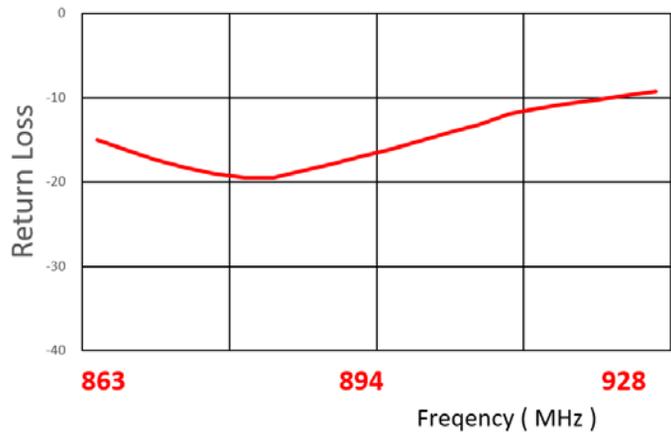
P/N	2195835-1/-2/-3/-5/-6/-7	2195835-4/-8
Frequency Range (MHz)	863-928	863-928
VSWR	< 2.3:1	< 2.3:1
Average Efficiency	35%	47%
Peak Gain	1.4dBi	-0.9dBi
Average Gain	-4.5dB	-3.2dB
Power Handling	10 Watt cw	
Feed Point Impedance	50 ohms unbalanced	
Polarization	Linear	
Size	38 mm x 9.0 mm x 0.2 mm	
Weight	< 0.9 g	
Mounting	Adhesive flexible tape	
Mating Connectors	MHF type receptacle (TE PN 2337019-1), MHF4 type receptacle (TE PN: 2334884-1)	
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  $\leq$  150 mm cable length

