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868/915MHz PFC ANTENNA

SWA4389



Features & Applications:

- *Flexible PCB Antenna*
- *I-PEX MHF 4L connector with 100mm cable*
- *Cable and connector can be customized*
- *Devices with ISM 868MHz / 915MHz radios*
- *M2M, IoT*
- *Metering, Industry automation*

ELECTRICAL SPECIFICATIONS @ 25°C

General Specifications

Antenna type	Nominal Impedance	Polarization	Radiation pattern
Dipole	50Ω	Linear	Omni

Frequency (MHz)	860~930 MHz
Return Loss	<-5dB
VSWR	< 3.5
Efficiency (%) (pasted on 1.5mm thickness plastic plate)	860 - 870MHz band: 35% 900 - 930MHz band: 37%
Gain (dBi) (pasted on 1.5mm thickness plastic plate)	860 - 870MHz band: 2.8±0.2dBi 900 - 930MHz band: 3.0±0.2dBi

MECHANICAL SPECIFICATIONS

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FPC Dimension (Length x Width)	Color	Cable OD	Connector Type	Cable length
37mm x 9mm	Black	1.13mm	IPEX MHF 4L	100mm

ENVIRONMENTAL SPECIFICATIONS

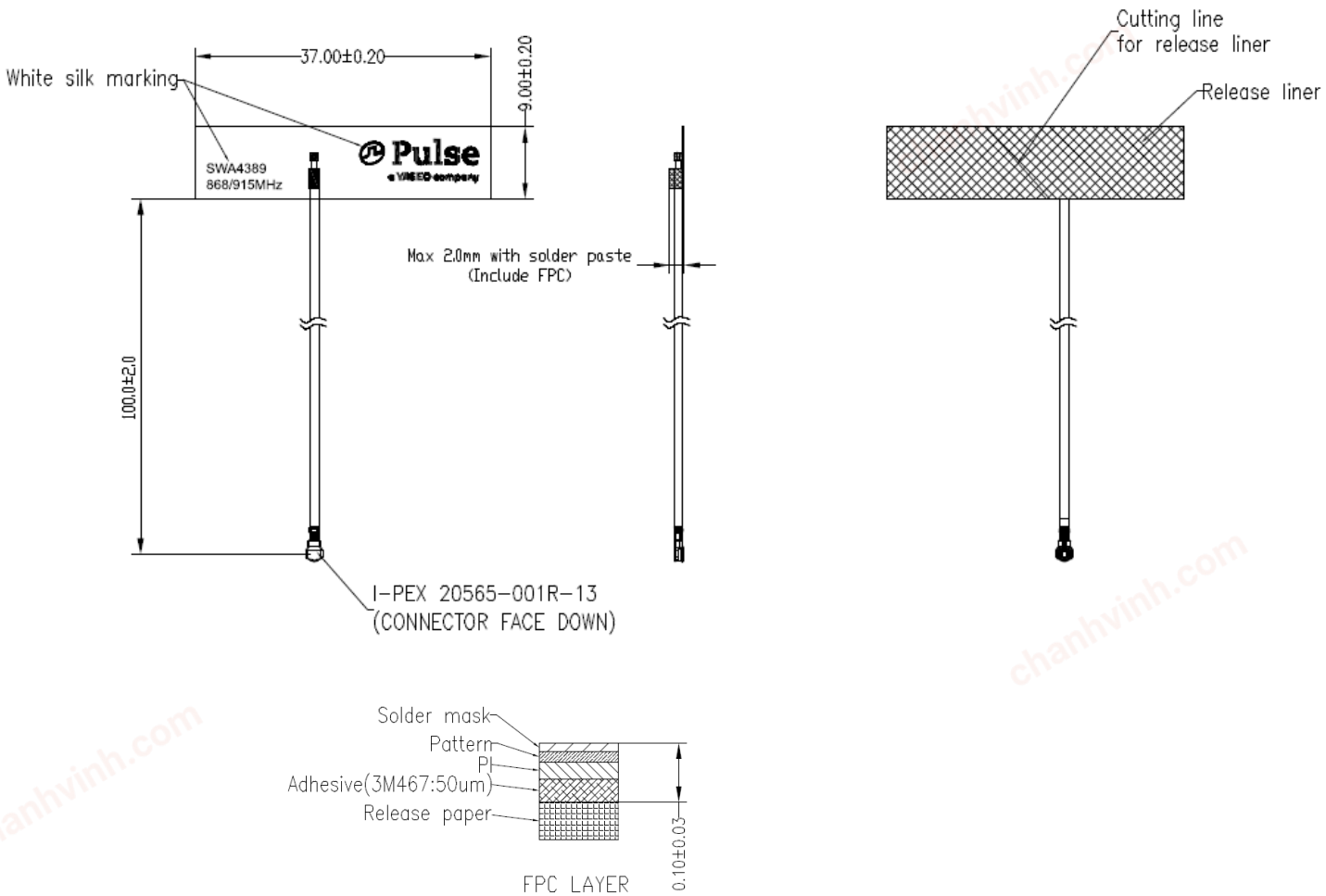
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Storage Temperature	Operating Temperature	RoHS Compliant
-40/+85° C	-40/+85° C	Yes

