

TECHNICAL DATA SHEET Description: 868MHz On Ground Ceramic SMD Loop Antenna

PART NUMBER: W3214

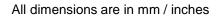
# Features:

- Frequency 863-873 MHz
- Size 10 x 3.2 x 5mm
- Full metal under antenna
- Peak Gain 1dBi
- Peak Efficiency 55%
- RoHs Compliant
- MSL level 1

## **Applications:**

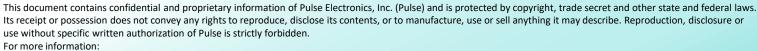
- 868MHz ISM band radios
- IoT devices
- · Sensors, monitoring
- Industry automation





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1



**Description:** 868MHz On Ground Ceramic SMD Loop Antenna

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## **ELECTRICAL SPECIFICATIONS**

863-873MHz
50 Ω
-20dB
-5dB
Omni
1dBi
38% (55% peak)
Linear
5W

## **MECHANICAL SPECIFICATIONS**

Overall Length Weight Antenna Material

## 10x3.2x5mm 0.73g Ceramic with silver plating

## **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature Storage Temperature RoHS Compliant -40~+85° C -40~+85° C Yes

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2

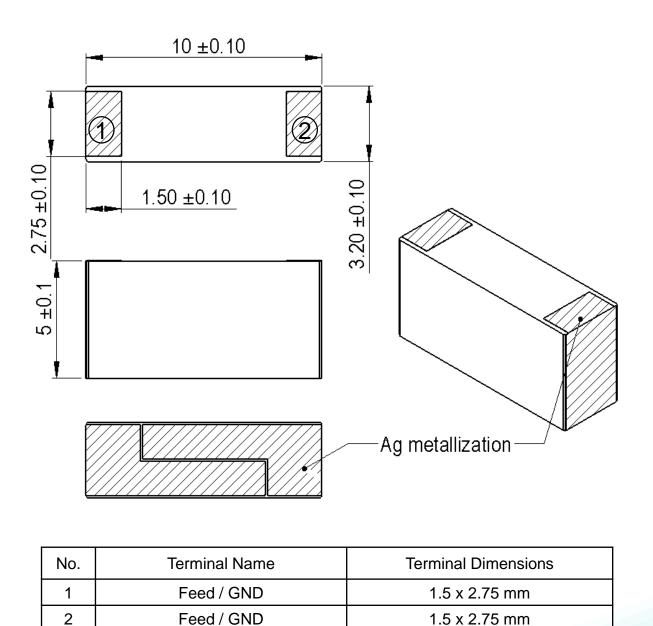


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## **MECHANICAL DRAWING**



Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND

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3



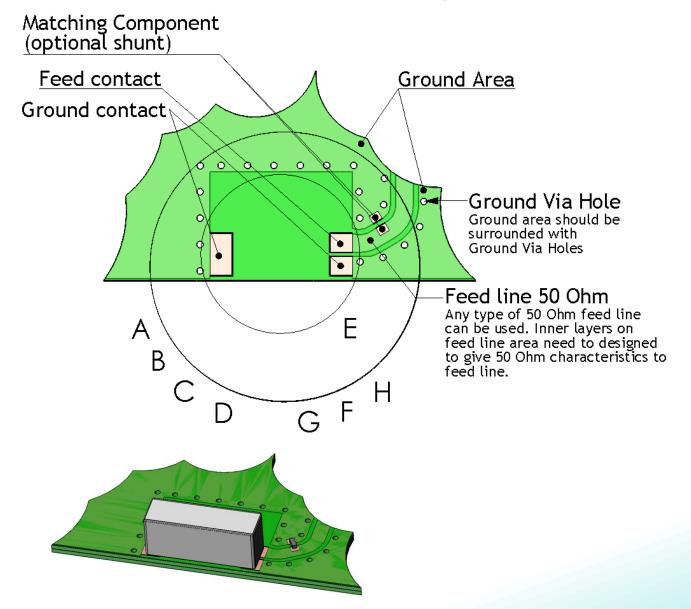
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**MECHANICAL DRAWING AND TERMINAL CONFIGURATION** 

