

Description: ISM 868 / 915 MHz Chip Antenna

Compact size W x L x H (10

## Series: Ceramic

### PART NUMBER: W3014

**Features:** 

Low profile

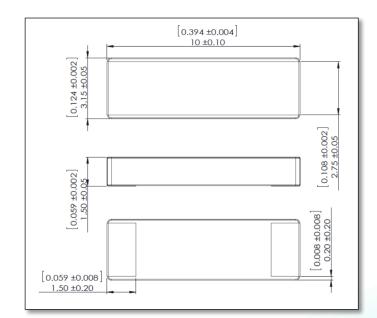
x 3.2 x 1.5 mm)

Low weight (240 mg)

Fully SMD compatible

Lead free materials





#### All dimensions are in mm / inches

#### Issue: 1622

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Pulse Worldwide Headquarters 12220 World Trade Drive San Diego, CA 92128 USA Tel:1-858-674-8100

Pulse/Larsen Antennas 3611 NE 112<sup>th</sup> Ave Vancouver, WA 98682 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998



# Lead free soldering

# Applications:

compatible

- 868MHz radios
- 915MHz radios



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### **ELECTRICAL SPECIFICATIONS**

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



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### **MECHANICAL SPECIFICATIONS**

10x3.2x1.5 mm

Weight

Size

240 mg

### **ENVIRONMENTAL SPECIFICATIONS**

**Operating temperature** 

-40/+85° C

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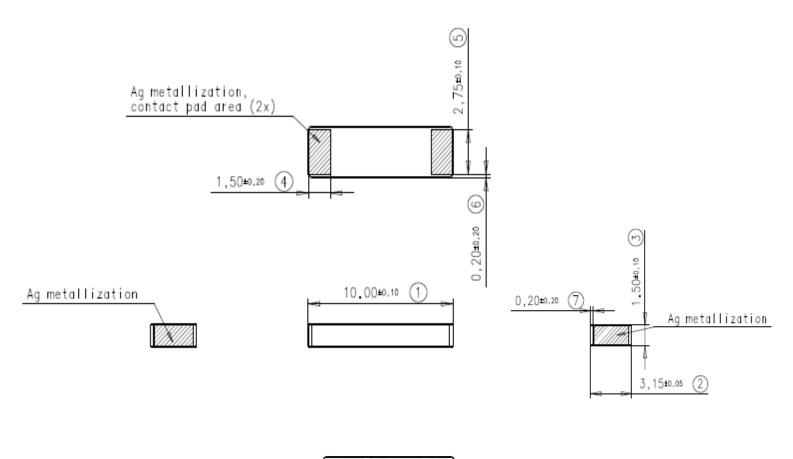


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### **MECHANICAL DRAWING**





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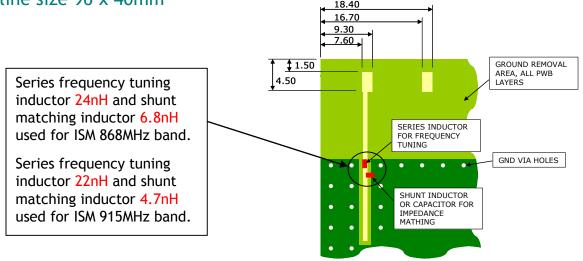
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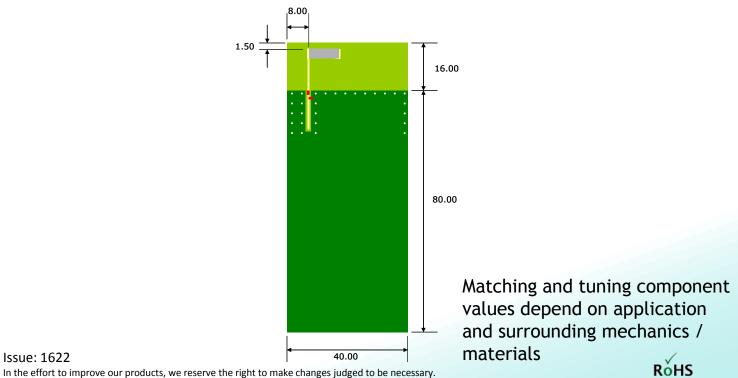
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### **OTHER SPECIFICATIONS**

