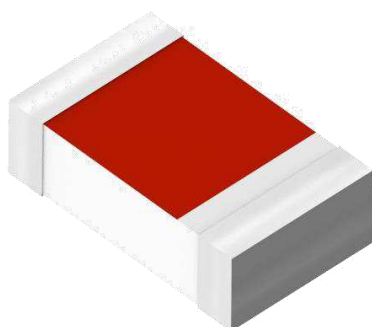




Wi-Fi / BT 2.4GHz Ceramic SMD Antenna 2x1.2x0.6 mm

Part Number: **L000946-01**
L000946-80

FEATURES & BENEFITS

- WiFi/Bluetooth/ZigBee/ISM 2.4 GHz/IEEE802.11 b/g/n Application
- SMD Passive Ceramic Patch Antenna with evaluation board 40 x 20 mm²,
- With Good VSWR/ Gain for small size, clearance and operating temperature is 105°C (higher range of operating temperature)
- With matching circuits that designed on the evaluation board.

RF SPECIFICATIONS

Frequency Range (MHz)	2400-2484
Bandwidth (MHz)	84 MHz
VSWR (center frequency)	< 2.2:1
Peak Gain (Typ.)	0.9 dBi
Average Gain (Typ.)	-2.7 dB
Efficiency (Typ.)	53 %
Feed Point Impedance	50 ohms
Polarization	Linear Polarization

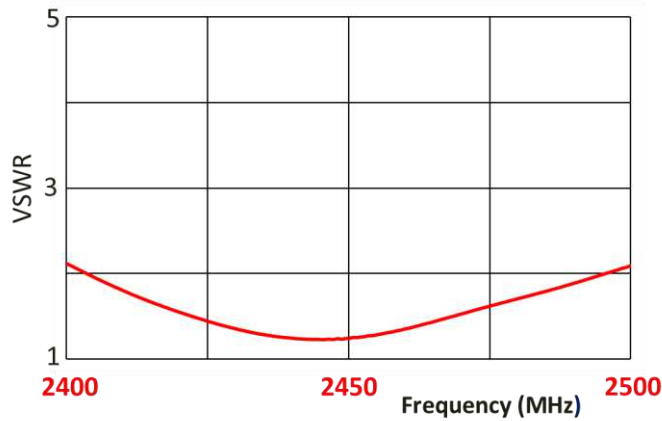
MECHANICAL SPECIFICATIONS

Size (L x W x H)	2.0 mm x 1.2 mm x 0.6 mm (L/W/H ± 0.2)
Weight	< 0.1 g
Mounting	SMD (Surface Mount Device)
Mating Connector	N/A
Cable	N/A
Operating Temperature	-40 to +105°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.

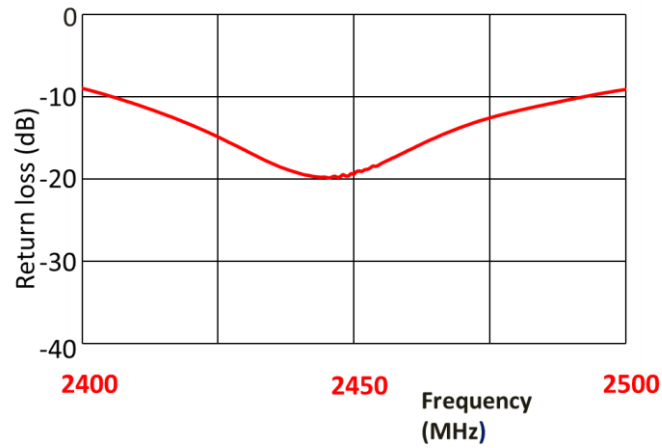
RF DATA

(shown as L000946-01 : Ground size : 40 x 20 x 1 mm.)

