

# New JRC SAW FILTER

## NSNJ2016

Application

**f<sub>0</sub>=921.5MHz BW=13MHz ISM**

Electrical Specification: (Table 1)

The device characteristics are measured in the circuit shown in Fig.1.

Table 1. Electrical Specifications

Item		Spec.	Typical@25 °C
Nominal Center Frequency (f <sub>0</sub> )		-	921.5MHz
Insertion Loss	915~928MHz	2.0dB max.	1.4dB
Response Variation		1.0dB max.	0.2dB
Input and Output VSWR		2.0 max.	1.5
Out of Band Rejection (Relative to Through Level)	415~665MHz	30dB min.	38dB
	665~815MHz	30dB min.	34dB
	815~875MHz	23dB min.	26dB
	875~895MHz	20dB min.	24dB
	895~905MHz	4dB min.	10dB
	938~948MHz	4dB min.	8dB
	948~968MHz	7dB min.	9dB
	968~1028MHz	20dB min.	27dB
	1028~1178MHz	30dB min.	34dB
	1178~1428MHz	22dB min.	31dB

(Operating Temperature Range: -40~+85°C)

Maximum Rating: (Table 2)

Table 2. Maximum Ratings

Item	Rating
Maximum Input Power	+20dBm (CW,1000Hr,Ta=85 °C)
Maximum DC Voltage	7.5V
Operating Temperature Range	-40~+85°C
Storage Temperature	-40~+85°C

Mechanical Specifications: (Fig.2)

Package is designed as small as 2.0x1.6x0.65[mm<sup>3</sup>] for SMD (Surface Mount Device) type.