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 18.40



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



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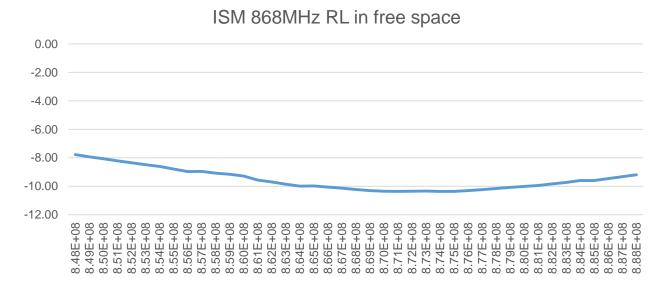
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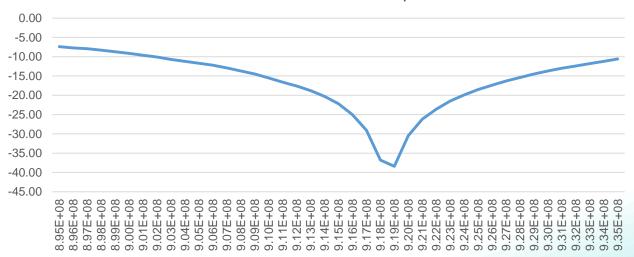
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### CHARTS

# **Return Loss**



### ISM 915MHz RL in free space



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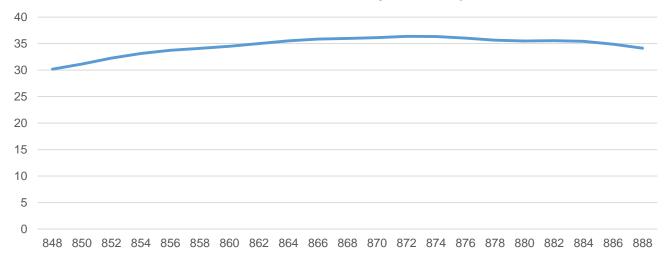
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### **CHARTS**

Efficiency(%)

ISM 868MHz Total Efficiency in free space, %





### ISM 915MHz Total Efficiency in free space, %

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RoHS

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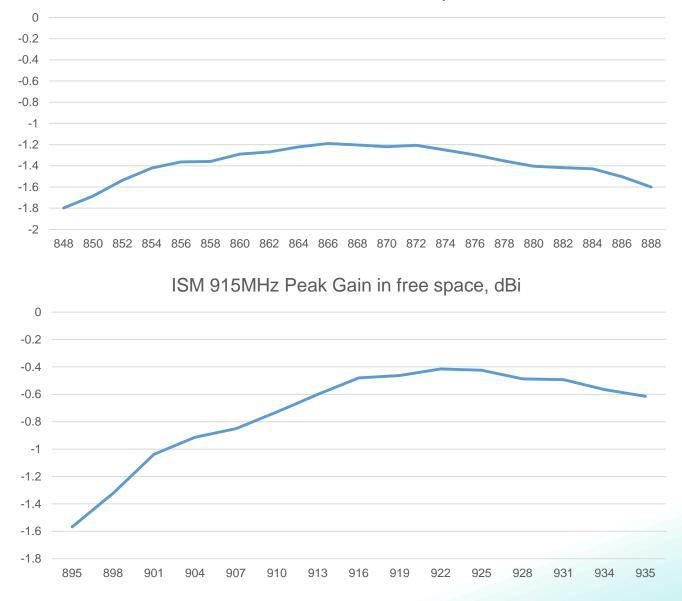
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### CHARTS

# Peak Gain(dBi)

ISM 868MHz Peak Gain in free space, dBi



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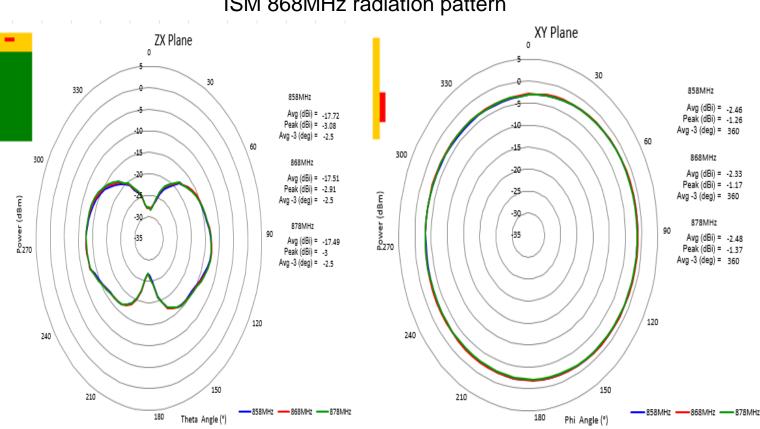
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### **CHARTS**

# free space radiation pattern



ISM 868MHz radiation pattern

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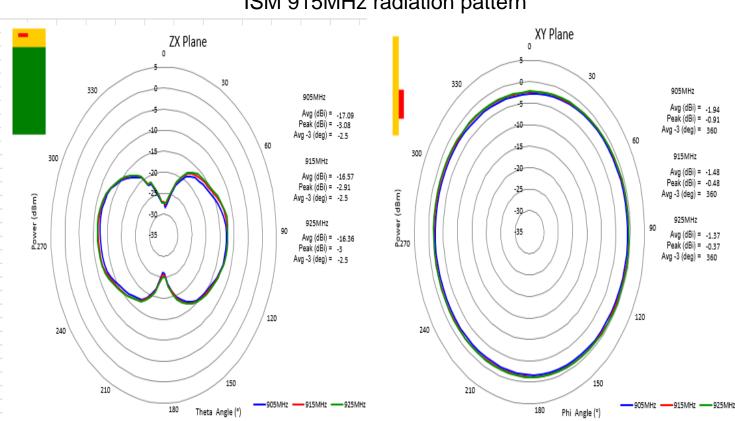
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### **CHARTS**

