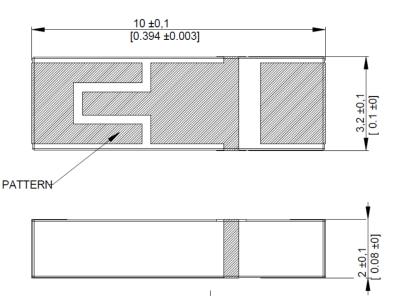


Description: ISM868/915, ISM2.4G

## Series: Ceramic antenna

PART NUMBER: W3320





### All dimensions are in mm / inches

### Issue: 2049

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## Features:

- 3 in1 –combo antenna
  - Port 1: 868/915MHz
  - Port 2: 2.4GHz
- Compact size 3.2x10x2mm
- SMT mounting on PCB
- Tape & Reel packing
- High isolation between ports >20dB

## **Applications:**

- ISM band radios
- 868MHz, 915MHz, 2.4GHz
- IoT, M2M, set top boxes, devices requiring small embedded multiband ISM antenna



TECHNICAL DATA SHEET Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## **ELECTRICAL SPECIFICATIONS**

Frequency	ISM868/915MHz, ISM2.4GHz
Nominal Impedance	$50\Omega$
Return Loss	<-7dB @868/915MHz
	<-5dB@2.4
Gain	1dBi +/- 1 dB@868/915MHz
	3dBi +/- 1 dB@2.4GHz
Radiation Pattern	Omni
Polarization:	Vertical
Power withstanding	2W

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Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

### **MECHANICAL SPECIFICATIONS**

Weight	0.3 g
Overall Length	10[0.39] MM[INCHES]
Over all width	3.2[0.12] MM[INCHES]
Over all thickness	2[0.08] MM[INCHES]
MSL Level	1

## **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40/+85° C

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3

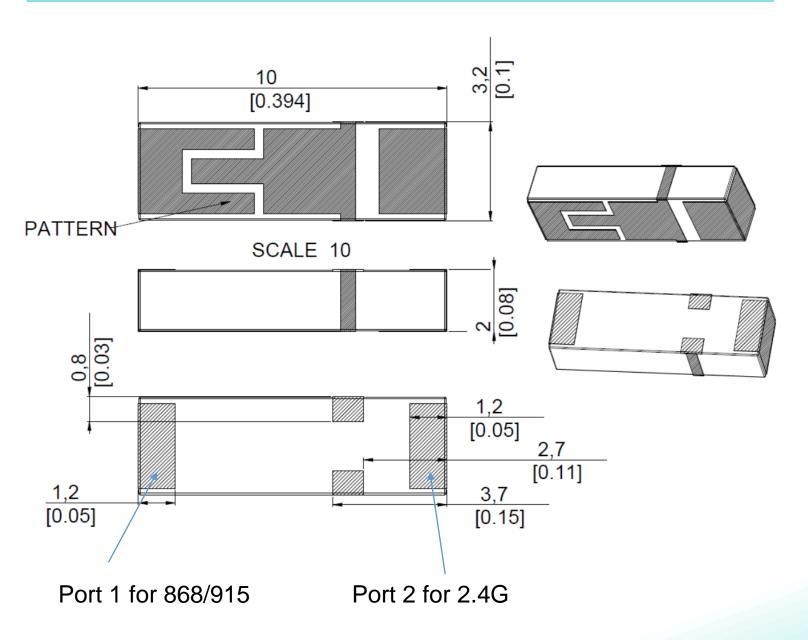


Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## **MECHANICAL DRAWING**



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4



Description: ISM868/915, ISM2.4G

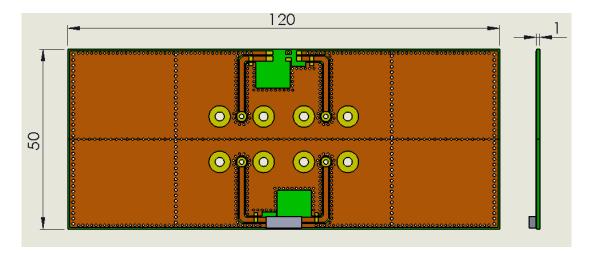
Series: Ceramic antenna

PART NUMBER: W3320

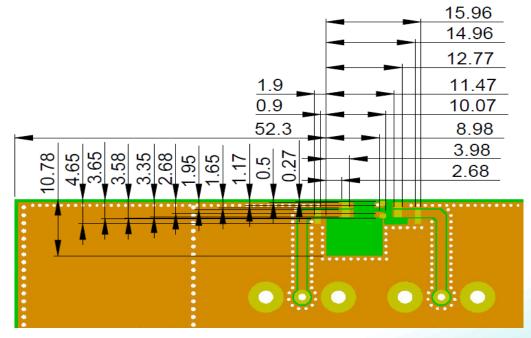
## **OTHER SPECIFICATIONS**

# PCB LAYOUT

1, PCB material, FR4, size, 120X50X1mm



# 2, Clearance area (Top)



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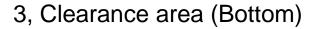
Description: ISM868/915, ISM2.4G