# Ground cleared under antenna TOP and MIDDLE layers, clearance area 10.8 mm x 8.25mm (BOTTOM layer solid ground)



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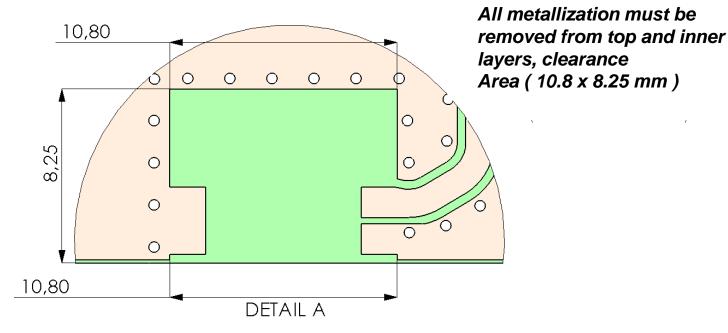
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**MECHANICAL DRAWING AND TERMINAL CONFIGURATION** 

## Recommended Antenna Pad Dimensions on PCB Layout (top surface) Ground cleared under antenna on top and inner layers, clearance area 10.8 mm x 8.25 mm



Ground clearance area (10.80 x 8.25 mm)

## Bottom solid ground layer

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5



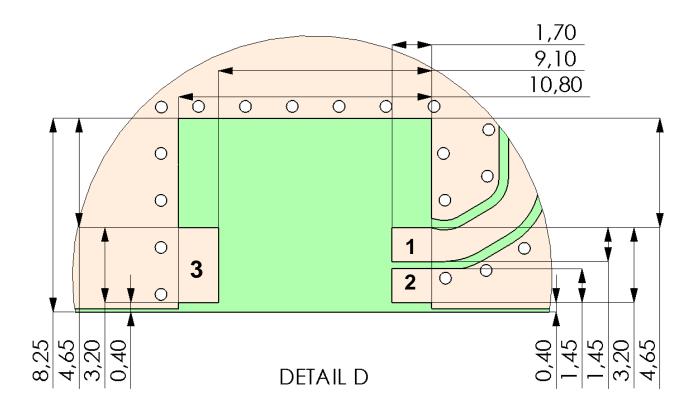
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**MECHANICAL DRAWING AND TERMINAL CONFIGURATION** 

Recommended Antenna Pad Dimensions on PWB Layout (top surface)



PCB contact pads						
No.	Terminal Name	Terminal Dimensions				
1	Feed	1.70 x 1.45 mm				
2	GND	1.70 x 1.45 mm				
3	GND	1.70 x 3.20 mm				

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6



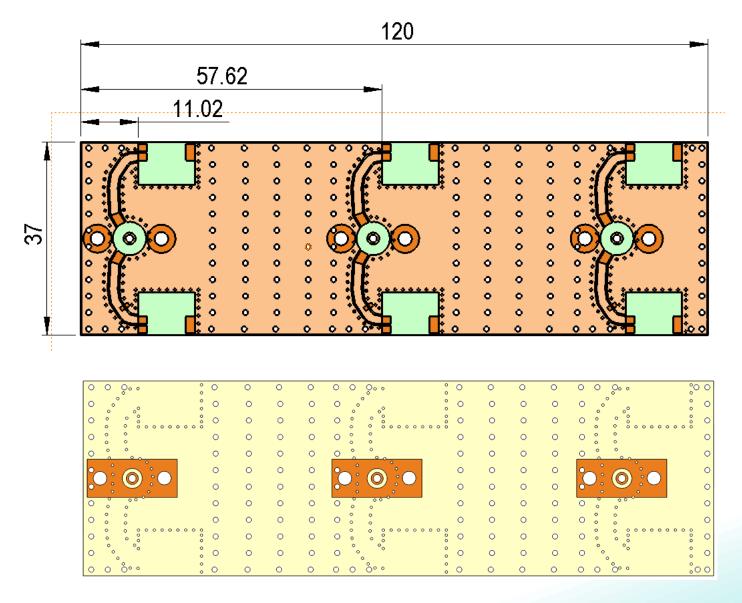
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**MECHANICAL DRAWING AND TERMINAL CONFIGURATION** 