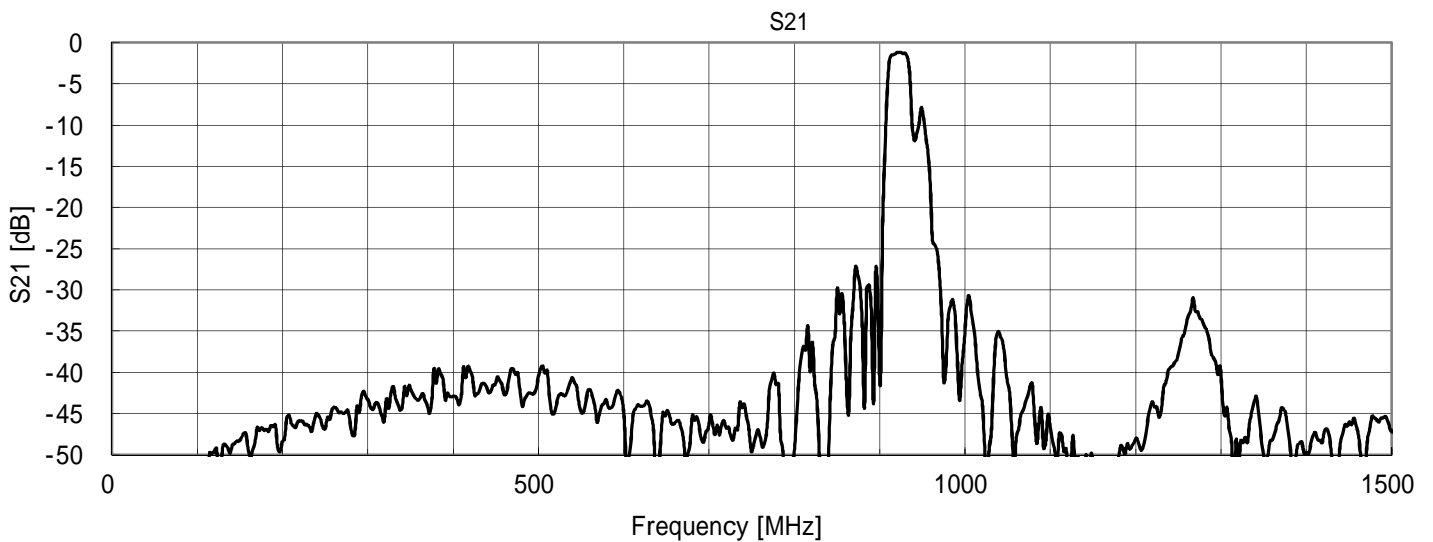
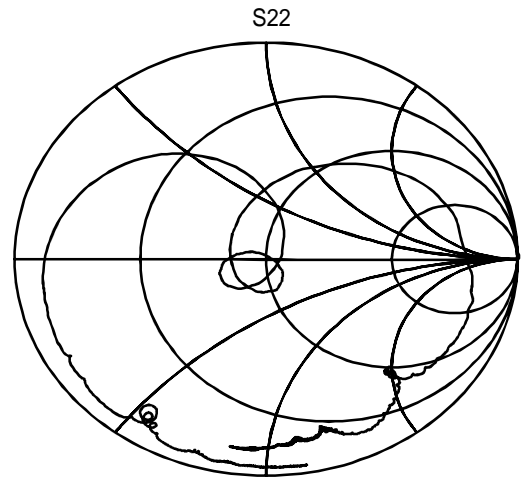
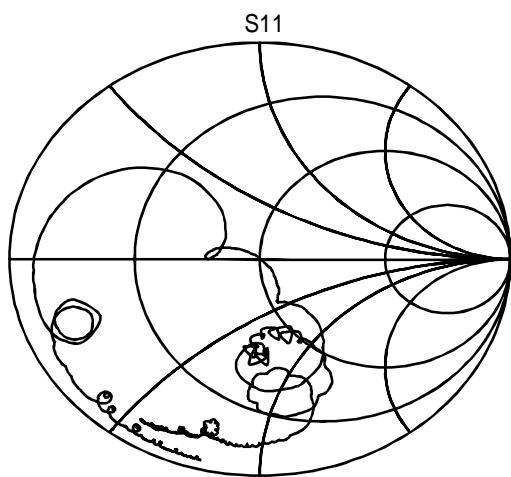
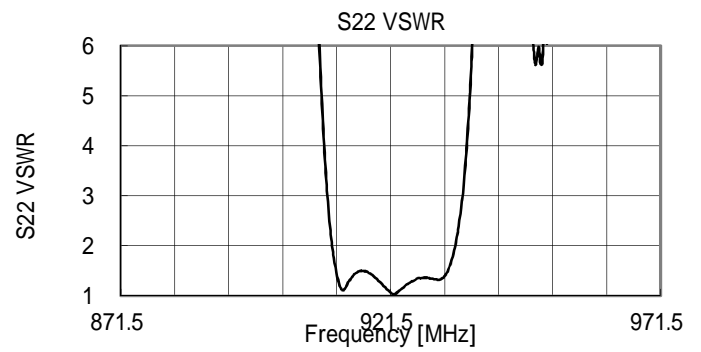
