



HANGZHOU SAPPLAND MICROELECTRONICS TECHNOLOGY CO., LTD

SAW Device Preliminary Data Sheet

Band 66 Duplexer / Unbalanced /1612

PN: **SPSD66SU11F**

Rev: 0.1

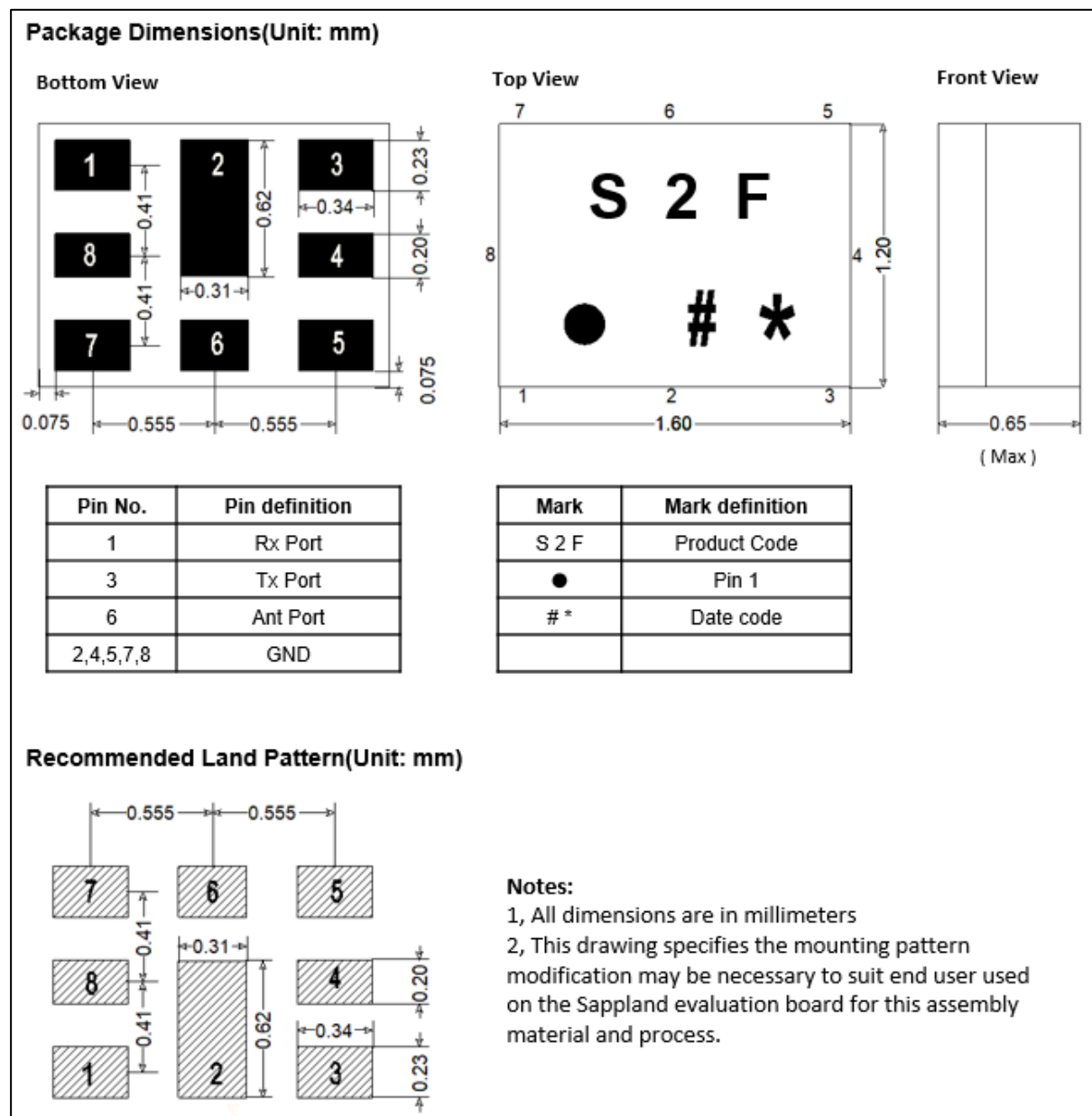
Feature:

- low insertion loss
- high isolation between Tx and Rx

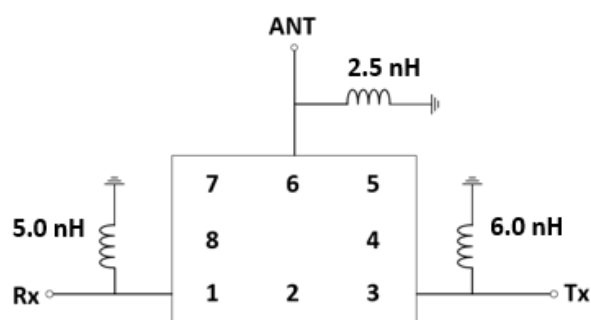
1.Revision History

Revision	Date	Comments
0.1	Aug-24-2024	Initial release

2.Package and Pin map



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		2.0	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	52		dB	
	699.00 ~ 716.00 MHz	45	52		dB	
	704.00 ~ 716.00 MHz	45	52		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	42		dB	
	1805.00 ~ 1880.00 MHz	-	9		dB	
	2110.00 ~ 2200.00 MHz	40	45		dB	
	2350.00 ~ 2360.00 MHz	30	40		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	25	34		dB	
	3300.00 ~ 3800.00 MHz	20	28		dB	
	3300.00 ~ 4200.00 MHz	5	13		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		2.3	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	45	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	31		dB	
	3300.00 ~ 4200.00 MHz	25	29		dB	
	4220.00 ~ 4310.00 MHz	25	28		dB	
	4400.00 ~ 5000.00 MHz	10	19		dB	
	4900.00 ~ 5950.00 MHz	5	12		dB	

