New JRC SAW FILTER
NSTS9119

Application

ITS f0=760MHz BW=9MHz High ATT Type

Electrical Specification: (Table 1)

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

Table 1. Electrical Specifications

Item		Spec.	Typical	Temp.
Input and Output Impedance			50Ω	
Nominal Center Frequency (f0)			760MHz	
Insertion Loss	755.5~764.5MHz	4.3dB max.	3.3dB	25±5ºC
		5.0dB max.	4.5dB	-40~+85ºC
Response Variation	755.5~764.5MHz	2.0dB max.	0.8dB	25±5ºC
		2.5dB max.	2.0dB	-40~+85ºC
VSWR	755.5~764.5MHz	2.5 max.	2.0	-40~+85ºC
Out of Band Rejection (Relative to Through Level)	750MHz	20dB min.	27dB	25±5ºC
		10dB min.	15dB	-40~+85ºC
	770MHz	12dB min.	17dB	25±5ºC
		5dB min.	8dB	-40~+85ºC

(Operating Temperature Range : -40~+85ºC)

Maximum Rating: (Table 2)

Table2. Maximum Ratings

Item	Rating
Maximum Input Power	+20dBm
Maximum DC Voltage	7.5V
Operating Temperature Range	-40~+85ºC
Storage Temperature	-40~+95ºC

Mechanical Specifications: (Fig.2)

Package is designed as small as 3.0x3.0x1.15[mm^3] 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/products/device/index.html (Japanese)
http://www.njr.com/products/device/index.html (English)

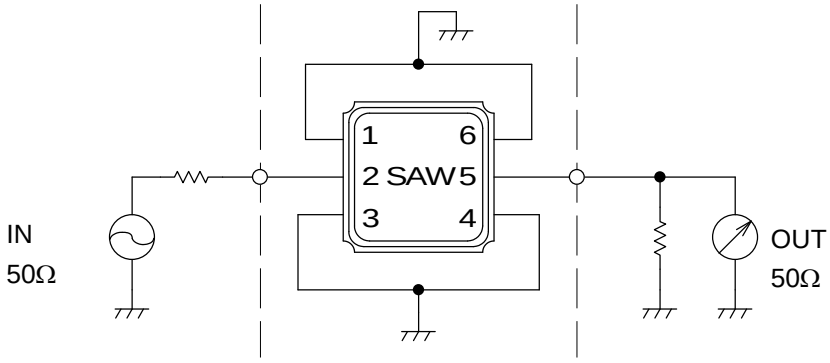
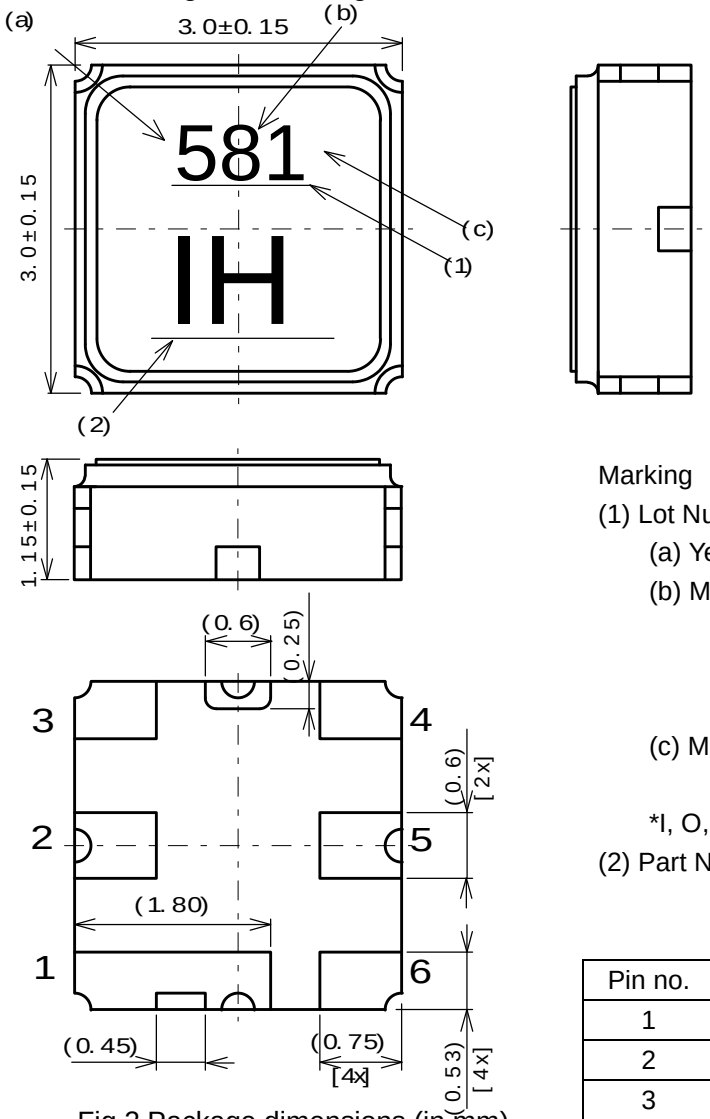