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Mechanical Drawing

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Units: mm

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During the assembly of the antenna in a device, the cable needs to be positioned away from the antenna flex to achieve the best performance. The cable must be away from the flex edge at least 5mm as shown in figure 1. If the cable bends into the antenna flex, the antenna performance will be degraded.

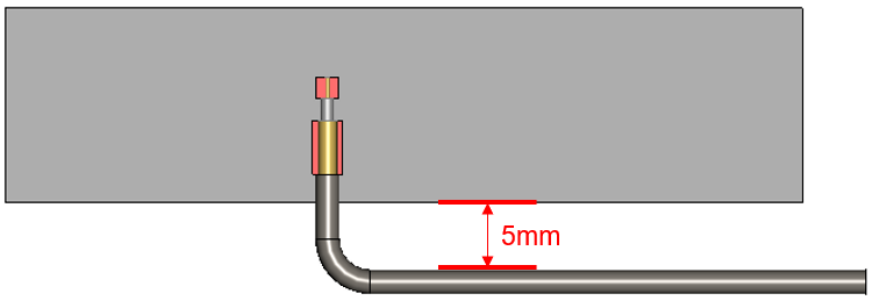


Figure 1 Cable Bending

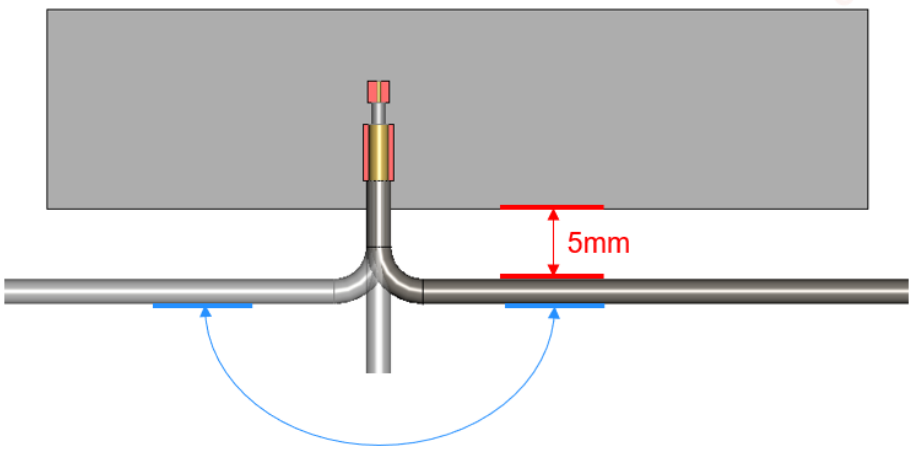


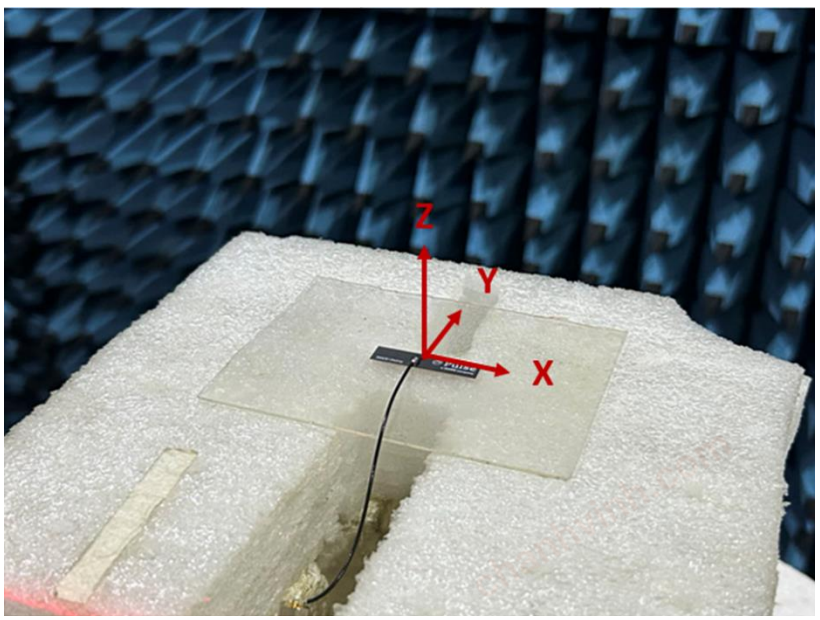
Figure 2 Cable Activity Range

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Test setup (pasted on 1.5mm thickness plastic plate)

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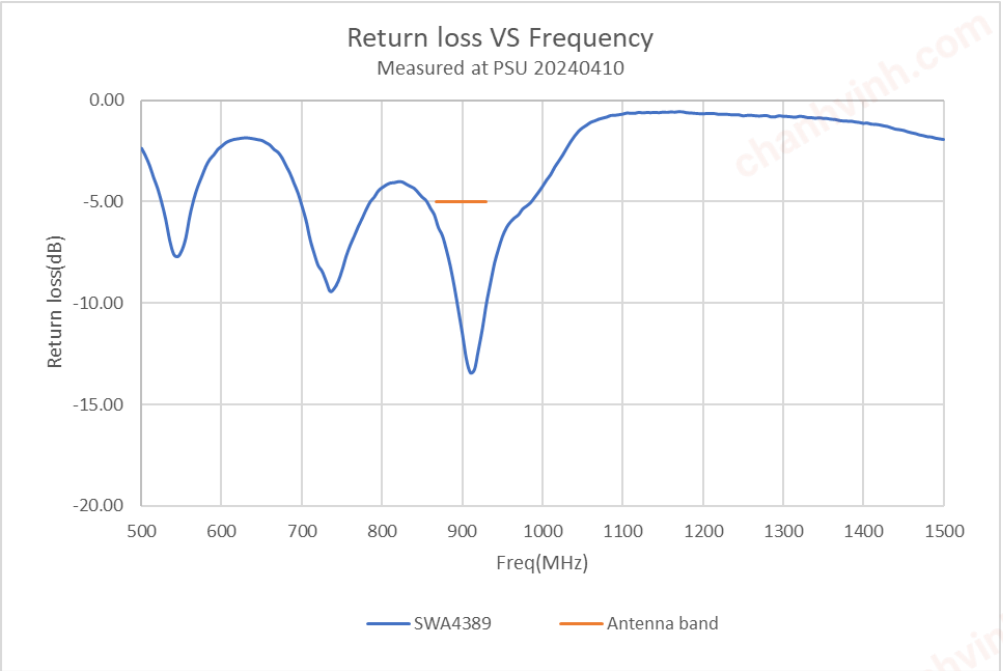


