



HANGZHOU SAPPLAND MICROELECTRONICS TECHNOLOGY CO., LTD

SAW Device Data Sheet

Band 8 RX Filter / Unbalanced / 1109

PN: SPSR008U01C

Rev: 1.2

Feature:

- Unbalanced
- RoHS compatible

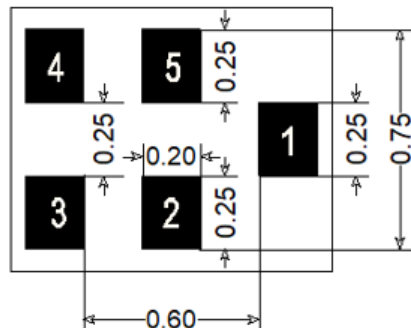
1.Revision History

Revision	Date	Comments
1.0	Mar-10-2021	Initial release
1.1	Apr -30-2021	Revised address
1.2	Dec-08-2023	Update DS format

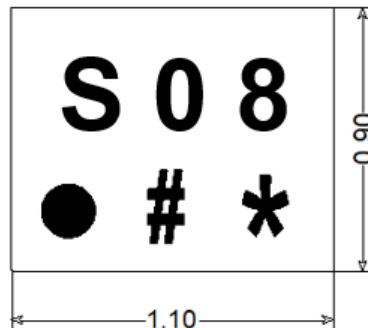
2.Package and Pin map

Package Dimensions(Unit: mm)

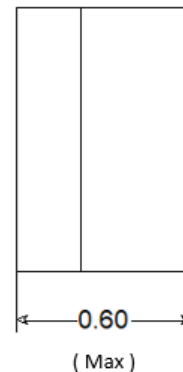
Bottom View



Top View



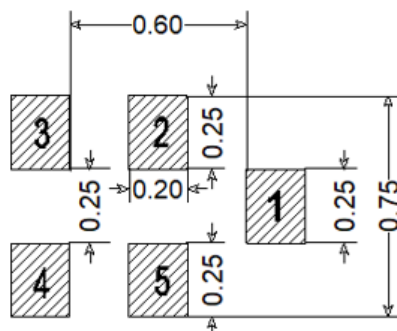
Front View



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

Mark	Mark definition
S 0 8	Model number
# *	Date code

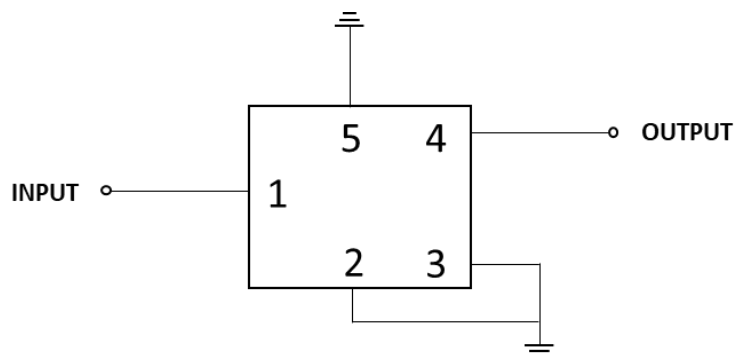
Recommended Land Pattern(Unit: mm)



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	-20 ~ 85 °C	
Input Power Max	15 dBm	
D.C Voltage between the terminals	3 V	25±2deg.C

3.2 Electrical specification

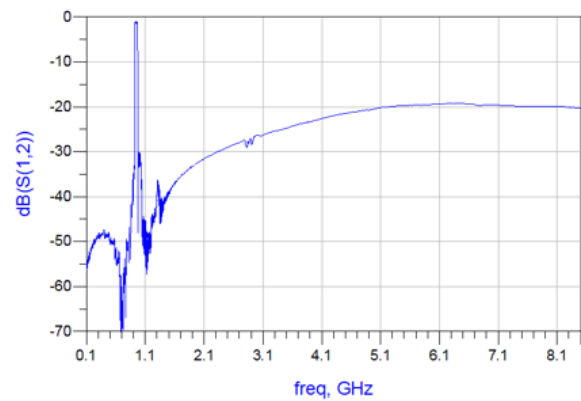
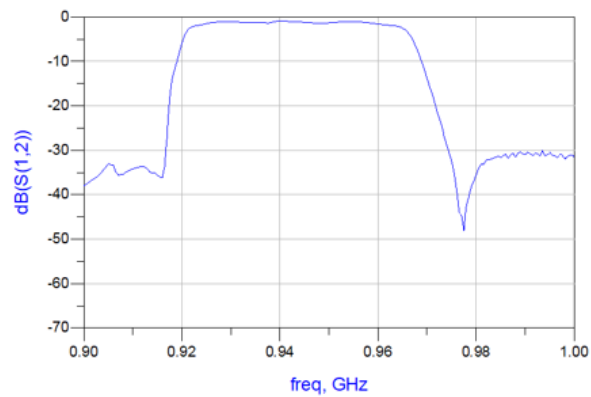
Electrical specification (-20 to +85 °C)