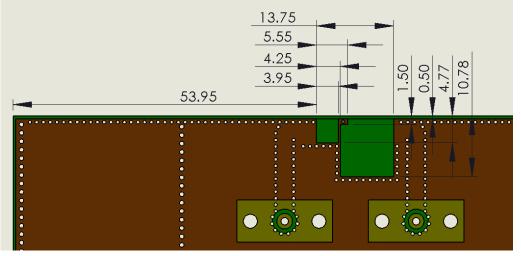
Series: Ceramic antenna

PART NUMBER: W3320

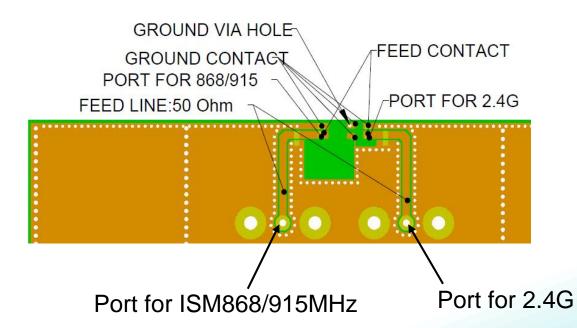
## **OTHER SPECIFICATIONS**

# PCB LAYOUT





## 4, PCB Features



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6



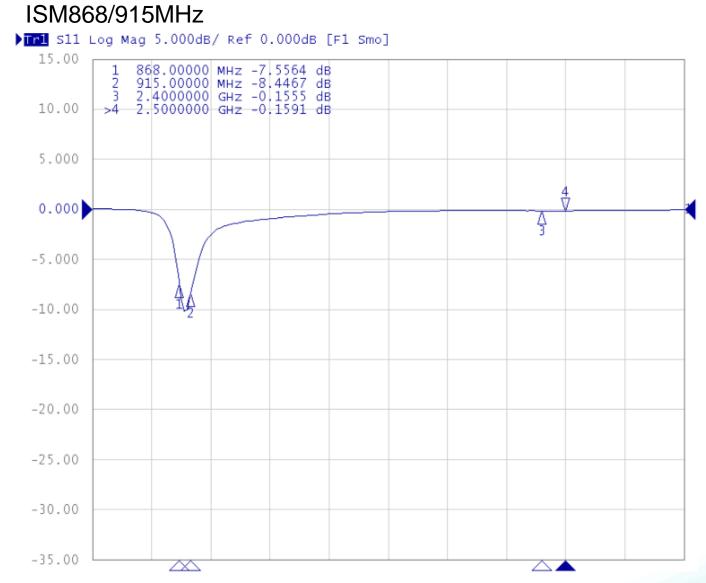
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## CHARTS

# **Return Loss**



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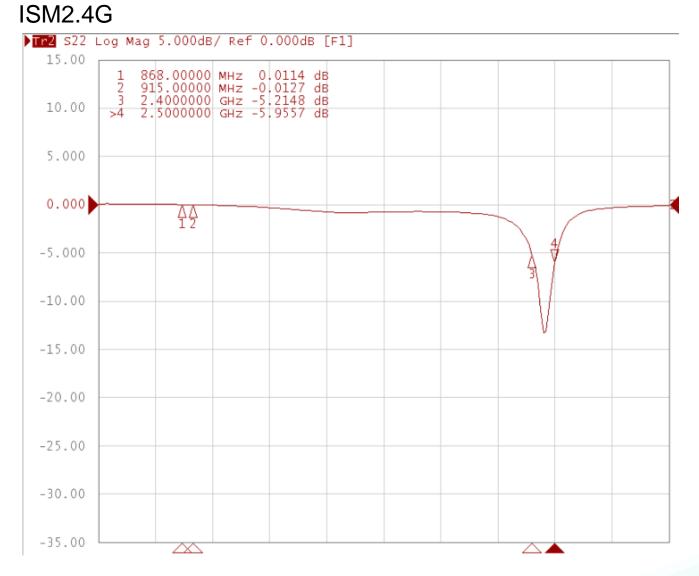
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## CHARTS

