



HANGZHOU SAPPLAND MICROELECTRONICS TECHNOLOGY CO., LTD

SAW Device Preliminary Data Sheet

Band 66 Duplexer / Unbalanced /1814

PN: **SPSD66SU11A**

Rev: 0.2

Feature:

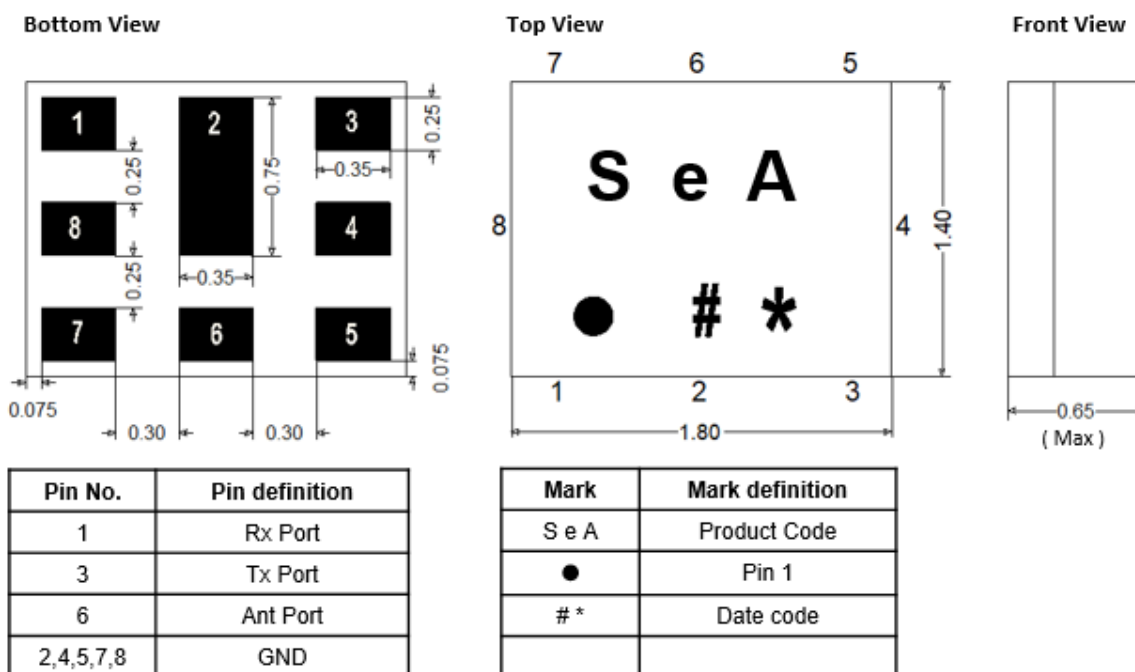
- low insertion loss
- high isolation between Tx and Rx

1.Revision History

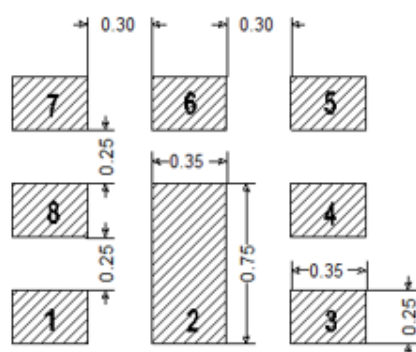
Revision	Date	Comments
0.1	Jun -14-2024	Initial release
0.2	Aug-30-2024	Update performance, packing Qty'

2.Package and Pin map

Package Dimensions(Unit: mm)



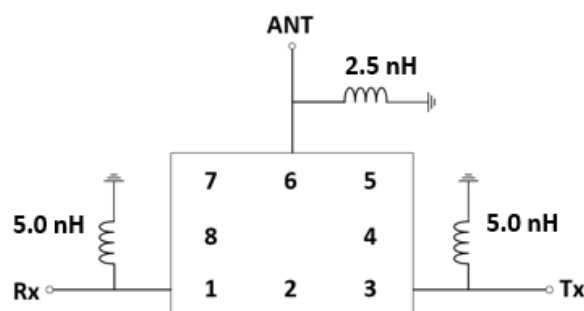
Recommended Land Pattern(Unit: mm)



Notes:

- 1, All dimensions are in millimeters
- 2, This drawing specifies the mounting pattern modification may be necessary to suit end user used on the Sappland evaluation board for this assembly material and process.