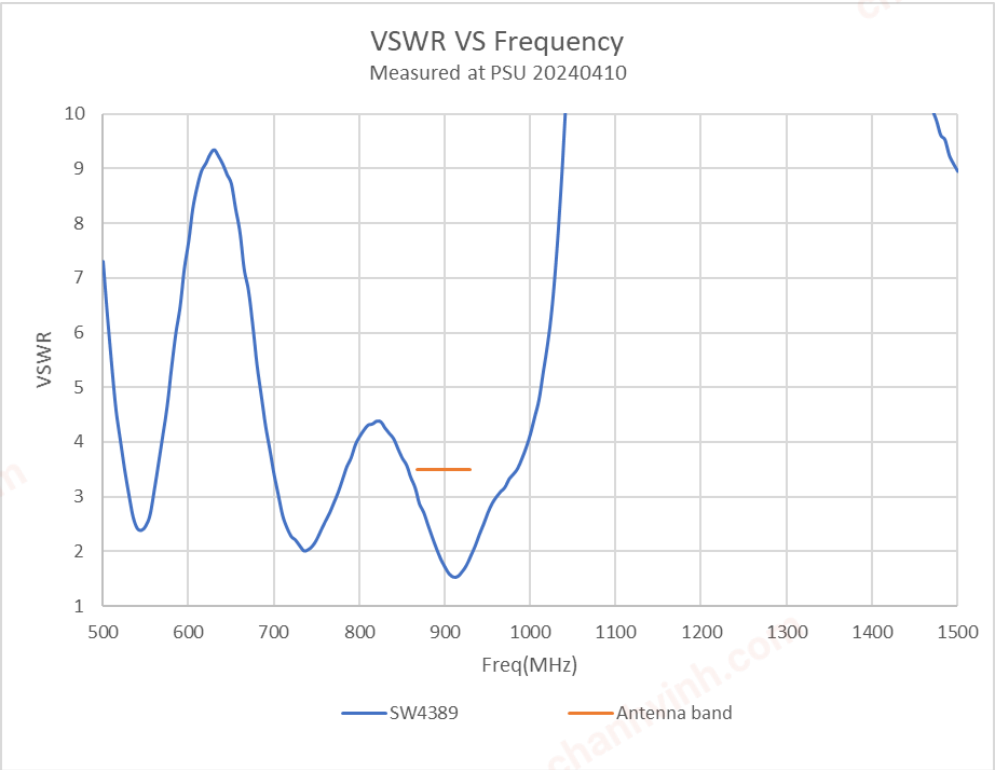


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Charts- Antenna Return loss & VSWR

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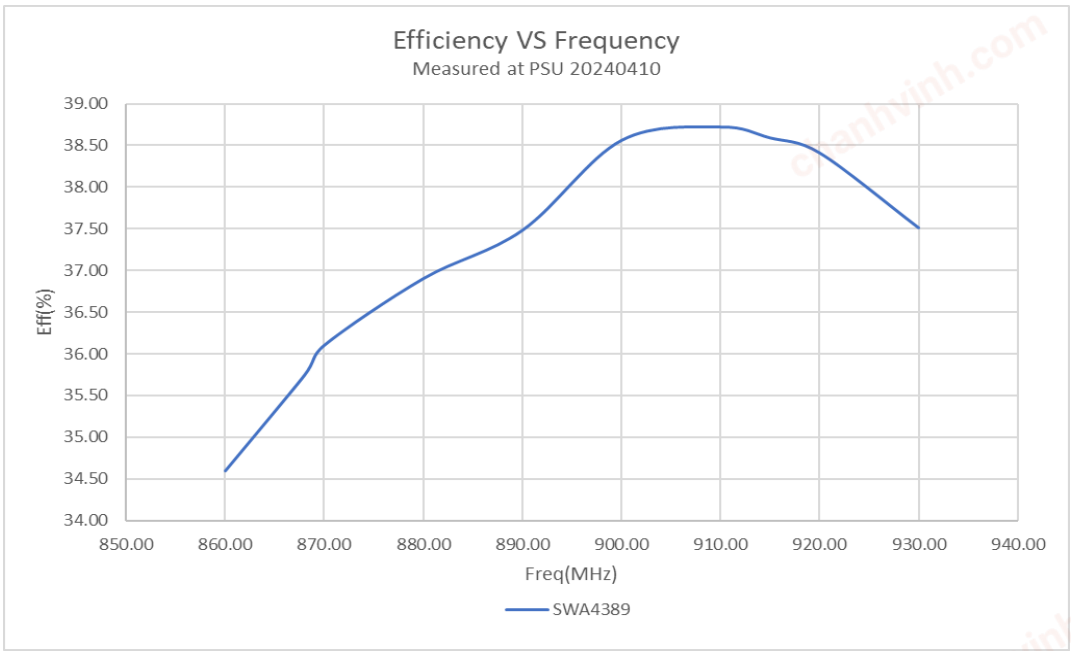


