



HANGZHOU SAPPLAND MICROELECTRONICS TECHNOLOGY CO., LTD

SAW Device Data Sheet

Band 41 Tx Filter / Unbalanced /1411

PN: SPST41FU11B

Rev: 0.2

Feature:

- low insertion loss
- high out-band rejection
- high power

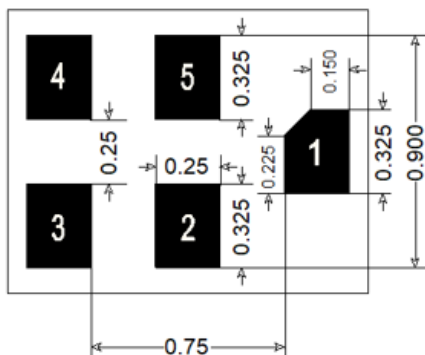
1.Revision History

Revision	Date	Comments
0.1	Feb-07-2024	Initial release
0.2	Aug-29-2024	Update package, performance table, packing information

2.Package and Pin map

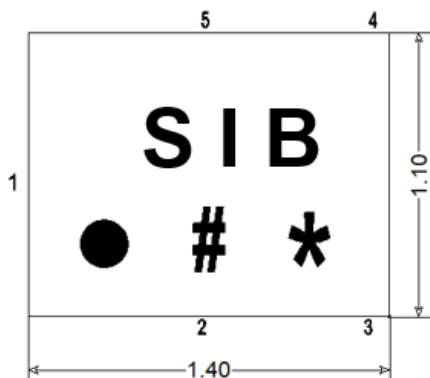
Package Dimensions(Unit: mm)

Bottom View



Pin No.	Pin definition
1	Input
4	Output
2,3,5	GND

Top View

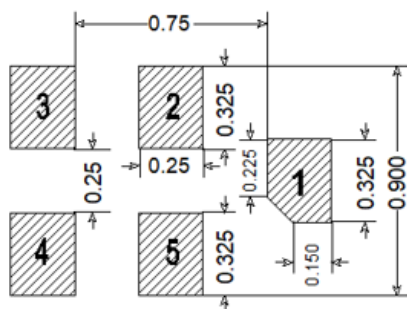


Mark	Mark definition
S I B	Model number
# *	Date code

Front View



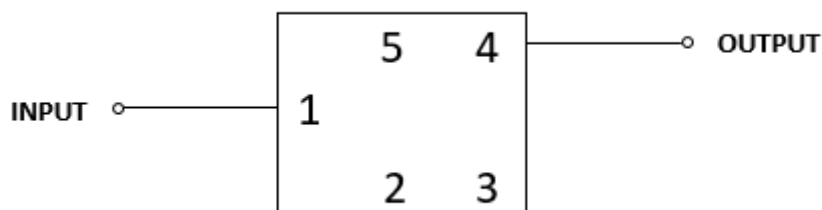
Recommended Land Pattern(Unit: mm)



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 idea components)



3. Performance

3.1 Absolute maximum ratings

Item	Rating	Note
Storage Temperature	-40 ~ 85 °C	
Operating Temperature	-30 ~ 85 °C	
Input Power Max	32 dBm	LTE, 50%, 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		-	2593.00	-	MHz	
Insertion Loss	2496.00 ~ 2500.00 MHz		2.9	4.0	dB	
	2500.00 ~ 2515.00 MHz		2.7	3.5	dB	
	2515.00 ~ 2675.00 MHz		2.4	2.9	dB	
	2675.00 ~ 2690.00 MHz		2.6	3.2		
Amplitude ripple	2496.00 ~ 2690.00 MHz		0.7	2.0	dB	
	2515.00 ~ 2675.00 MHz		0.5	1.5	dB	
VSWR	2496.00 ~ 2690.00 MHz		1.4	2.0	-	In
	2496.00 ~ 2690.00 MHz		1.4	2.0	-	Out
Absolute attenuation	100.00 ~ 600.00 MHz	45	60		dB	
	677.00 ~ 960.00 MHz	40	50		dB	
	1166.00 ~ 1254.00 MHz	35	43		dB	
	1559.00 ~ 1607.00 MHz	35	41		dB	
	1710.00 ~ 1785.00 MHz	35	45		dB	
	1805.00 ~ 1880.00 MHz	30	35		dB	
	1880.00 ~ 1920.00 MHz	25	32		dB	
	1920.00 ~ 1980.00 MHz	25	27		dB	
	1930.00 ~ 1995.00 MHz	20	26		dB	
	2010.00 ~ 2025.00 MHz	20	24		dB	
	2110.00 ~ 2200.00 MHz	10	14		dB	
	2401.00 ~ 2423.00 MHz	20	26		dB	
	2423.00 ~ 2463.00 MHz	25	30		dB	
	2448.00 ~ 2468.00 MHz	15	25		dB	
	2453.00 ~ 2473.00 MHz	5	15		dB	
	2401.00 ~ 2423.00 MHz	25	35		dBint	Any 19 MHz