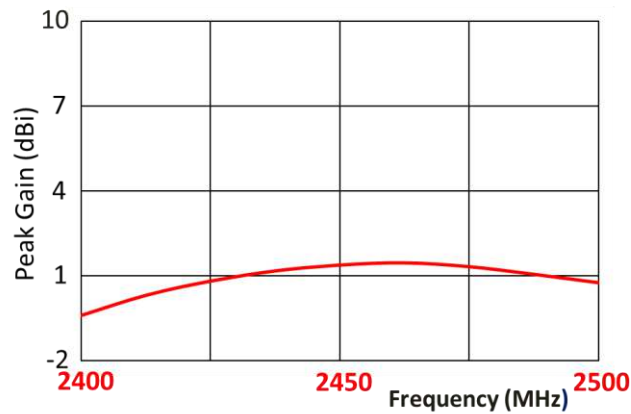
VSWR



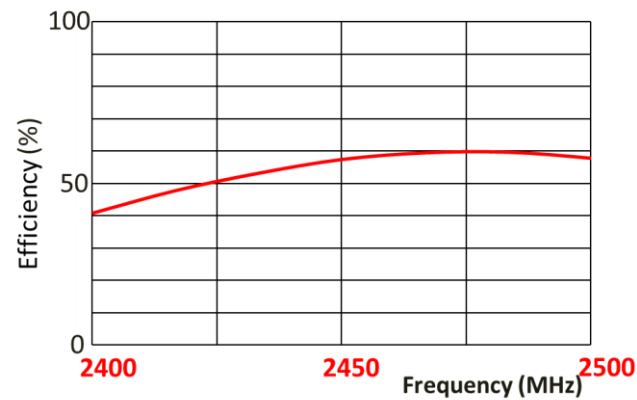
Return Loss



Peak Gain



Efficiency

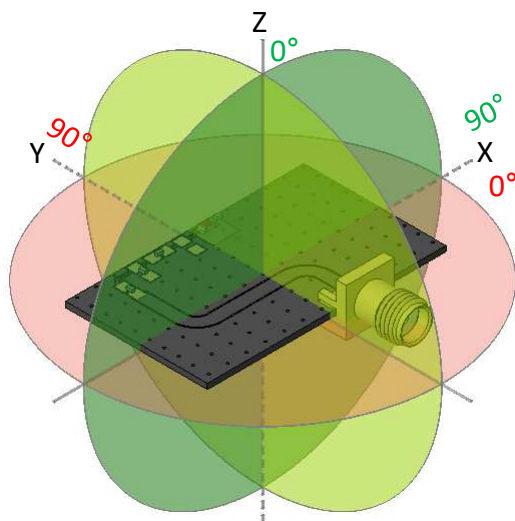


Data measured in free space and on reference ground plane of 40x20x1 mm ground plane condition, application data might vary.

RADIATION PATTERN

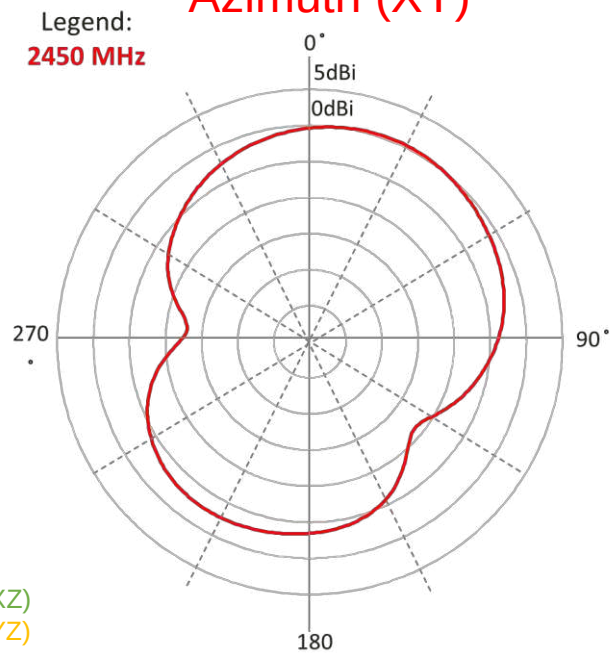
(shown as L000946-01 : Ground size : 40 x 20 x 1 mm.)