Application circuit (with ideal components)



3. Performance

3.1 Absolute maximum ratings

Item	Rating	Note
Storage Temperature	-40 ~ 85 °C	
Operating Temperature	-30 ~ 85 °C	
Input Power Max	29 dBm	CW,5000h,50°C
D.C Voltage between the terminals	3 V	25±2deg.C

3.2 Electrical specification

Tx Electrical specification (-30 to +85 °C)

TX to ANT		Characteristics			Unit	Note
		min	Typ. ¹	max		
Center Frequency		-	1745.00	-	MHz	
Insertion Loss	1710.00 ~ 1780.00 MHz		1.9	2.6	dB	
Amplitude ripple	1710.00 ~ 1780.00 MHz		0.9	1.5	dB	
VSWR	1710.00 ~ 1780.00 MHz		1.6	2.1	-	Tx
	1710.00 ~ 1780.00 MHz		1.6	2.1	-	ANT
Absolute attenuation	10.00 ~ 728.00 MHz	45	50		dB	
	699.00 ~ 716.00 MHz	45	50		dB	
	704.00 ~ 716.00 MHz	45	50		dB	
	777.00 ~ 787.00 MHz	40	50		dB	
	824.00 ~ 849.00 MHz	40	48		dB	
	1226.00 ~ 1250.00 MHz	35	40		dB	
	1559.00 ~ 1607.00 MHz	35	40		dB	
	1805.00 ~ 1880.00 MHz	-	9		dB	
	2110.00 ~ 2200.00 MHz	40	43		dB	
	2350.00 ~ 2360.00 MHz	30	39		dB	
	2400.00 ~ 2500.00 MHz	30	37		dB	
	2440.00 ~ 2494.00 MHz	30	37		dB	
	2500.00 ~ 2570.00 MHz	30	37		dB	
	3410.00 ~ 3560.00 MHz	20	28		dB	
	3300.00 ~ 3800.00 MHz	15	21		dB	
	3300.00 ~ 4200.00 MHz	5	11		dB	
	4400.00 ~ 5000.00 MHz	5	10		dB	
	4900.00 ~ 5950.00 MHz	5	12		dB	

1) Typical value at 25±2deg.C

Rx Electrical specification (-30 to +85 °C)

ANT to RX		Characteristics			Unit	Note
		min	Typ. ¹	max		
Center Frequency		-	2155.00	-	MHz	
Insertion Loss	2110.00 ~ 2170.00 MHz		2.4	2.9	dB	
	2110.00 ~ 2200.00 MHz		2.5	3.3	dB	
Amplitude ripple	2110.00 ~ 2200.00 MHz		0.9	2.0	dB	
VSWR	2110.00 ~ 2200.00 MHz		1.7	2.1	-	Rx
	2110.00 ~ 2200.00 MHz		1.7	2.1	-	ANT
Absolute attenuation	10.00 ~ 1710.00 MHz	40	45		dB	
	400.00 ~ 400.00 MHz	45	55		dB	
	699.00 ~ 716.00 MHz	45	55		dB	
	777.00 ~ 787.00 MHz	45	55		dB	
	824.00 ~ 849.00 MHz	45	55		dB	
	1710.00 ~ 1780.00 MHz	40	50		dB	
	2305.00 ~ 2315.00 MHz	40	50		dB	
	2400.00 ~ 2500.00 MHz	30	36		dB	
	3300.00 ~ 3800.00 MHz	25	30		dB	
	3820.00 ~ 3910.00 MHz	25	35		dB	
	3300.00 ~ 4200.00 MHz	25	29		dB	
	4220.00 ~ 4310.00 MHz	25	30		dB	
	4400.00 ~ 5000.00 MHz	10	19		dB	
	4900.00 ~ 5950.00 MHz	5	12		dB	

