

WiFi6 Dual Band PCB SMD Antenna 3.2x1.6x1.6mm

Part Number: L000948-01
L000948-80

FEATURES & BENEFITS

- DUAL BAND WLAN/Bluetooth/IEEE802.11 a/b/g/n/ac Application.
- SMD Passive ceramic Chip Antenna with evaluation board 40 x 40 mm²
- With Good VSWR/ Gain for small size and clearance.
- With matching circuits that designed on the evaluation board.

RF SPECIFICATIONS

Frequency Range (MHz)	2400-2484	5150-5850
Bandwidth (MHz)	84 MHz	700 MHz
VSWR (center frequency)	< 2.4:1	< 2.7:1
Peak Gain (Typ.)	1.8 dBi	0.1 dBi
Average Gain (Typ.)	-2.5 dB	-4.4 dB
Efficiency (Typ.)	55 %	38%
Feed Point Impedance	50 ohms	
Polarization	Linear Polarization	

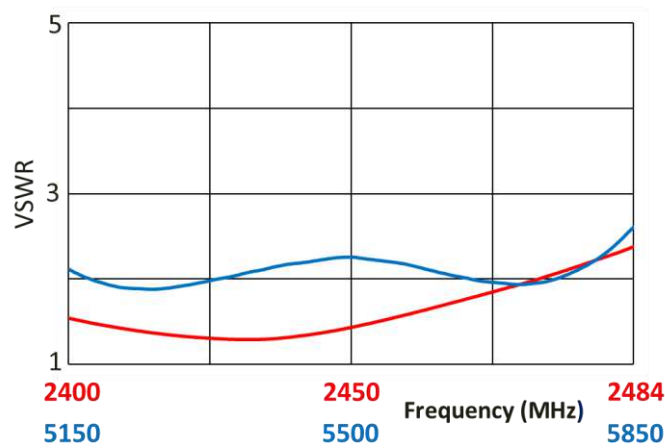
MECHANICAL SPECIFICATIONS

Size (L x W x H)	3.2 mm x 1.6 mm x 1.6 mm (L/W/H $\pm$ 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	FR4
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

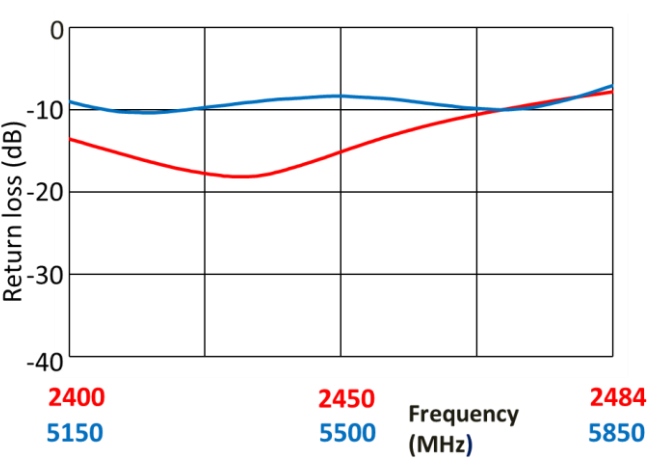
RF DATA

(shown as L000948-01 : Ground size : 40 x 40 x 1 mm.)

