SPECIFICATION

Part No   :   **GP.1575.15.4.B.02**

Product Name   **:**   15mm*15mm*4mm
                               1575mhz GPS/Galileo Patch
                               Antenna
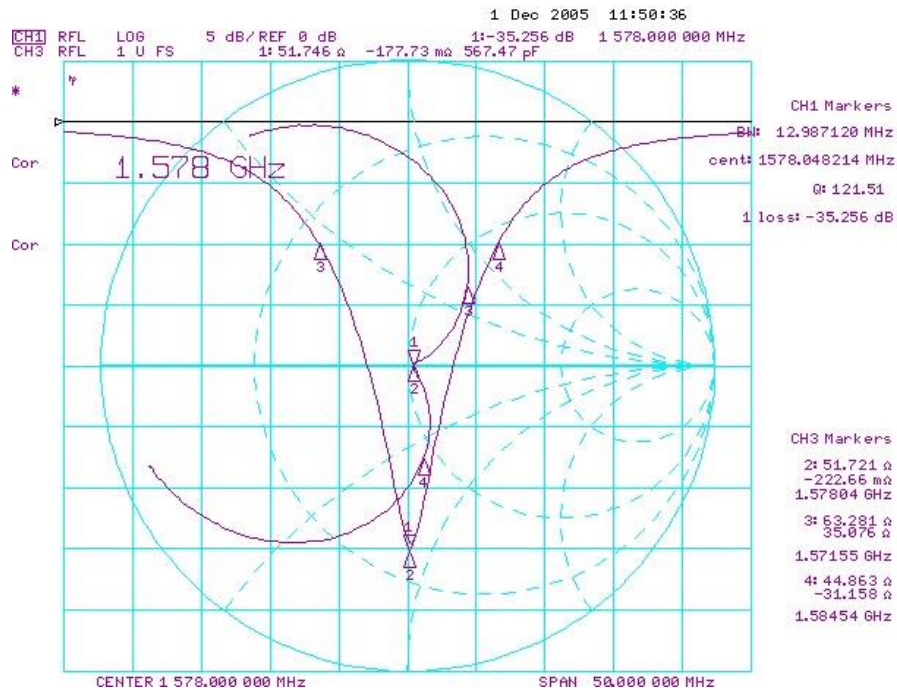   RoHS Compliant

1. **Introduction**

This miniaturized ceramic GPS/GALILEO patch antenna is based on smart *XtremeGain*™ technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the customer device environment.
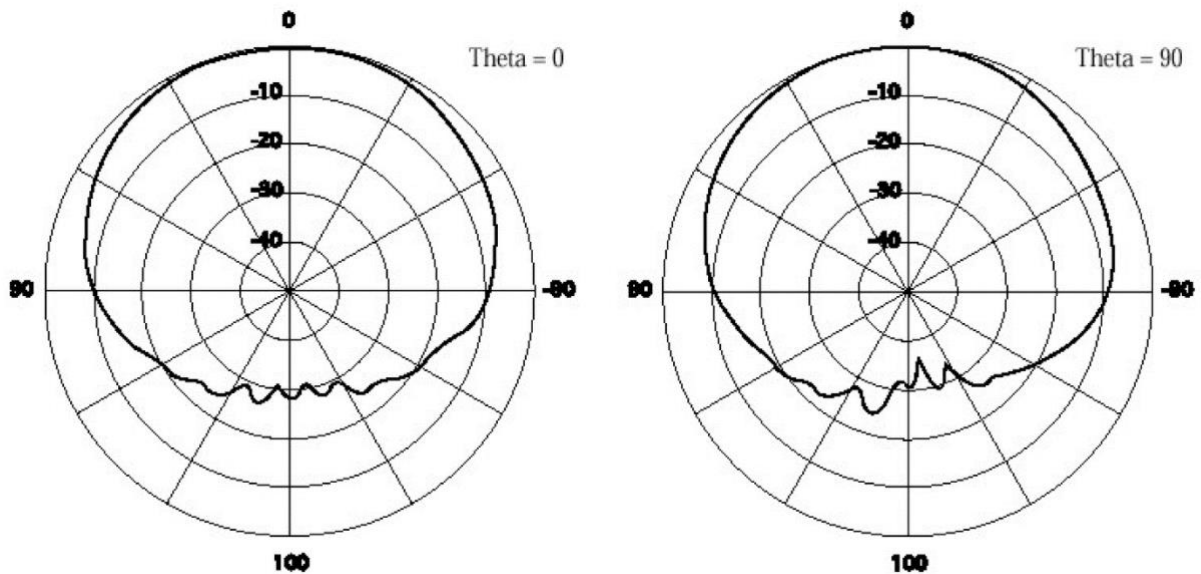
2. **Specification Table**

