

# WiFi6E Triple Band Ceramic SMD Antenna 3.2x1.6x0.5 mm

Part Number: **L000950-01**  
**L000950-80**

## FEATURES & BENEFITS

- Supporting WiFi Triple band, covering 2.4~2.5 GHz & 5.15~5.85 GHz & 5.925~7.125 GHz, WLAN/Bluetooth/IEEE802.11 a/b/g/n/ac Application.
- SMD Passive Ceramic Patch Antenna with evaluation board 80 x 40 mm<sup>2</sup>,
- With Good VSWR/ Gain for small size and clearance, ultra-low profile
- With matching circuits that designed on the evaluation board.

## RF SPECIFICATIONS

Frequency Range (MHz)	2400-2484	5150-5850	5925-7125
Bandwidth (MHz)	84 MHz	700 MHz	1200 MHz
VSWR (center frequency)	< 1.5:1	< 3.2:1	< 2.0:1
Peak Gain (Typ.)	0.7 dBi	0.8 dBi	-0.3 dBi
Average Gain (Typ.)	-2.4 dB	-2.6 dB	-4.1 dB
Efficiency (Typ.)	54 %	52 %	42 %
Feed Point Impedance	50 ohms		
Polarization	Linear Polarization		

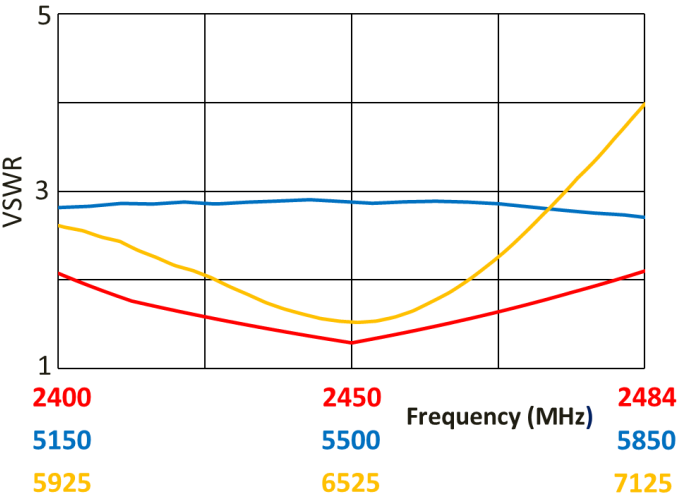
## MECHANICAL SPECIFICATIONS

Size ( L x W x H )	3.2 mm x 1.6 mm x 0.5 mm ( L/W/H ± 0.15)
Weight	< 0.1 g
Mounting	SMD (Surface Mount Device)
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to + 85°C
Storage Temperature	-5 to + 40°C
Dielectric Material	Ceramic
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

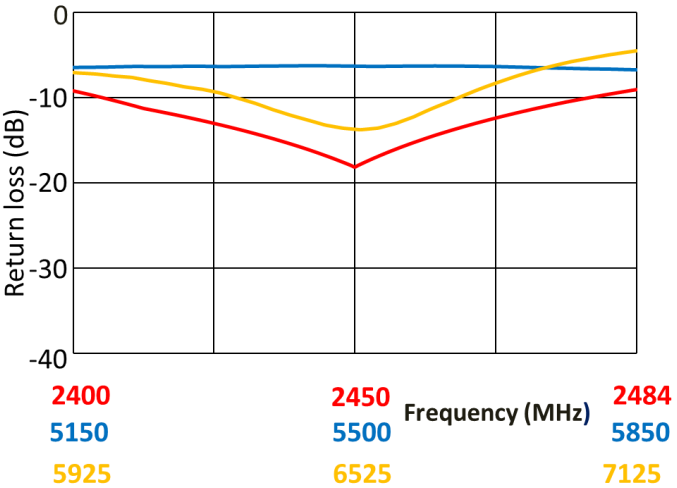
RF DATA

(shown as L000950-01 : Ground size : 80 x 40 x 1 mm.)