TX to ANT		Characteristics			Unit	Note
		min	Typ. ¹	max		
Center Frequency		-	942.5	-	MHz	
Insertion Loss	925.00 ~ 960.00 MHz		1.8	2.8	dB	
Amplitude ripple	925.00 ~ 960.00 MHz		0.6	2.3	dB	
VSWR	925.00 ~ 960.00 MHz		1.8	2.3	-	Input
	925.00 ~ 960.00 MHz		1.8	2.3	-	Output
Absolute attenuation	100.00 ~ 880.00 MHz	38	45		dB	
	880.25 ~ 914.75 MHz	30	36		dB	
	980.00 ~ 1558.00 MHz	25	30		dB	
	1559.00 ~ 1607.00 MHz	40	45		dB	
	1850.00 ~ 1920.00 MHz	35	43		dB	
	2400.00 ~ 2500.00 MHz	30	37		dB	
	2775.00 ~ 2880.00 MHz	28	34		dB	
	3700.00 ~ 3840.00 MHz	25	30		dB	
	4625.00 ~ 4800.00 MHz	20	30		dB	
	4900.00 ~ 5950.00 MHz	18	28		dB	

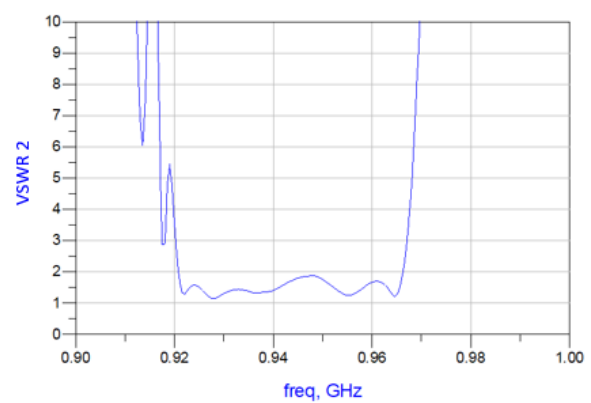
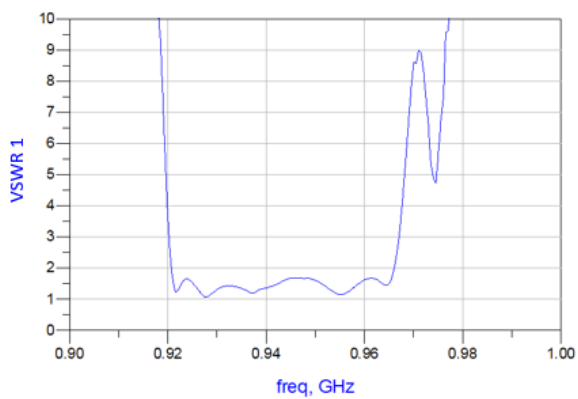
1) Typical value at 25±2deg.C

3.3 Plots

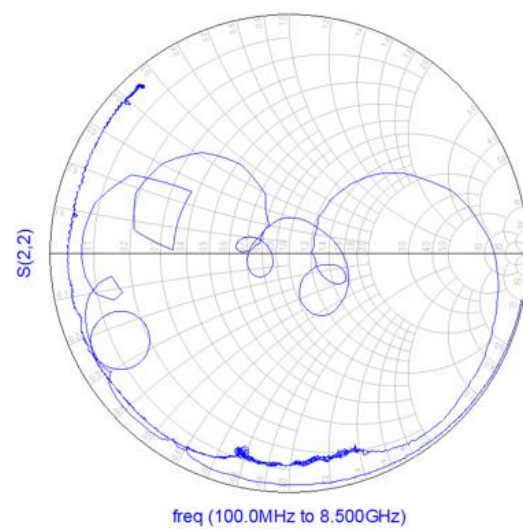
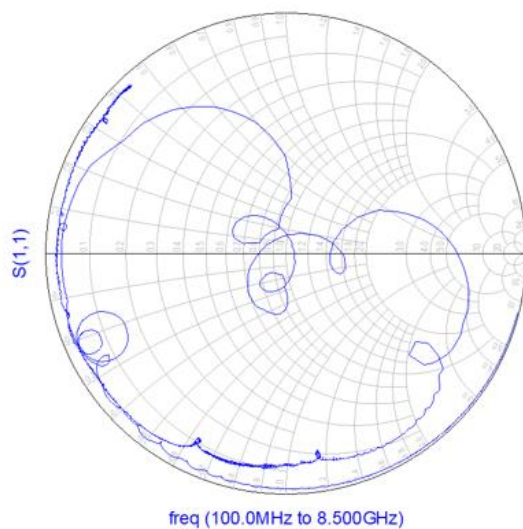
Frequency response