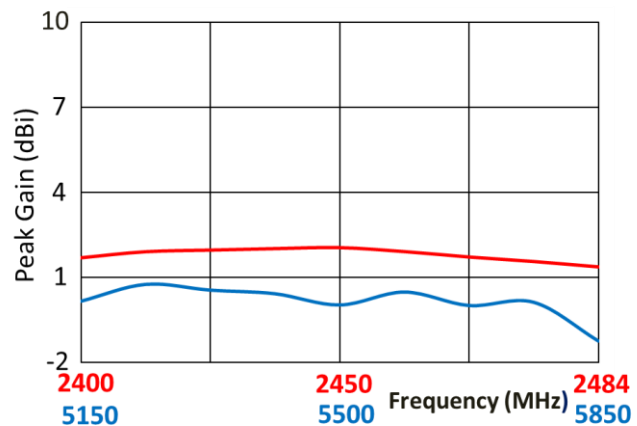
VSWR



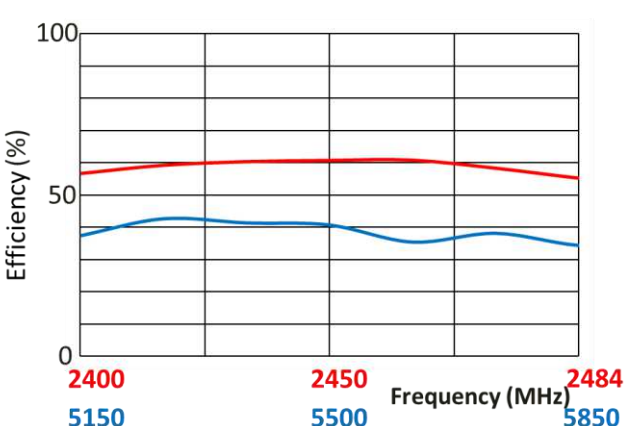
Return Loss



Peak Gain



Efficiency

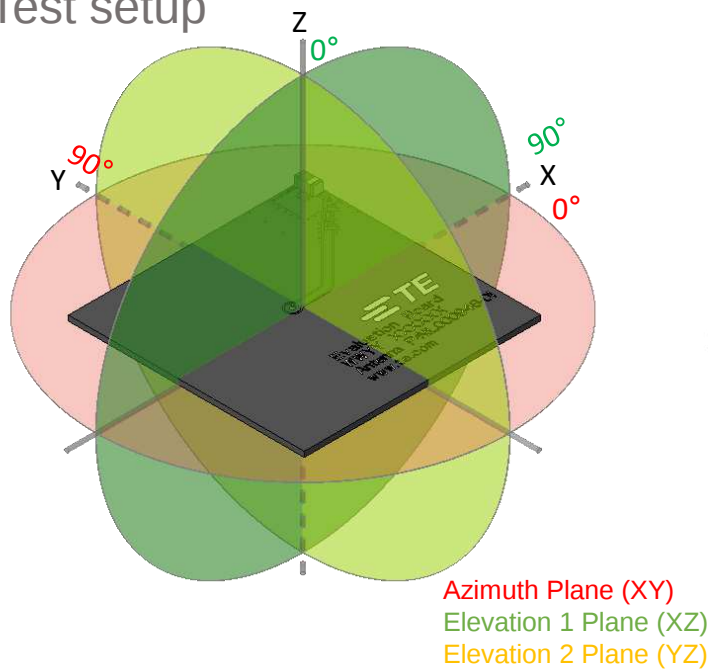


Data measured in free space and on reference ground plane of 40x40x1 mm ground plane condition, application data might vary.

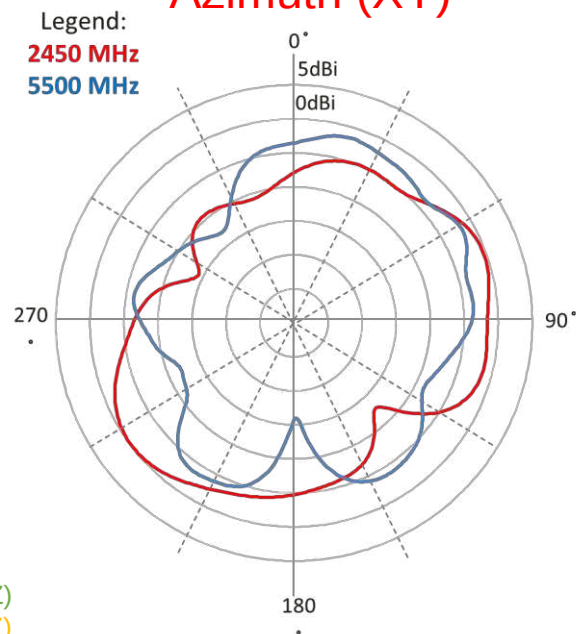
RADIATION PATTERN

(shown as L000948-01 : Ground size : 40 x 40 x 1 mm.)

