

Embedded SMD GNSS Antenna

● Features

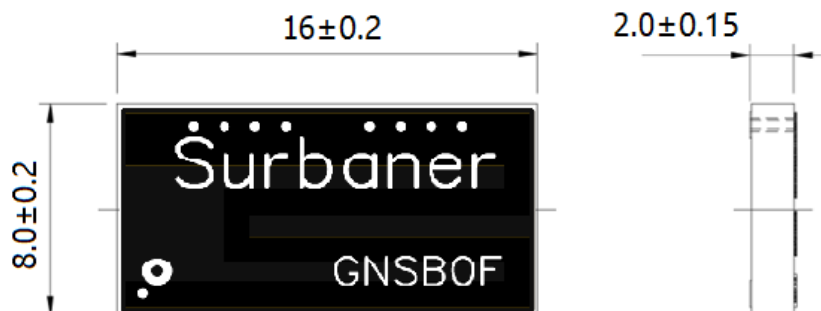
1. Surface Mounted Devices with a small dimension of 16.0mm x 8.0mm x 2.0mm meet future miniaturization trend.
2. Antenna for 1164-1249 MHz, 1559-1609 MHz and GNSS for embedded applications.
3. GNSS bands covered are GPS L1, L2, L5; GLONASS L1, L2, L3; Galileo E1, E5a/b; BeiDou B1I, B2I, B3, B2a; QZSS L1, L1C, L1S, L2C, L5
4. Designed for SMD mounting

● Applications

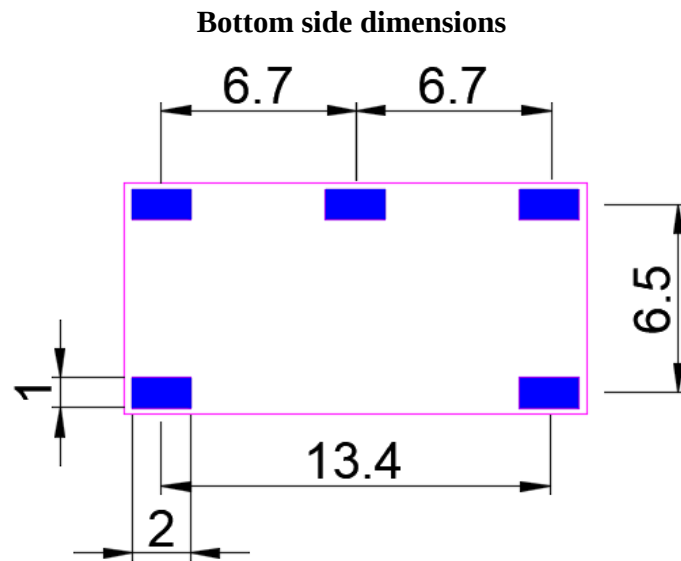
1. Vehicle Positioning
2. Handheld & Portable Devices
3. Trackers Devices
4. Wearable Devices



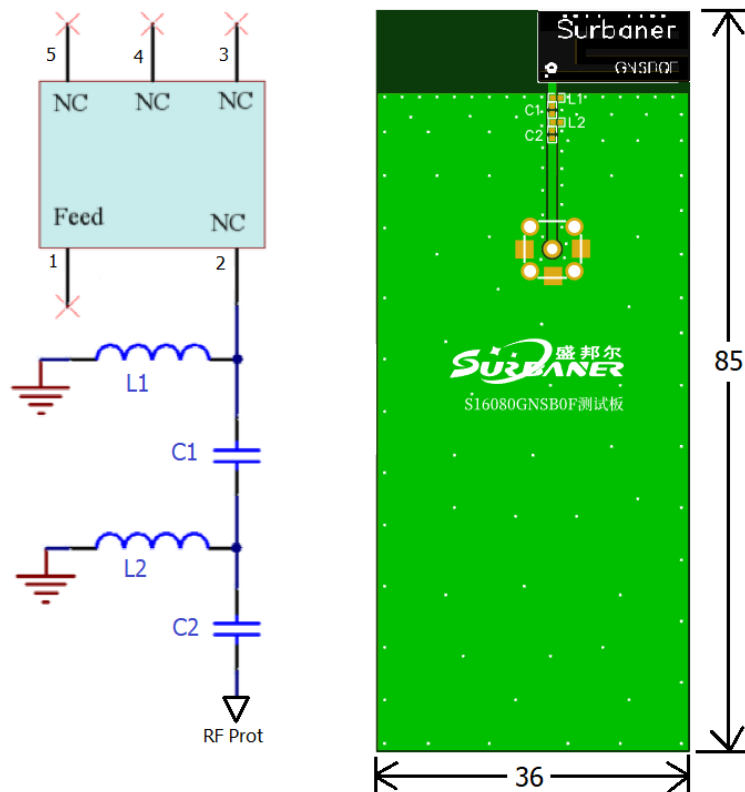
● Dimensions (Unit: mm)