Test setup

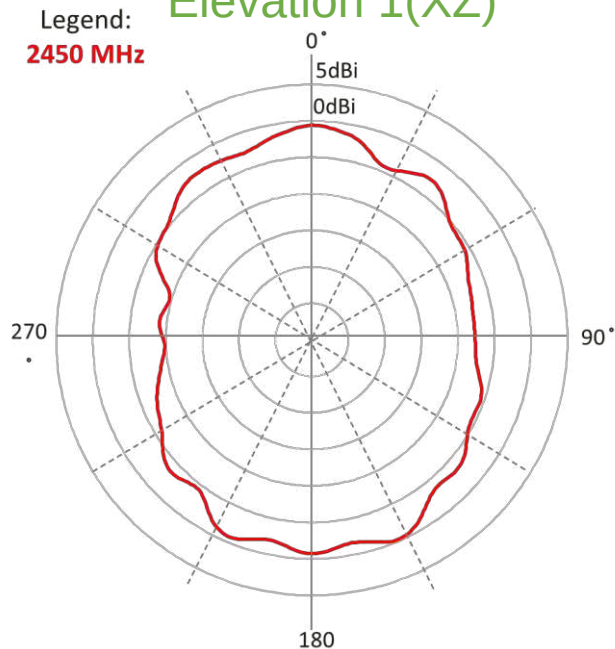


Azimuth Plane (XY)
Elevation 1 Plane (XZ)
Elevation 2 Plane (YZ)

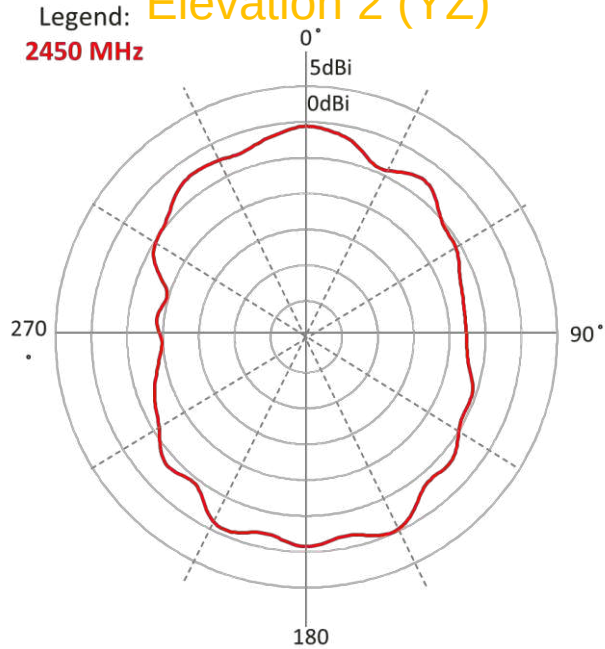
Azimuth (XY)



Elevation 1(XZ)

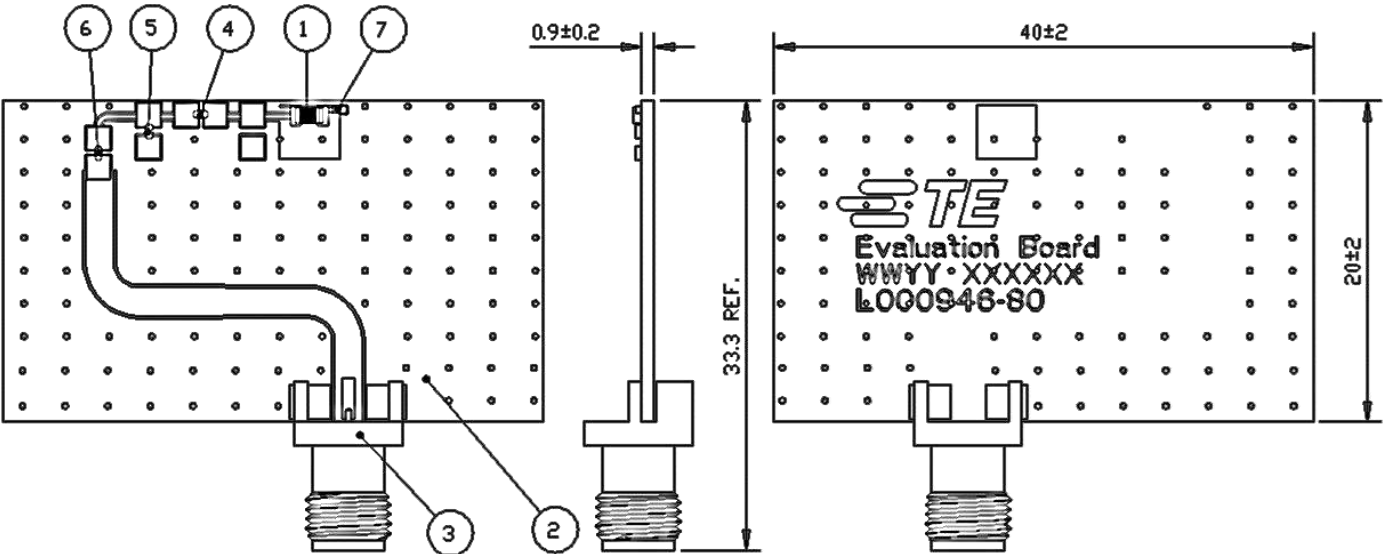


Elevation 2 (YZ)