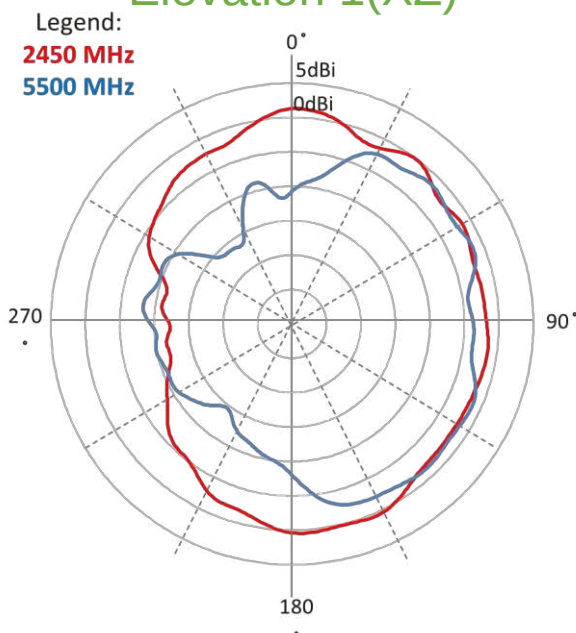
Test setup



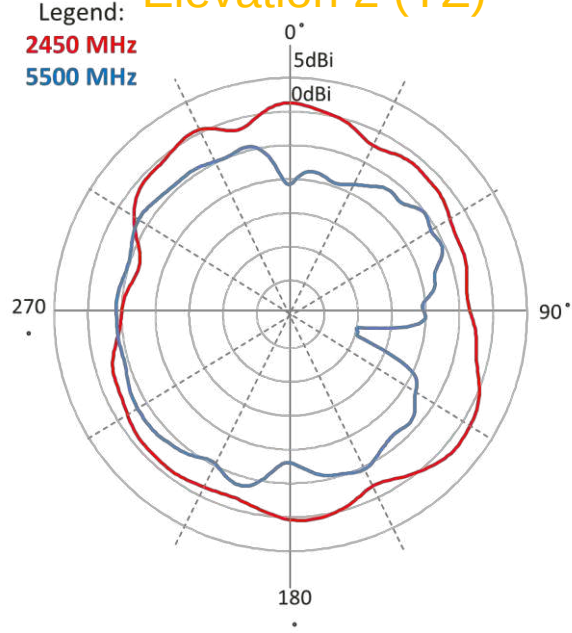
Azimuth (XY)



Elevation 1(XZ)