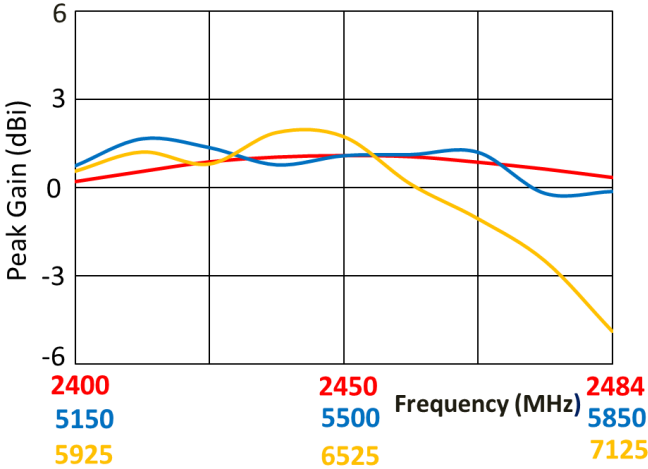
VSWR



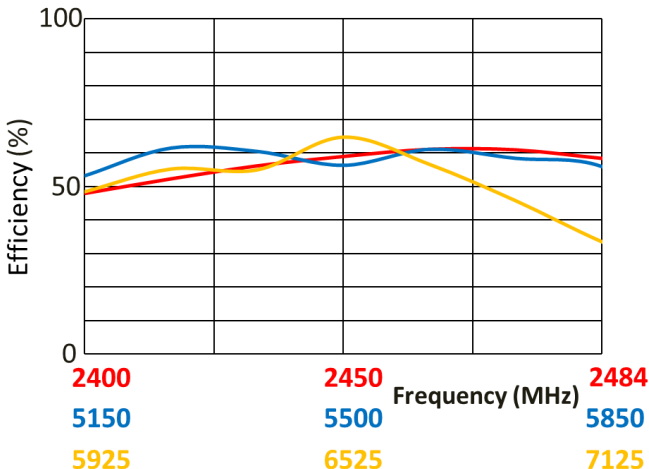
Return Loss



Peak Gain



Efficiency

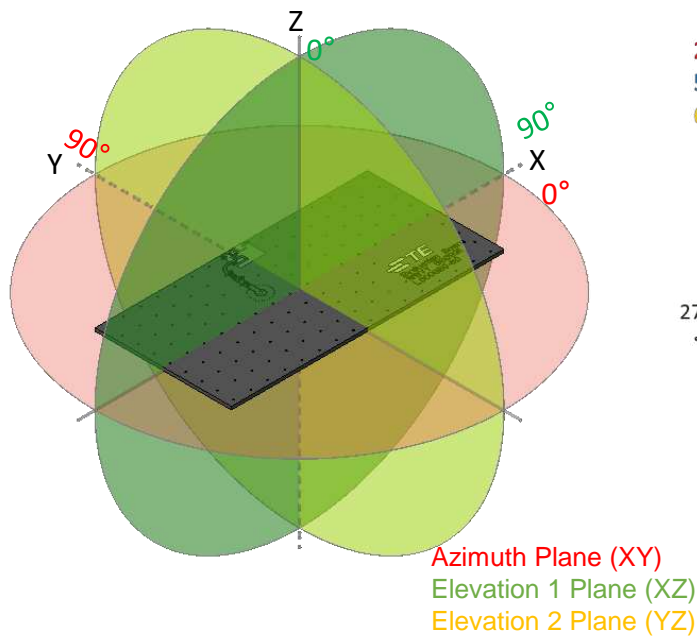


Data measured in free space and on reference ground plane of 80x40x1 mm ground plane condition, application data might vary.

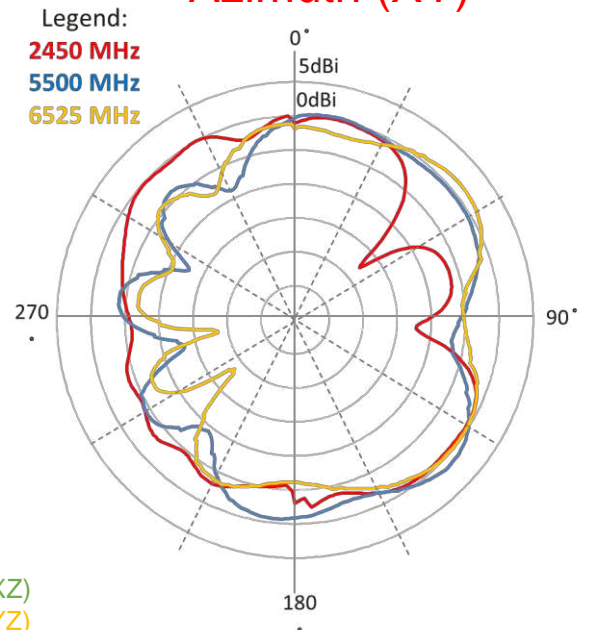
# RADIATION PATTERN

(shown as L000950-01 : Ground size : 80 x 40 x 1 mm.)