# **Return Loss**



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8



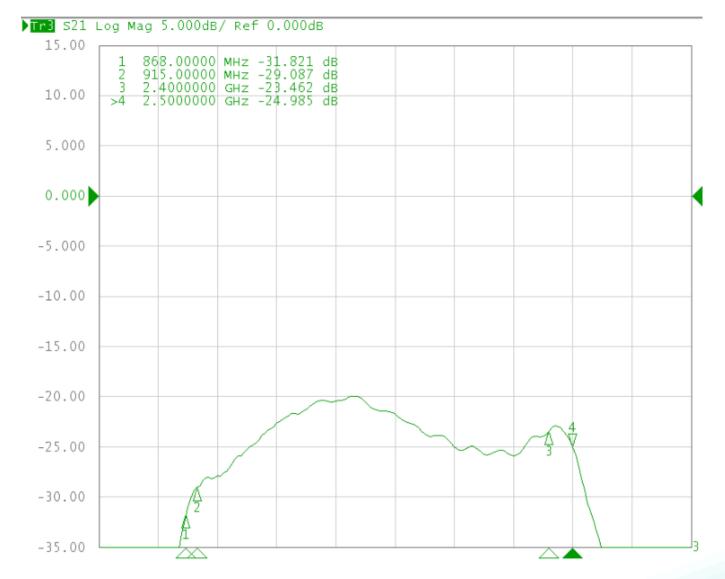
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

## CHARTS

## Isolation



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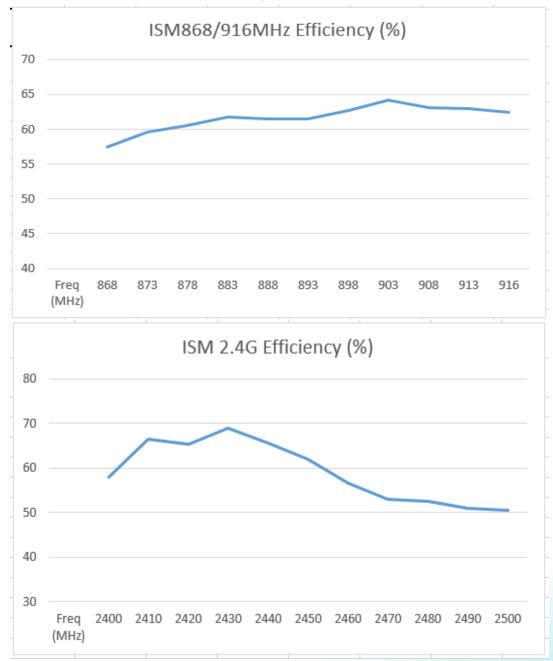
Description: ISM868/915, ISM2.4G

## Series: Ceramic antenna

PART NUMBER: W3320

## CHARTS

## Efficiency(%)



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ROHS 10



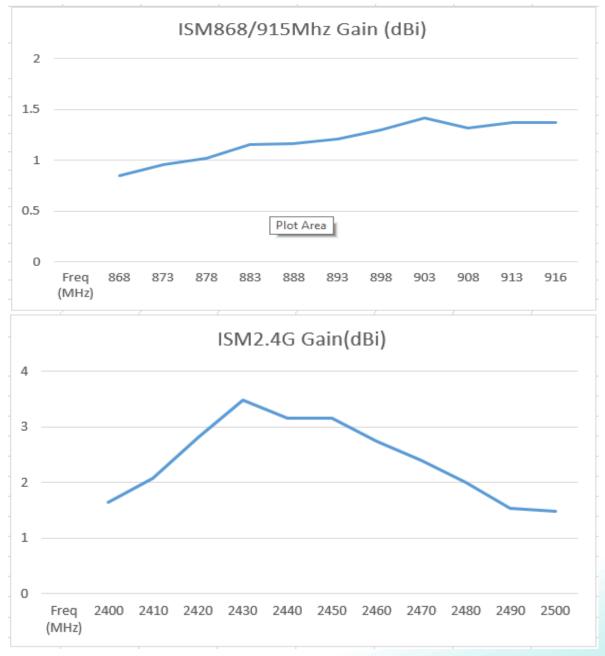
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

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## CHARTS

Gain (dBi)