Recommended test board layout for electrical characteristic measurement, test board outline size 120 x 37mm



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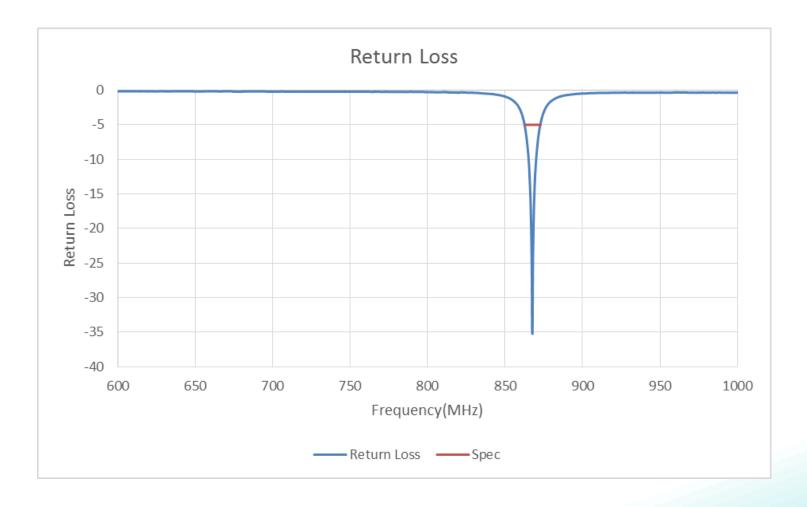
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## **CHARTS**

Measured on the 120x37mm test board with matching circuit, 10pF shunt capacitor, position center location of test board edge.

Ground cleared under antenna, clearance area 10.80 mm x 8.25 mm top and middle layers.



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8



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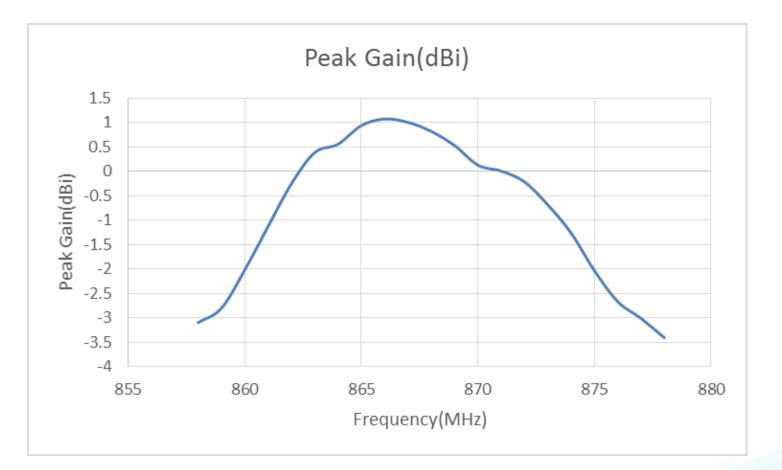
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9



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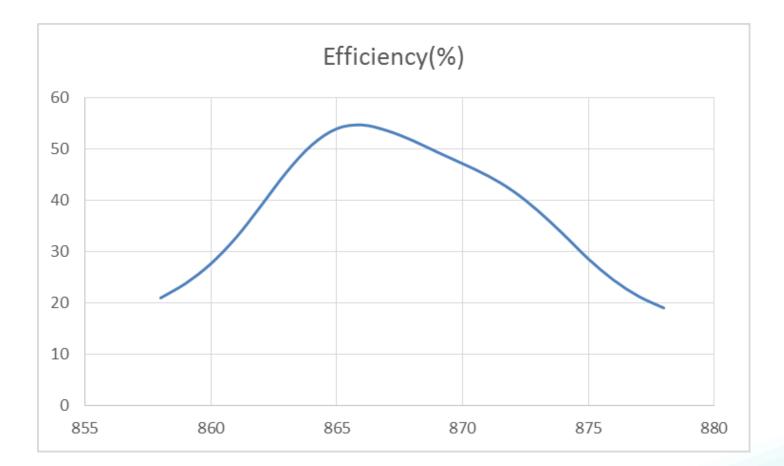
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ROHS 10



