



# ISM 915 MHz SDP LPWAN FPC ANTENNAS

### **FEATURES & BENEFITS**

- 915 MHz ISM antenna for LoRaWAN and other IoT products
- For use in European Union (EU) and other global regions (Non-Americas regions)
- 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 LI	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%		
Peak Gain	-1.7dBi		
Average Gain	-7.9 dBi		
Power Handling	10 Watt cw		
Feed Point Impedance	50 ohms		
Polarization	Linear		
Size	25mm x 22.4mm x 0.15mm		
Weight	<1g		
Mounting	Adhesive		
Mating Connectors	MHF1 and MHF4 type, Refer to page 6		
Cable	1.13mm Dia.		
Operating / Storage Temperature	-40 to +85°C		
Hazardous Materials	A certificate of conformance is available from the product page on TE website.		

# ANTENNA RF SPECIFICATIONS WITH DIFFERENT CABLE ASSEMBLIES

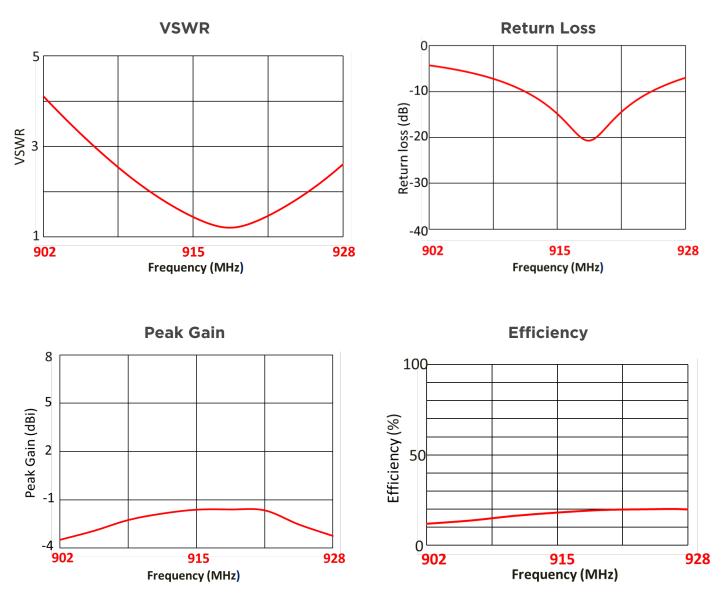
Cable Length / Cable OD 117 mm	RE DATA	Frequency Range (MHz)	
Cable Length / Cable OD 1.13 mm	RF DATA	902 - 928	
	VSWR	< 4.5:1	
50 mm	Average Efficiency	16 %	
50 mm	Peak Gain (Max)	-1.6 dBi	
	Average Gain	-7.8 dBi	
	VSWR	< .4.5:1	
100 mm	Average Efficiency	16%	
	Peak Gain (Max)	-1.7 dBi	
	Average Gain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

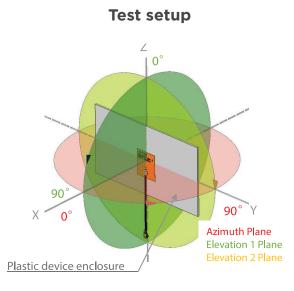
(Shown with 100 mm cable: Others vary with different cable lengths.)



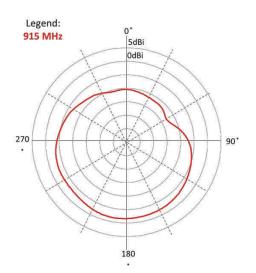
Data measured in free space and on 1.8 mm thick PC plastic

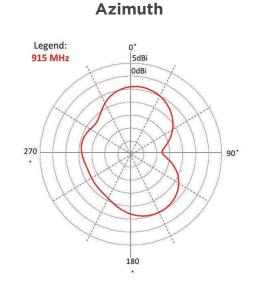
## **RADIATION PATTERN**

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

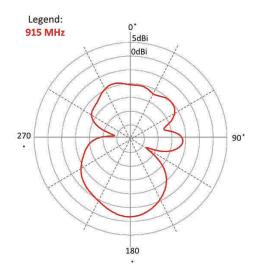


# **Elevation 1**



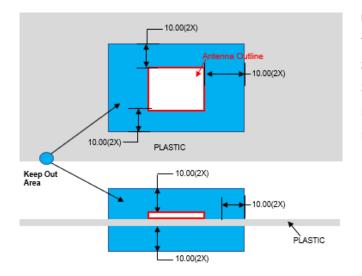


Elevation 2



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

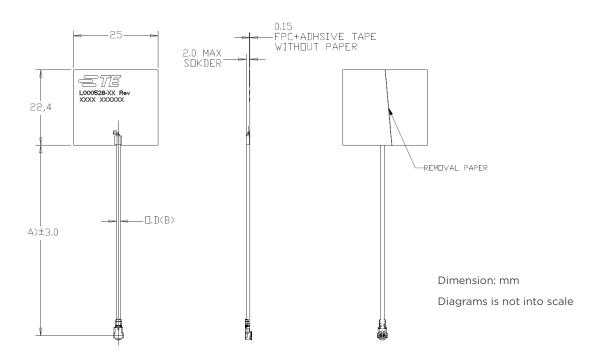
3. Contact TE if Keep Out Area cannot be guaranteed.

Dimension: mm

Diagrams is not into scale

## DIMENSIONS

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



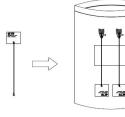
#### ISM 915 MHz SDP LPWAN FPC ANTENNAS

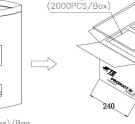
Standard Antenna Solutions

#### MATING COMPONENTS TO PART NUMBERS AND DIMENSIONS

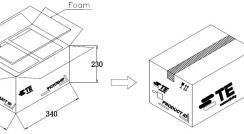
PART NUMBER	CABLE LENGTH (A)	CABLE O.D ("B"), CONNECTOR TYPE	MATING COMPONENTS			
	ММ	INCH	мм	(ON CABLE)	PART NUMBER	IMAGE
L000528-01	50	1.97	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
L000528-02	100	3.93	1.13	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	$\overline{\mathbf{o}}$
L000528-03	150	5.90	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





40 Bag/Box



25 PCS/Bundle

50pcs(2Bundles)/Bag drying agent: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
China:	+86 (0) 400-820-6015

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

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