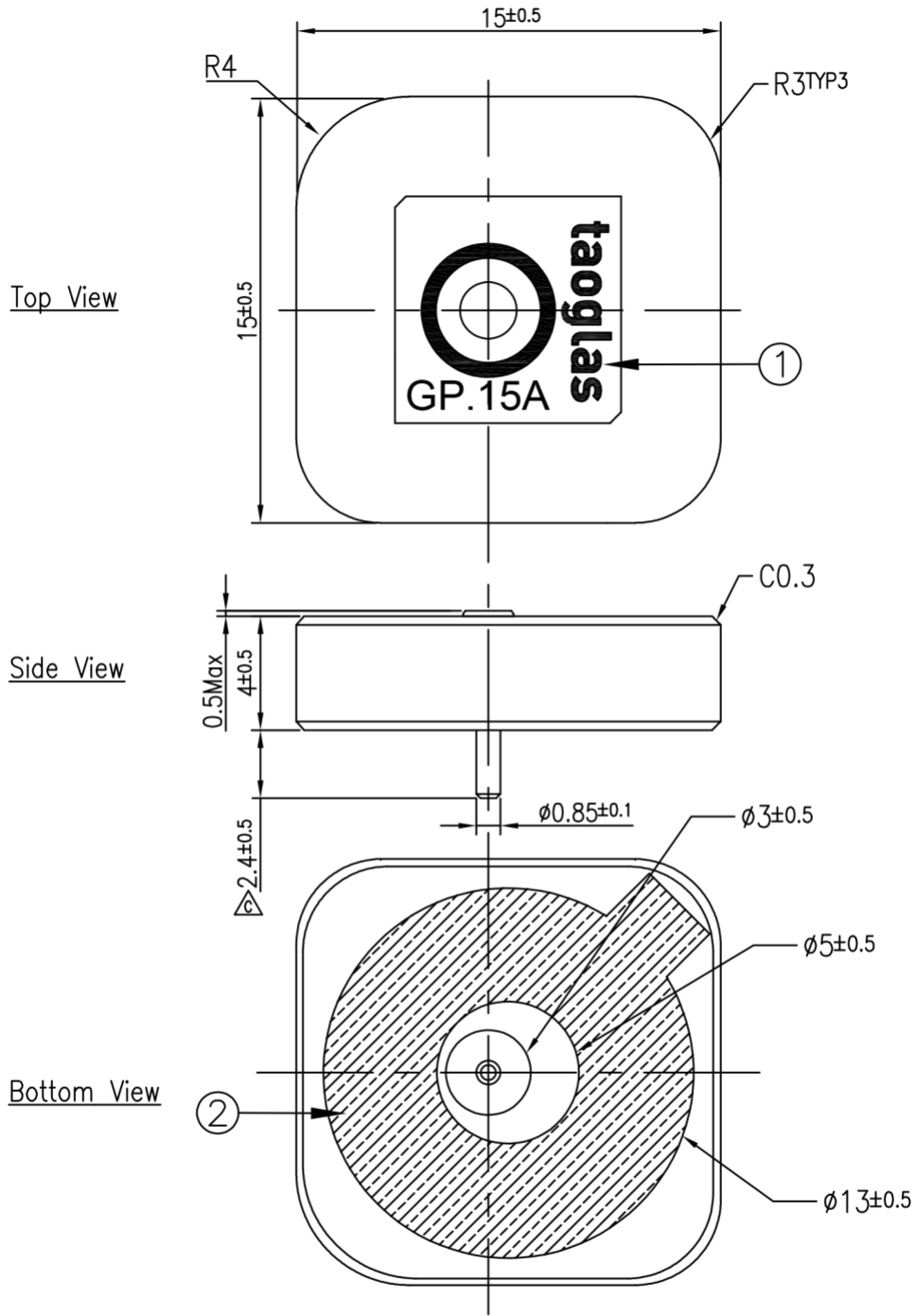| No	Parameter	Specification	Notes
1	Range of Receiving Frequency	1575.42 MHz ± 1.023 MHz	
2	Center Frequency	1578 ± 2MHz	With 66x52.5mm ground plane
3	Bandwidth	6 MHz min	Return Loss <-10 dB
4	VSWR	1.5 max	Center Frequency
5	Gain at Zenith	1.0 dBic typ.	
6	Gain at 10°elevation	- -	
7	Axial Ratio	3 dB max	
8	Polarization	RHCP	
9	Impedance	50 Ohms	
10	Frequency Temperature Coefficient（τf）	0 ± 20ppm / oC	-40ºC to +85ºC
11	Operating Temperature	-40°C to +85°C	