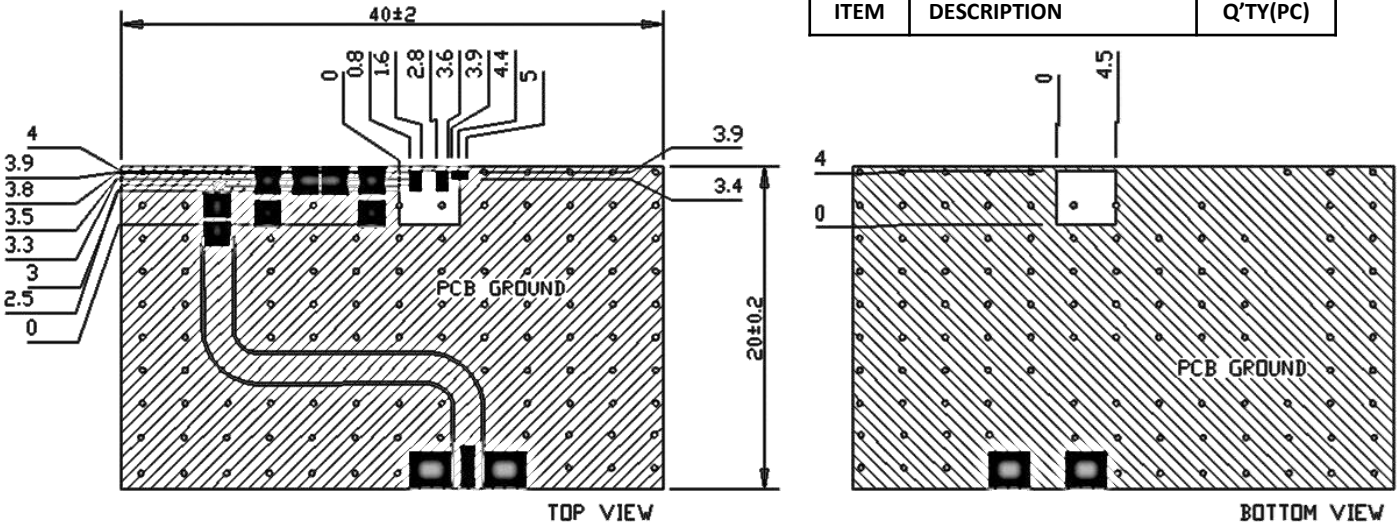


Data measured in free space and on reference ground plane of 40x20x1 mm ground plane condition, application data might vary.