1) Typical value at 25±2deg.C

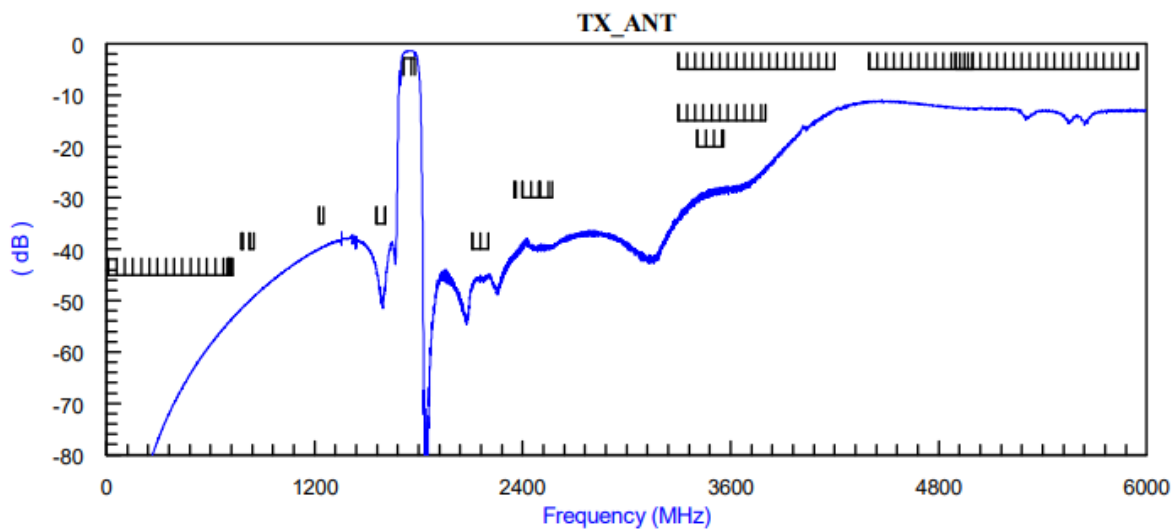
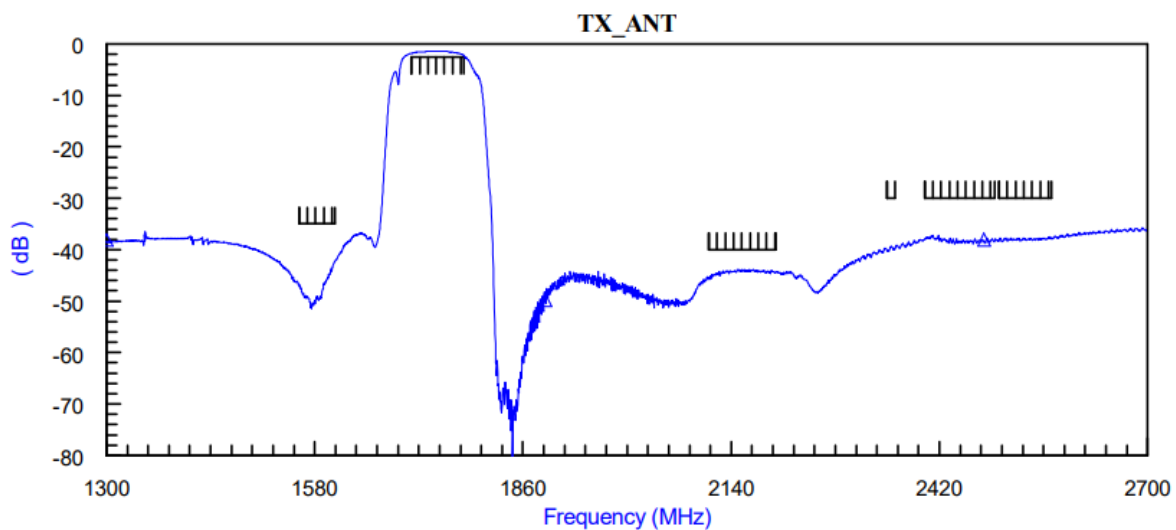
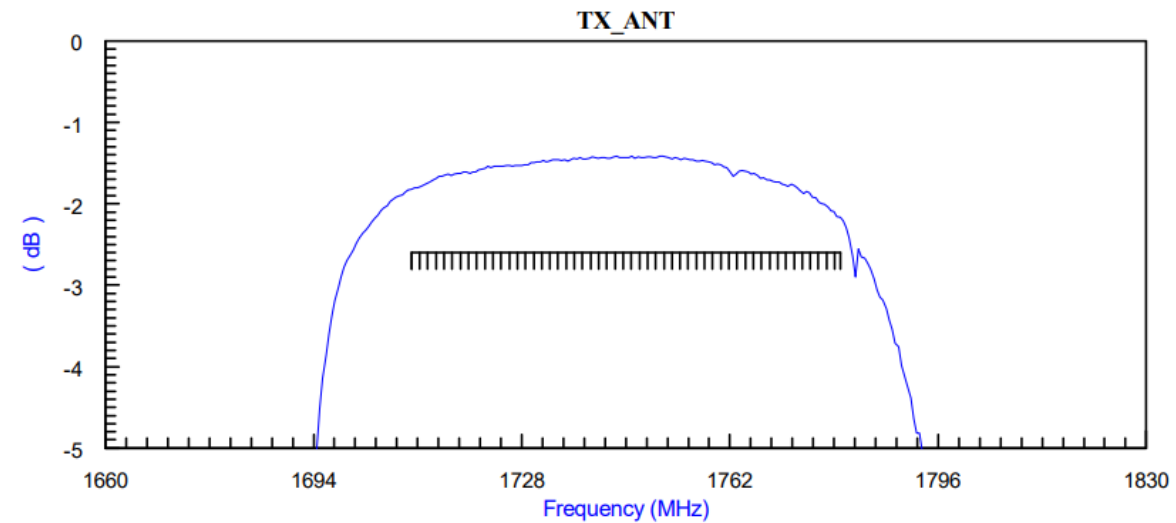
Tx/Rx Electrical specification (-30 to +85 °C)

