HANGZHOU SAPPLAND MICROELECTRONICS TECHNOLOGY CO., LTD

SAW Device Data Sheet

Band 5 RX Filter / Unbalanced / 1109

PN: SPSR005U01C

Rev: 1.2

Feature:

- Unbalanced
- RoHS compatible

 www.sappland.com

ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

1.Revision History

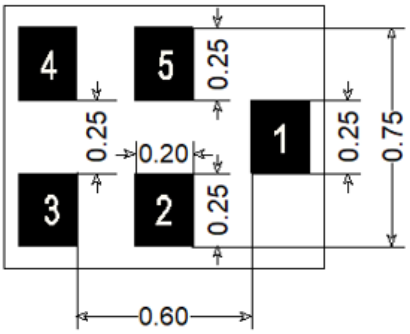
Revision	Date	Comments
1.0	Mar-10-2021	Initial release
1.1	Apr-30-2021	Revised address
1.2	Dec-08-2023	Update DS format

ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

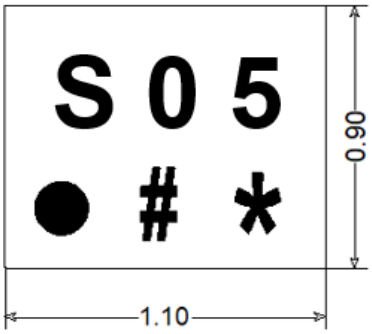
2.Package and Pin map

Package Dimensions(Unit: mm)

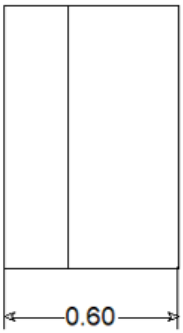
Bottom View



Top View



Front View

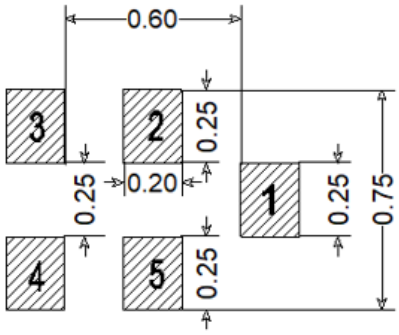


(Max)

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

Mark	Mark definition
S 0 5	Model number
# *	Date code

Recommended Land Pattern(Unit: mm)

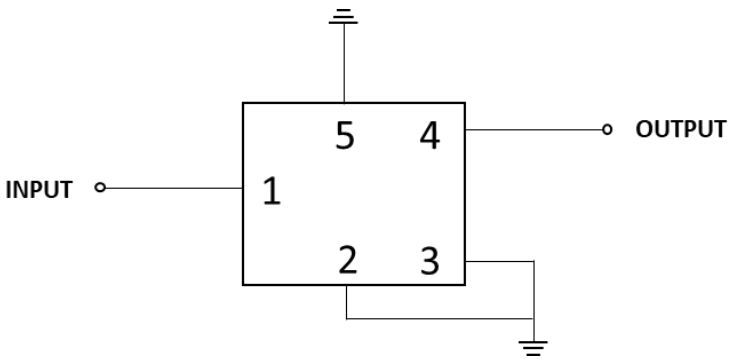


Notes:

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)



ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

3.Performance

3.1 Absolute maximum ratings

Item	Rating	Note
Storage Temperature	-40 ~ 85 ℃	
Operating Temperature	-20 ~ 85 ℃	
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 ℃）

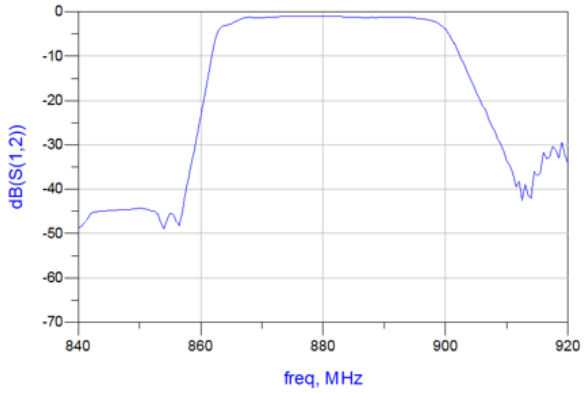
TX to ANT		Characteristics			Unit	Note
		min	Typ. [1]	max		
Center Frequency		-	881.5	-	MHz	
Insertion Loss	869.00 ~ 894.00 MHz		1.7	2.0	dB	
Amplitude ripple	869.00 ~ 894.00 MHz		0.5	1.1	dB	
VSWR	869.00 ~ 894.00 MHz		1.9	2.2	-	Input
	869.00 ~ 894.00 MHz		1.9	2.2	-	Output
Absolute attenuation	779.00 ~ 804.00 MHz	46	49		dB	
	824.00 ~ 849.00 MHz	42	44		dB	
	846.50 ~ 854.00 MHz	30	44		dB	
	909.00 ~ 979.00 MHz	20	29		dB	
	1693.00 ~ 1788.00 MHz	35	38		dB	
	2400.00 ~ 2500.00 MHz	30	33		dB	
	2500.00 ~ 3500.00 MHz	26	29		dB	
	4000.00 ~ 6000.00 MHz	23	29		dB	

