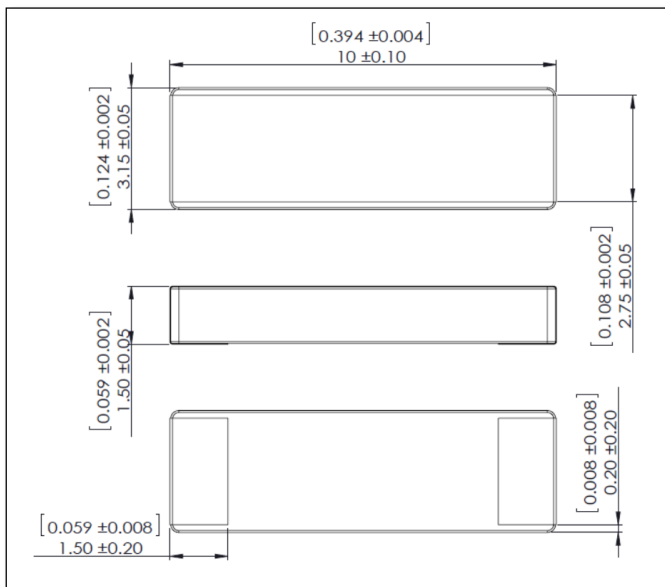


**Description:** ISM 868 / 915 MHz Chip Antenna**Series:** Ceramic**PART NUMBER:** W3014**Features:**

- Low profile
- Compact size W x L x H (10 x 3.2 x 1.5 mm)
- Low weight (240 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible

**Applications:**

- 868MHz radios
- 915MHz radios

All dimensions are in mm / inches

**Issue:** 2049

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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Pulse (Suzhou) Wireless Products Co, Inc.  
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Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998

**Description:** ISM 868 / 915 MHz Chip Antenna**Series:** Ceramic**PART NUMBER:** W3014**ELECTRICAL SPECIFICATIONS**

Frequency	848-888MHz/895-935MHz
Nominal Impedance	50Ω
Return loss	-7dB
Gain (Radiating element)	-0.5dBi +/- 1 dB
Radiation Pattern	Omni
Polarization:	linear
Total Efficiency	35%

Issue: 2049

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**Description:** ISM 868 / 915 MHz Chip Antenna**Series:** Ceramic**PART NUMBER:** W3014**MECHANICAL SPECIFICATIONS**

Size	10x3.2x1.5 mm
Weight	240 mg
MSL Level	1

**ENVIRONMENTAL SPECIFICATIONS**

Operating temperature	-40/+85° C
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Issue: 2049

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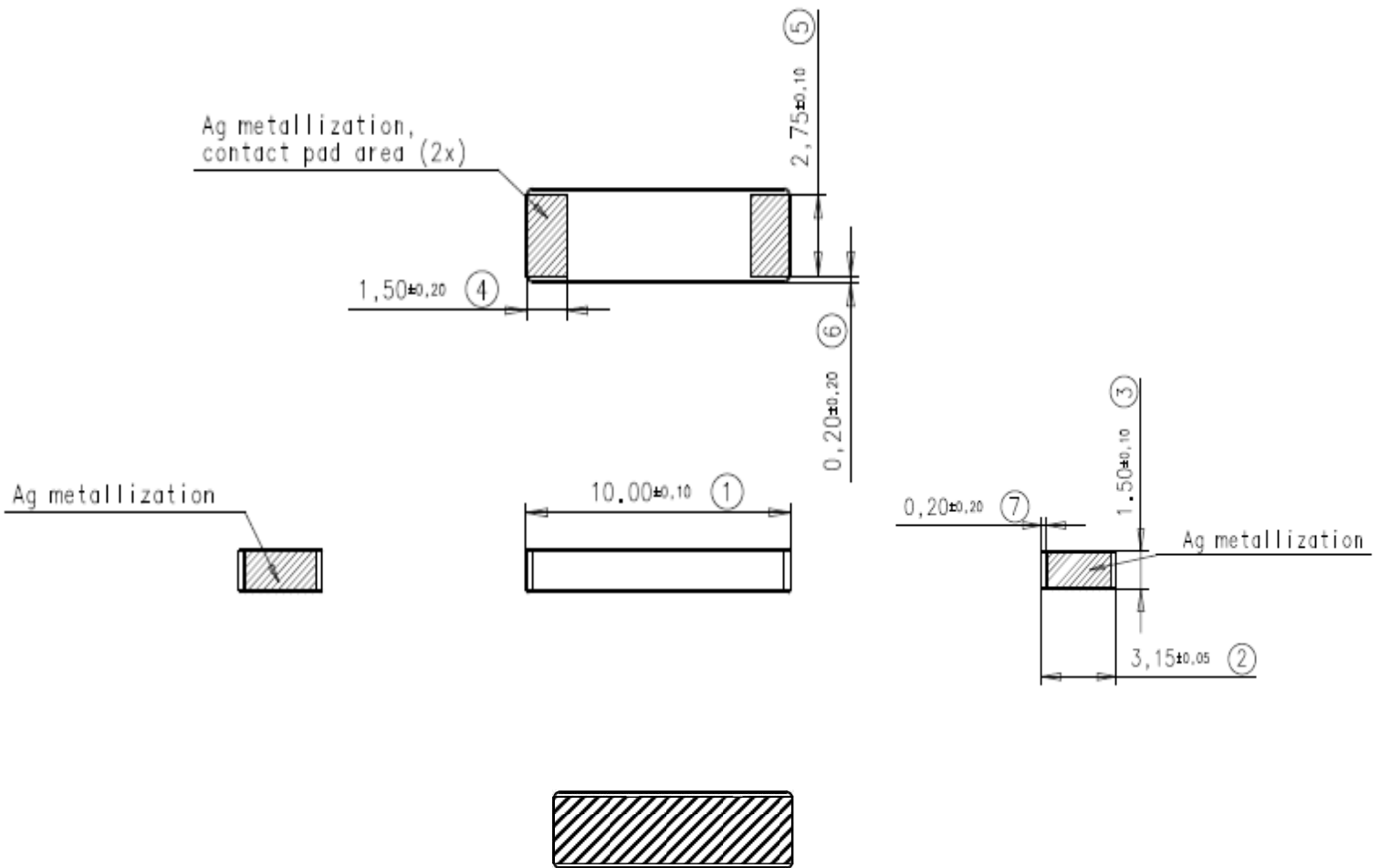
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Description: ISM 868 / 915 MHz Chip Antenna