1) Typical value at 25±2deg.C

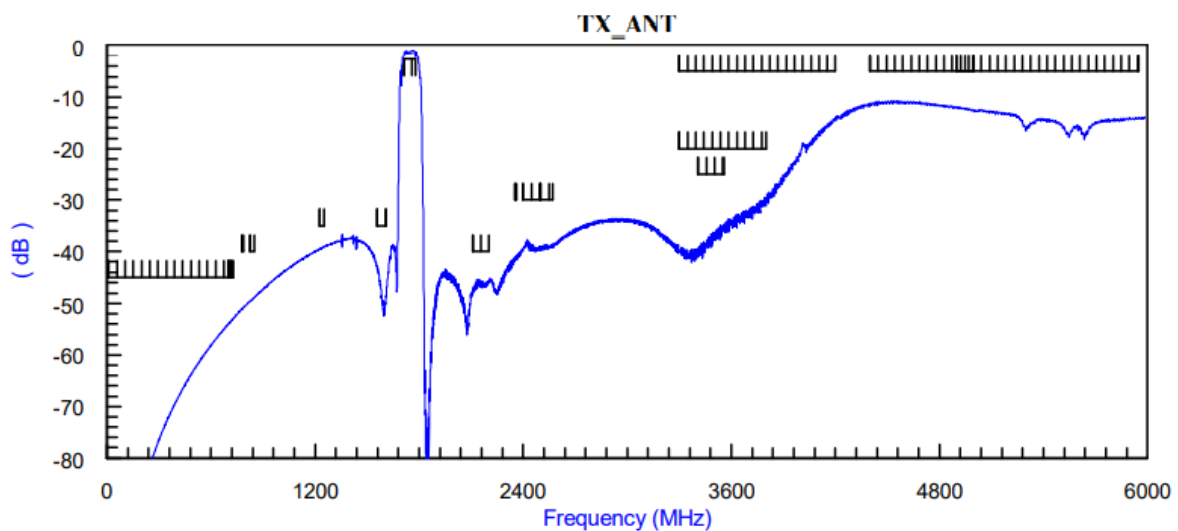
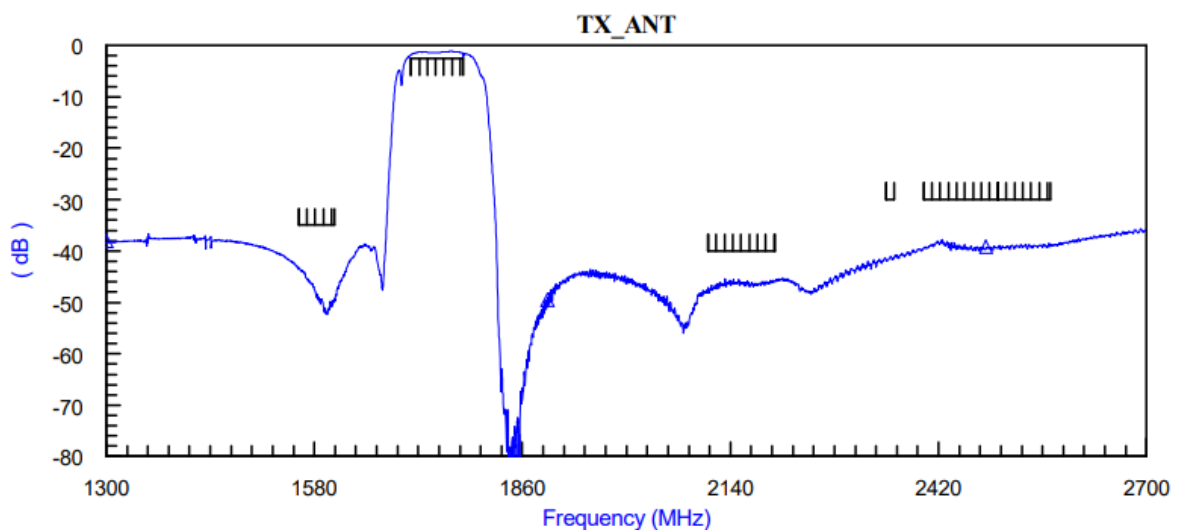