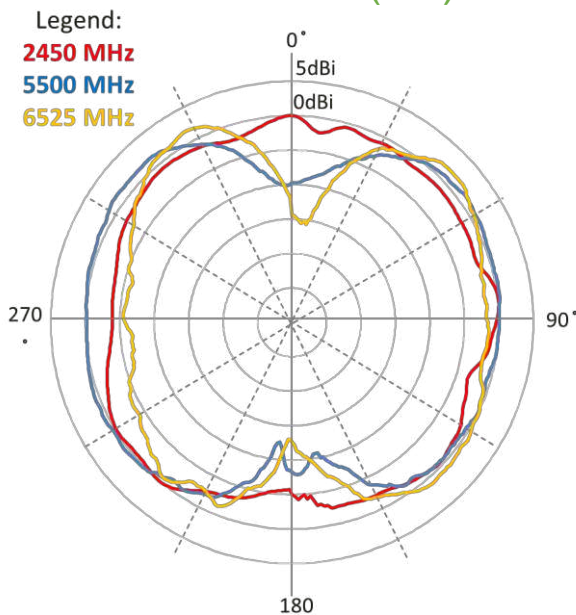
## Test setup



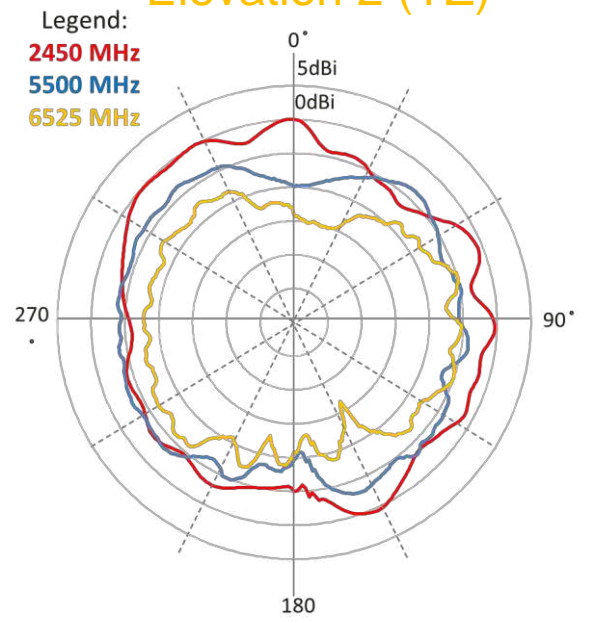
## Azimuth (XY)



## Elevation 1 (XZ)



## Elevation 2 (YZ)



Data measured in free space and on reference ground plane of 80x40x1 mm ground plane condition, application data might vary.