Series: Ceramic

PART NUMBER: W3014

## MECHANICAL DRAWING



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Description: ISM 868 / 915 MHz Chip Antenna

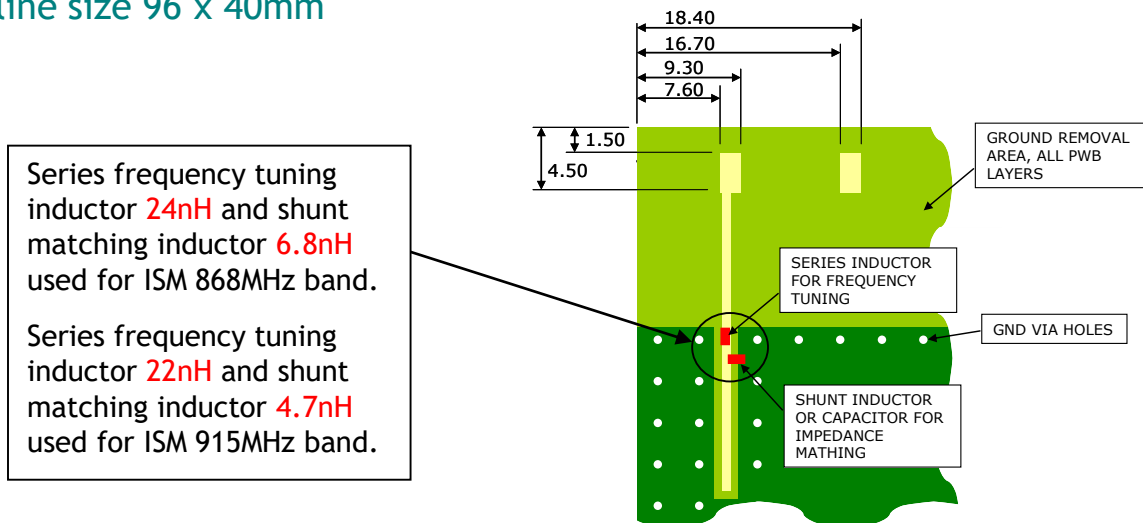
Series: Ceramic

PART NUMBER: W3014

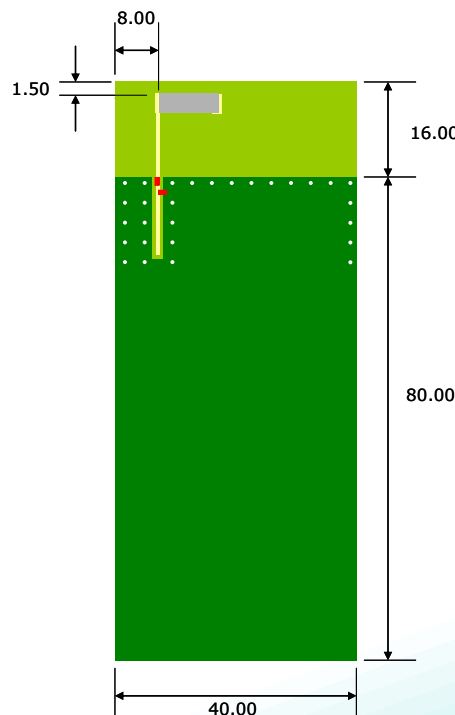
## OTHER SPECIFICATIONS

Ground cleared under antenna, clearance area **40 mm x 16 mm**

Recommended test board layout for electrical characteristic measurement, test board outline size 96 x 40mm



Feed line should be designed to match 50  $\Omega$  characteristic impedance, depending on PWB material and thickness.