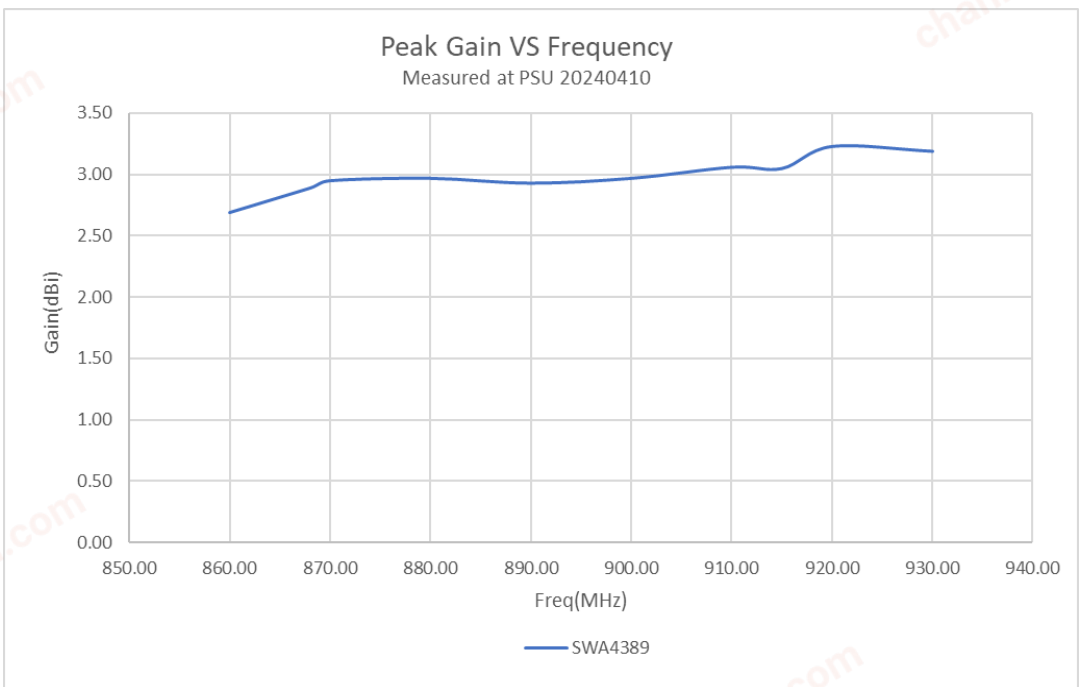


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Charts – Efficiency & Peak Gain

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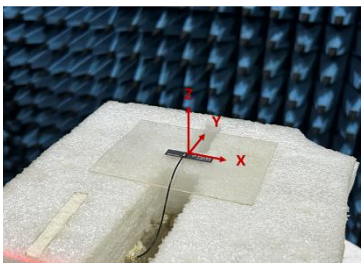