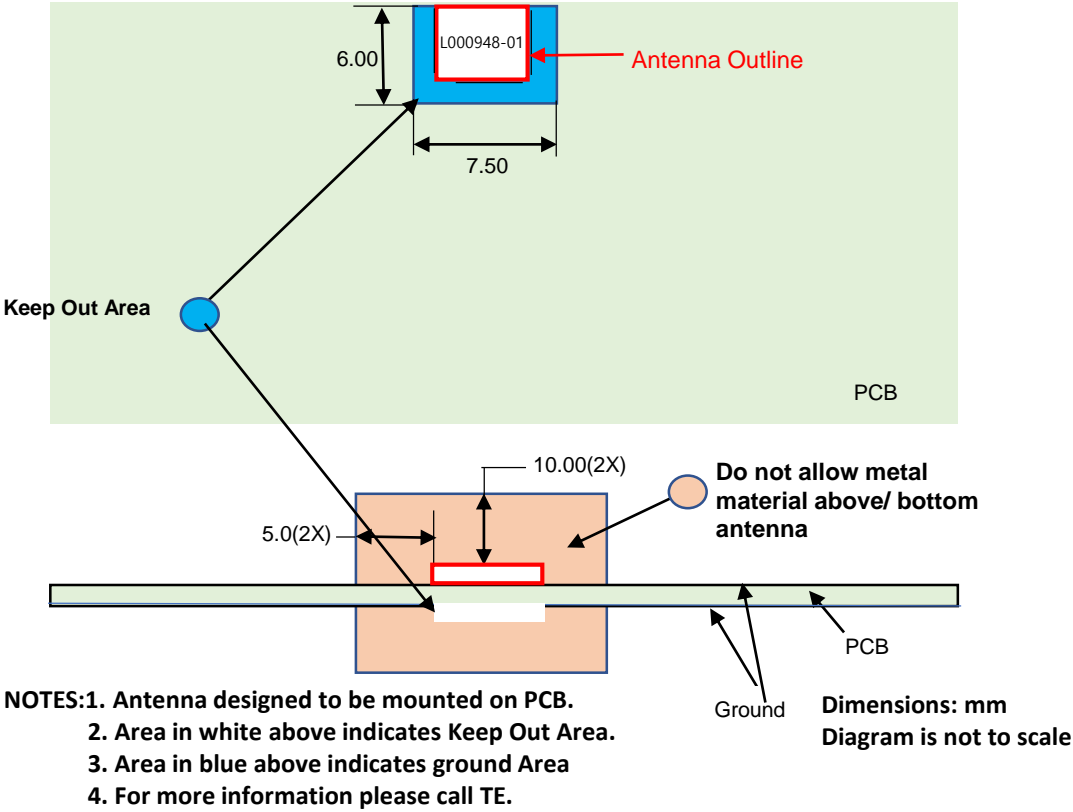
Figure 1: Mechanical drawing of the evaluation board. The drawing includes four views: a top view (left), a side view (right), a bottom view (bottom left), and a detail view (bottom right). The top view shows a rectangular board with dimensions 80±2 mm by 40±2 mm. It features a circular cutout with a hole in the center, a rectangular cutout on the right side, and a small rectangular feature on the left side. The bottom view shows the same board with a circular cutout and a hole in the center, and a rectangular cutout on the right side. The side view shows the board's thickness and a small rectangular feature on the left side. The detail view shows a close-up of the circular cutout and the hole in the center, with dimensions 80±2 mm by 40±2 mm. The drawing also includes a label "SEE DETAIL A" and "SEE DETAIL B". The bottom view is labeled "PCB GROUND".

9	0402 CAPACITOR(3.3pF)	1
8	0402 CAPACITOR(0.2pF)	1
7	0402 CAPACITOR(2.2pF)	1
6	0402 INDUCTOR(15nH)	1
5	0402 INDUCITOR(8.2nH)	1
4	0402 RESISTOR(00hm)	2
3	SMA Connector(Female)	1
2	EVB	1
1	ANTENNA	1
ITEM	DESCRIPTION	Q'TY(PC)

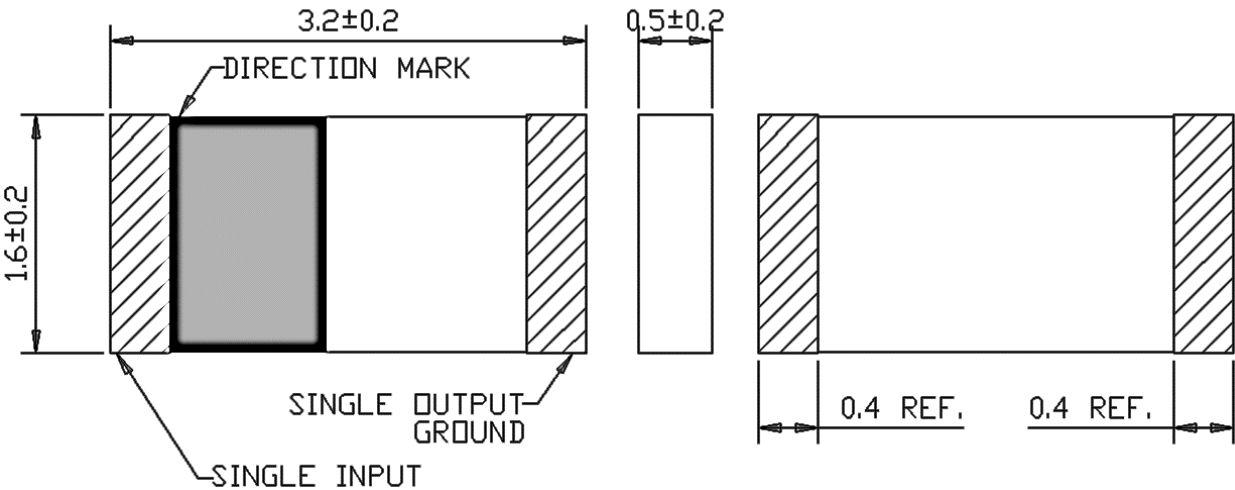
**Dimensions: mm**  
**Tolerance :  $\pm 0.2\text{mm}$**   
**Diagram is not to scale**