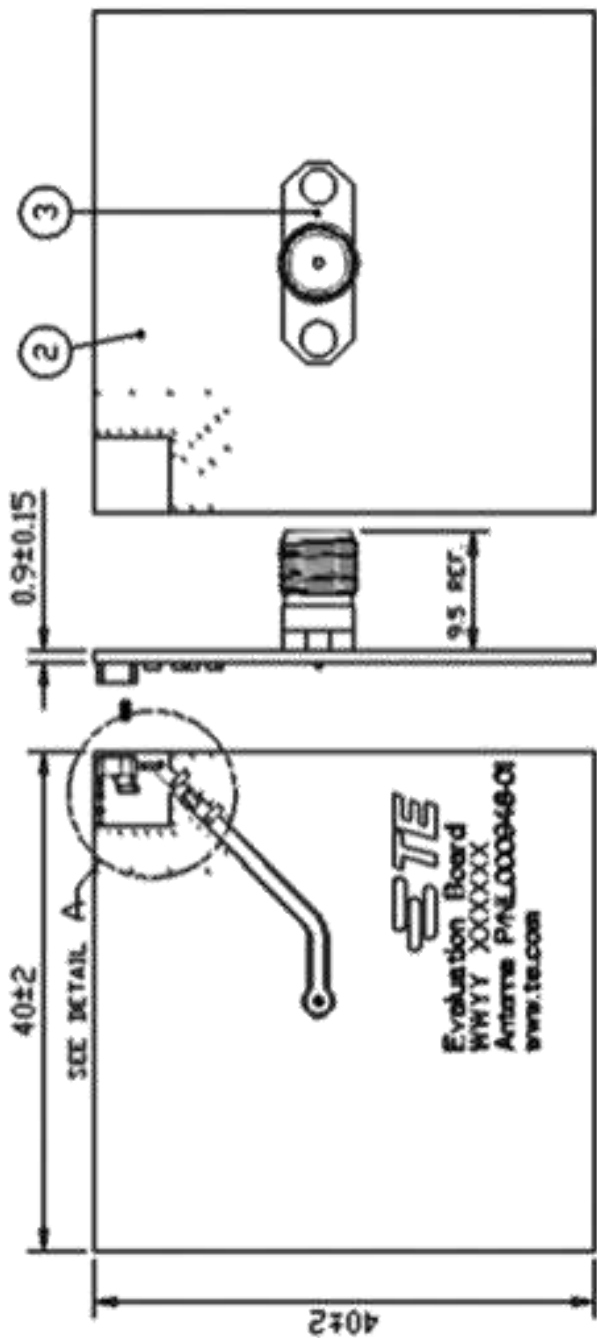


Elevation 2 (YZ)

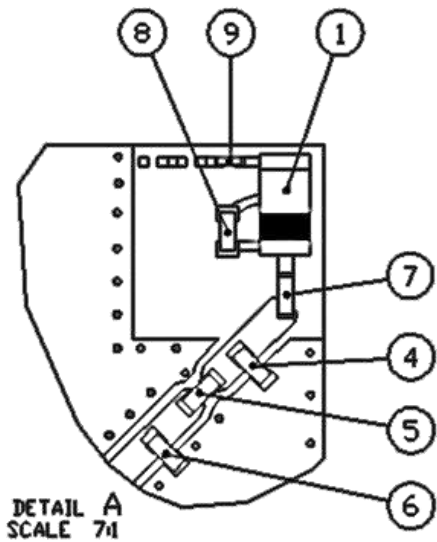


Data measured in free space and on reference ground plane of 40x40x1 mm