L	W	H
Length	Width	Height
16.0±0.2	8.0±0.2	2.0±0.15



● Evaluation Board and Matching Circuits



● Electrical Characteristics

(1) 1164 MHz - 1278 MHz Band

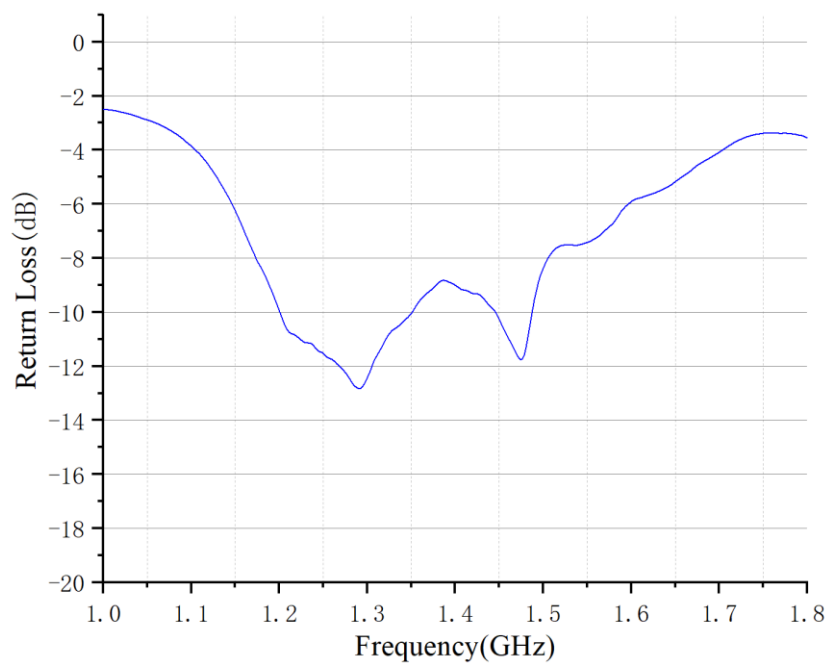
Item	Feature	Specification
1	Working Band	1164~1278 MHz
2	Peak gain	1.81dBi
3	VSWR	3.0 MAX
4	Polarization	Linear
5	Azimuth beamwidth	Omnidirectional
6	Impedance	50 Ω
NOTE: The specification is defined based on the test board dimension.		