VSWR



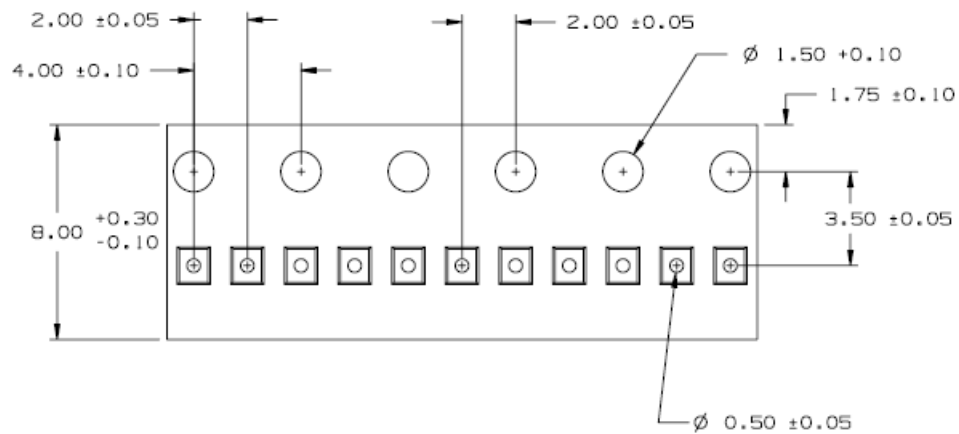
Smith chart



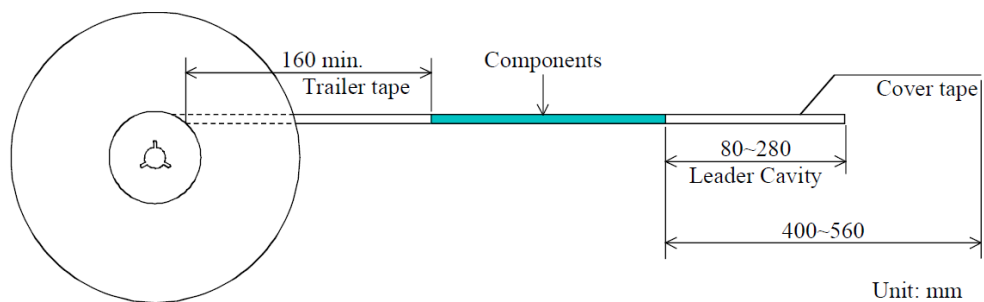
4.Packing Information

Reeling Qty: 5000 pcs/reel

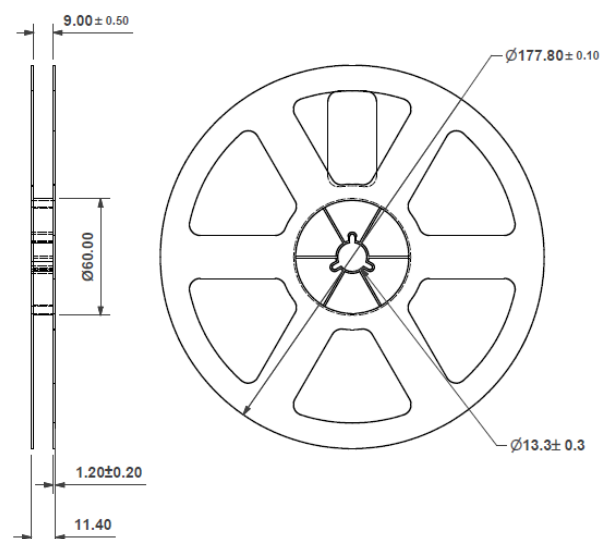
Carrier Tape :



Tape :



Reel :



Important Notice

PLEASE READ THIS NOTICE BEFORE USING OUR PRODUCTS.

1. All specifications are based on the test circuit
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. This is the optimum impedance in order to achieve the performance shown