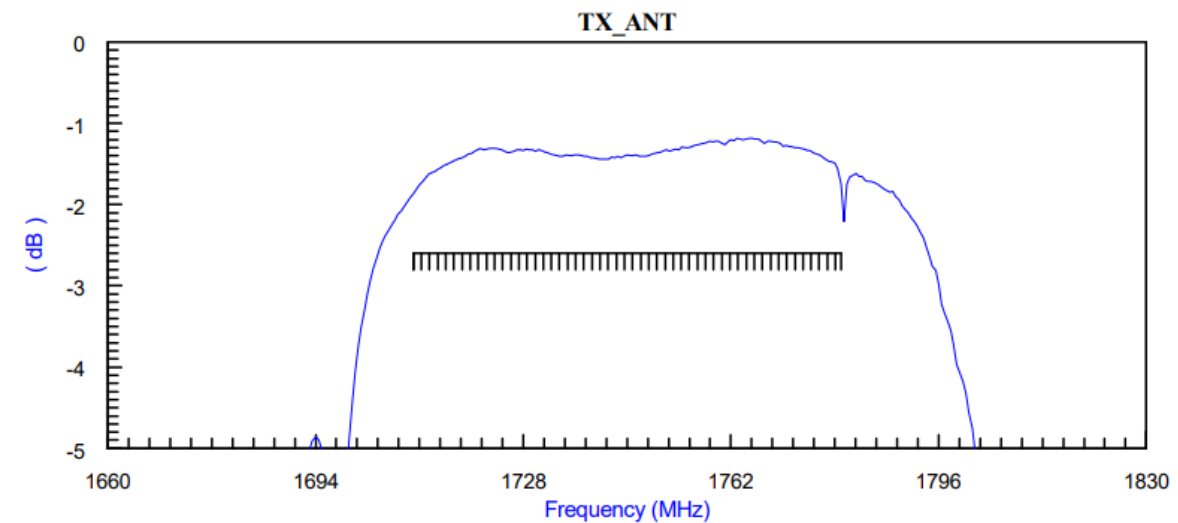
Tx/Rx Electrical specification (-30 to +85 °C)