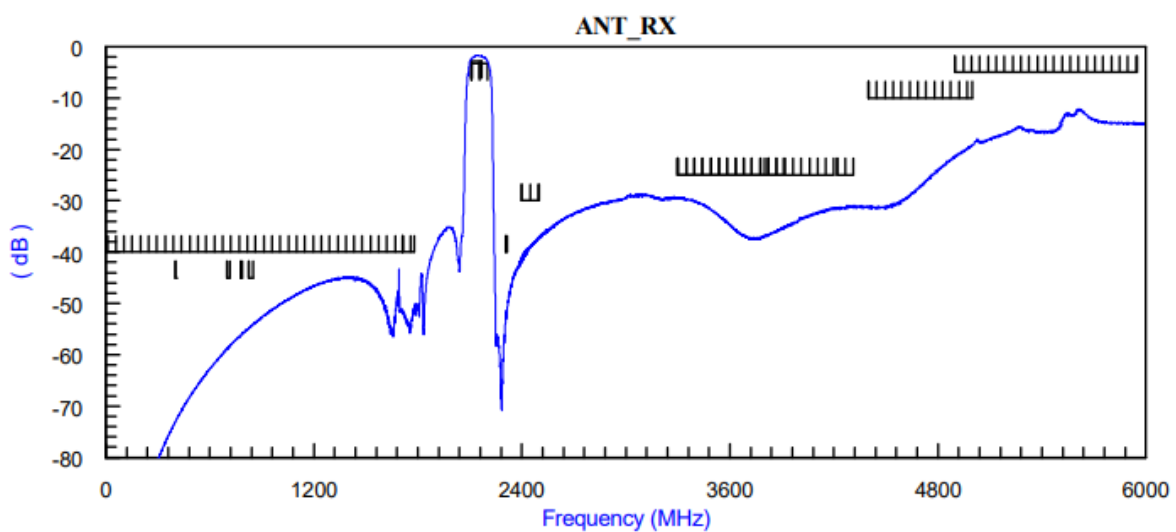
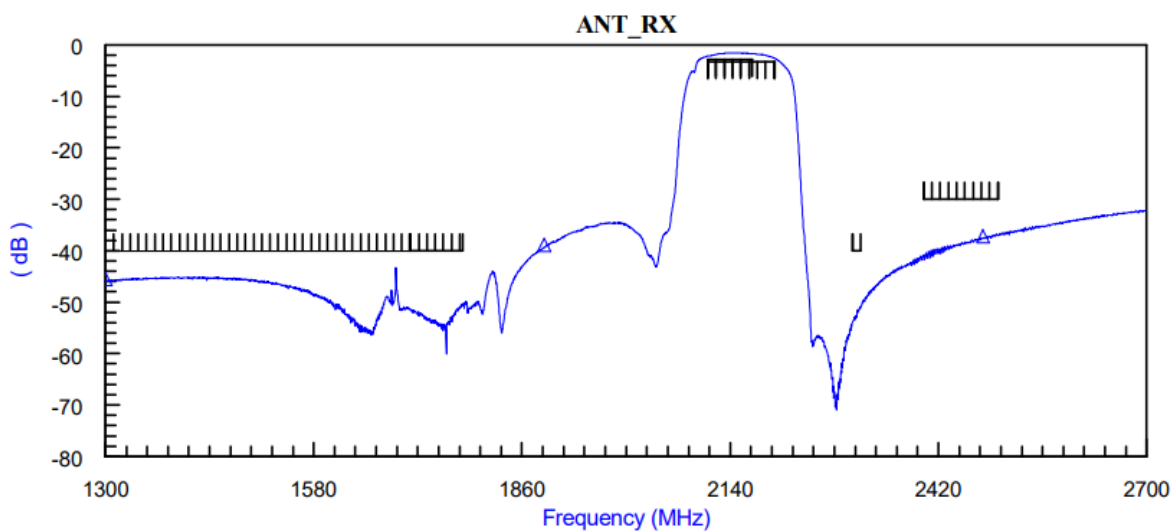
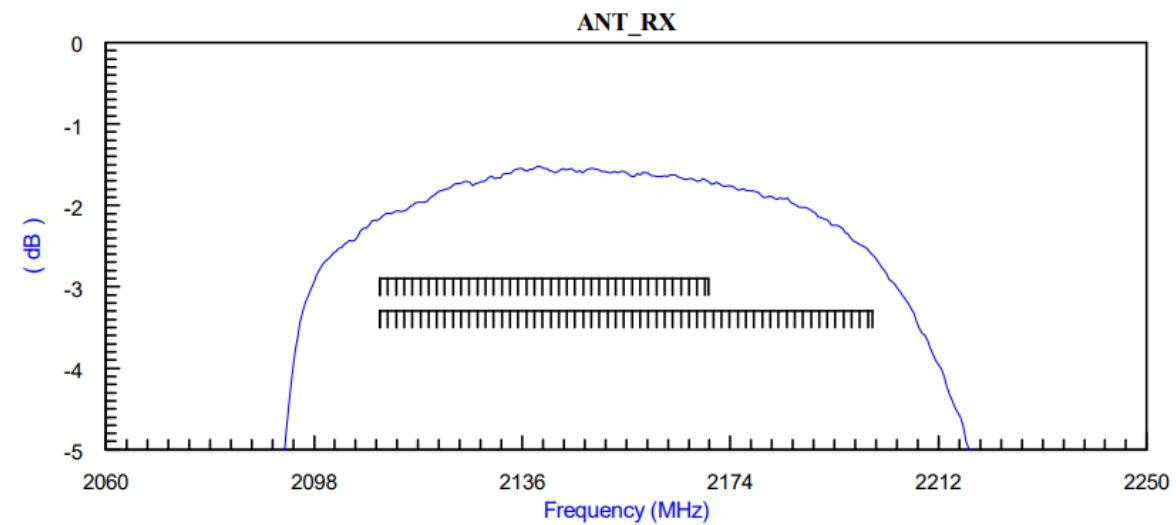
TX / RX		Characteristics			Unit	Note
		min	Typ. ¹	max		
Isolation	1710.00 ~ 1780.00 MHz	50	53		dB	
	2110.00 ~ 2200.00 MHz	50	55		dB	