ground plane condition, application data might vary.

MOUNTING GUIDE AND MATCHING CIRCUIT

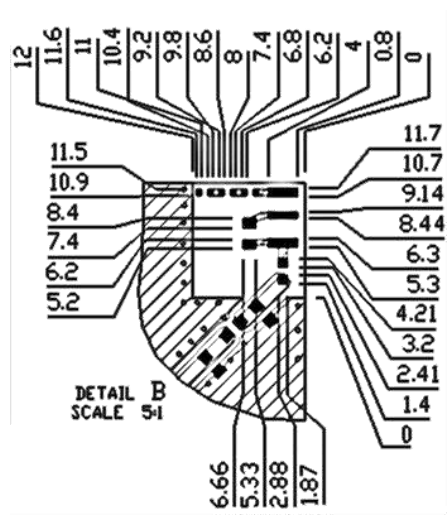
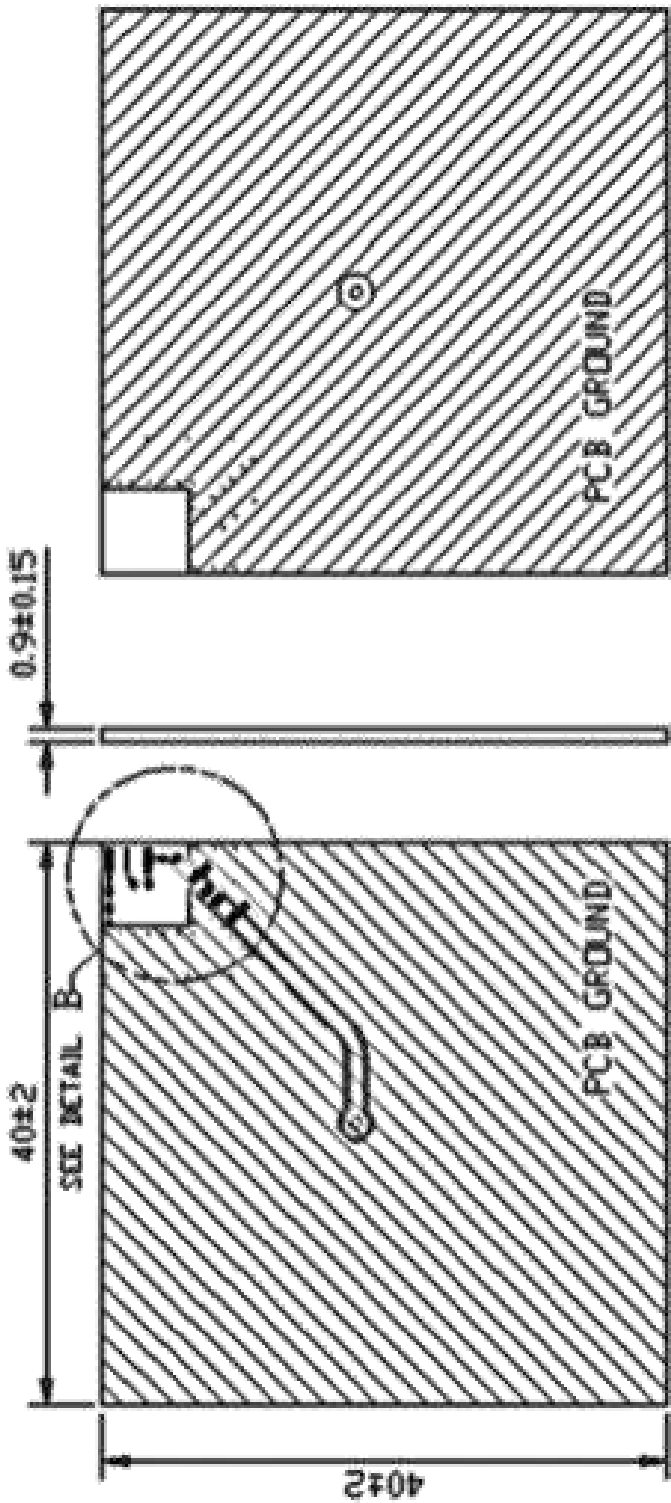