MOUNTING GUIDE AND MATCHING CIRCUIT



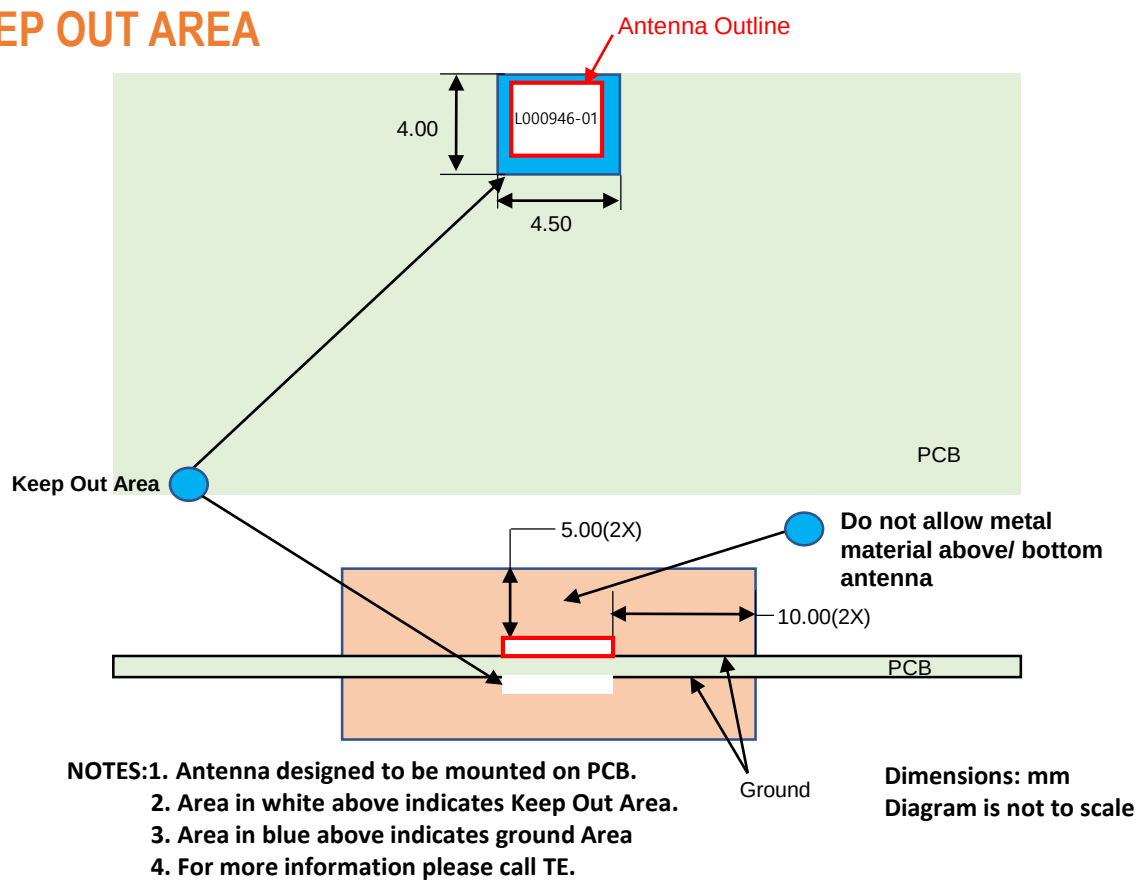
7	0402 CAPACITOR(1.2pF)	1
6	0402 CAPACITOR(22pF)	1
5	0402 CAPACITOR(1.5pF)	1
4	0402 RESISTOR(0Ohm)	1
3	SMA Connector(Female)	1
2	EVB	1
1	ANTENNA	1
ITEM	DESCRIPTION	Q'TY(PC)



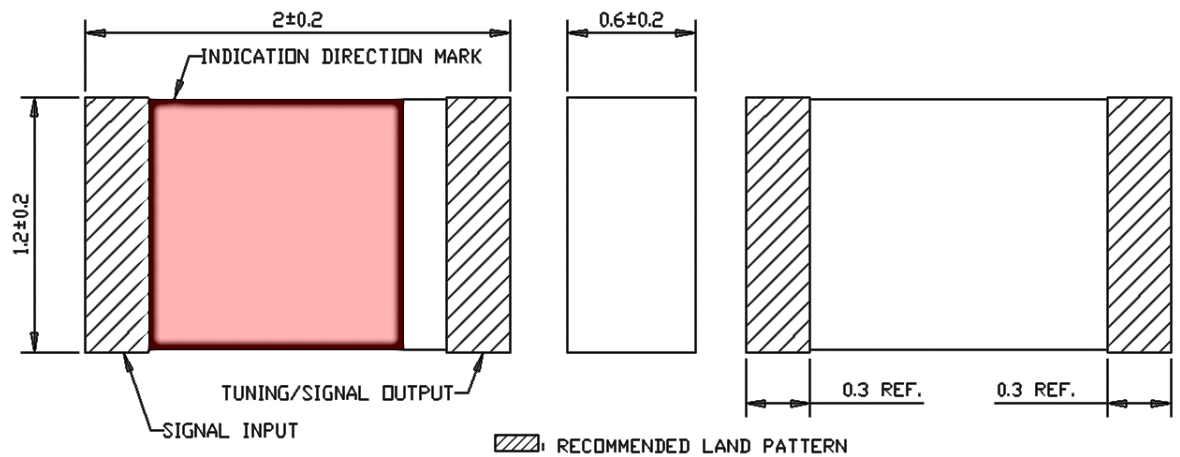
NOTES: 1. Antenna must be mounted on the edge of PCB.
2. For more information please call TE.
3. Reference PCB Dimension(mm) - 40.0 x 20.0 x 0.9