1) Typical value at 25±2deg.C

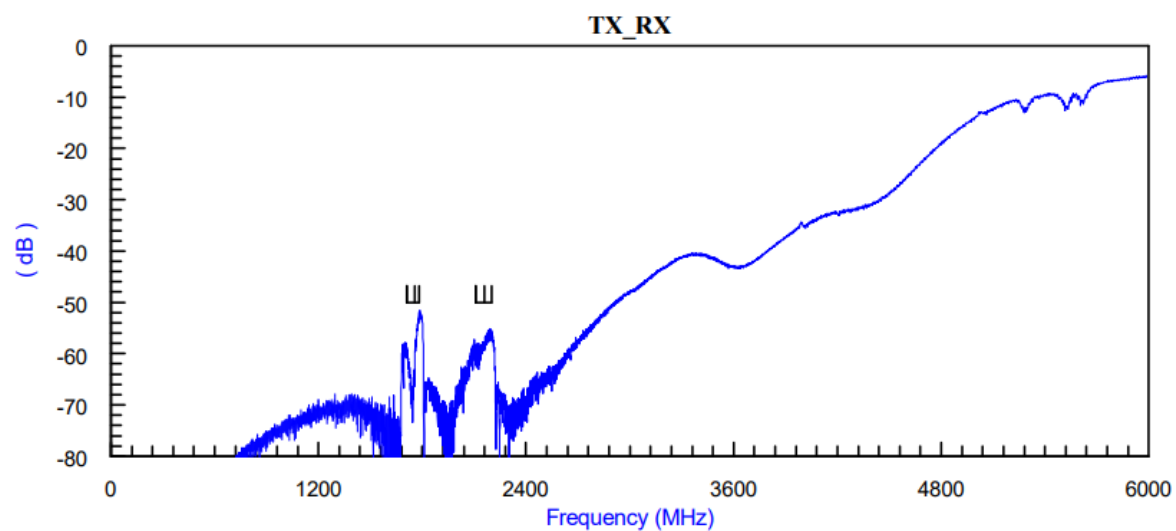
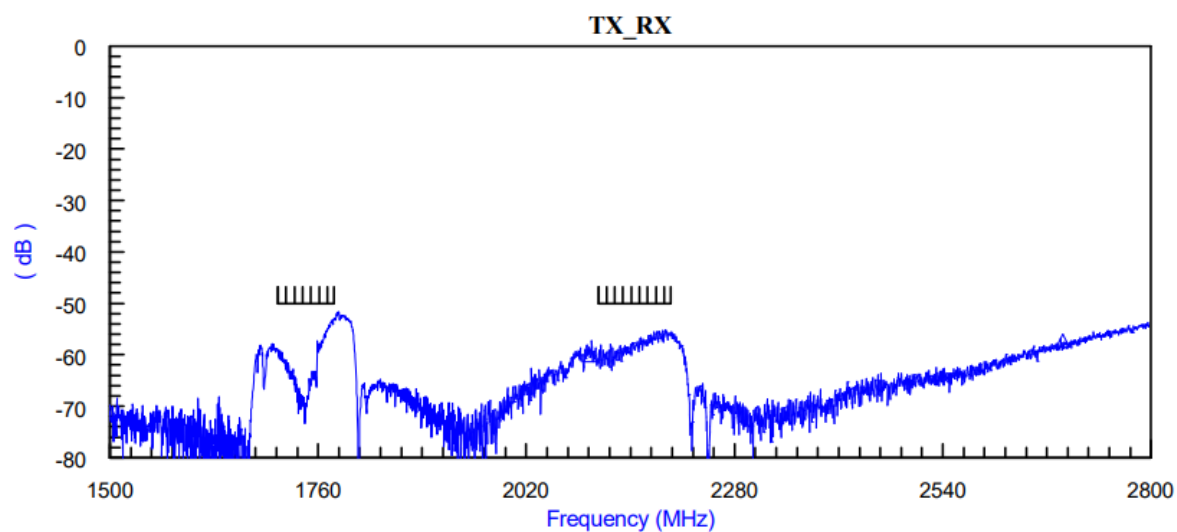
3.3 Plots