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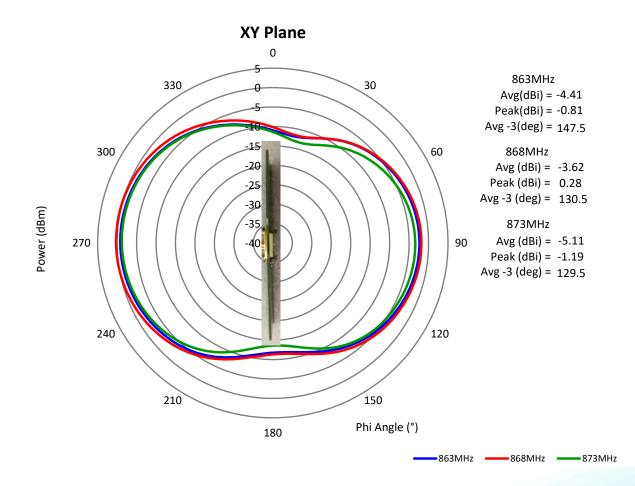
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### CHARTS

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## **Radiation Pattern**



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#### **ZX** Plane 0 863MHz 330 30 Avg(dBi) = -4.48Peak(dBi) = -0.09 Avg -3(deg) = 90.5 300 60 868MHz Avg (dBi) = -3.83 20 Peak (dBi) = 0.78 Avg -3 (deg) = 85.5 -25 ower (dBm) 873MHz 270 90 Avg (dBi) = -5.24 Peak (dBi) = -1.03 Avg -3 (deg) = 96.5 240 120 150 210 Phi Angle (°) 180 873MHz 863MHz 868MHz

# **Radiation Pattern**

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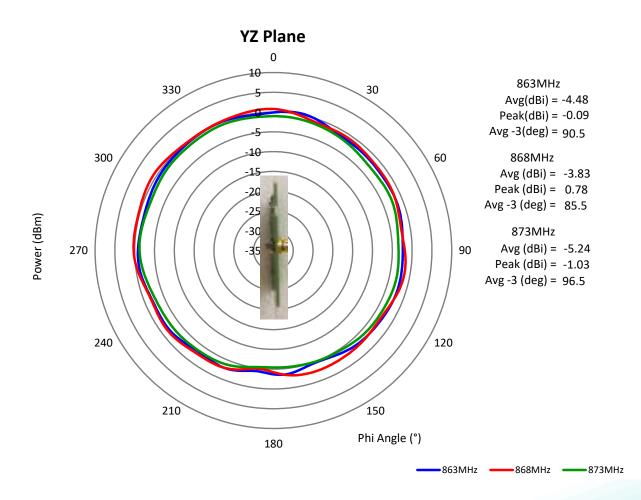
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# **Radiation Pattern**

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## PACKAGING

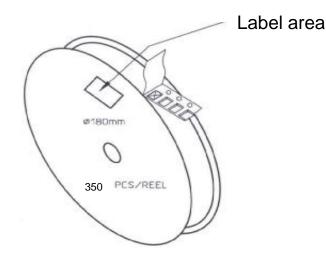
350pcs antennas per 7" reel

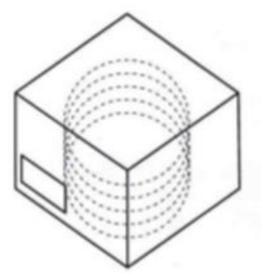
3pcs 7" reel per inner package box

2pcs inner box per out box

Total 2100pcs antenna per out box

Out box size: 390mmx215mmx165mm





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单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)