Fig.1 Measuring circuit



Marking

(1) Lot Number

(a) Year

(b) Month

*Oct.--- X

Nov.--- Y

Dec.--- Z

(c) Manufacture Lot

1-9, A-Z, a-z

*I, O, and Q are excluded.

(2) Part Number Mark

Fig.2 Package dimensions (in mm)

Pin no.	Connection
1	GND
2	IN/OUT
3	GND
4	GND
5	OUT/IN
6	GND

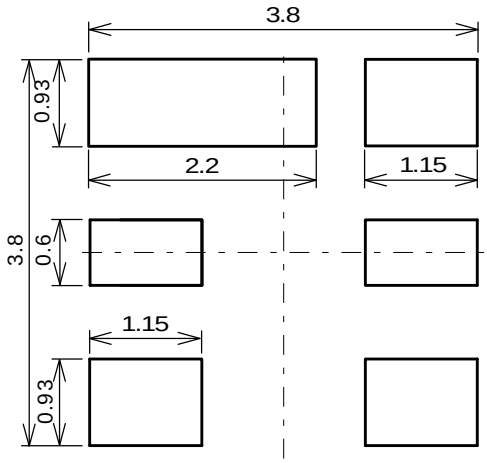


Fig.3 Desirable land area (in mm)

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 -40ºC or more than +85ºC, 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: 350ºC 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 influences for qualification to this component in mounting on PCB when this component is cleaned.

6. As it might be a cause of degradation of 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.

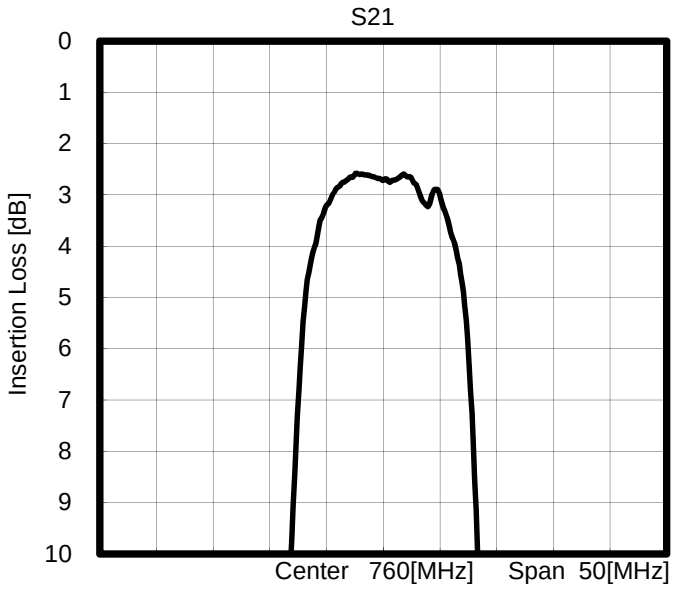
7. As it might be a cause of degradation or destruction to apply D.C. voltage between each terminal, apply D.C. voltage 7.5V max. in actual circuit.