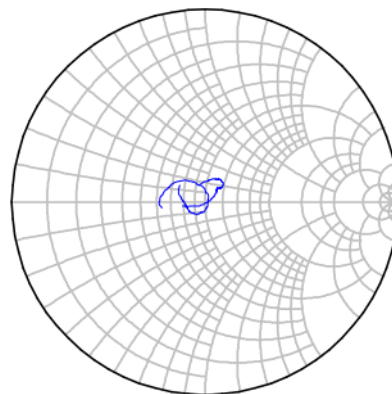
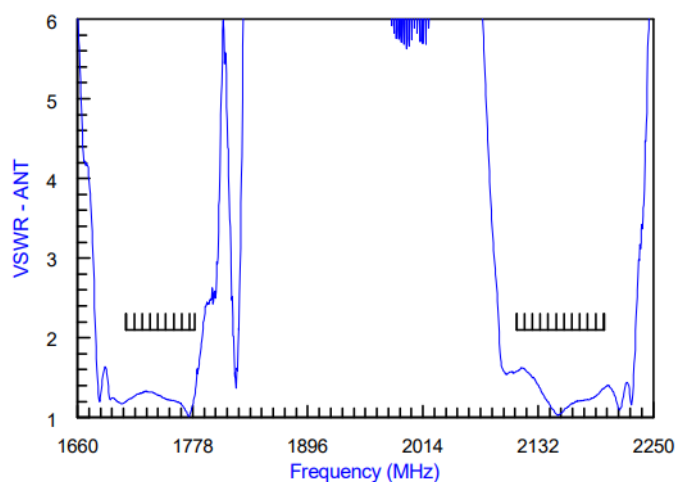
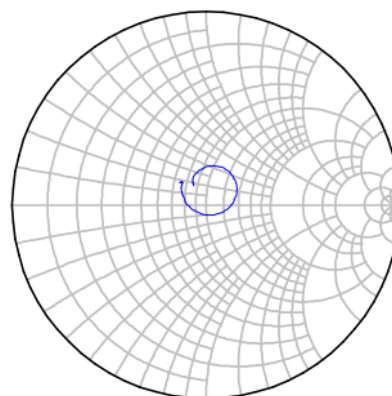
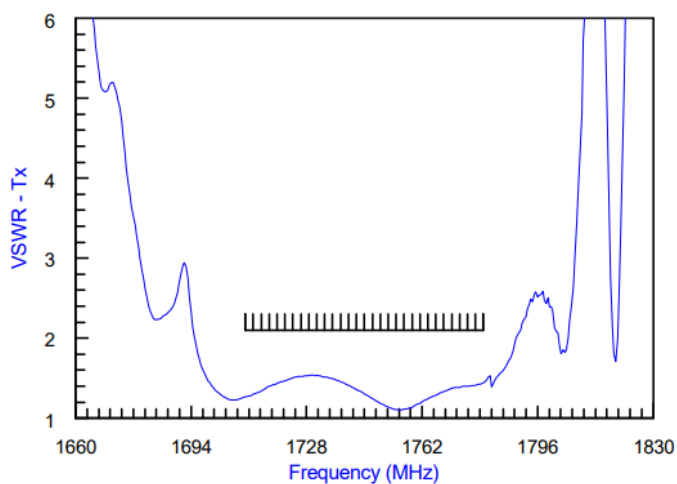
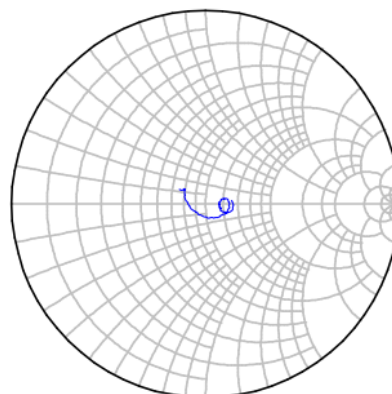
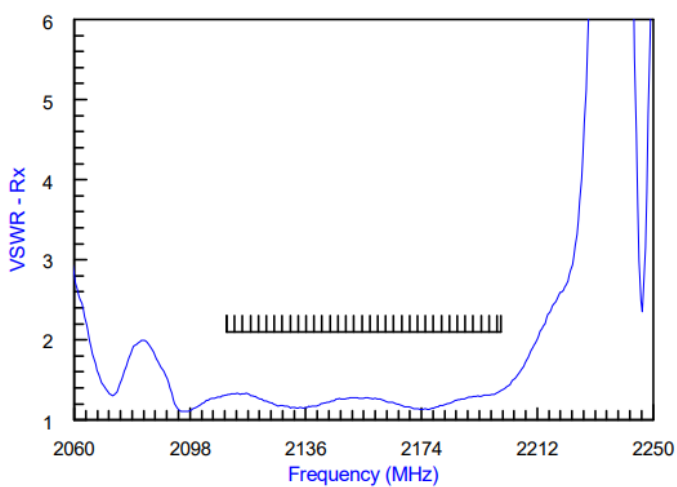
Tx - Ant