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

KEEP OUT AREA



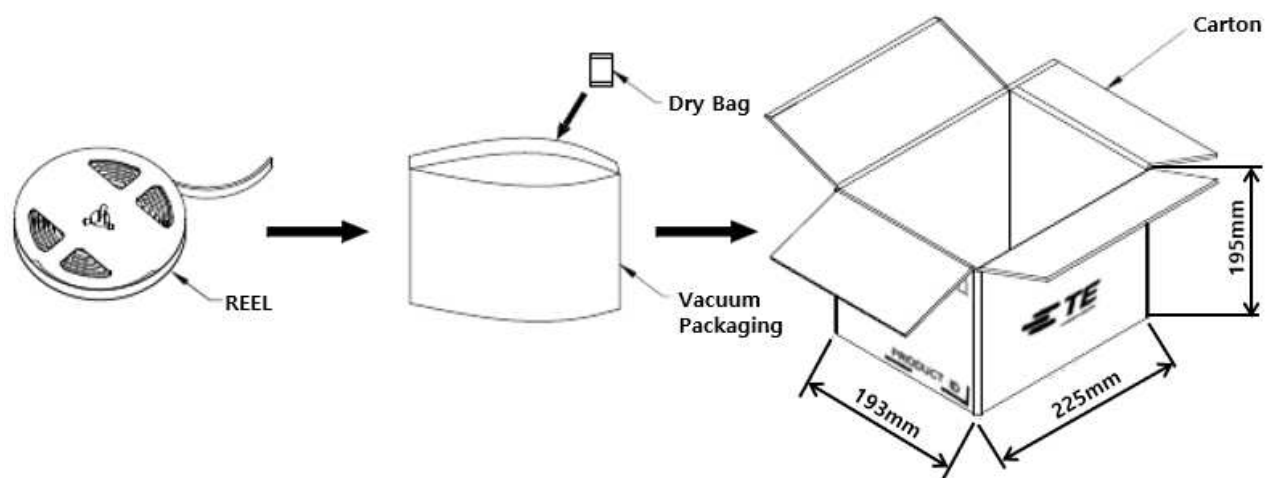
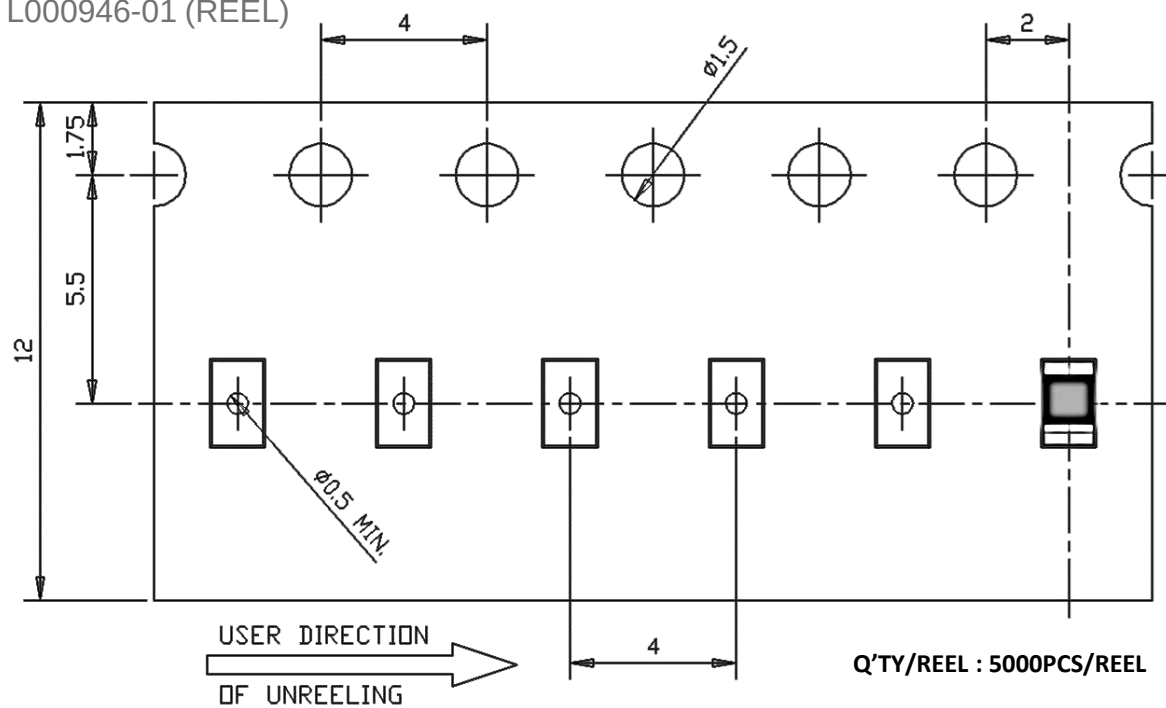
DIMENSIONS