Matching and tuning component values depend on application and surrounding mechanics / materials

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Description: ISM 868 / 915 MHz Chip Antenna

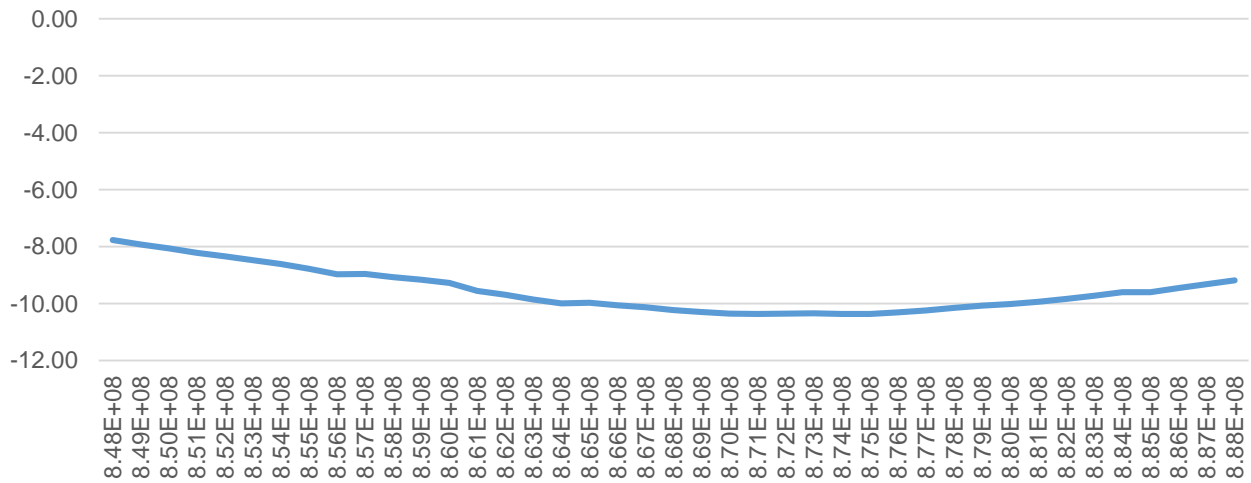
Series: Ceramic

PART NUMBER: W3014

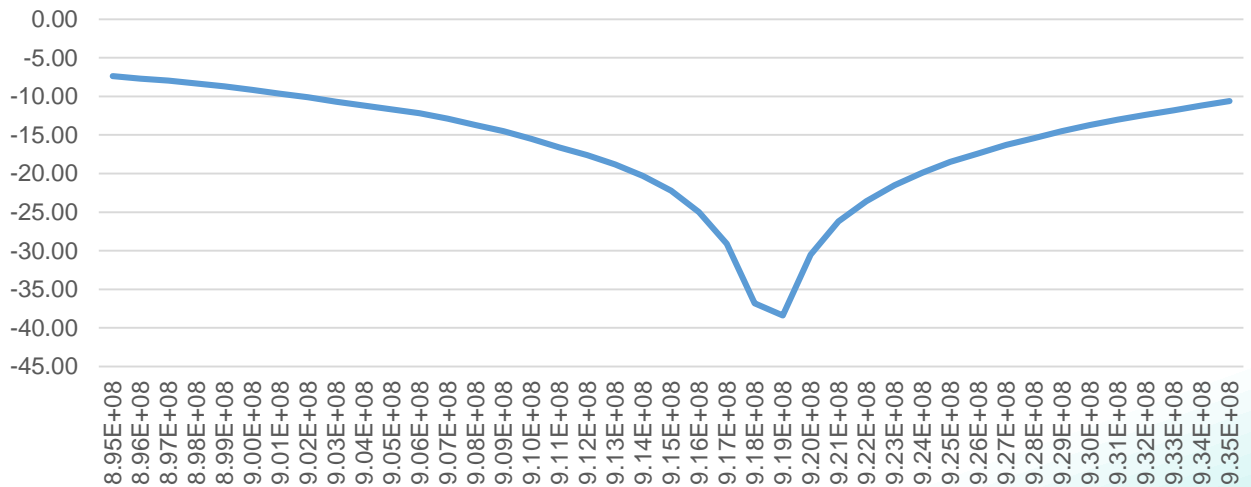
CHARTS

Return Loss

ISM 868MHz RL in free space



ISM 915MHz RL in free space



Issue: 2049

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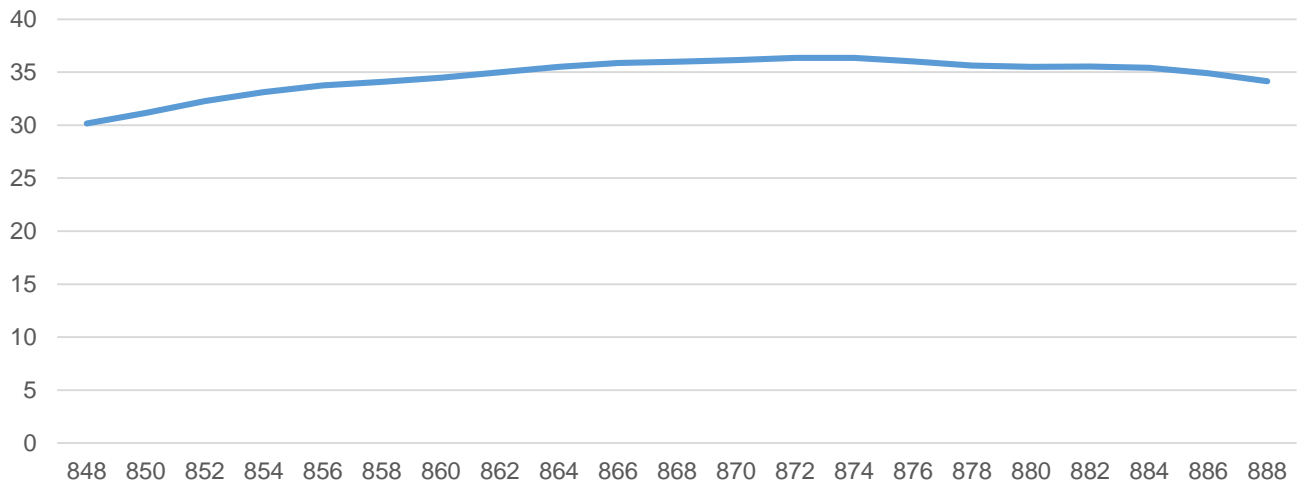
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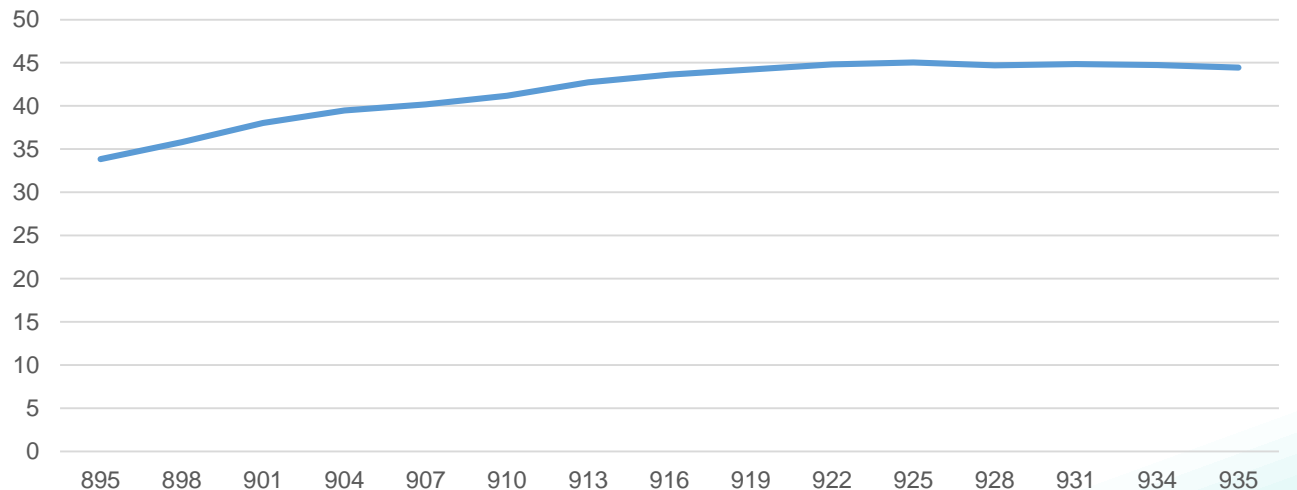