Ant – Rx

Tx – Rx



Ant – VSWR / Impedance**Tx – VSWR / Impedance****Rx – VSWR / Impedance**

4.Packing Information

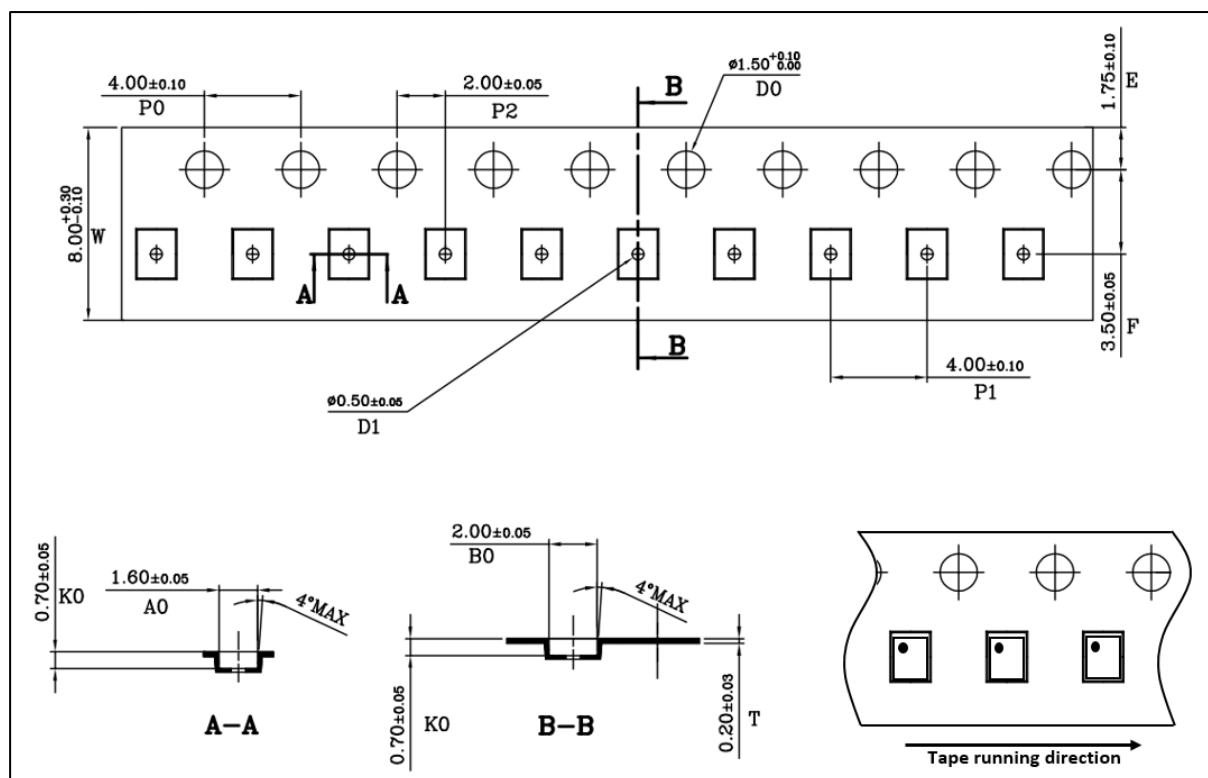


