



# ISM 915 MHz ANTENNA

# **FEATURES & BENEFITS**

- 915 MHz ISM antenna for LoRaWAN and other IoT products
- Available cable lengths: 50, 100, 150 mm
- Available connectors: MHF-type, MHFL4-type
- FPC with double side adhesive tape simplifies mounting within the device even on curved areas
- Omnidirectional coverage

# **PART NUMBERS**

PART NUMBER	CABLE LE	CONNECTOR TYPE	
	ММ	INCH	(ON CABLE)
L000528-01	50	1.97	MHF-TYPE PLUG
L000528-02	100	3.93	MHF-TYPE PLUG
L000528-03	150	5.90	MHF-TYPE PLUG
L000528-04	50	1.97	MHF4L-TYPE PLUG
L000528-05	100	3.93	MHF4L-TYPE PLUG
L000528-06	150	5.90	MHF4L-TYPE PLUG

# **SPECIFICATIONS**

(Shown with 100 mm cable, Others can vary with different cable)

Frequency Range (MHz)         902-928 MHz           VSWR         < 4.5:1           Average Efficiency         16%				
Average Efficiency 16%	< 4.5:1			
	16%			
Peak Gain -1.7dBi	-1.7dBi			
Average Gain -7.9 dBi	-7.9 dBi			
Power Handling 10 Watt cw	10 Watt cw			
Feed Point Impedance 50 ohms				
<b>Polarization</b> Linear	Linear			
<b>Size</b> 25mm x 22.4mm x 0.15mm	25mm x 22.4mm x 0.15mm			
Weight <1g	<1g			
<b>Mounting</b> Adhesive	Adhesive			
Mating Connectors MHF1 and MHF4 type, Refer to page 6	MHF1 and MHF4 type, Refer to page 6			
Cable 1.13mm Dia.	1.13mm Dia.			
Operating / Storage Temperature -40 to +85°C	-40 to +85°C			
Hazardous Materials A certificate of conformance is available from the product page on	A certificate of conformance is available from the product page on TE website.			

# ANTENNA RF SPECIFICATIONS WITH DIFFERENT CABLE ASSEMBLIES

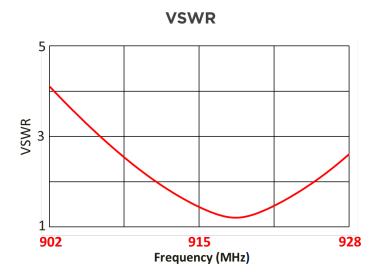
Cable Length / Cable OD 117 mm	RF DATA	Frequency Range (MHz)	
Cable Length / Cable OD 1.13 mm	RF DATA	902 - 928	
	VSWR	< 4.5:1	
FO	Average Efficiency	16 %	
50 mm	Peak Gain (Max)	-1.6 dBi	
	Average Gain	-7.8 dBi	
	VSWR	< .4.5:1	
100	Average Efficiency	16%	
100 mm	Peak Gain (Max)	-1.7 dBi	
	Average Gain	-7.9 dBi	
	VSWR	< 4.5:1	
150	Average Efficiency	15%	
150 mm	Peak Gain (Max)	-2 dBi	
	Average Gain	-8.2 dBi	

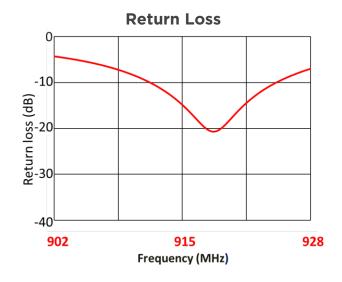
# **CABLE LOSS**

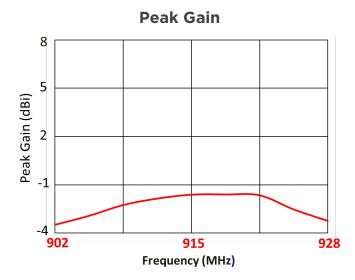
OD 1.13mm (P/N: L-000528-01-06)				
Freq. Range (MHz)	902 - 928			
Cable attenuation (dB/m)	< 0.33			

## **RF DATA**

(Shown with 100 mm cable: Others vary with different cable lengths.)