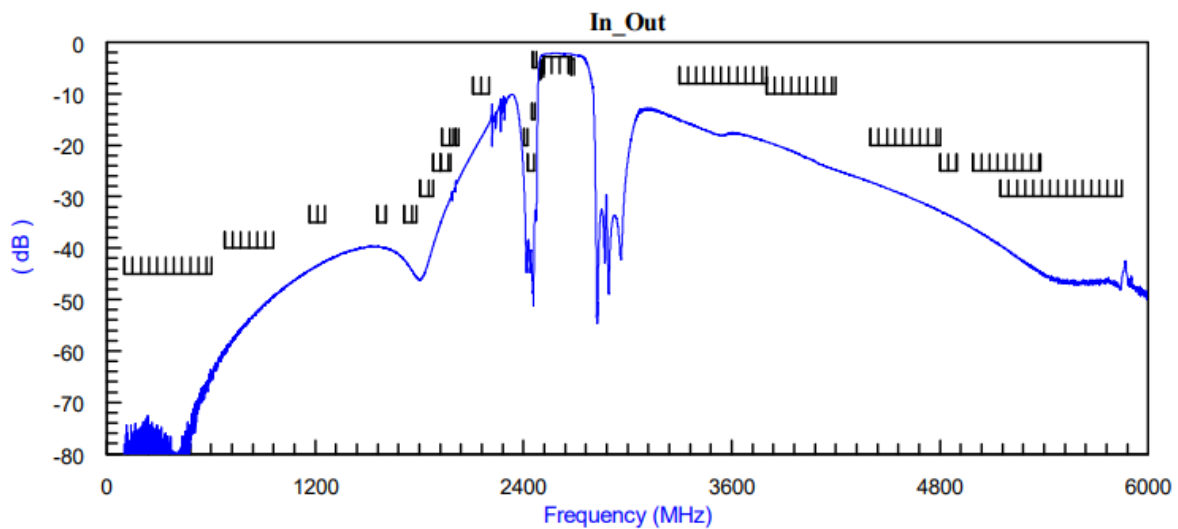
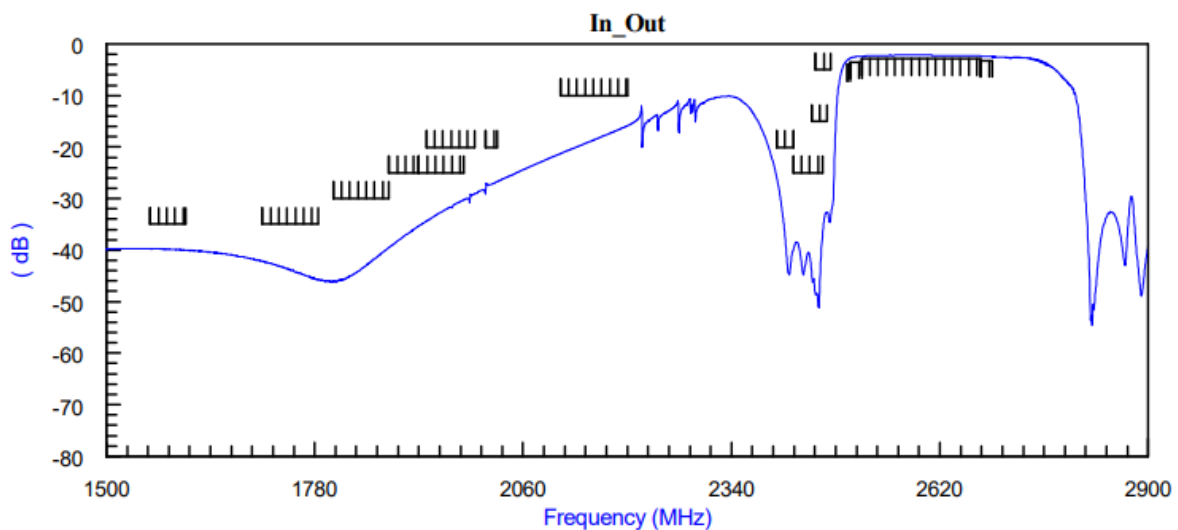
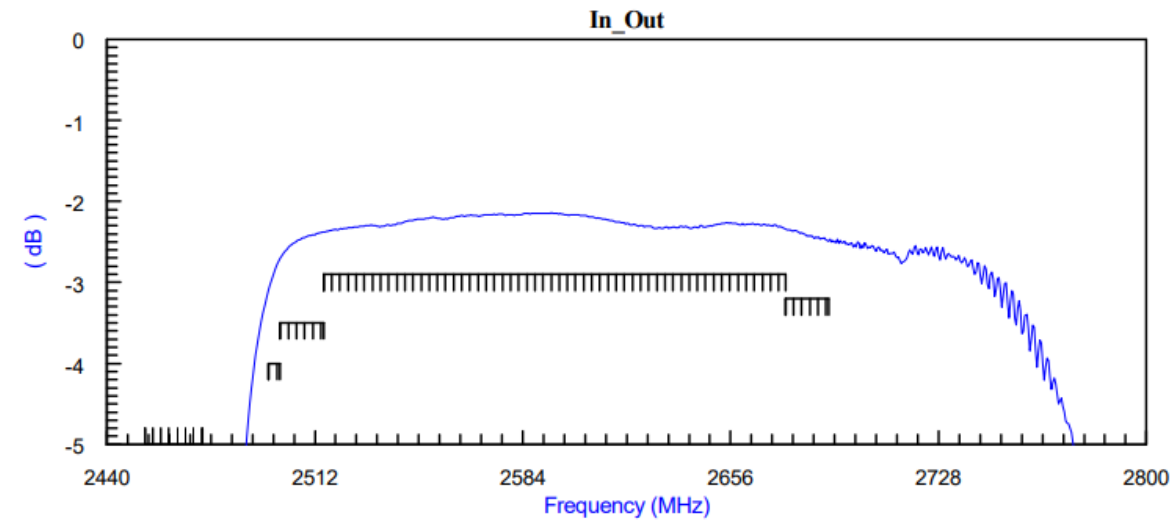
	2423.00 ~ 2463.00 MHz	30	38		dBint	Any 19 MHz
	2448.00 ~ 2468.00 MHz	25	35		dBint	Any 19 MHz
	2453.00 ~ 2473.00 MHz	20	30		dBint	Any 19 MHz
	3300.00 ~ 3800.00 MHz	8	14		dB	
	3800.00 ~ 4200.00 MHz	10	18		dB	
	4400.00 ~ 4800.00 MHz	20	26		dB	
	4800.00 ~ 4900.00 MHz	25	33		dB	
	4992.00 ~ 5380.00 MHz	25	37		dB	
	5150.00 ~ 5850.00 MHz	30	40		dB	