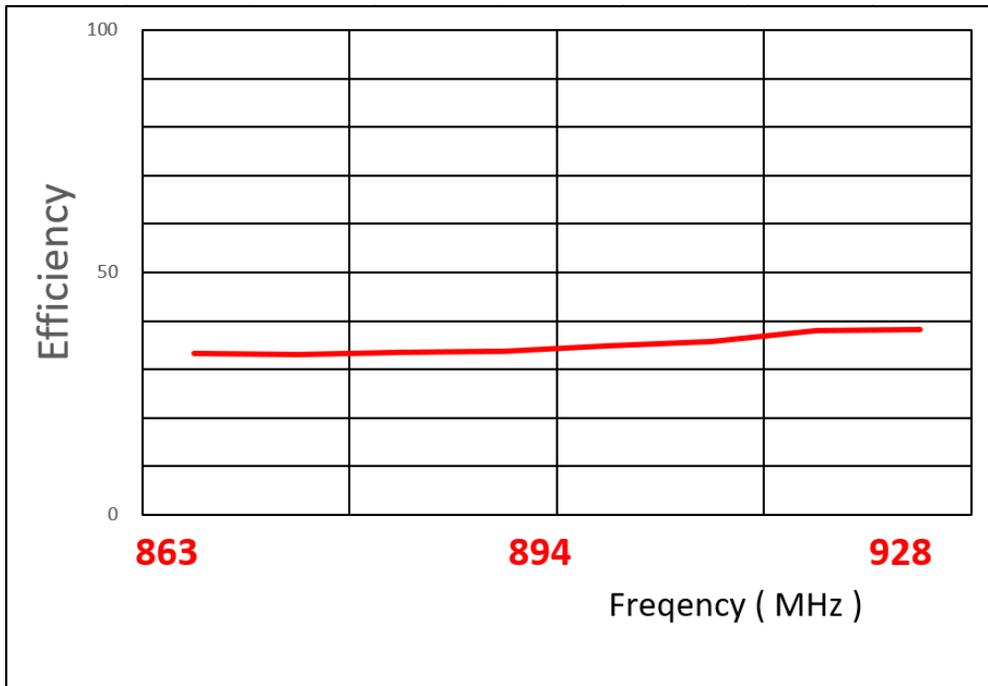
VSWR



Return Loss



Efficiency

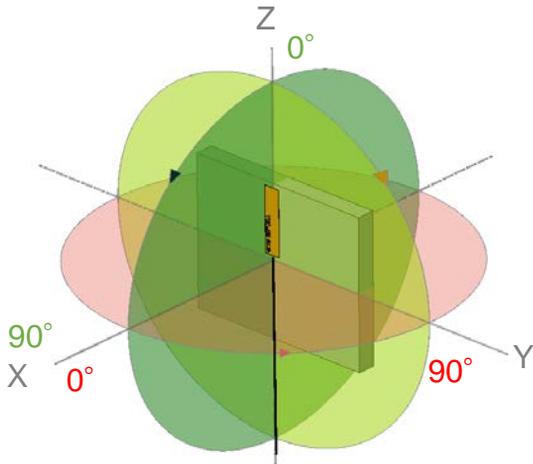


P/N : 2195835-1/-2/-3/-5/-6/-7

Data measured in free space and on plastic device enclosure

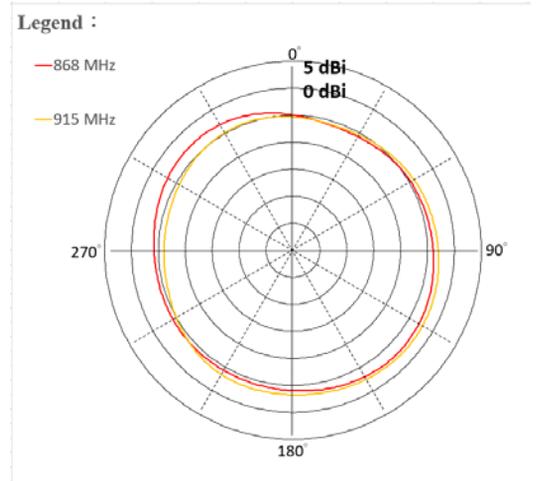
# RADIATION PATTERN ≤ 150 mm cable length