- NOTES:** 1. Antenna must be mounted on the edge of PCB.  
2. For more information please call TE.  
3. Reference PCB Dimension(mm) - 80.0 x 40.0 x 1.0

KEEP OUT AREA



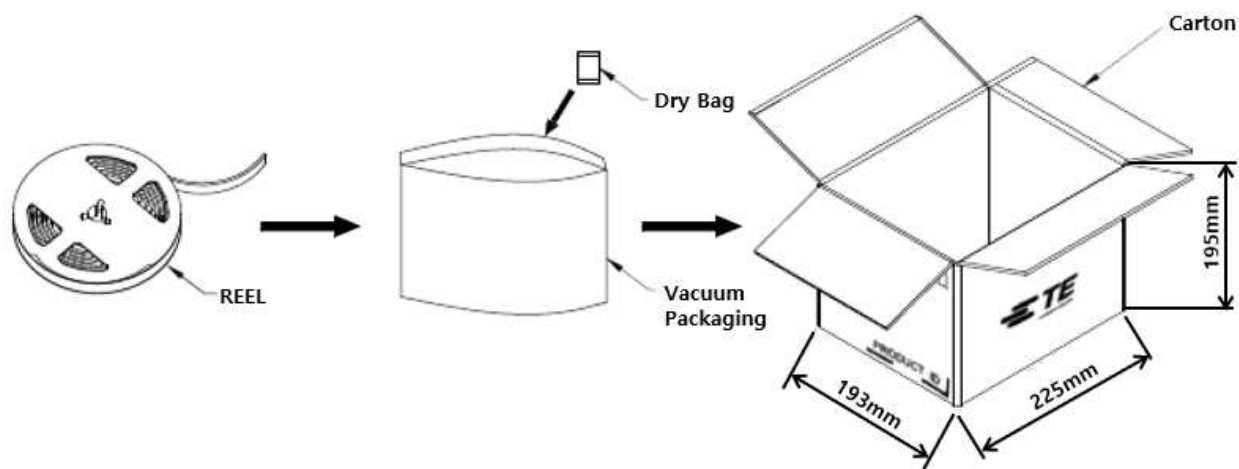
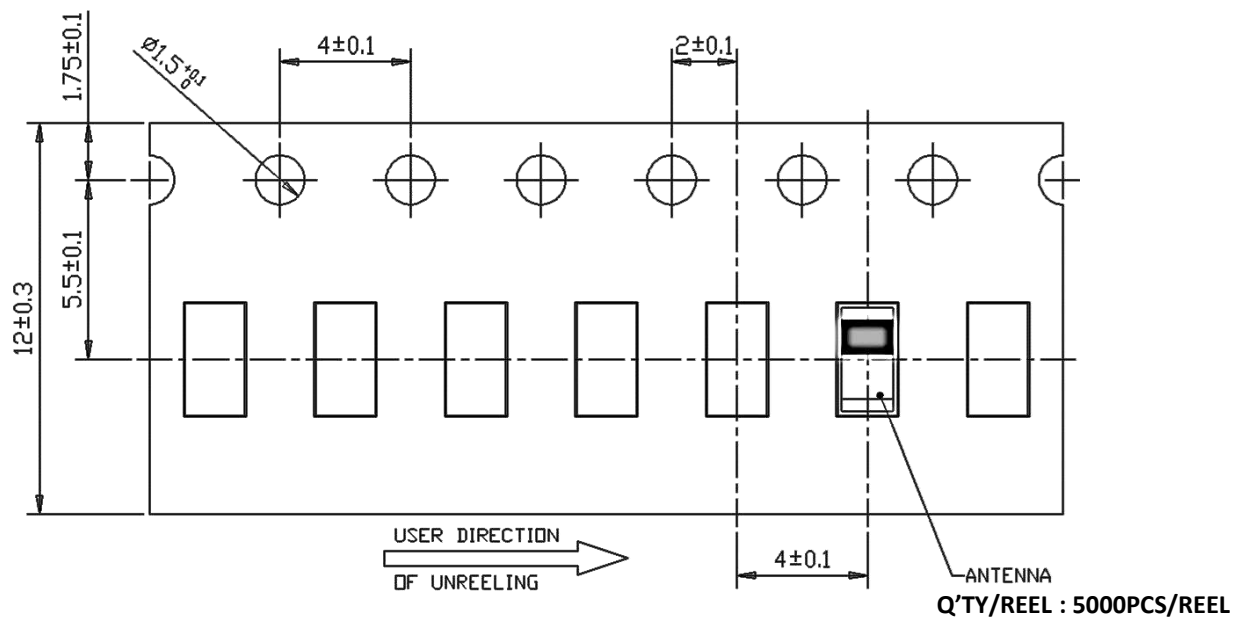
DIMENSIONS and PIN Definitions