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

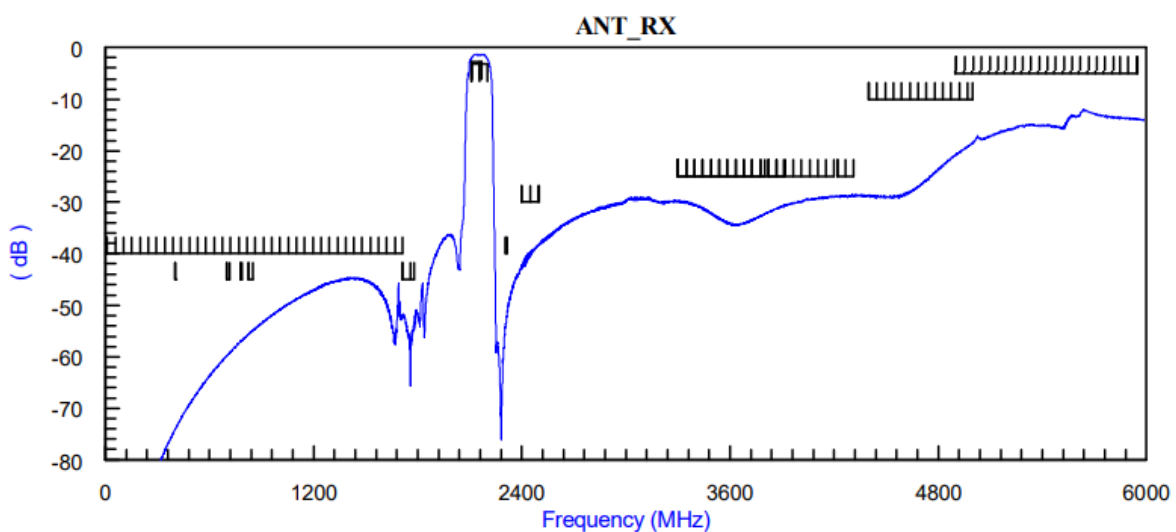
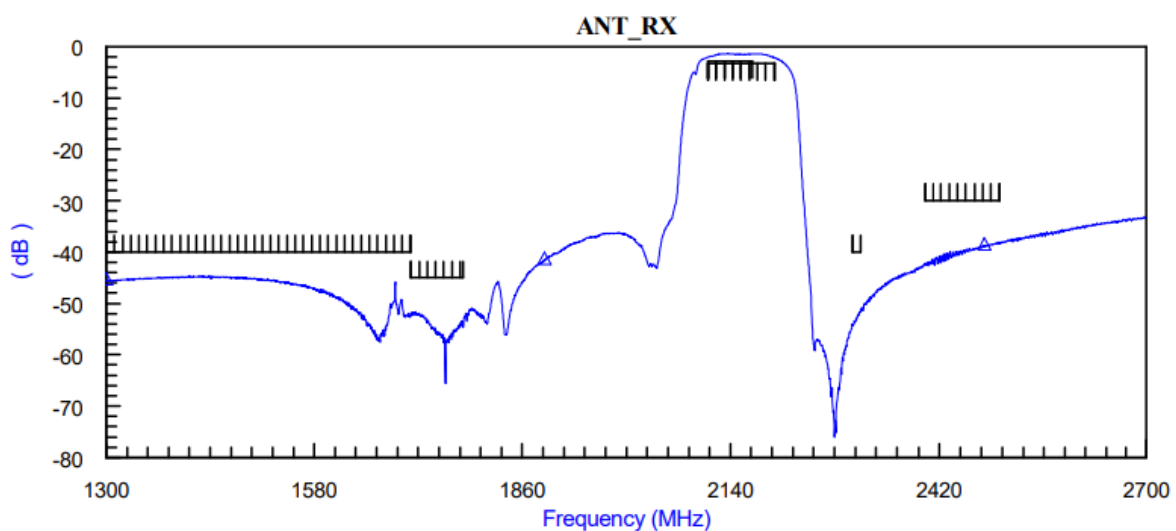
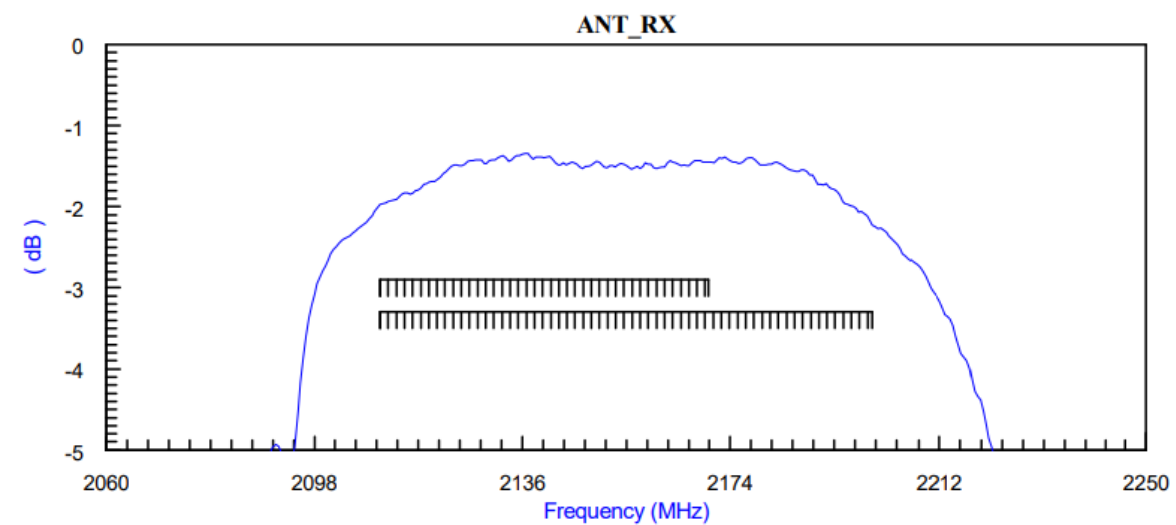
1) Typical value at 25±2deg.C