## Test setup

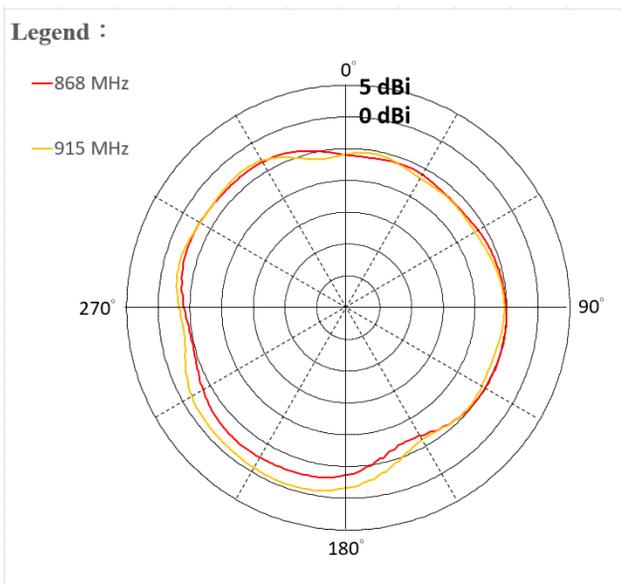


Azimuth Plane  
Elevation 1 Plane  
Elevation 2 Plane

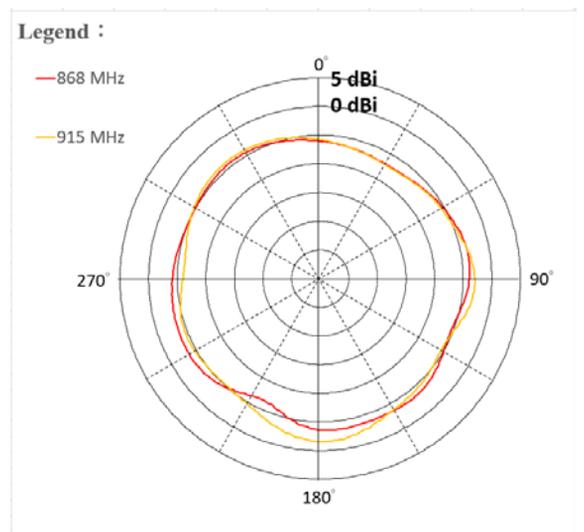
## Azimuth



## Elevation 1



## Elevation 2

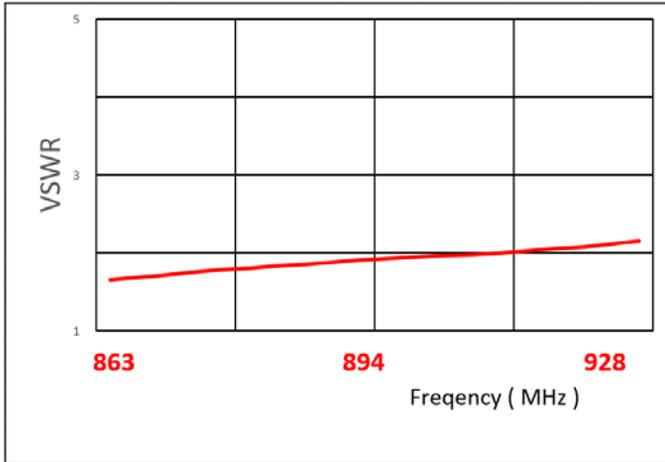


P/N : 2195835-1/-2/-3/-5/-6/-7

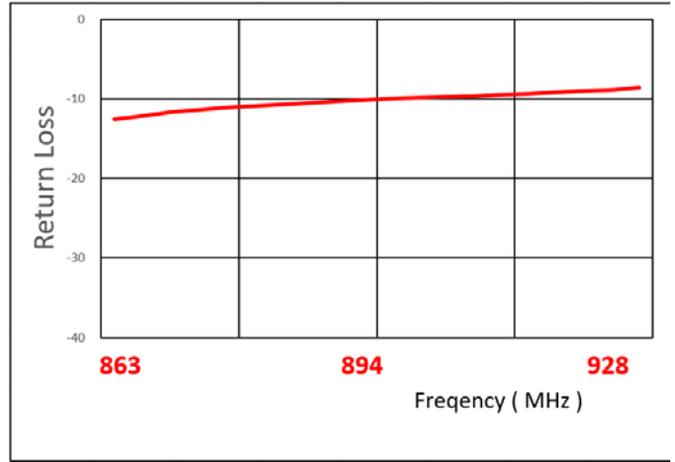
Data measured in free space and on plastic device enclosure