Dimensions: mm  
Diagram is not to scale

## PACKAGING

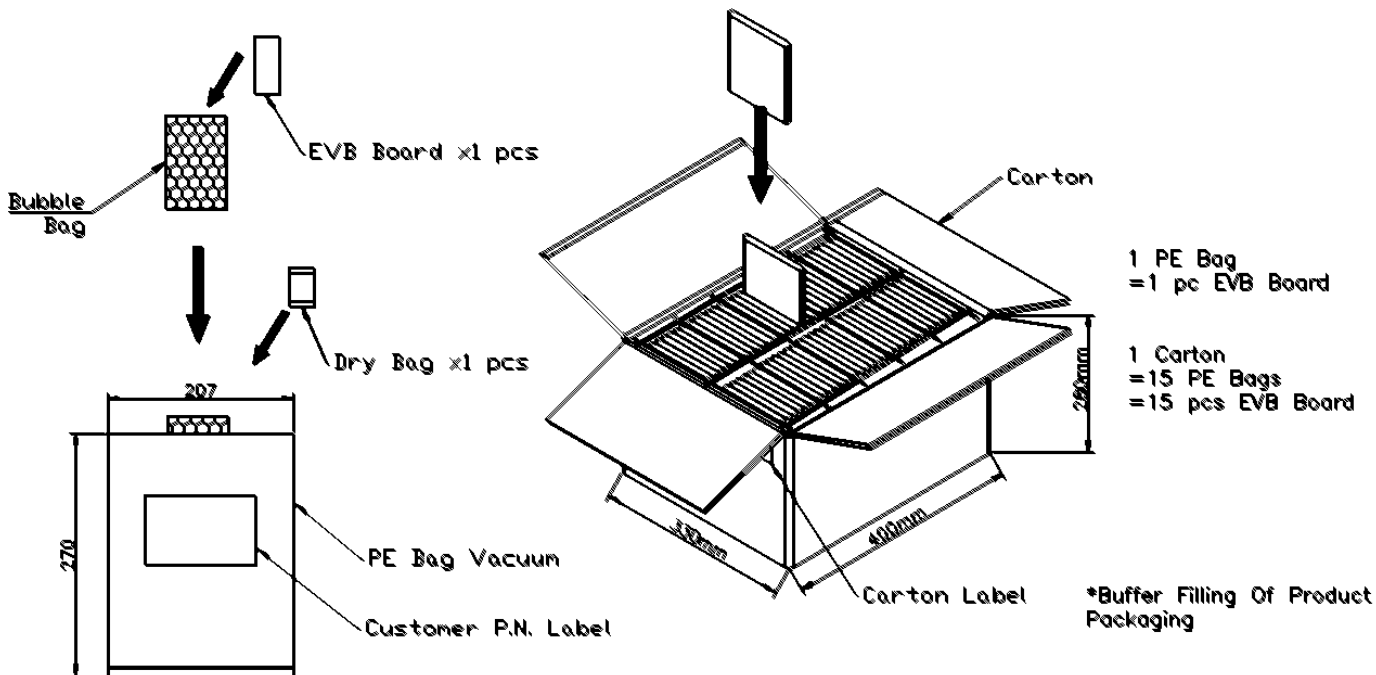
L000950-01 (REEL)



1Carton = 1REEL = 5000pcs  
\* Using Air pillows for packaging

### PACKAGING

L000950-80 (BULK)



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