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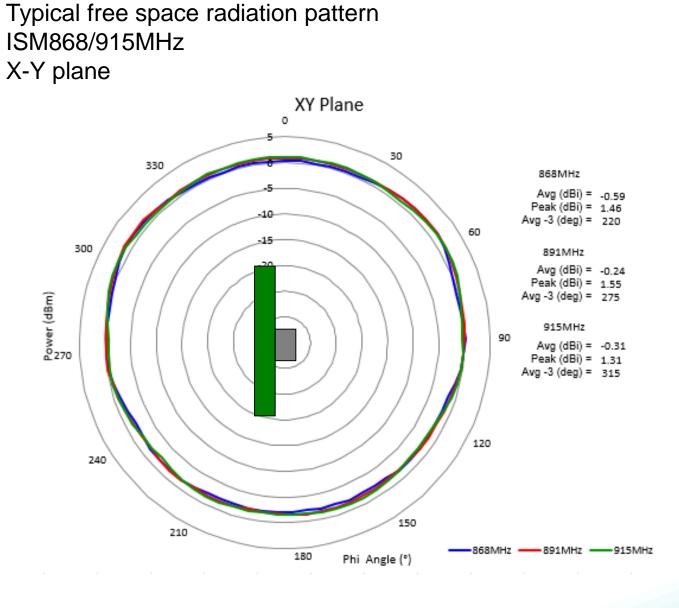


Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

### CHARTS



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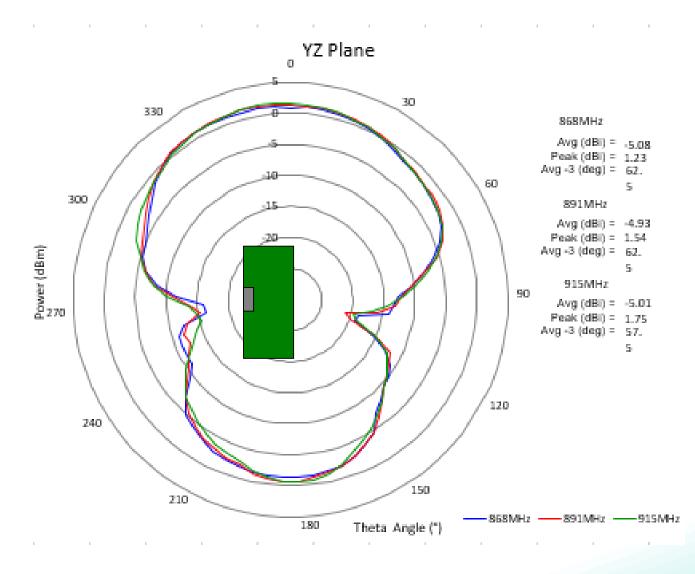
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

### **CHARTS**

# ISM868/915MHz Y-Z plane



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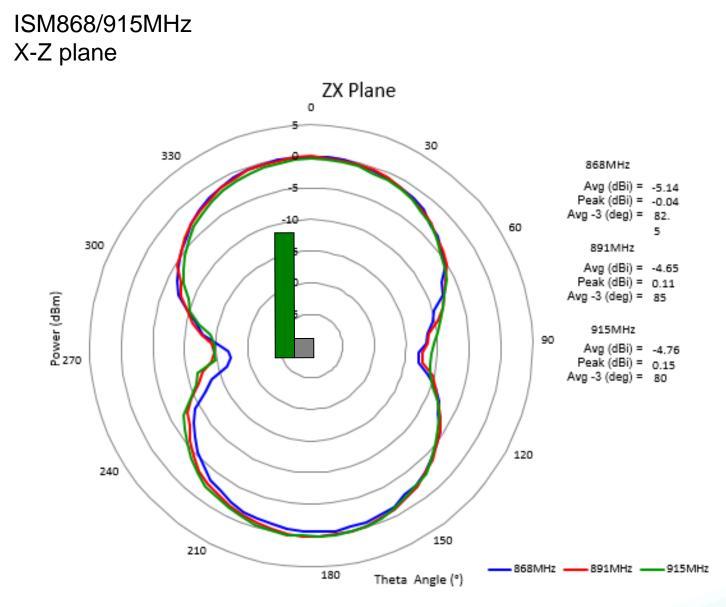


Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

**CHARTS** 



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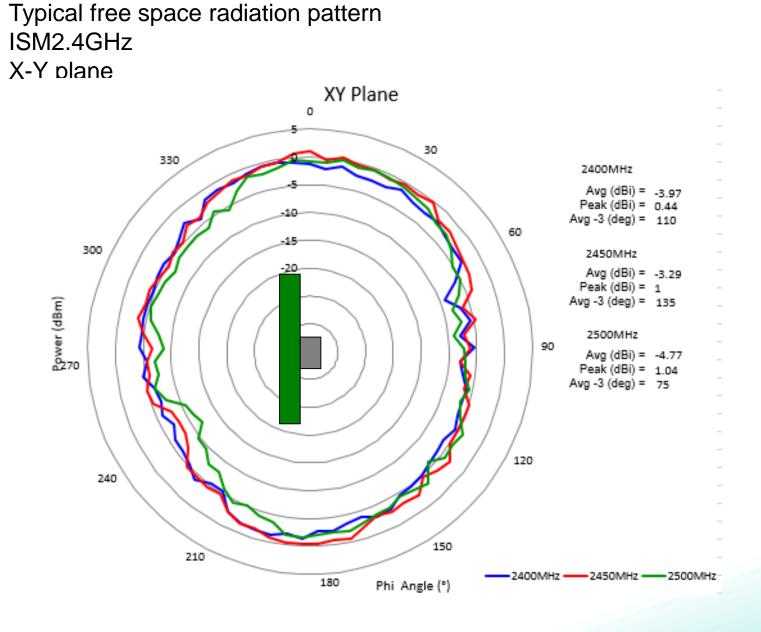


Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

### CHARTS



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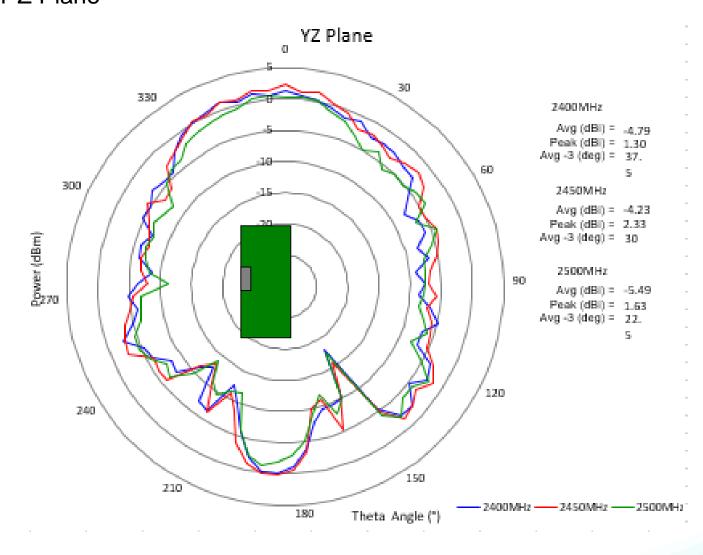
Description: ISM868/915, ISM2.4G

Series: Ceramic antenna

PART NUMBER: W3320

**CHARTS** 

ISM 2.4GHz Y-Z Plane



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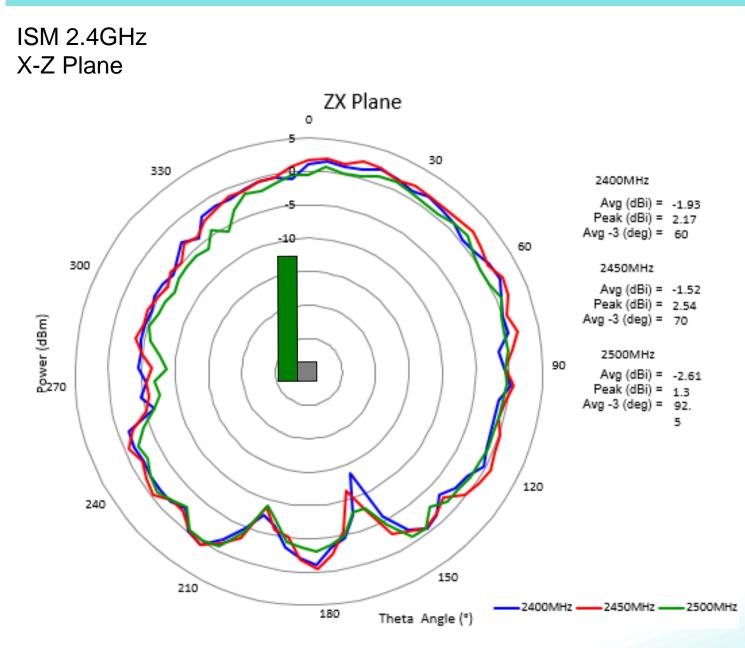


Description: ISM868/915, ISM2.4G

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**CHARTS** 



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Description: ISM868/915, ISM2.4G

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## PACKAGING

Taping package 1000PCS/Reel 3000PCS/Small box 6000PCS/Carton box



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