9	0402 RESISTOR(00hm)	1
8	0402 INDUCTOR(7.9nH)	1
7	0402 INDUCTOR(1.8nH)	1
6	0402 INDUCTOR(1.8nH)	1
5	0402 RESISTOR(00hm)	1
4	0402 CAPACITOR(0.3pF)	1
3	SMA Connector(Female)	1
2	EVB	1
1	ANTENNA	1
ITEM	DESCRIPTION	Q'TY (PC)



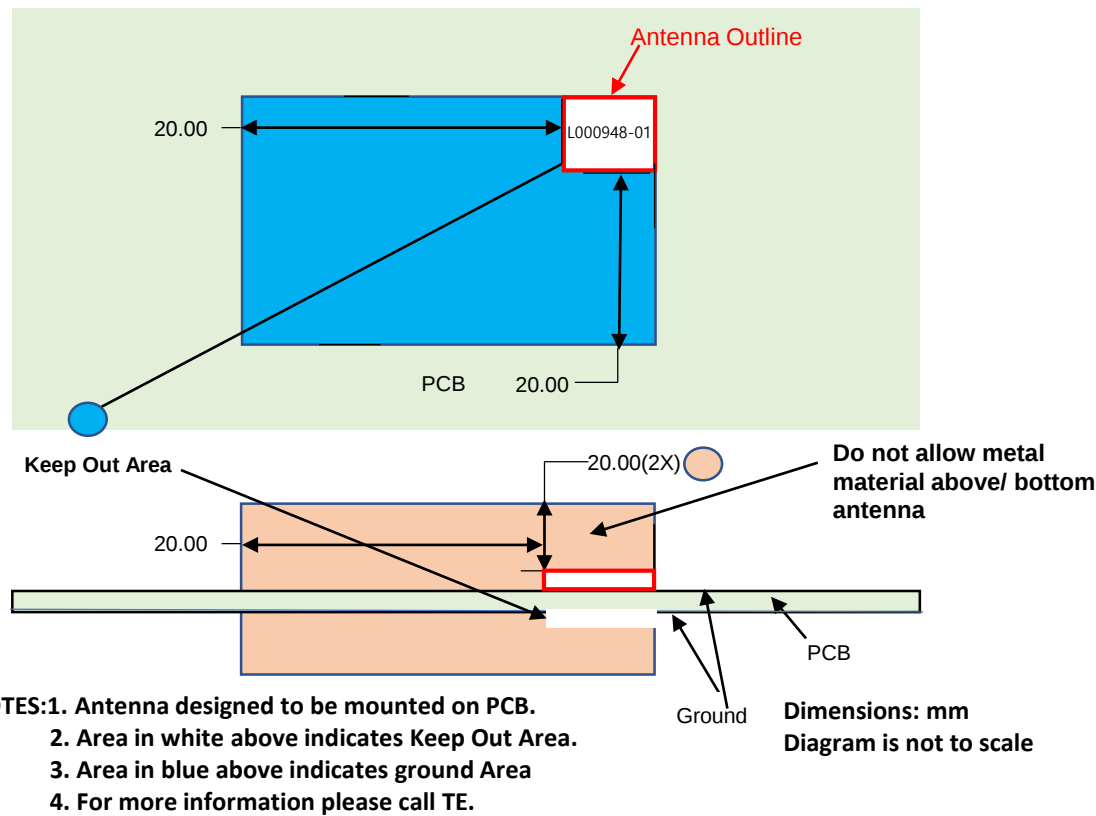
Dimension: mm
Tolerance : ±0.2mm
Diagrams is not to scale