Dimensions: mm
Diagram is not to scale

PACKAGING

L000946-01 (REEL)



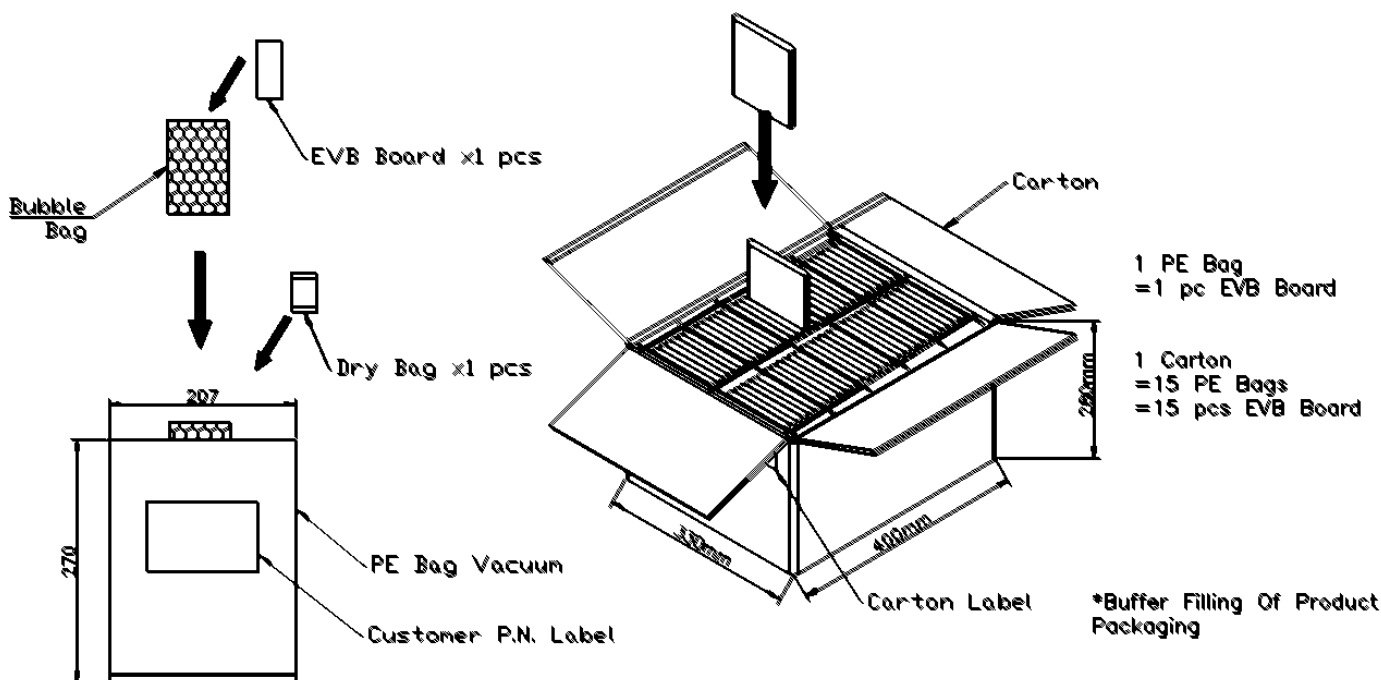
1Carton = 1REEL = 5000pcs
* Using Air pillows for packaging

Wi-Fi / BT 2.4GHz Ceramic SMD Antenna (2x1.2x0.6 mm)

Standard Antenna Solutions

PACKAGING

L000946-80 (BULK)



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Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

For phone numbers in other countries, go to te.com/support-center

te.com

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05/2021