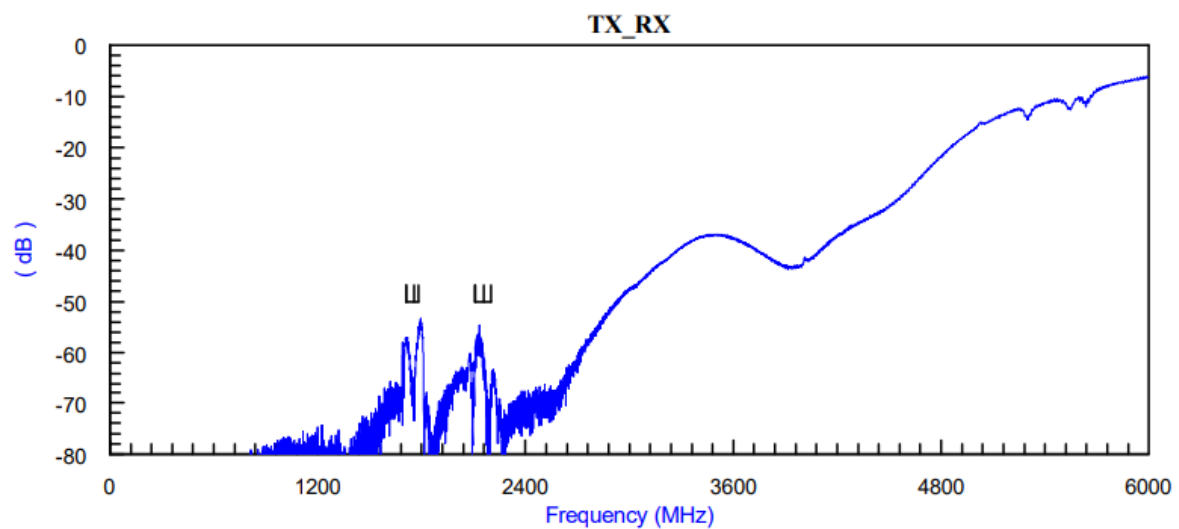
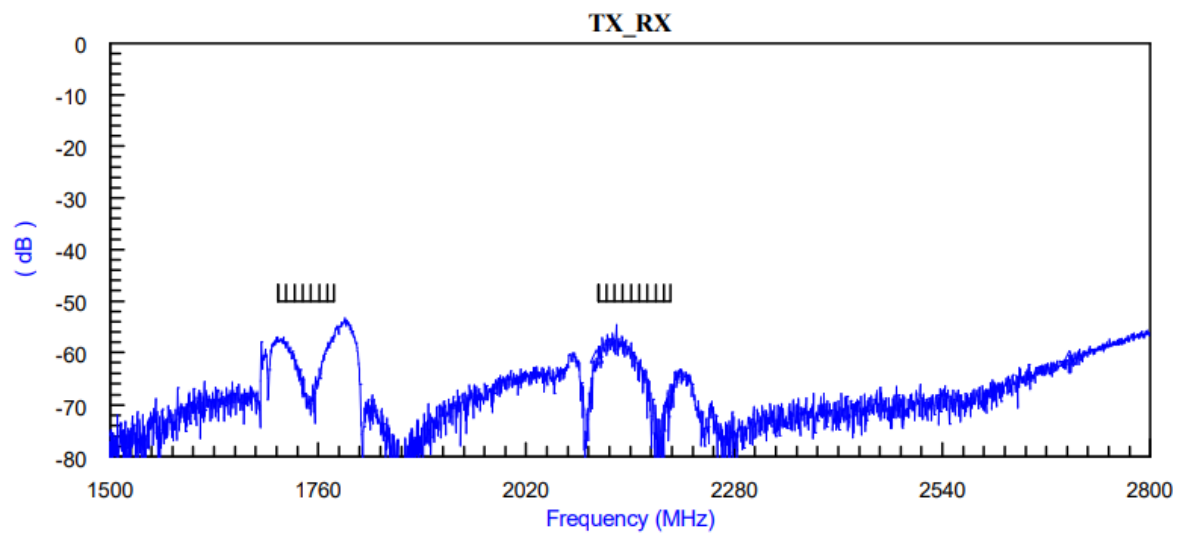
3.3 Plots