**Description:** ISM 868 / 915 MHz Chip Antenna**Series:** Ceramic**PART NUMBER:** W3014**CHARTS****Efficiency(%)**

ISM 868MHz Total Efficiency in free space, %



ISM 915MHz Total Efficiency in free space, %



Issue: 2049

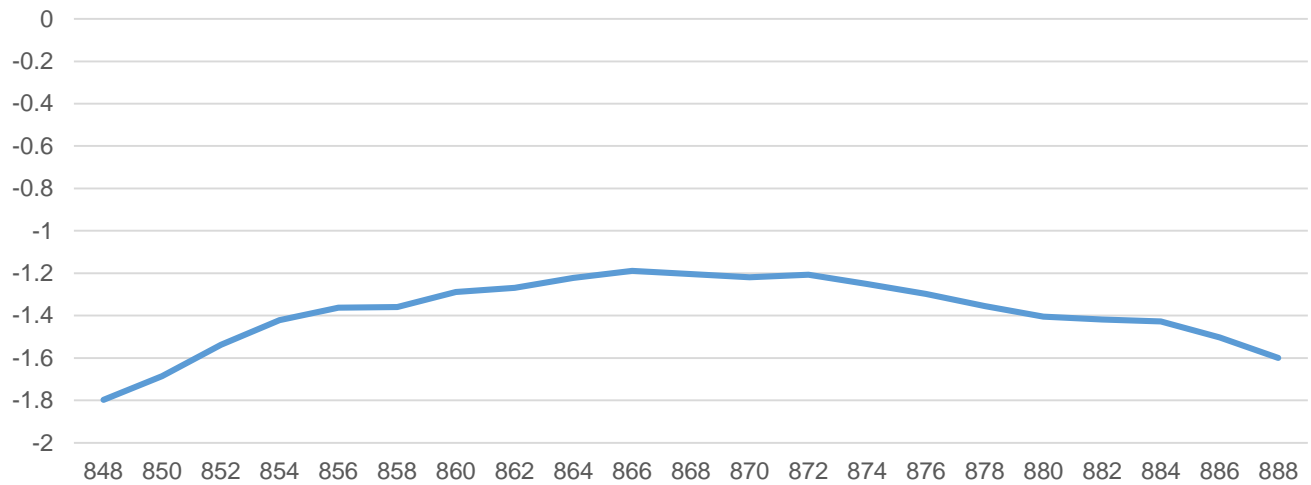
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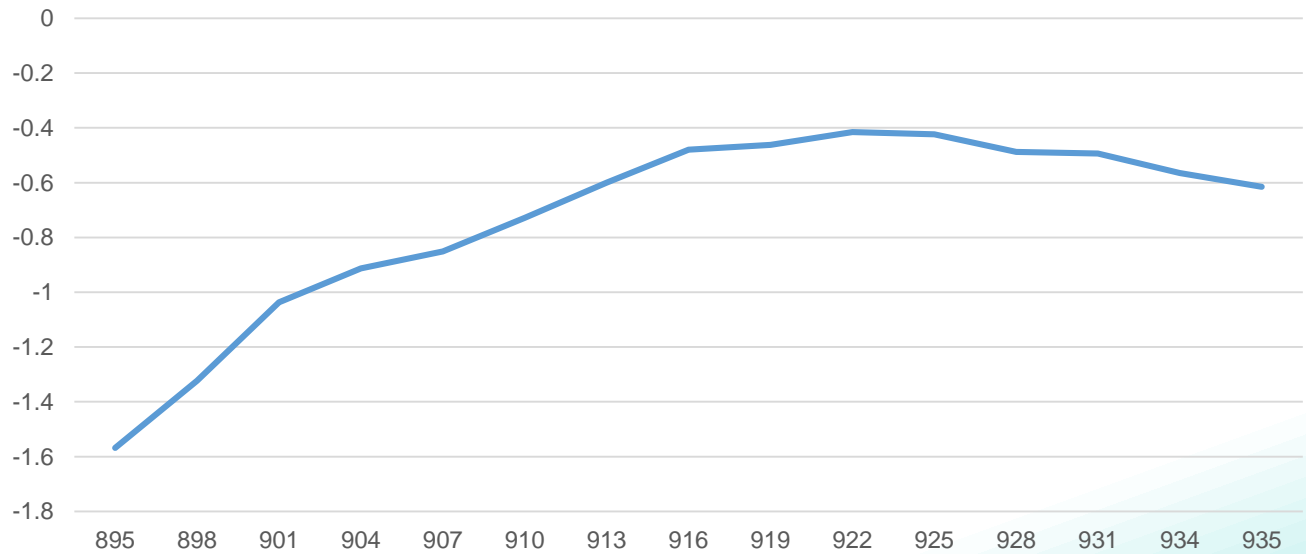