# free space radiation pattern



ISM 915MHz radiation pattern

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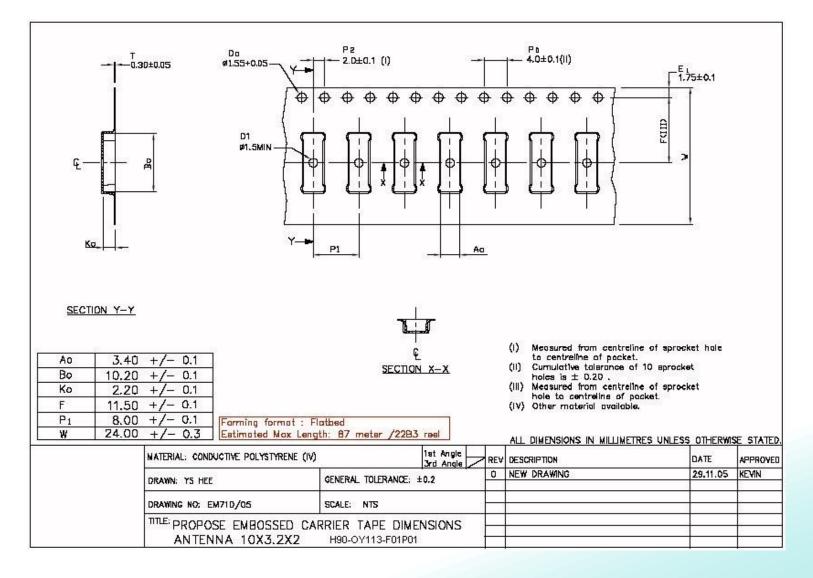
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### PACKAGING

## General

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

# Carrier tape



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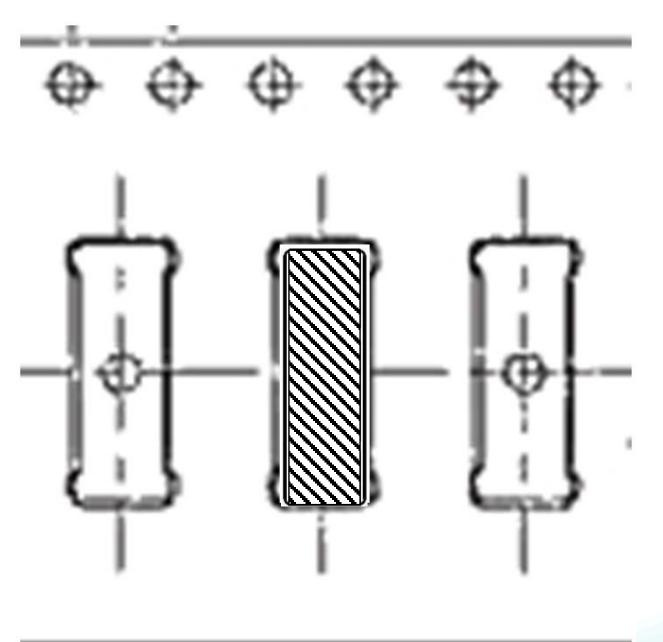


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# Block orientation



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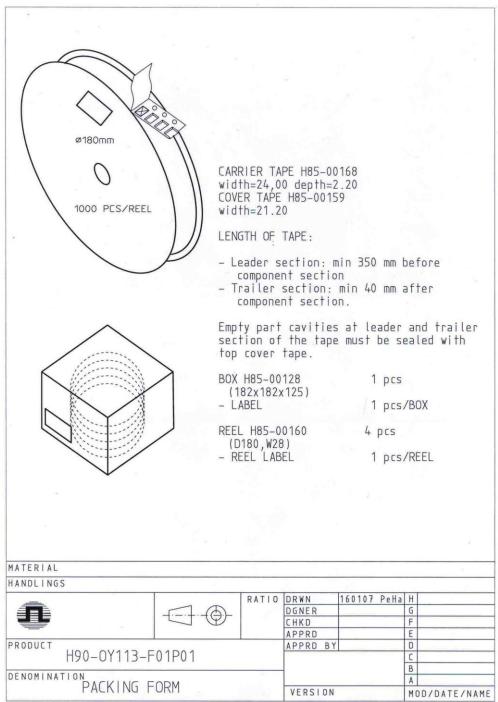


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# Packing form



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 A09-Y11NF
 A09-F8NF-M
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