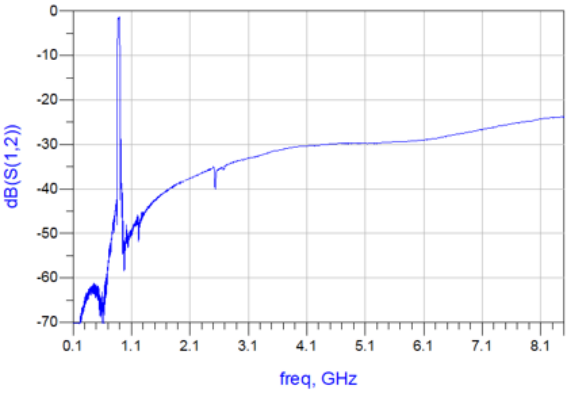
1) Typical value at 25±2deg.C

ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

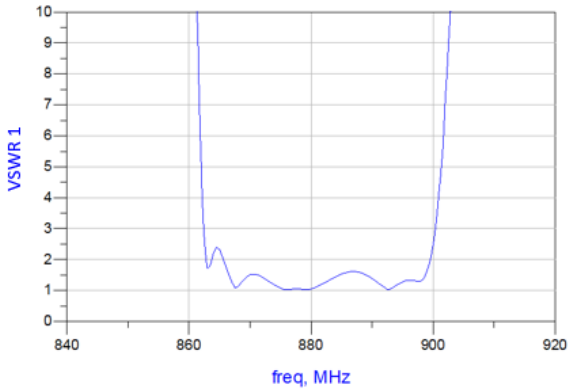
3.3 Plots

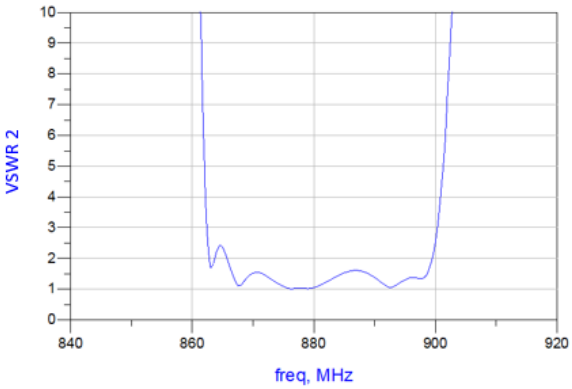
Frequency response



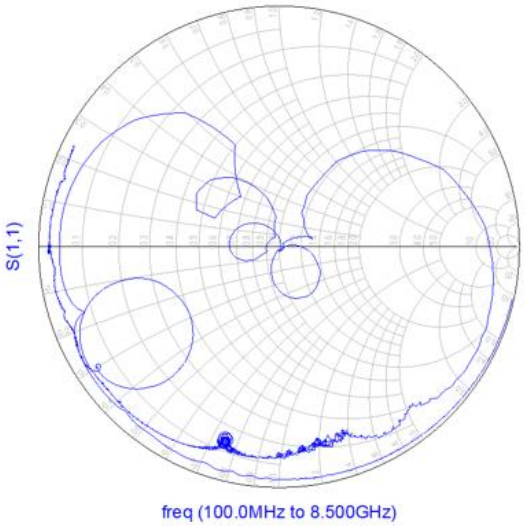


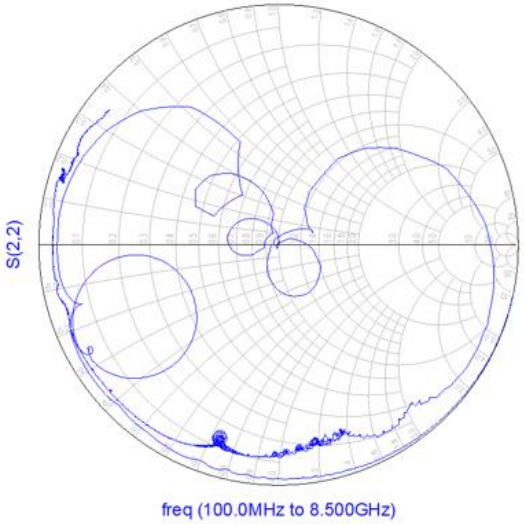
VSWR





Smith chart



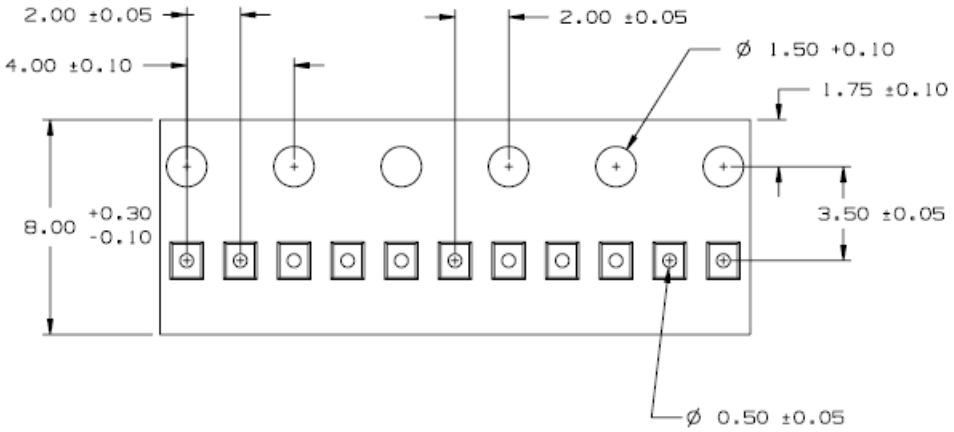


ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

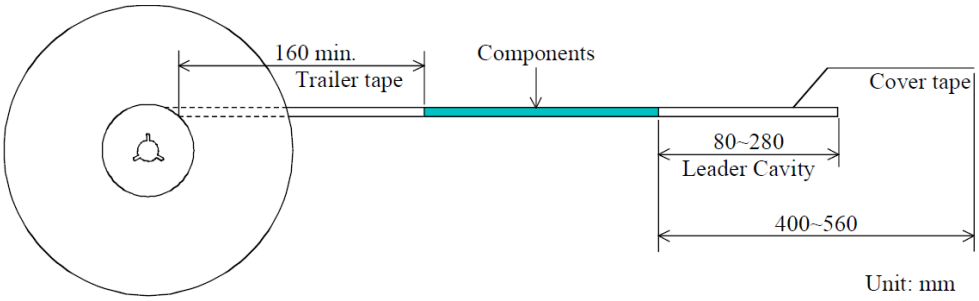
4.Packing Information

Reeling Qty: 5000 pcs/reel

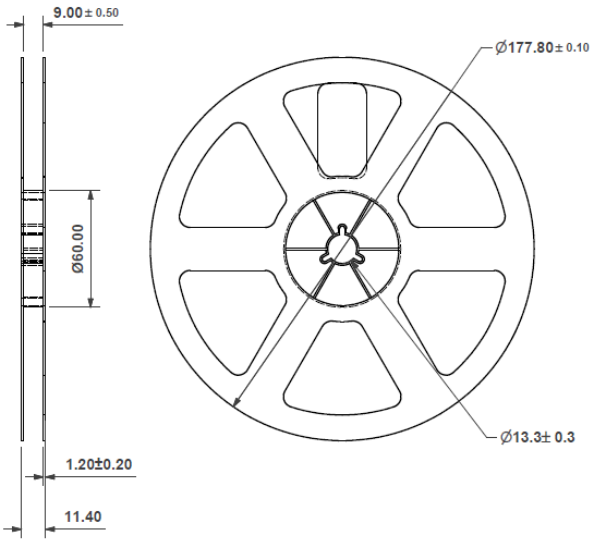
Carrier Tape :



Tape :



Reel :



ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812

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

ADD: R602, No.688 Dongxin Road, Hangzhou **Tel:** +86-571-81113802 **Fax:** +86-571-81113812