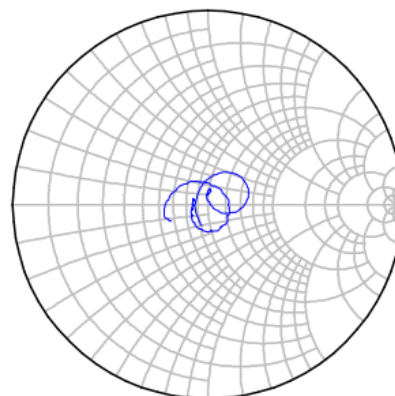
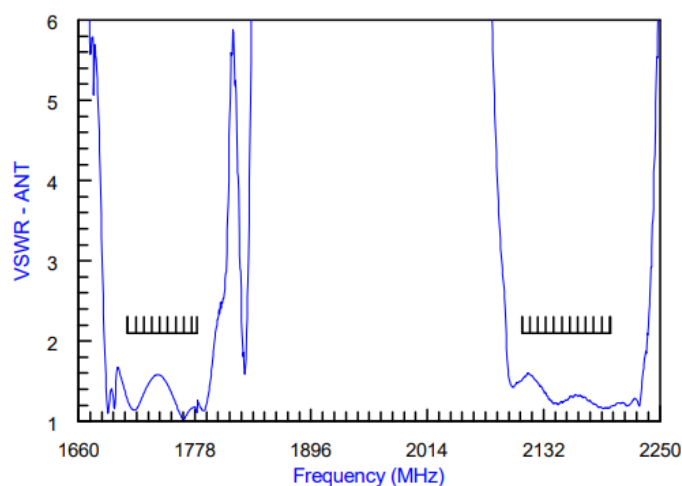
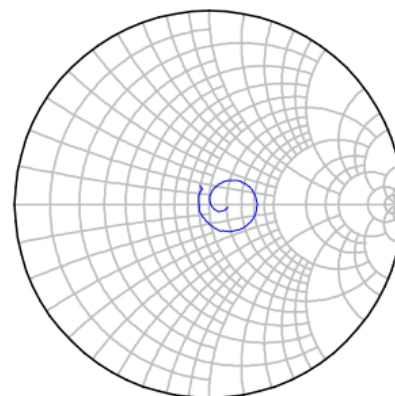
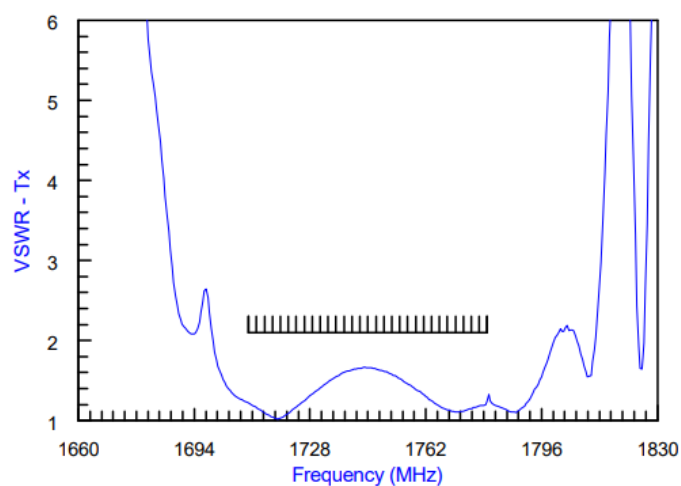
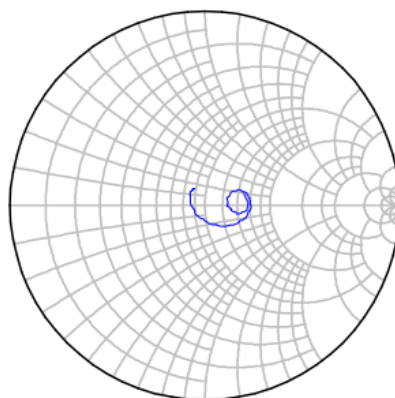
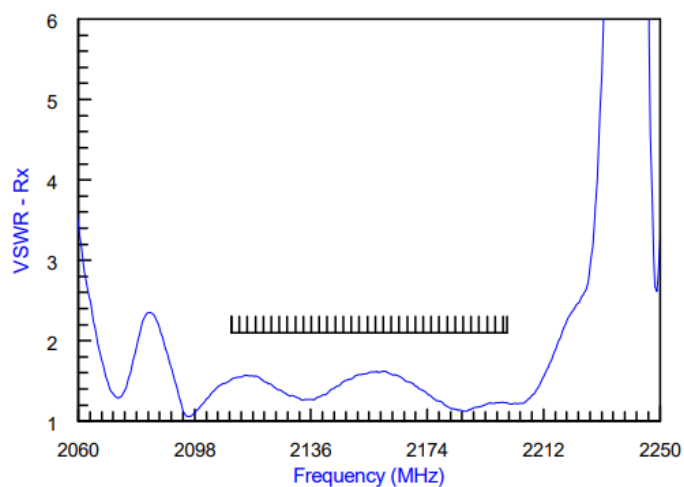
Tx - Ant