(2) 1559 MHz - 1609 MHz Band

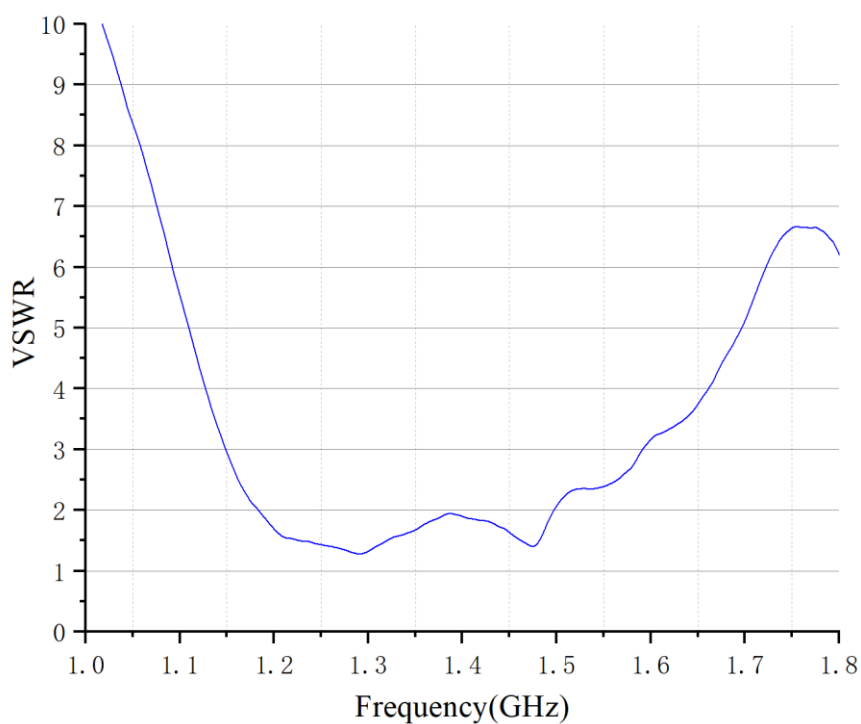
Item	Feature	Specification
1	Central frequency	1559~1609 MHz
2	Peak gain	0.21dBi
3	VSWR	4.0 MAX
4	Polarization	Linear
5	Azimuth beamwidth	Omnidirectional
6	Impedance	50 Ω
NOTE: The specification is defined based on the test board dimension.		