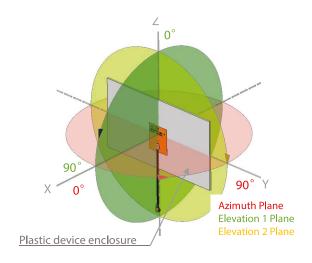


Data measured in free space and on 1.8 mm thick PC plastic

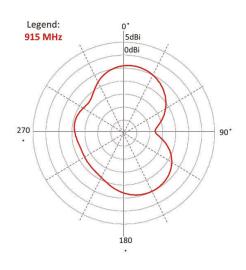
## **RADIATION PATTERN**

(Shown with 100 mm cable: Others vary with different cable lengths.)

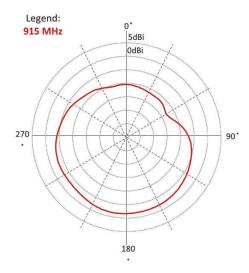
**Test setup** 



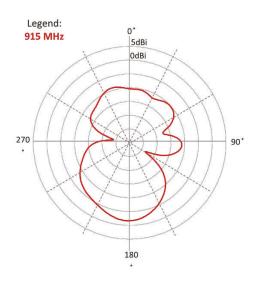
**Azimuth** 



**Elevation 1** 

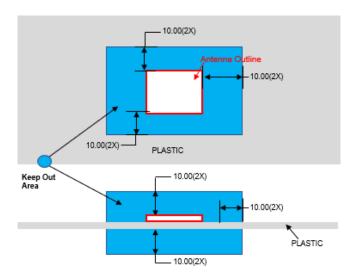


**Elevation 2** 



Data measured in free space and on 1.8 mm thick PC plastic

# **KEEP OUT AREA**



#### **NOTES**

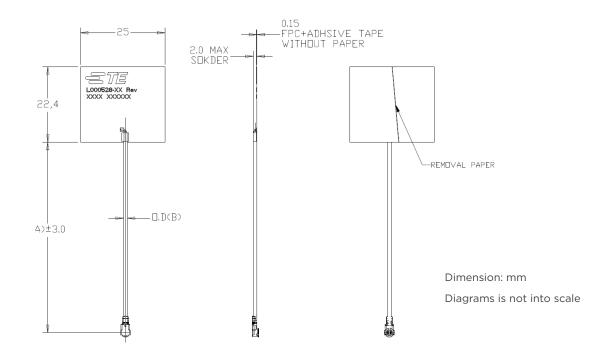
- 1. Antenna designed to be mounted on plastic cover.
- 2. Area in blue indicates Keep Out Area
- 3. Contact TE if Keep Out Area cannot be guaranteed.

Dimension: mm

Diagrams is not into scale

## **DIMENSIONS**

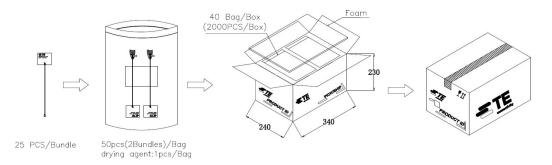
(Refer to Page 6 for dimension "A" and "B")



### MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

PART NUMBER	CABLE LENGTH (A)		CABLE O.D ("B"),	CONNECTOR TYPE	MATING COMPONENTS	
	ММ	INCH	MM	(ON CABLE)	PART NUMBER	IMAGE
L000528-01	50	1.97	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
L000528-02	100	3.93	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
L000528-03	150	5.90	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
L000528-04	50	1.97	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
L000528-05	100	3.93	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	
L000528-06	150	5.90	1.13	MHF4L-TYPE PLUG	RECEPTACLE (TE PN: 2334884-1)	

### **PACKAGING**



#### TE TECHNICAL SUPPORT CENTER

USA: +1 (800) 522-6752 +1 (905) 475-6222 Canada: 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 +33 (0) 1-3420-8686 France: Netherlands: +31 (0) 73-6246-999 +86 (0) 400-820-6015

For phone numbers in other countries, go to te.com/support-center

### te.com

TE, TE Connectivity and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. Other product names, logos, and company names mentioned herein may 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.

© 2024 TE Connectivity. All Rights Reserved.

Published 03-24