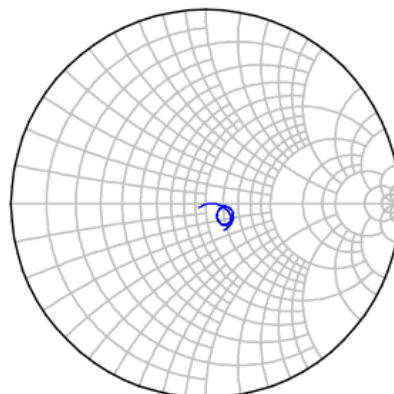
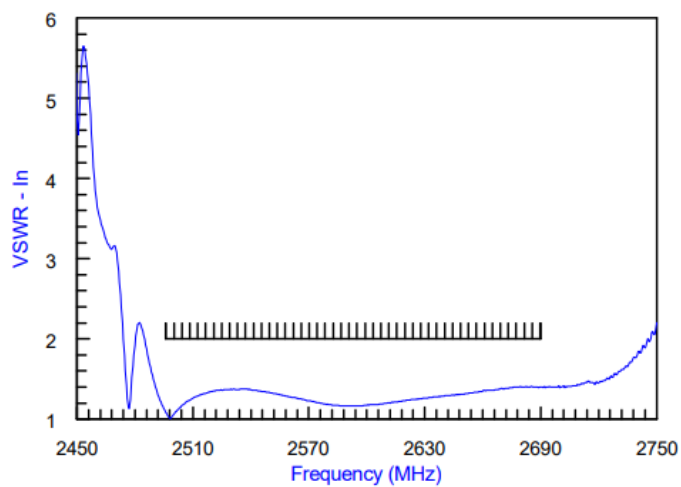
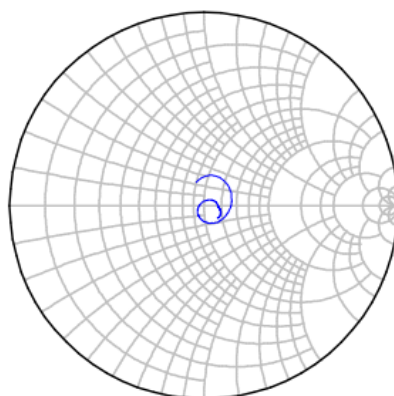
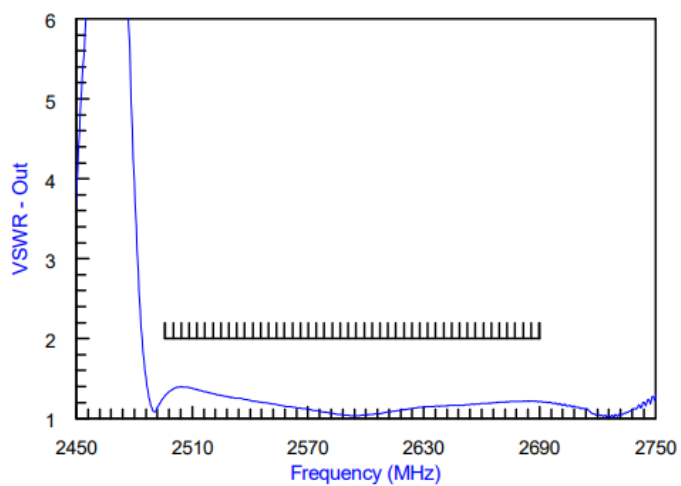
1) Typical value at 25±2deg.C