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**Description:** ISM 868 / 915 MHz Chip Antenna**Series:** Ceramic**PART NUMBER:** W3014**CHARTS****Peak Gain(dBi)**

ISM 868MHz Peak Gain in free space, dBi



ISM 915MHz Peak Gain in free space, dBi



Issue: 2049

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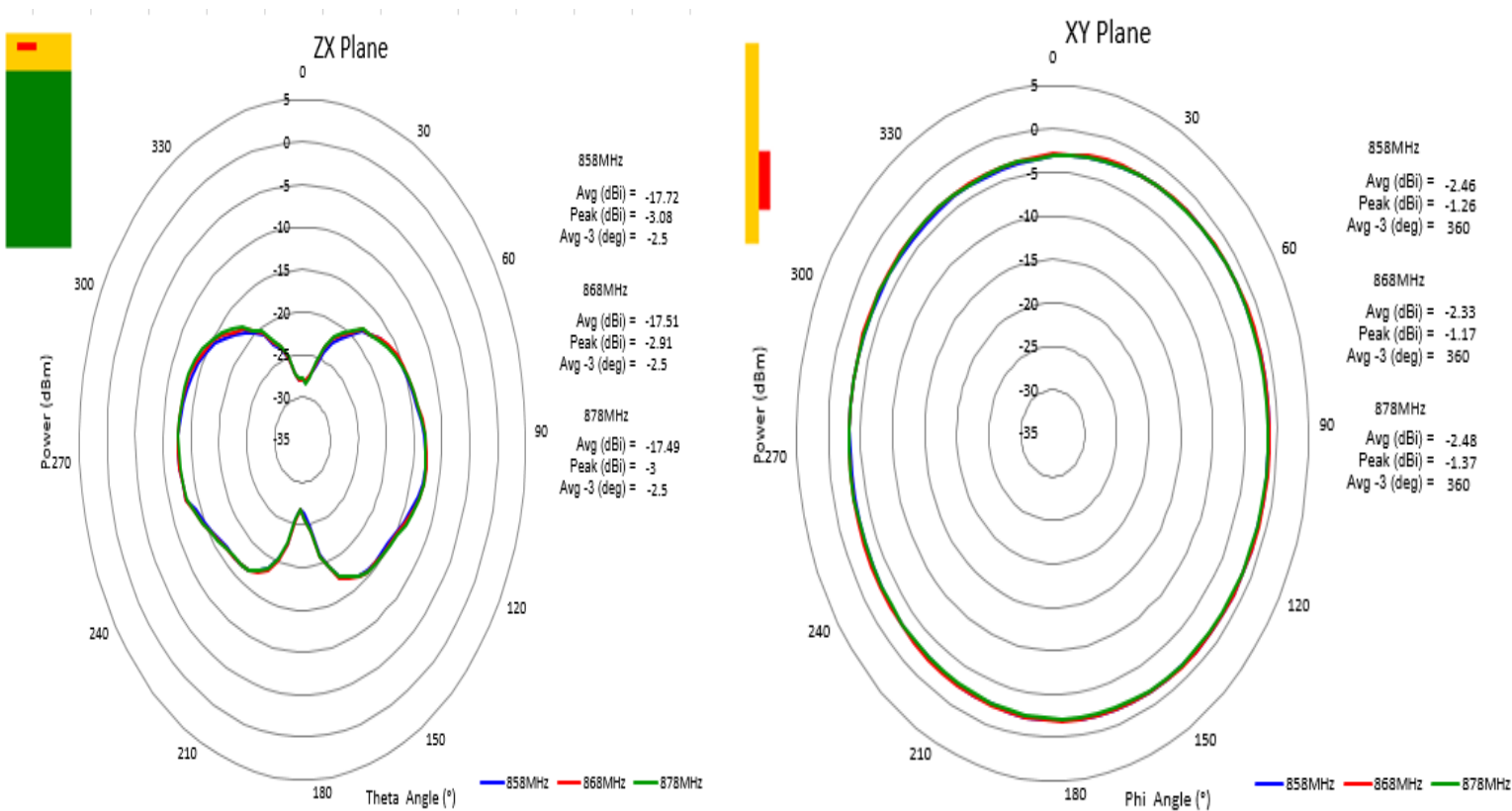
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## CHARTS