## RF DATA for 200 mm cable length

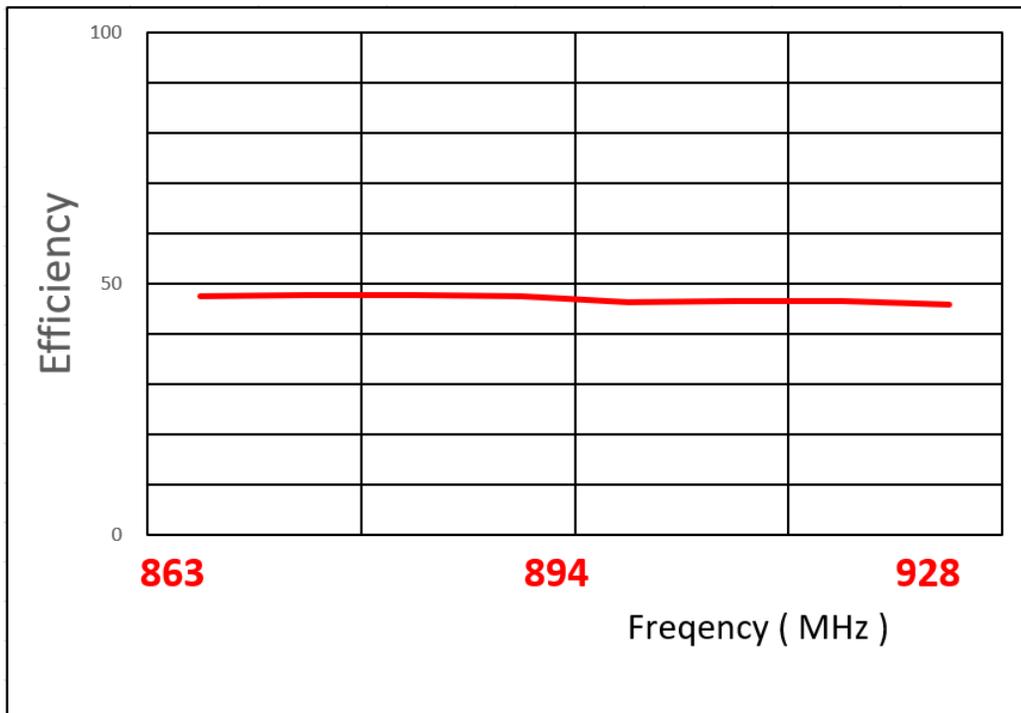
VSWR



Return Loss



Efficiency

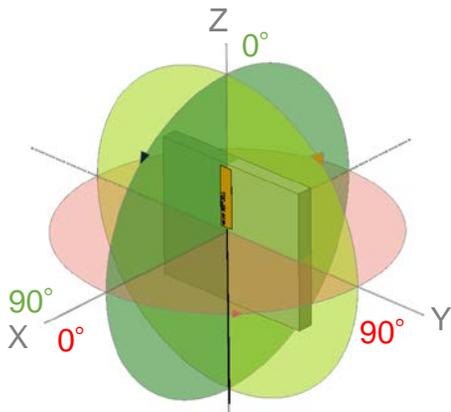


P/N : 2195835-4/-8

Data measured in free space and on plastic device enclosure

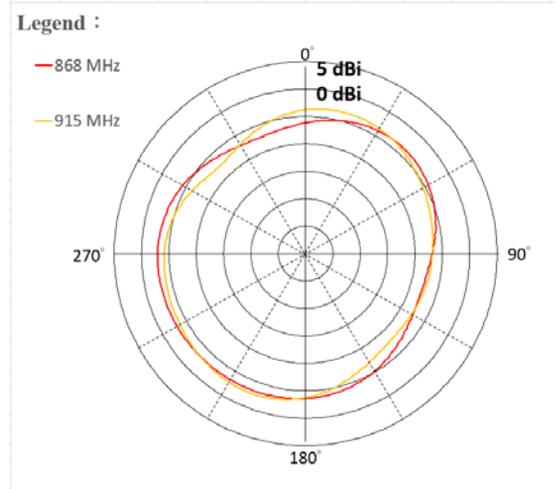
## RADIATION PATTERN for 200 mm cable length