MOUNTING GUIDE AND MATCHING CIRCUIT

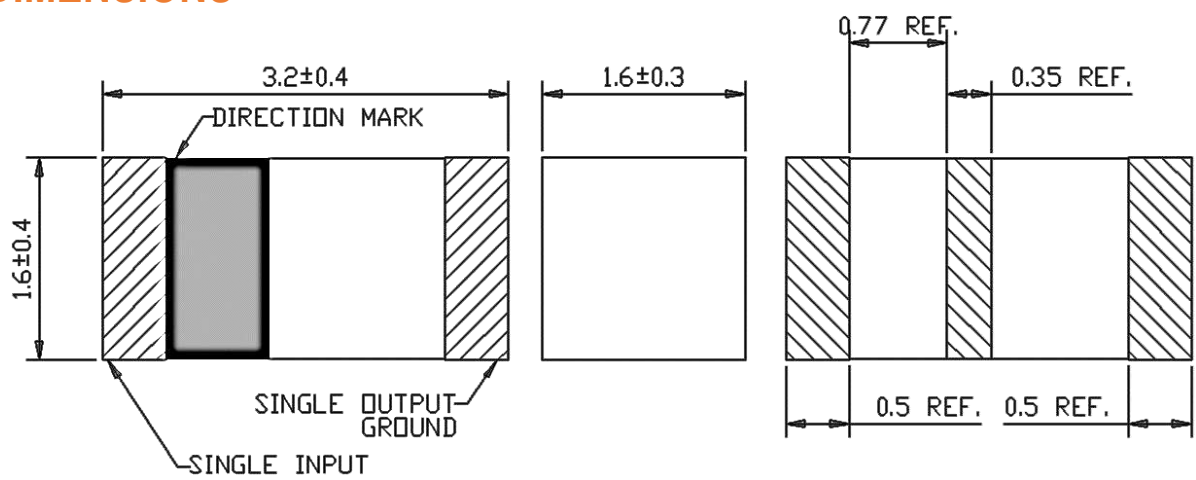


Dimension: mm
Tolerance : ± 0.2 mm
Diagrams is not to scale

KEEP OUT AREA



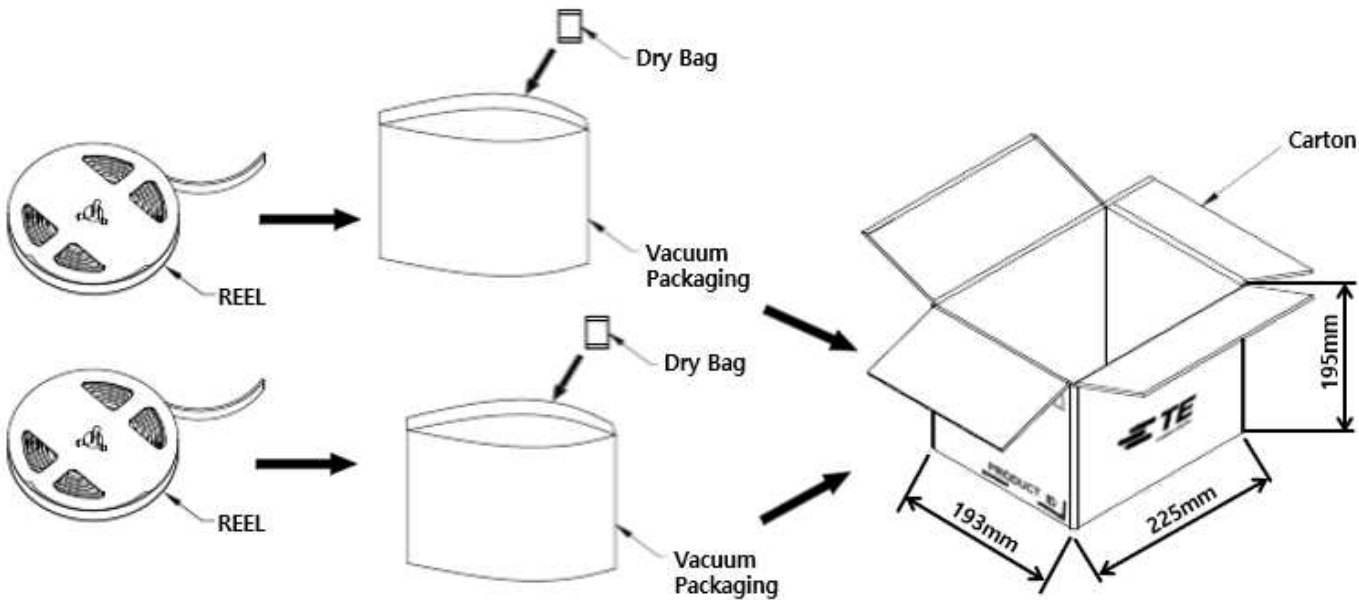
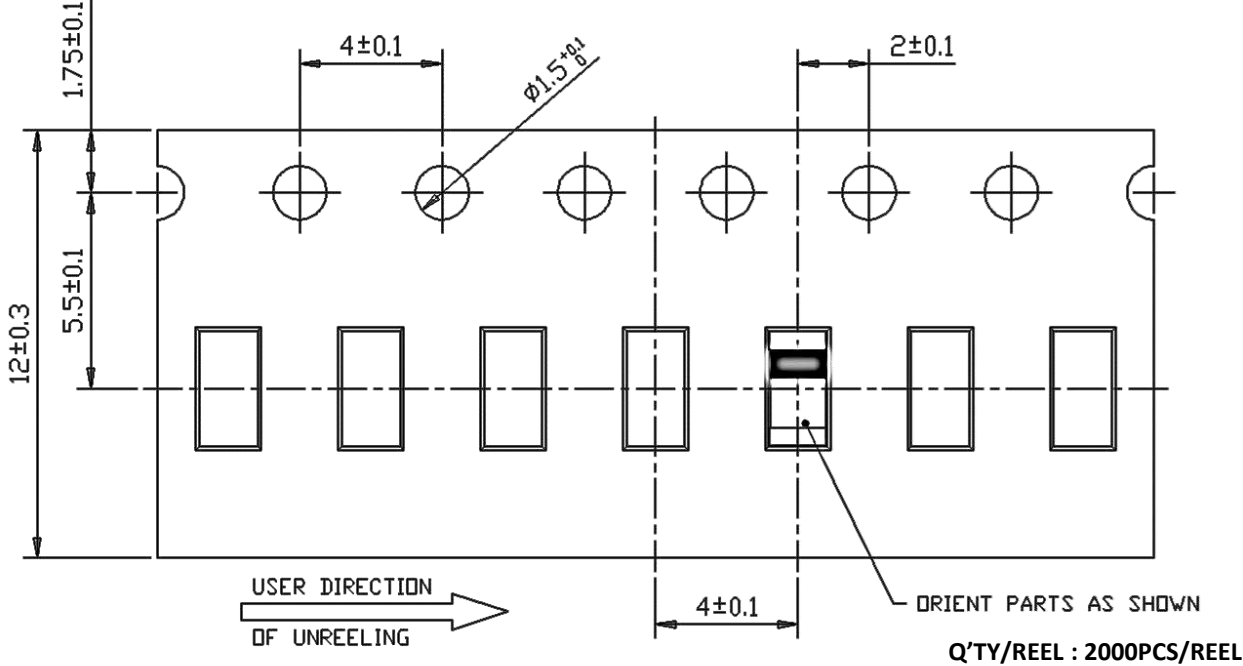
DIMENSIONS