3. Electrical Specification

3.1. Smith Chart

4. Antenna Gain Chart (Spin Dipole Method)

5.Mechanical Drawing

Top View

15±0.5

R4

R3TYP3

15±0.5

taoglas

GP.15A

①

Side View

C0.3

0.5Max

4±0.5

⚠ 2.4±0.5 c

Ø0.85±0.1

Bottom View

②

Ø3±0.5

Ø5±0.5

Ø13±0.5

NOTES:
1. Double sided adhesive area. ▨
2. Soldermask area. ▮

	Name	P/N	Material	Finish	QTY
1	GP.1575 Patch	001517F060000A	Ceramic	Brown	1
2	Double sided Adhesive	001517F060000A	Tesa 4972	White Linter	1

5.1.Layout Dimension

Top Side

Bottom Side

Ø3 — Gound

Ø0.95 Thru hole

Ø2.5

Gound

Ø0.95 Thru hole

TOL:±0.20
UNIT:mm
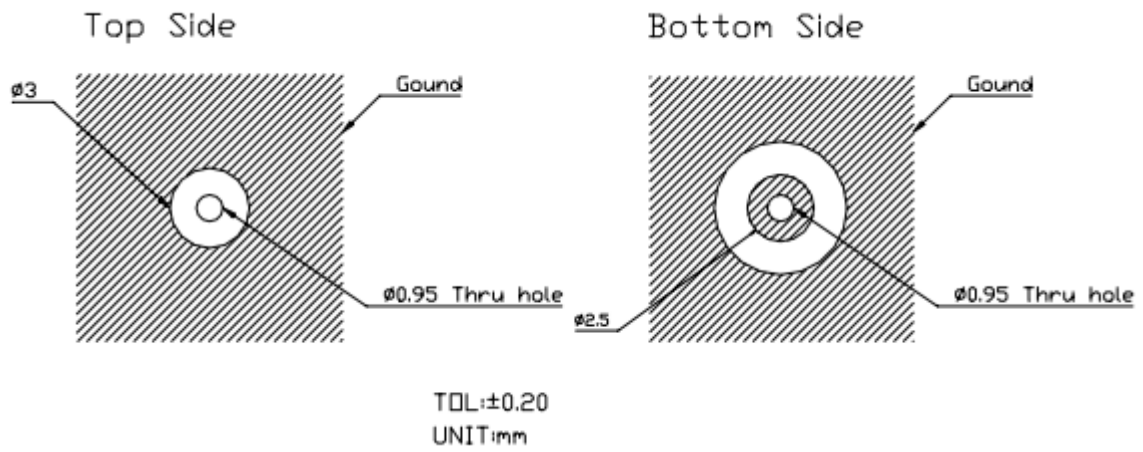
*Note Layout Dimensions may be affected by the thickness of the PCB