Ant – Rx



Tx – Rx

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

4.Packing Information

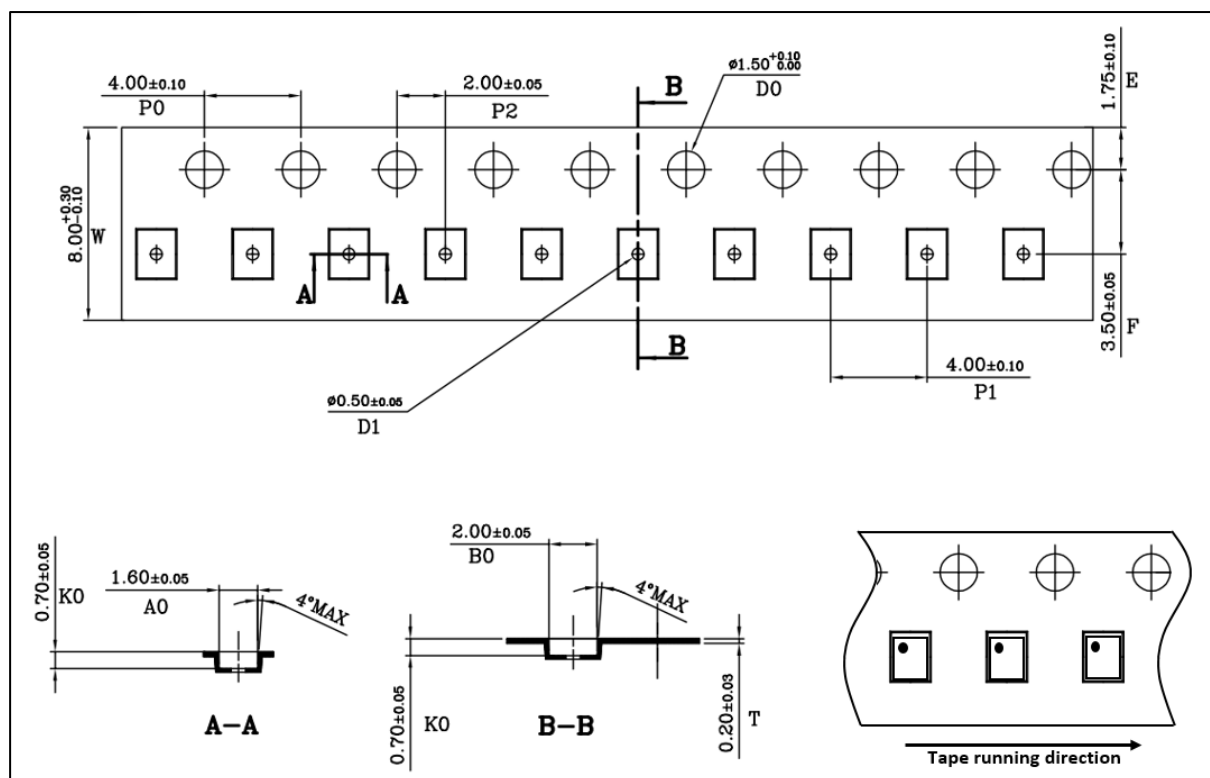
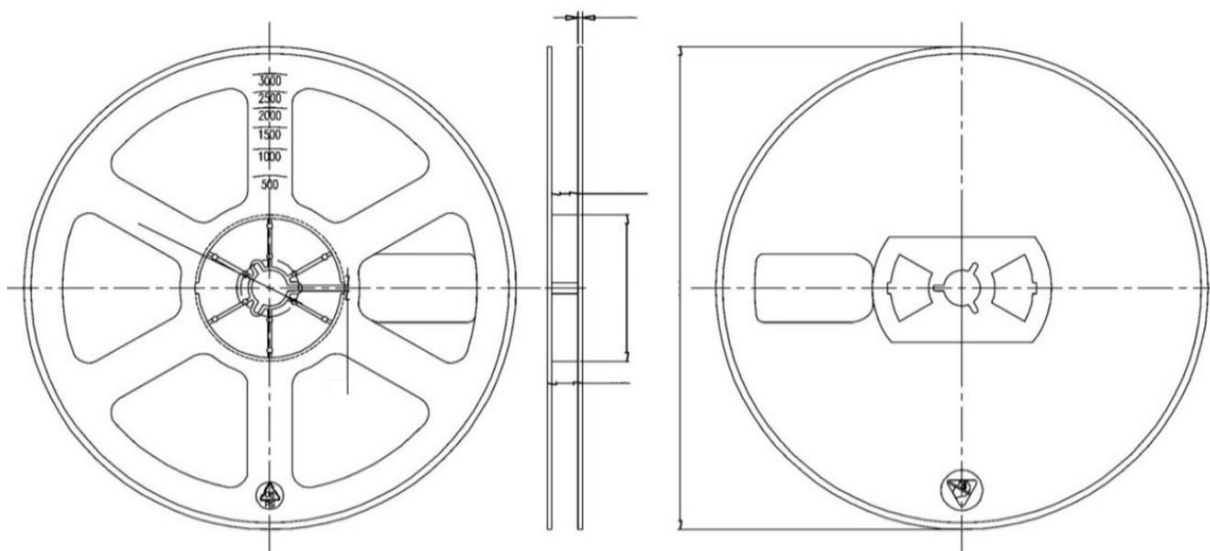


Figure 4-1 Carrier Tape Drawing (unit: mm)



Ø A	Ø N	Ø B	C	W1	W2	W3	Qty/Reel
178	54	13.2	2.2	8.4	12 Max	1.4	5000pcs
+2 / -2	+2 / -2	+0.3 / -0.2	+0.3 / -0.3	+1.5 / -0.0		+0.4 / -0.4	

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