### free space radiation pattern

#### ISM 868MHz radiation pattern



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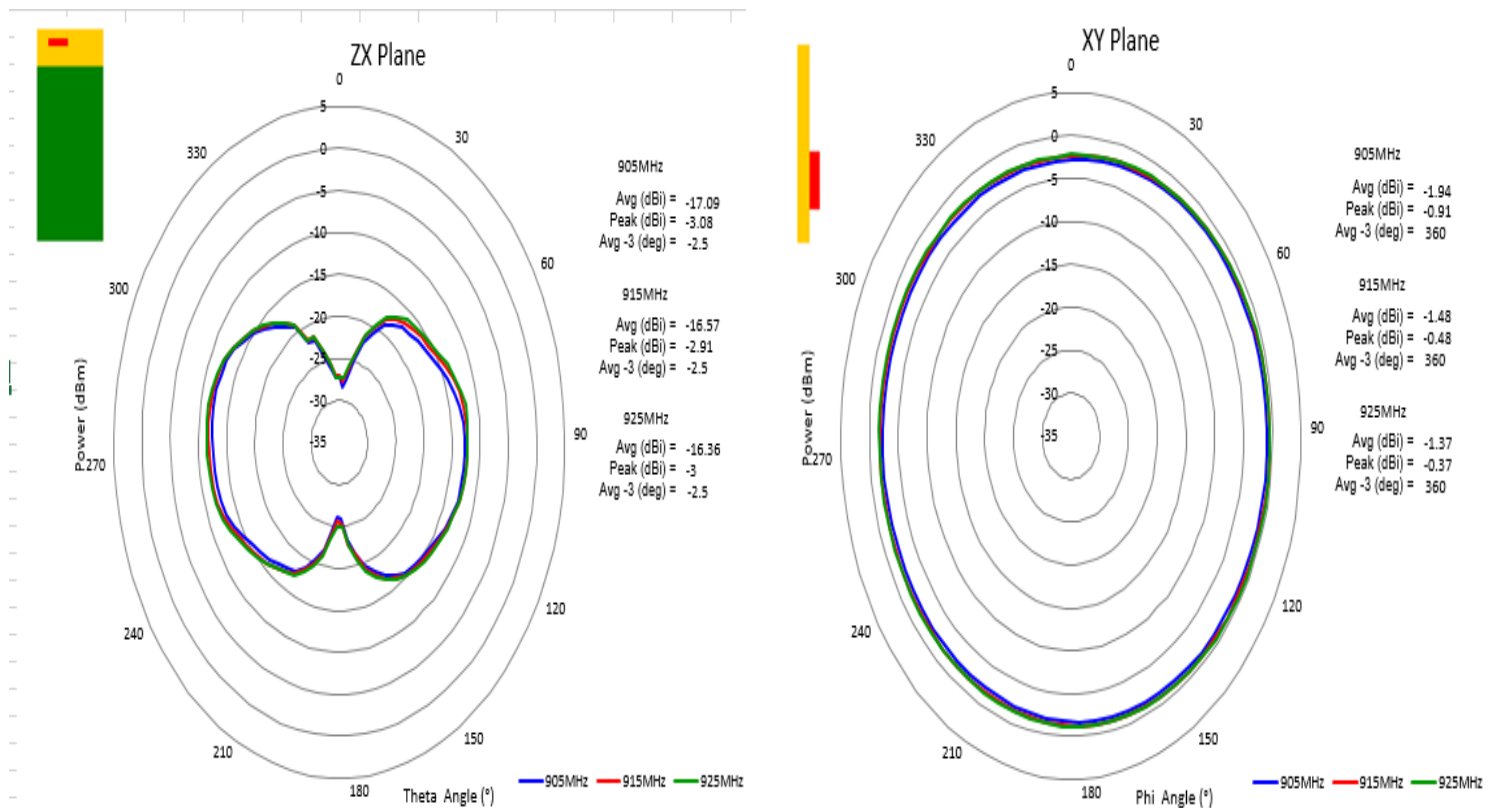
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## CHARTS