2) At temp. -20 to 25 deg.C

3.3 Plots

In - Out



In – VSWR / Impedance**Out – VSWR / Impedance**

4. Packing Information

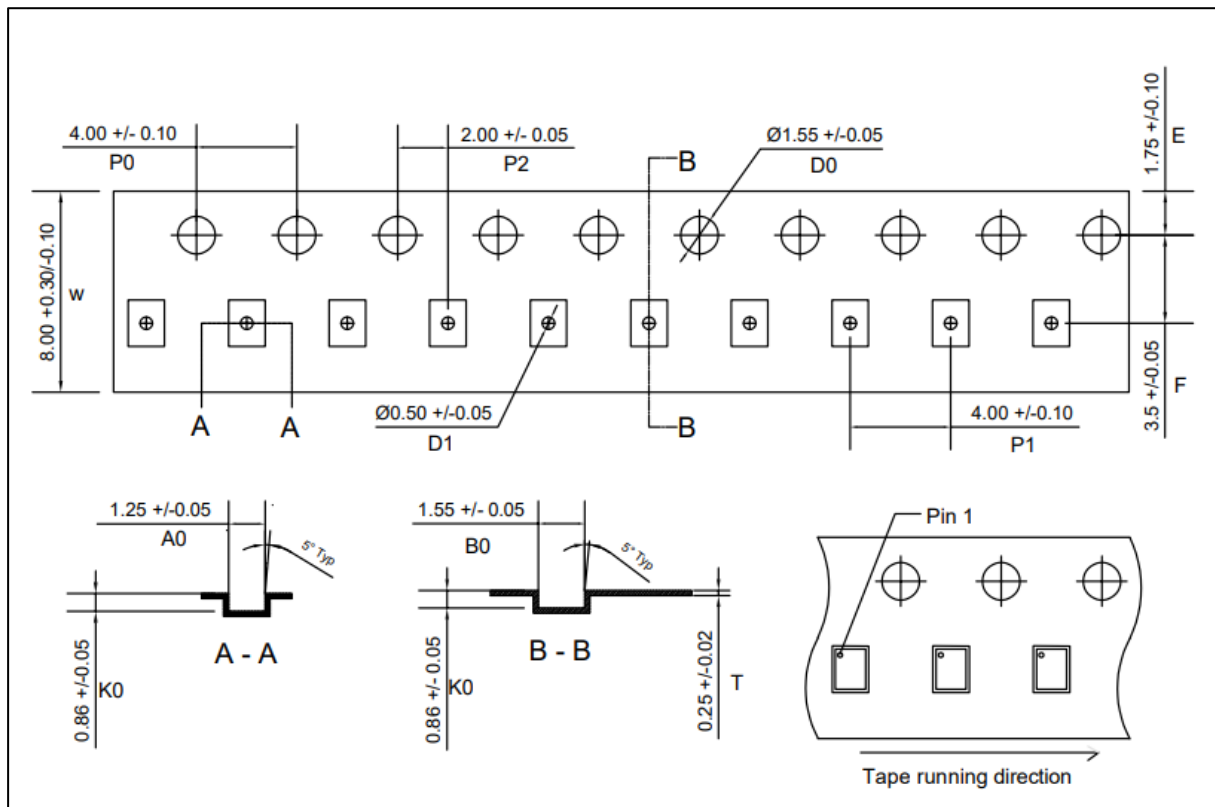


Figure 4-1 Carrier Tape Drawing (unit: mm)

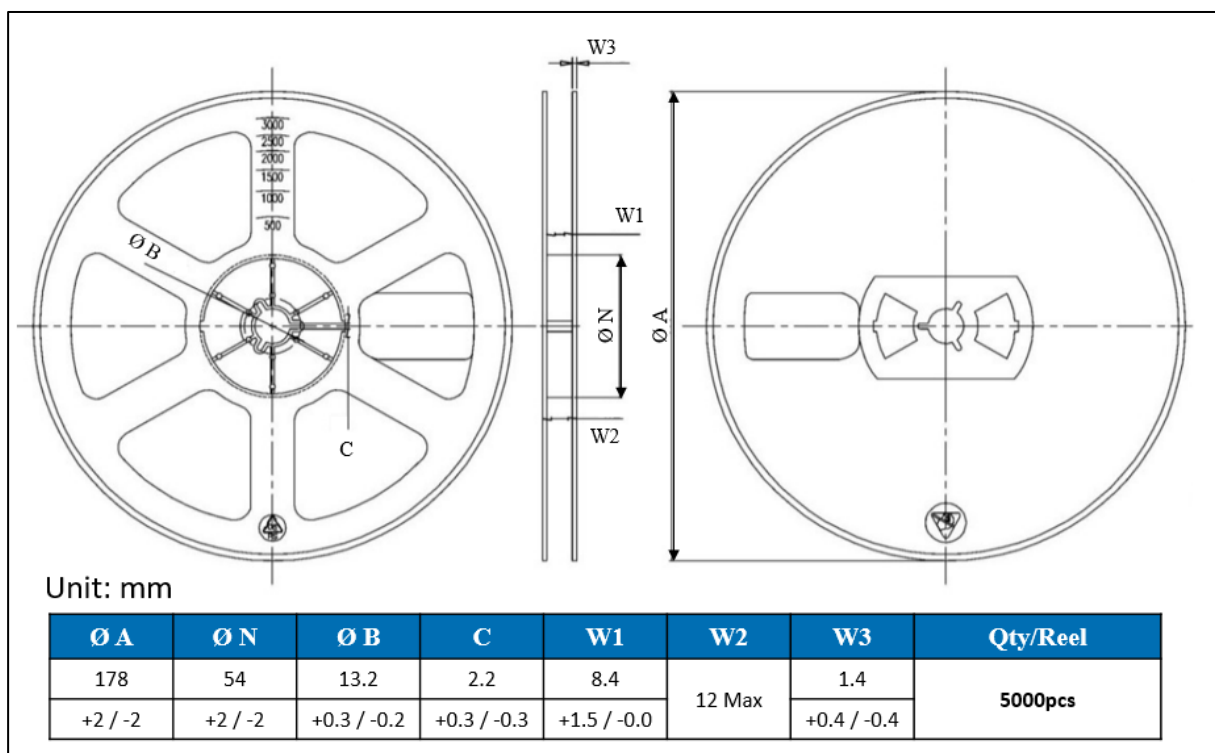


Figure 4-2 Reel Dimensions (Unit: mm) and Reeling Qty'