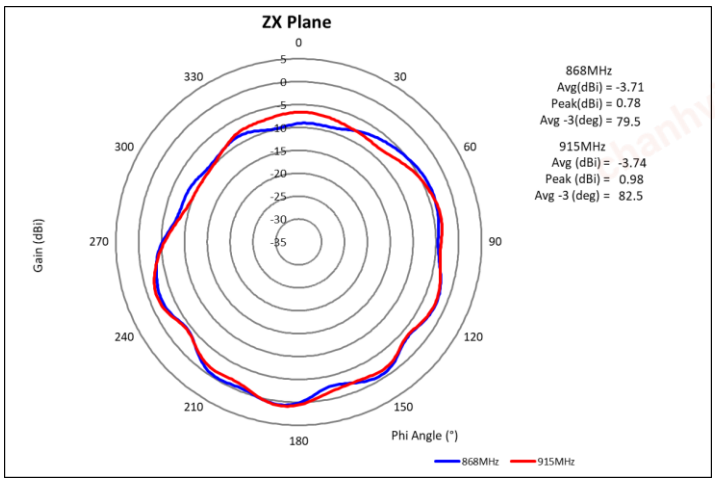


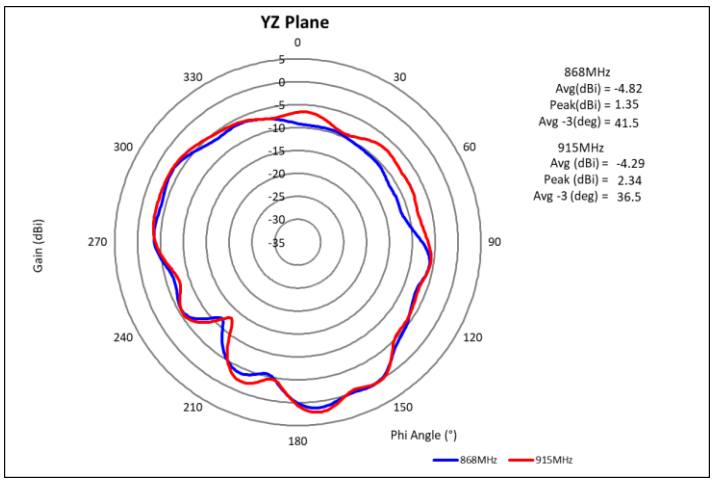
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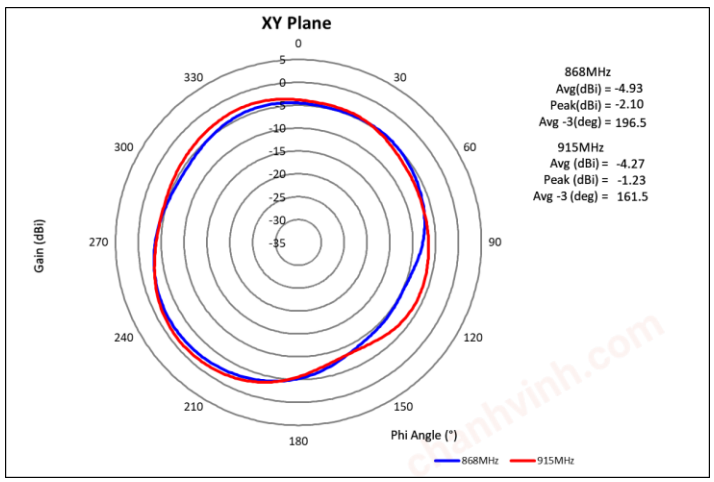
Charts – Antenna Radiation Gain Pattern

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PACKAGING

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1. 10 Pcs/PE bag
2. 10 PE bags in a group
3. 60 groups in a box
4. Total 6000 pcs/Carton box
   Carton box size: 460mm*235mm*140mm.



10 pcs/PE bag



10 PE bags in a group



60 groups in a box



Total 6000 pcs/Carton box
Carton box size:460mm*235mm*140mm

For More Information:
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