### free space radiation pattern

#### ISM 915MHz radiation pattern

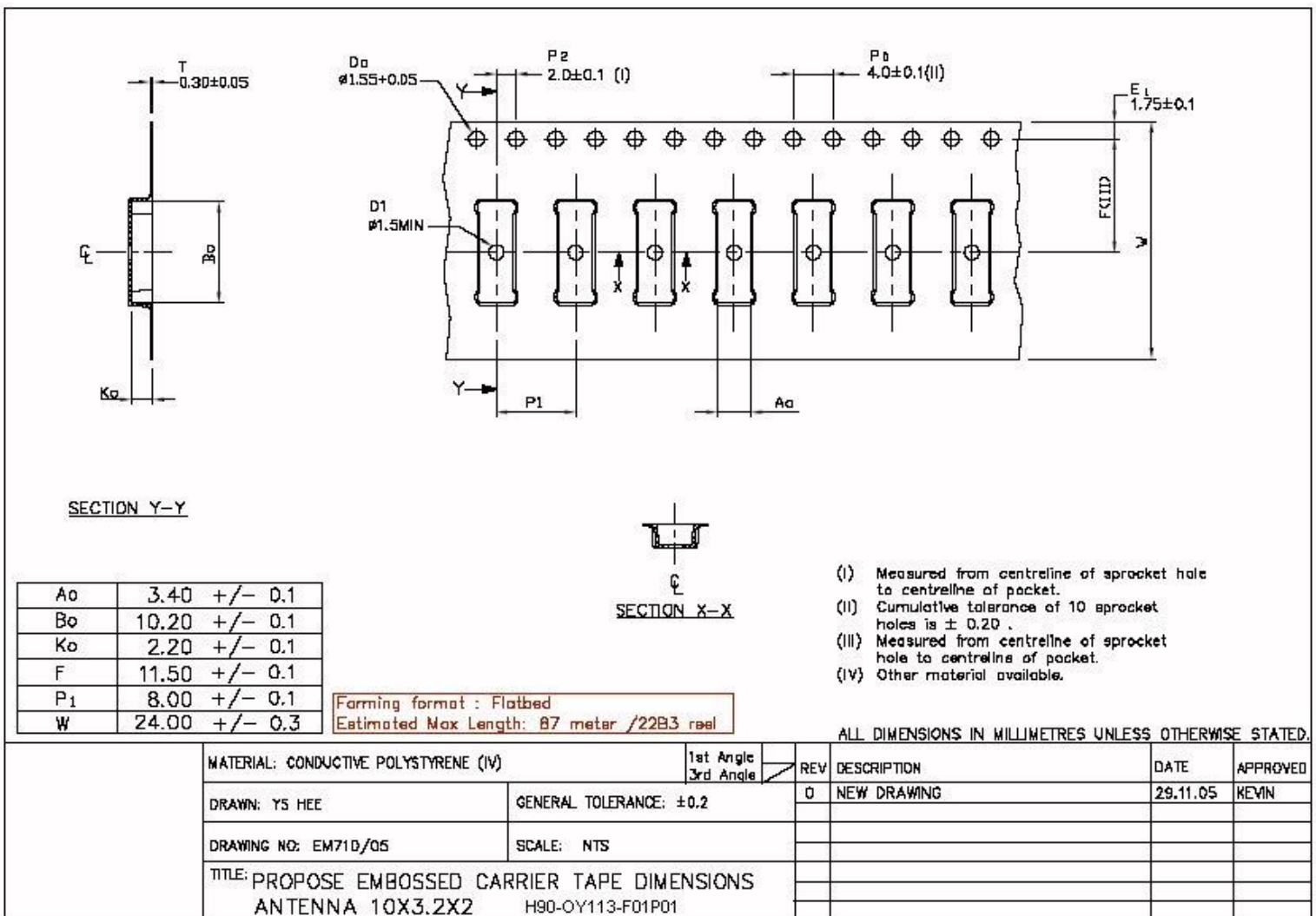


## PACKAGING

### General

Tape and reel packing is used. Carrier tape, reel and box dimensions are presented in following pictures.