### Test setup



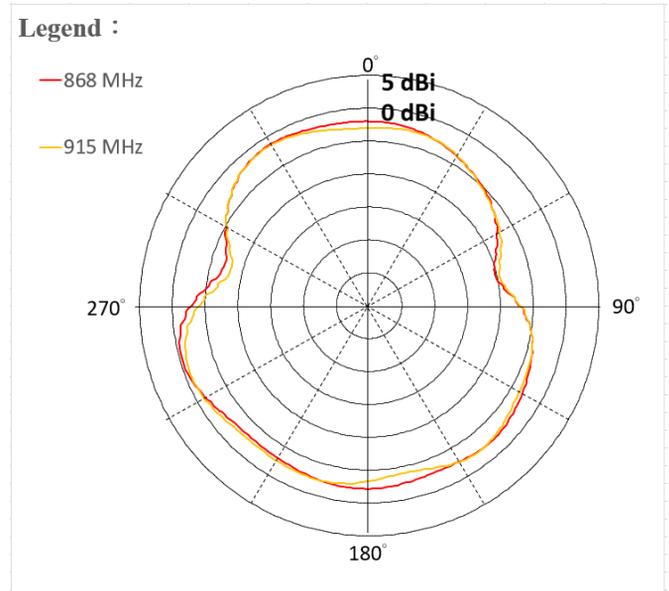
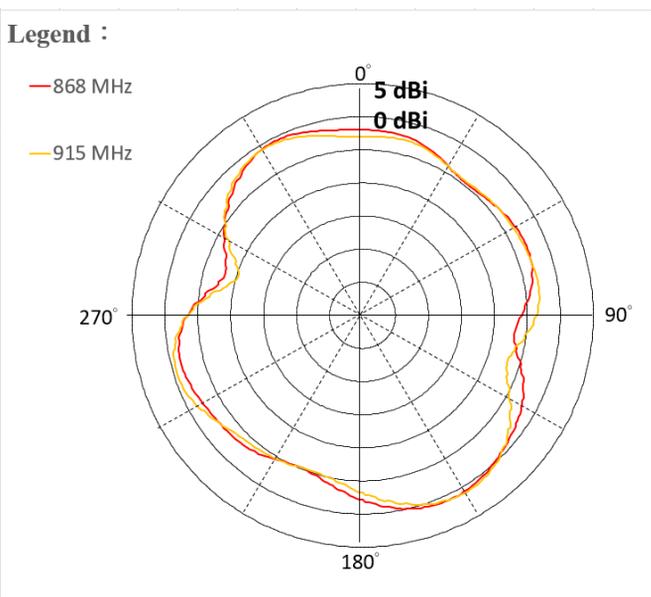
Azimuth Plane  
Elevation 1 Plane  
Elevation 2 Plane

### Azimuth



### Elevation 1

### Elevation 2



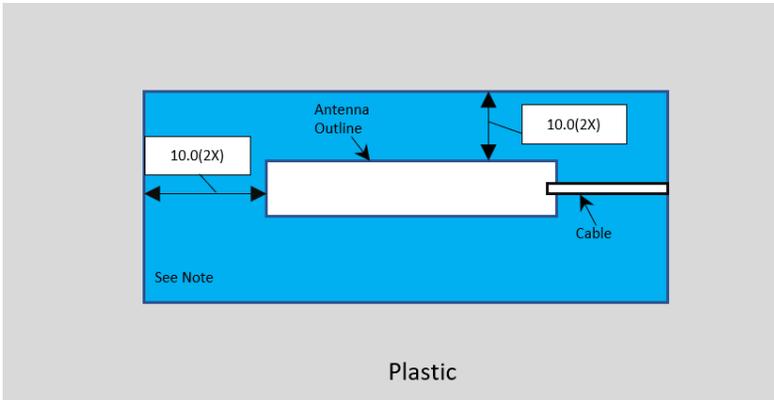
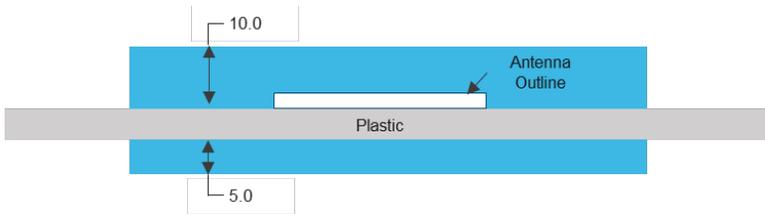
P/N : 2195835-4/-8