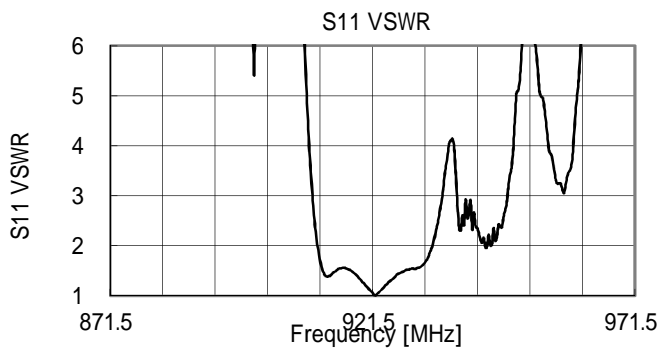
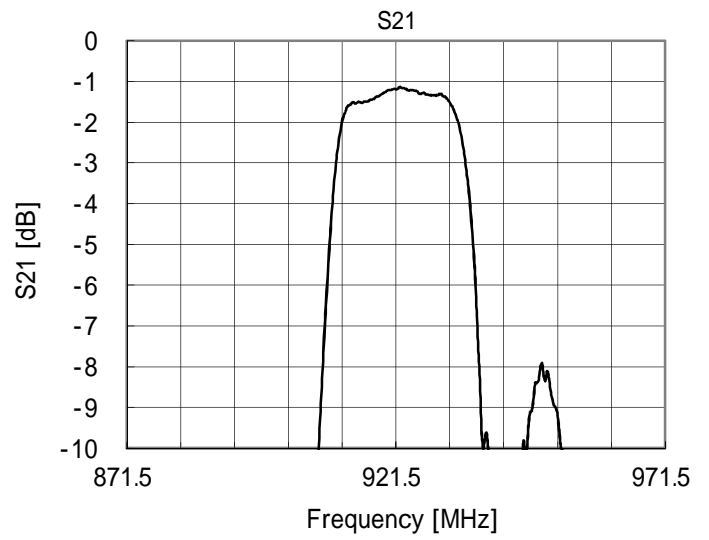
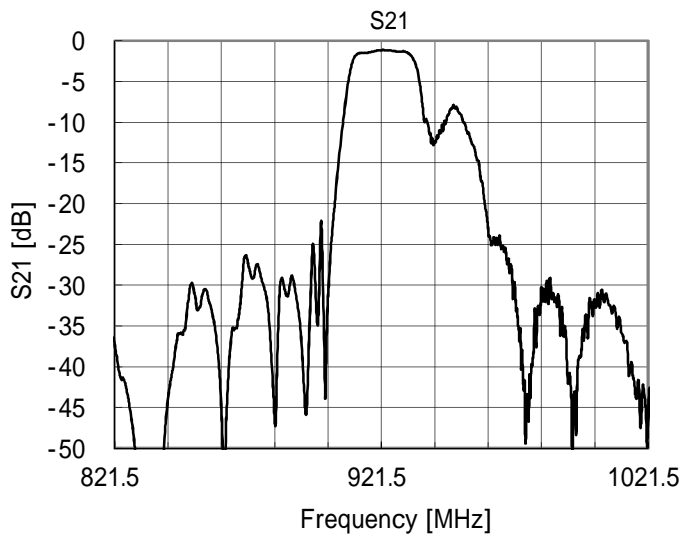
**Notice:**