### Carrier tape



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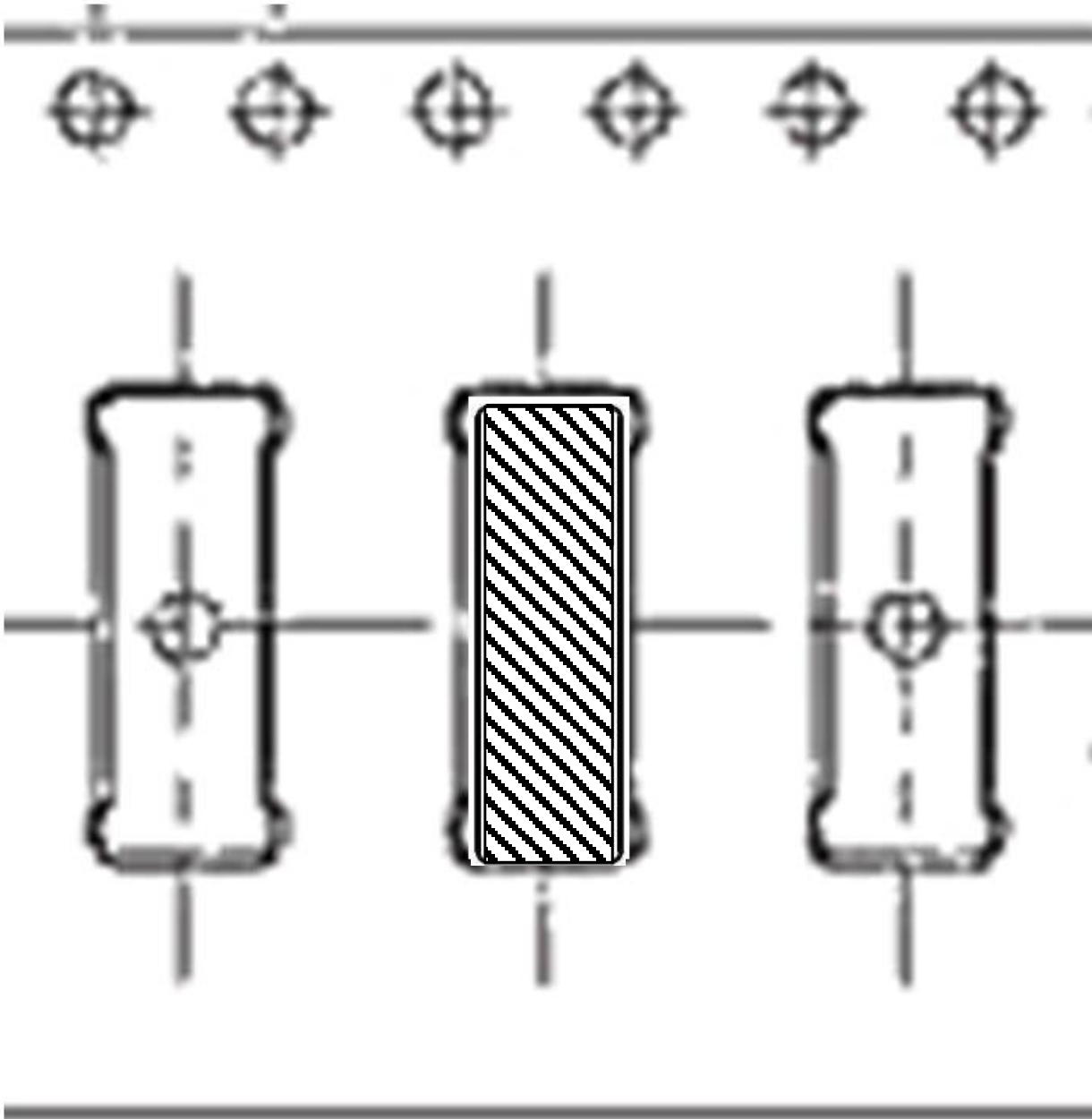
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Description: ISM 868 / 915 MHz Chip Antenna

Series: Ceramic

PART NUMBER: W3014

## Block orientation



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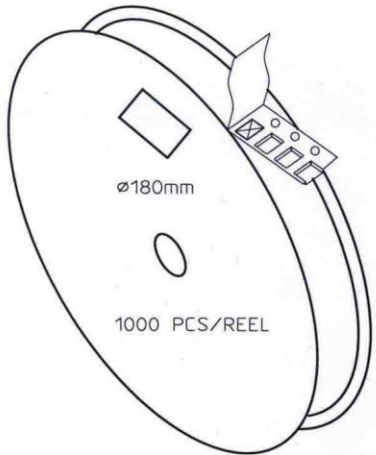
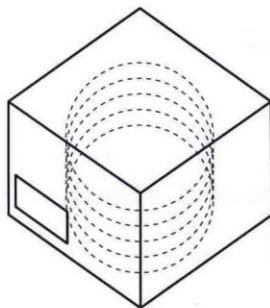
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**Description:** ISM 868 / 915 MHz Chip Antenna

**Series:** Ceramic

**PART NUMBER:** W3014

## Packing form


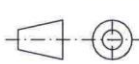
CARRIER TAPE H85-00168  
width=24,00 depth=2.20  
COVER TAPE H85-00159  
width=21.20

LENGTH OF TAPE:

- Leader section: min 350 mm before component section
- Trailer section: min 40 mm after component section.

Empty part cavities at leader and trailer section of the tape must be sealed with top cover tape.

BOX H85-00128 (182x182x125)	1 pcs
- LABEL	1 pcs/BOX
REEL H85-00160 (D180, W28)	4 pcs
- REEL LABEL	1 pcs/REEL

MATERIAL				
HANDLINGS				
		RATIO	DRWN 160107 PeHa H	
			DGNER	G
			CHKD	F
			APPRD	E
PRODUCT H90-OY113-F01P01		APPRD BY		
		D		
		C		
		B		
DENOMINATION PACKING FORM		A		
		VERSION	MOD/DATE/NAME	

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