Data measured in free space and on plastic device enclosure

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## KEEP OUT AREA

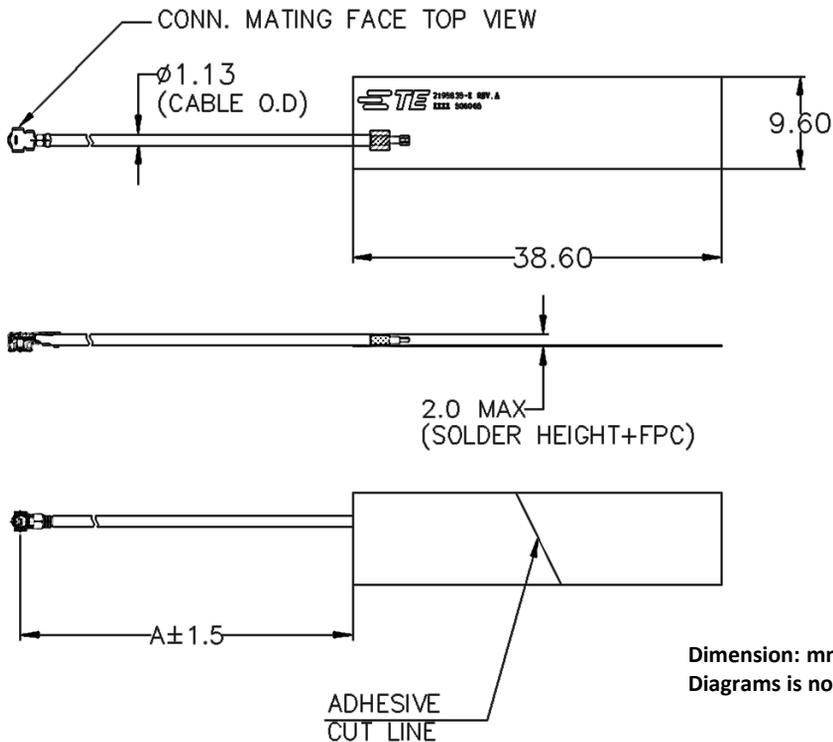


### NOTES

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



Dimension: mm  
Diagrams is not into scale

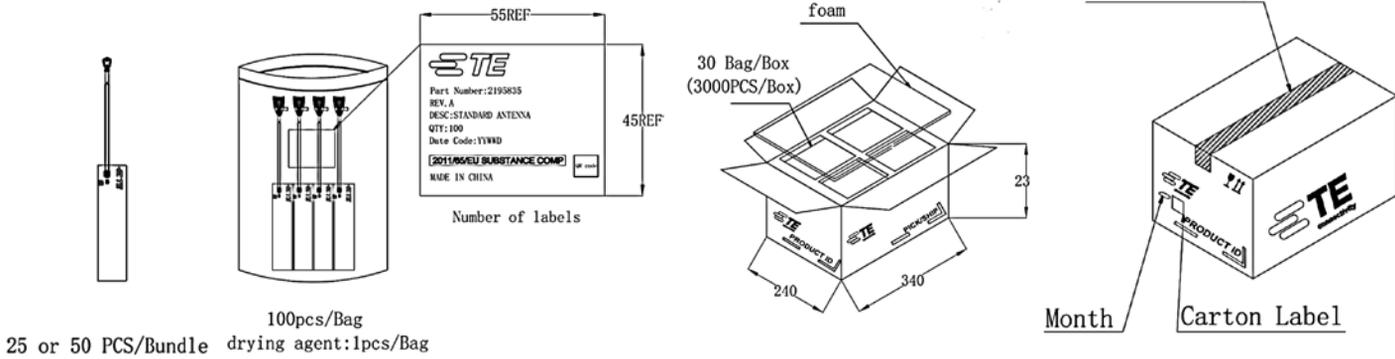
## MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

1-2195835-2	300	11.81	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
1-2195835-1	250	9.84	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2195835-4	200	7.87	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2195835-3	150	5.90	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2195835-2	100	3.93	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
2195835-1	50	1.97	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
1-2195835-4	300	11.81	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
1-2195835-3	250	9.84	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2195835-8	200	7.87	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2195835-7	150	5.90	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2195835-6	100	3.93	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
2195835-5	50	1.97	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
PART NUMBER	MM CABLE LENGTH(A)	INCH	CABLE (OD) mm	CONNECTOR TYPE (ON CABLE)	PART NUMBER MATING COMPONENTS	IMAGE

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## PACKAGING



### TE TECHNICAL SUPPORT CENTER

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For phone numbers in other countries, go to [te.com/support-center](http://te.com/support-center)

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