This part is electrostatic discharge sensitive and may be damaged by improper handling.

*New Japan Radio Co., Ltd.*

<http://www.njr.co.jp> (Japanese)

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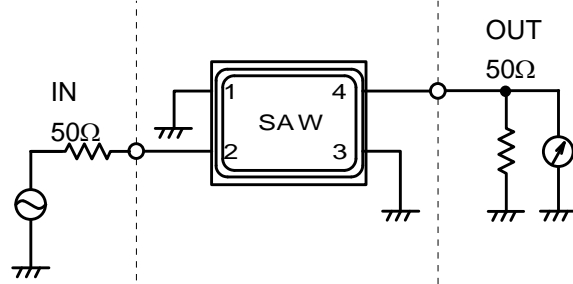


Fig.1 Measuring circuit

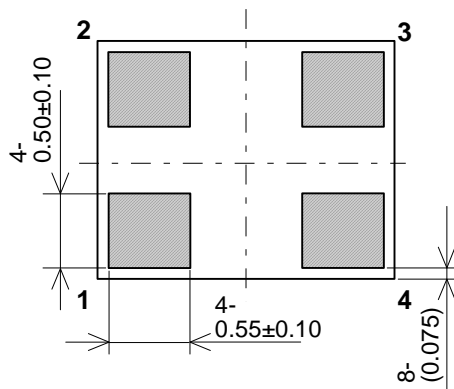
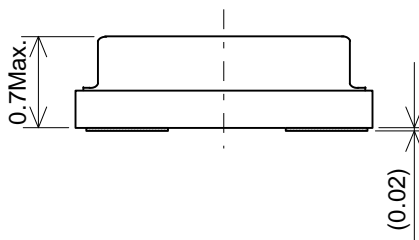
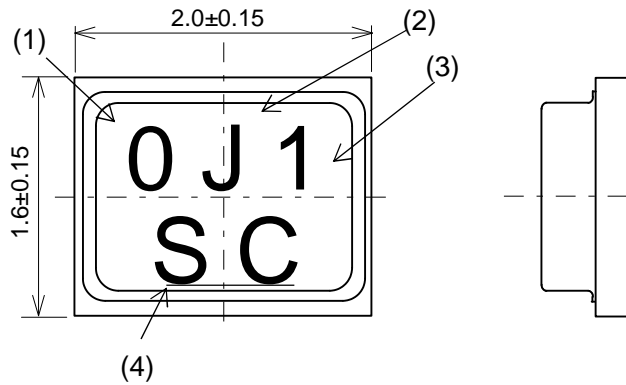


Fig.2 Package dimensions (in mm)

Marking

(1) Year

(2) Month

Jan.~Aug.--- A~H

Sep.--- J

Oct.--- K

Nov.--- L

Dec.--- M

(3) Lot

(4) Part Number Mark

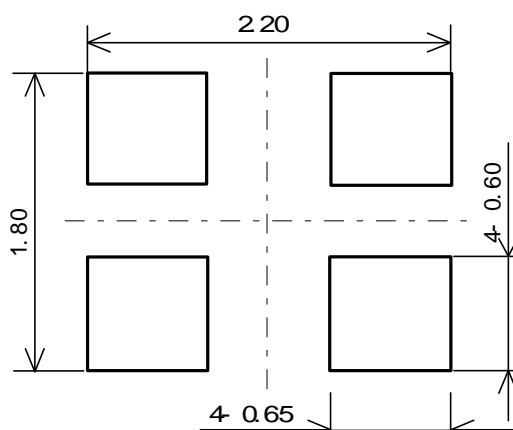


Fig.3 Desirable land area (in mm)

Pin no.	Connection
1	GND
2	IN
3	GND
4	OUT

**Notice**

1. Use this component within operating temperature range. It might not be satisfied with electrical specification without operating temperature range. When it is used less than  $-40^{\circ}\text{C}$  or more than  $+85^{\circ}\text{C}$ , it might be a cause of degradation or destruction of the component. Even if it endures during a short time, it causes degradation of qualification.
2. When soldering iron is used, solder with the temperature at the tip of soldering iron:  $350^{\circ}\text{C}$  max., the time of soldering: 10 seconds max., the power of soldering iron: 30W max..
3. Notice that the allowed time of soldering with soldering iron is accumulated time, when soldering is repeated.
4. As rapid temperature change for cleaning after reflow soldering might be a cause of destruction clean this component after confirming that temperature of this component goes down to room temperature.
5. Confirm that there are not any influence for qualification to this component in mounting on PCB when this component is cleaned.
6. As it might be a cause of degradation or destruction to apply static electricity to this component, do not apply static electricity or excessive voltage while assembling and measuring. And do not transport this component with bare hand.
7. As it might be a cause of degradation or destruction to apply D.C. voltage between each terminal, apply D.C. voltage 7.5V max. in actual circuit.

**Note**

1. This specification specifies the quality of this component as a single unit. Make sure that this component is evaluated and confirmed against this specification when it is mounted to your products.
2. The information contained herein may be changed without prior notice. It is therefore advisable to contact New Japan Radio Company before proceeding with the design of equipment incorporating this product.
3. The products are designed to be used with ordinary electronic equipment (data and communications equipment, office equipment, audio-video equipment, measuring instruments, etc). New Japan Radio Company does not assume any liability for the case using the products with the application required high reliability or safety extremely (such as space equipment, sea-bottom equipment, medical equipment etc). When intending to use any our product please contact our sales representatives in advance.