6.1Test Jig and Dimensions

0.8

66

Ø6.35

52.5
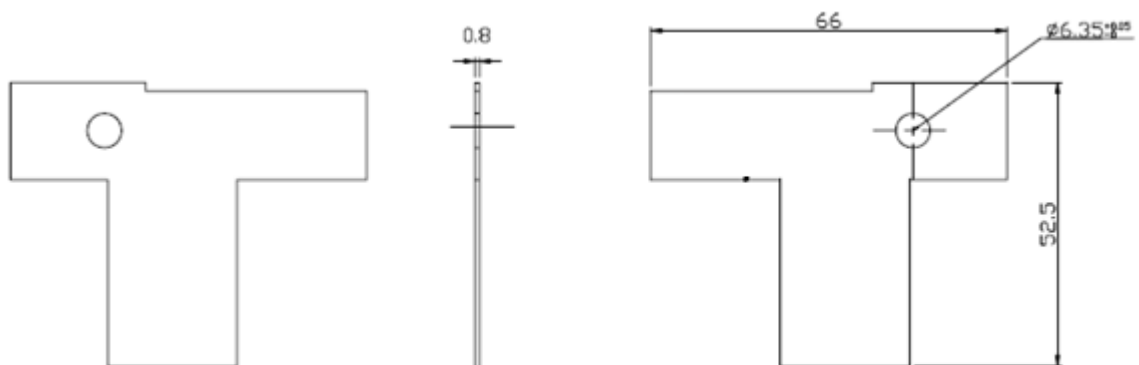
6.1.Test Fixture Antenna Setup & Measurements

Test Fixture

SMA Adapter

Ground Plane
66 by 52.5mm

Calibration Point

Antenna Setup & Measurements

Patch Antenna

Network Analyzer
S11 Characteristics
  :Log map
  :Smith Chart
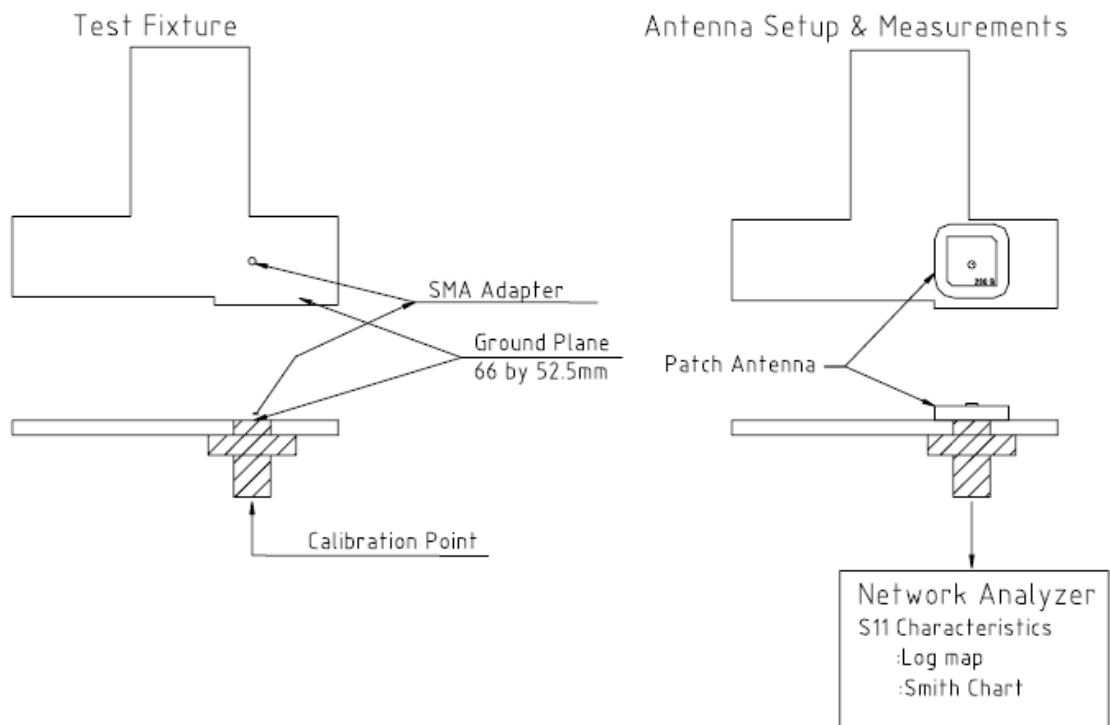
7.Packaging