Dimensions: mm
Diagram is not to scale

PACKAGING

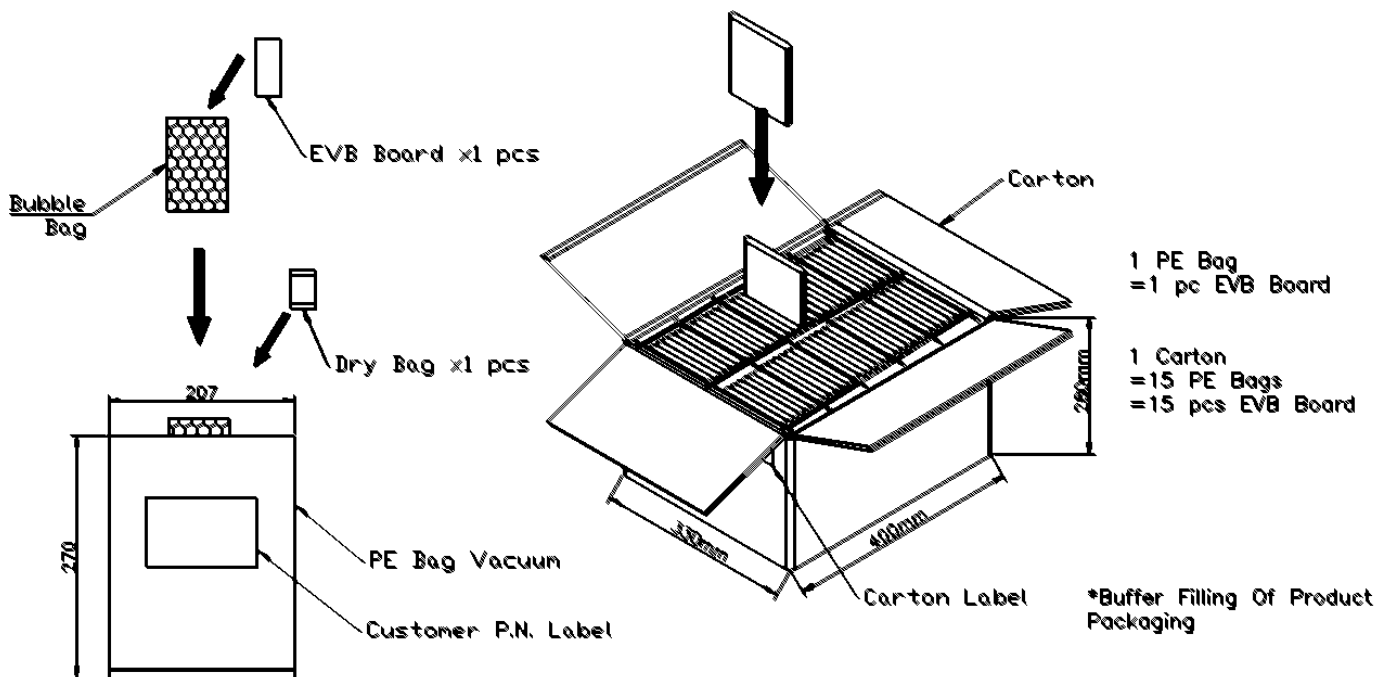
L000948-01 (REEL)



1Carton = 2REEL = 4000pcs
* Using Air pillows for packaging

PACKAGING

L000948-80 (BULK)



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