● RF-Parameter

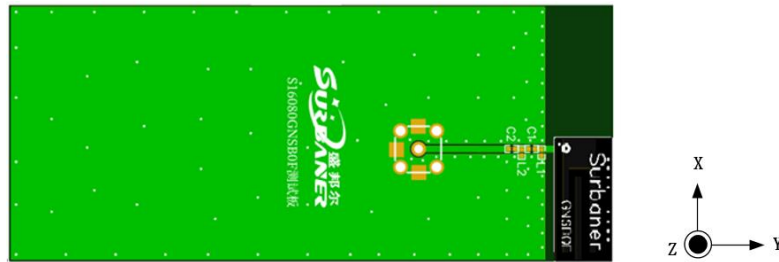
(1) Return Loss



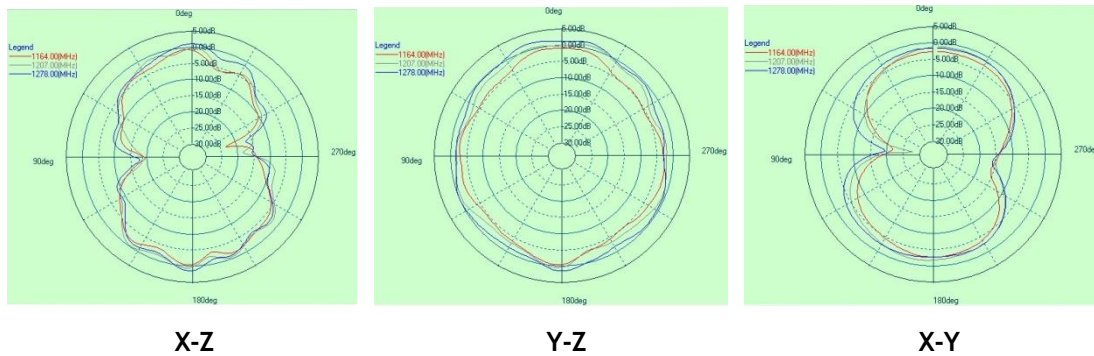
(2) VSWR



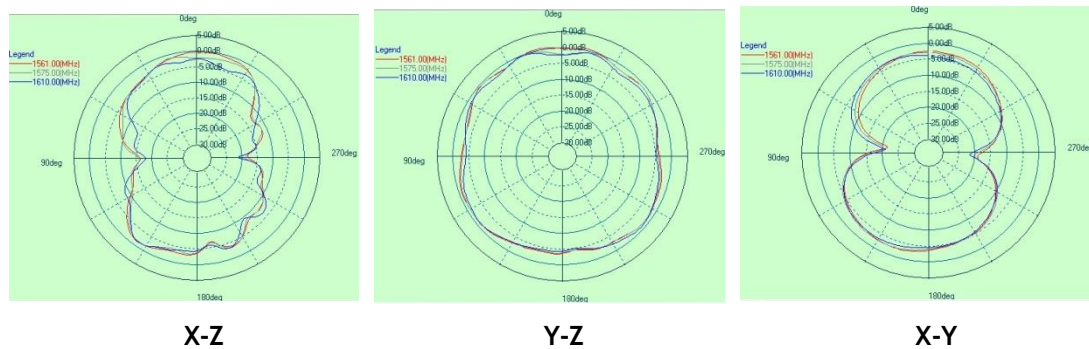
● Antenna Pattern



(1) 1164 MHz – 1278 MHz Band



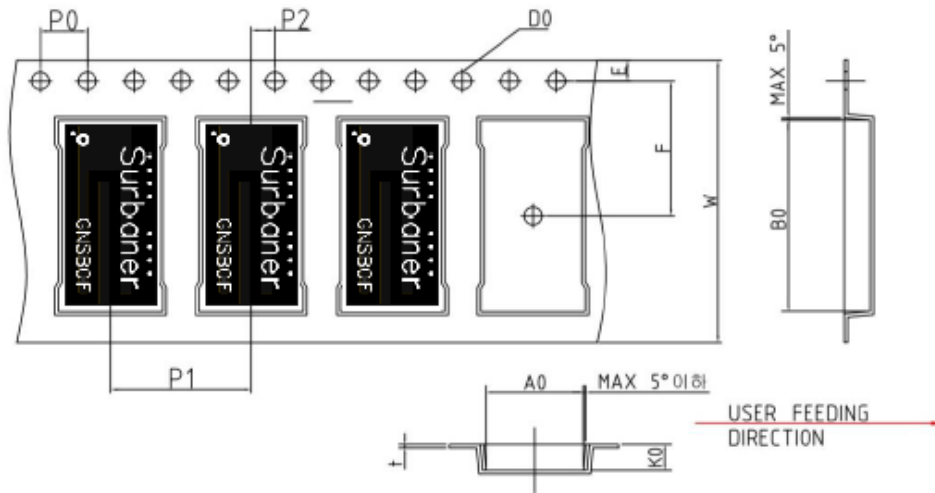
(2) 1561 MHz – 1610 MHz Band



● Dependability Test

Test Temperature	25°C±3°C
Operating Temperature	-25°C~+85°C
Temperature	-5°C~+40°C
Relative Humidity	20~70%HR

● Tape Characteristics

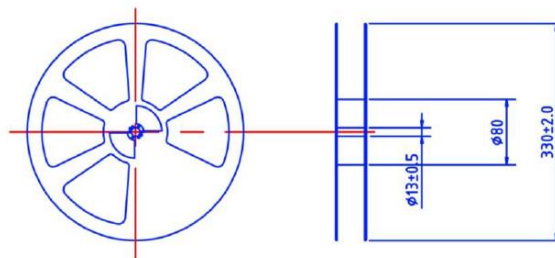


D0	A0	B0	P0	P1	P2
1.55±0.1	8.30±0.1	16.30±	4.00±0.1	12.00±0.1	2.00±0.1
E	F	W	K0	T	
1.75±0.1	11.50±0.1	24.00±0.3	2.25±0.1	0.3±0.05	
**Dimensions in mm					

Notes:

- 1) 10 Sprocket hole pitch cumulative tolerance = ±0.2
- 2) Camber not to exceed 1mm in 100mm
- 3) A0 and B0 measured on a plane 0.1mm above the bottom of the pocket.
- 4) K0 measured from a plane on the inside bottom of the pocket to the top surface of the carrier.

● Reel Dimensions



All dimensions in mm

Reel Dimension	Type	Color	Size	Hub
	PS	Black	φ330	φ80