Pieces per Inner Carton: 400

VACCUM

Antenna

Packing

96

263

154

Inside Box

DA package disassembly

exterior case

218

327

280

Inside Box

Outside Box

Shipping Label
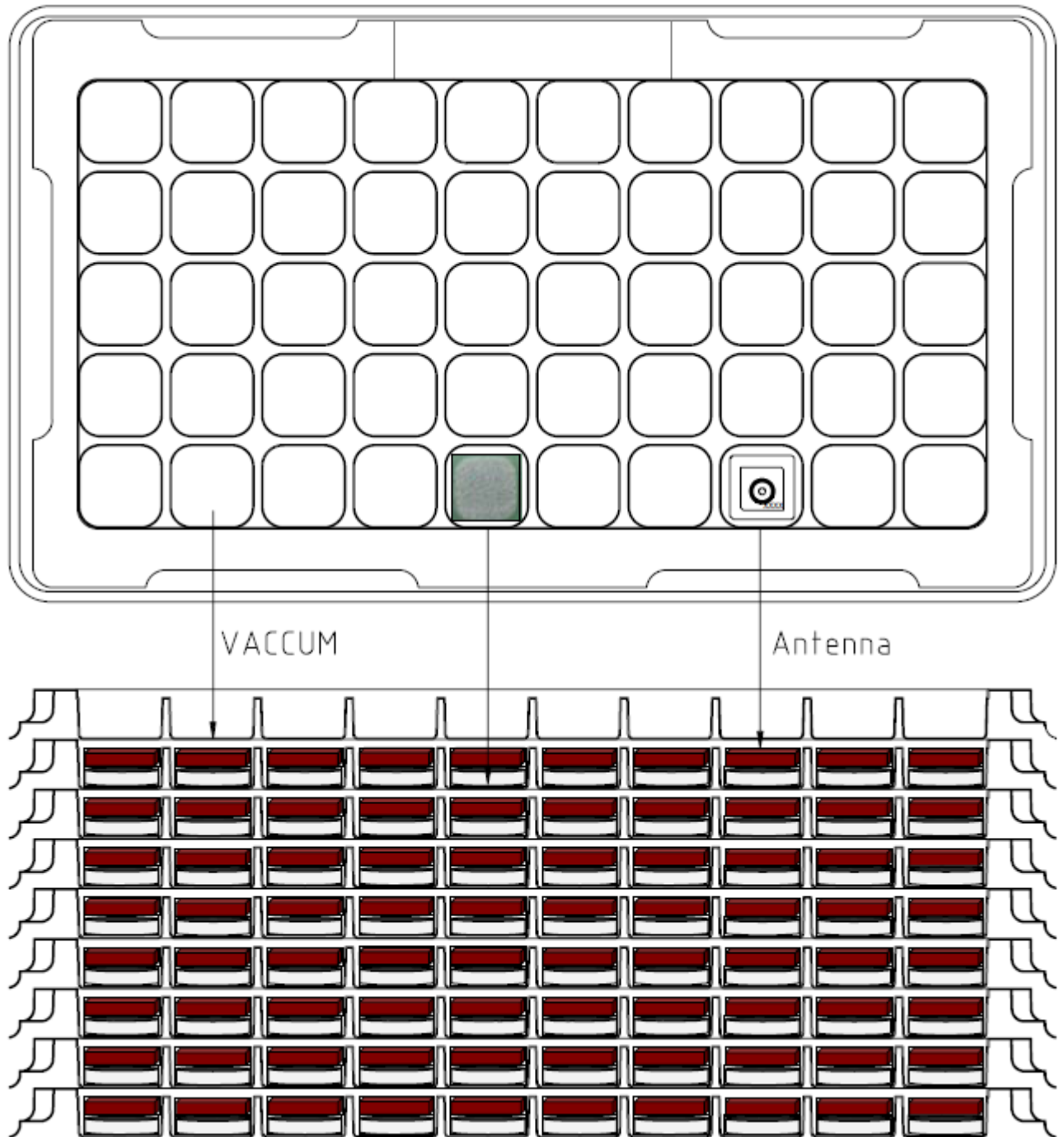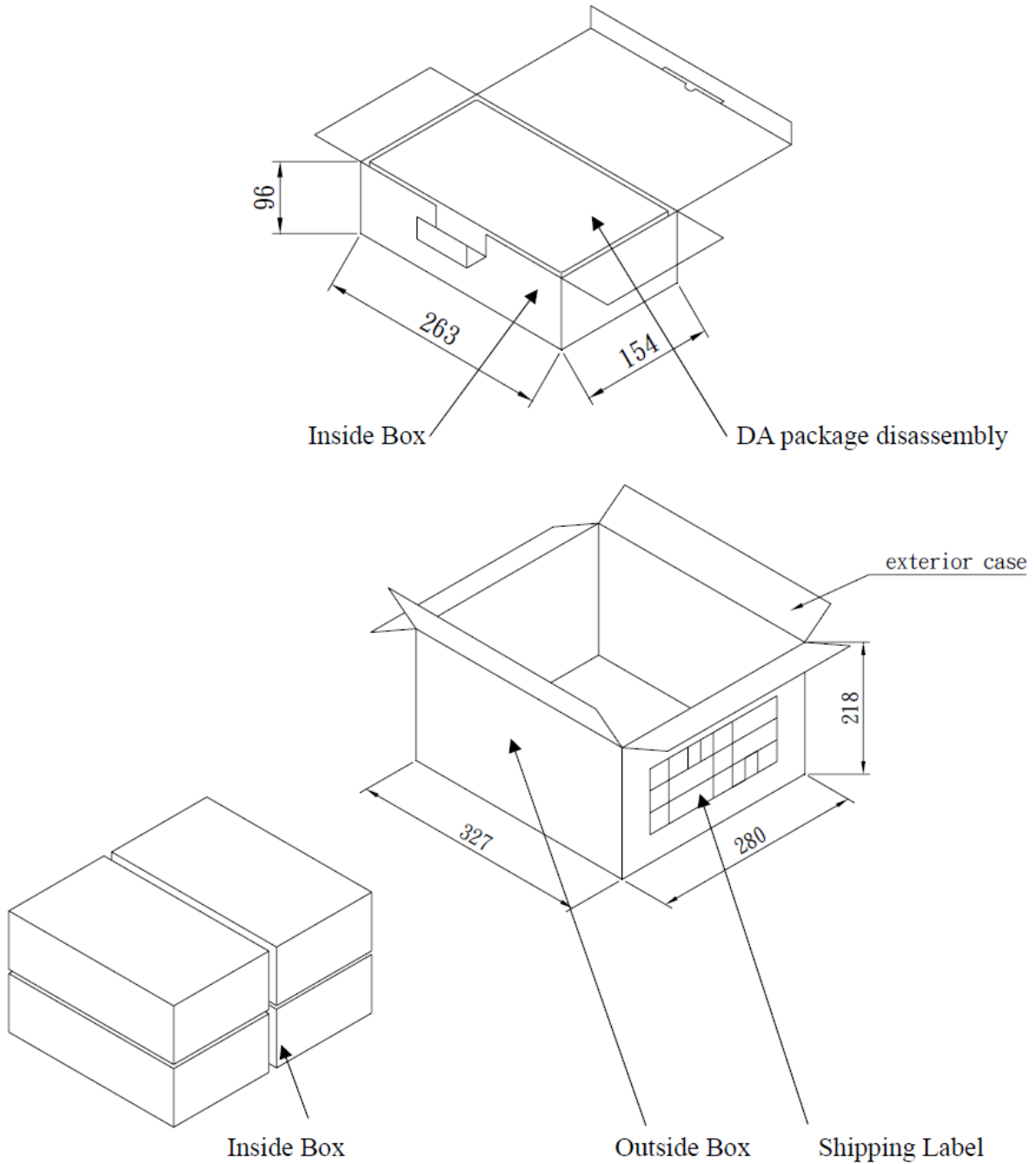
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