Figure 4-1 Carrier Tape Drawing (unit: mm)

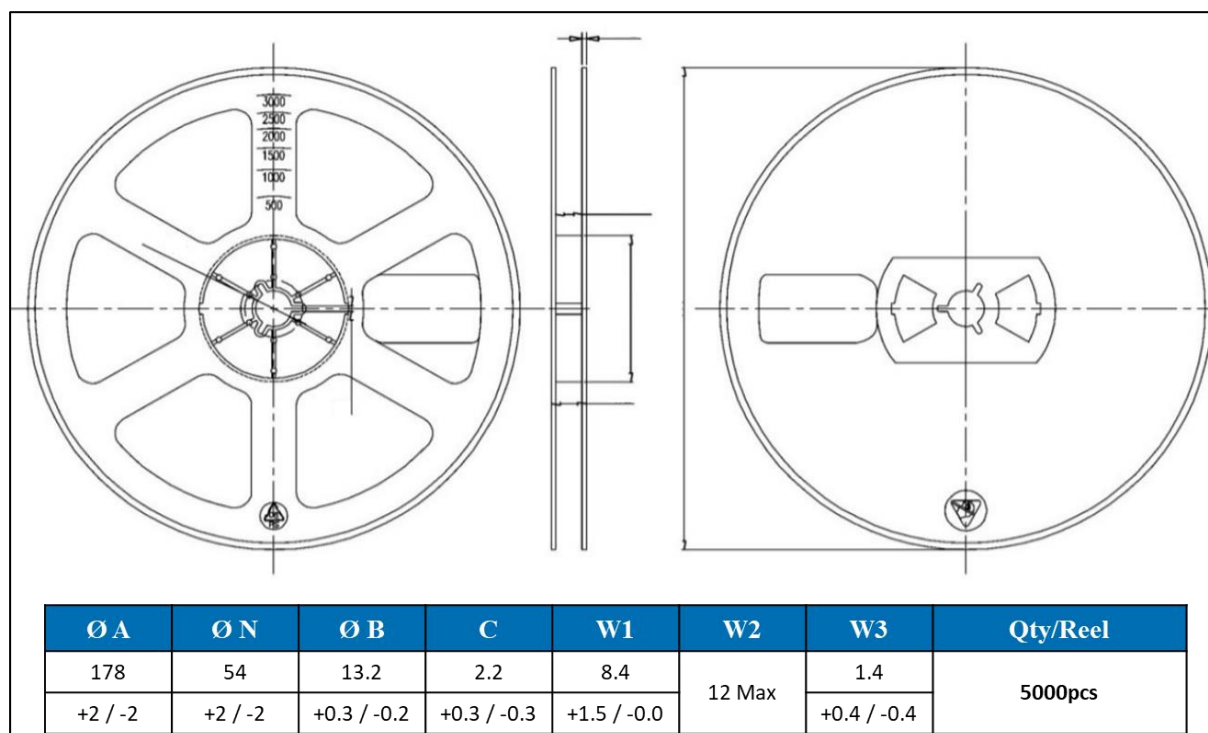


Figure 4-2 Reel Dimensions (Unit: mm) and Reeling Qty'