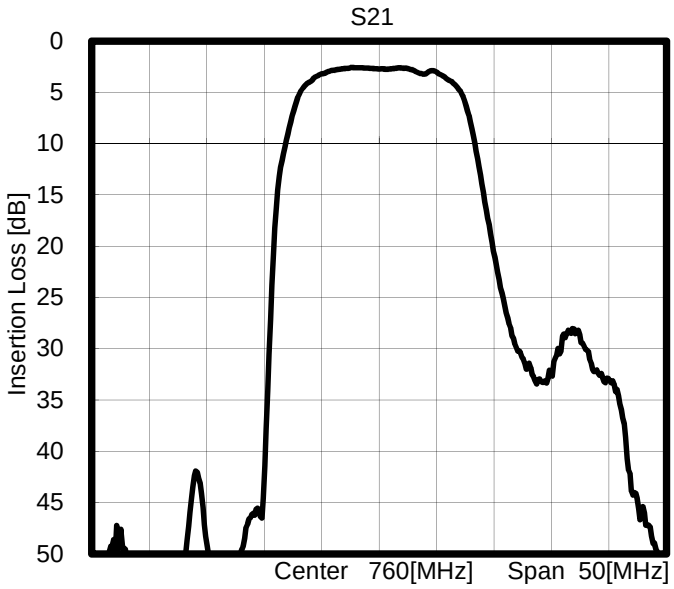
Note

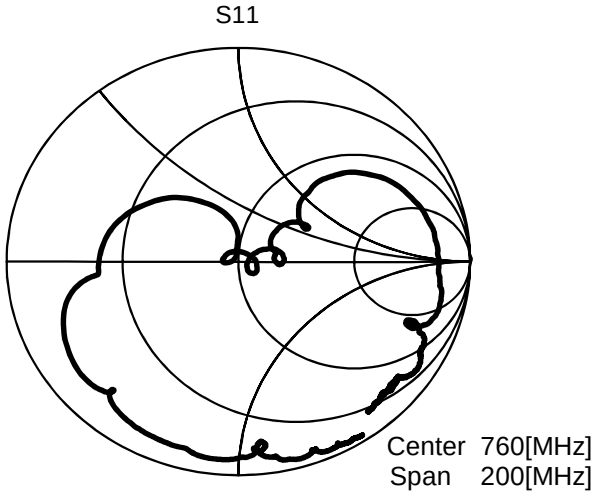
1. This specification specifies the quality of this component as a single unit. Make sure that this component is evaluated and confirmed against this specification when it is mounted to your products.

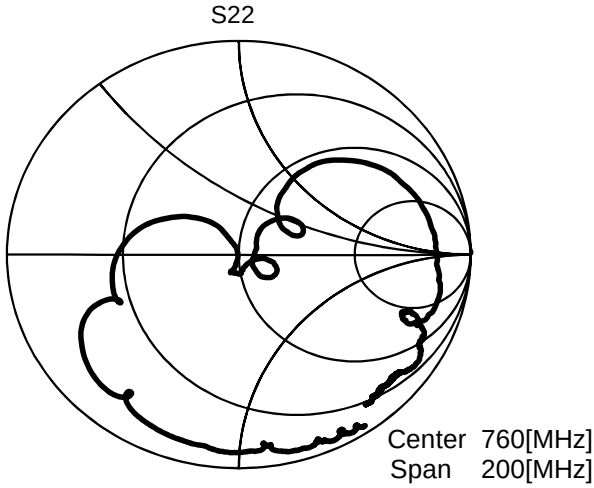
2. The information contained herein may be changed without prior notice. It is therefore advisable to contact New Japan Radio Company before proceeding with the design of equipment incorporating this product.

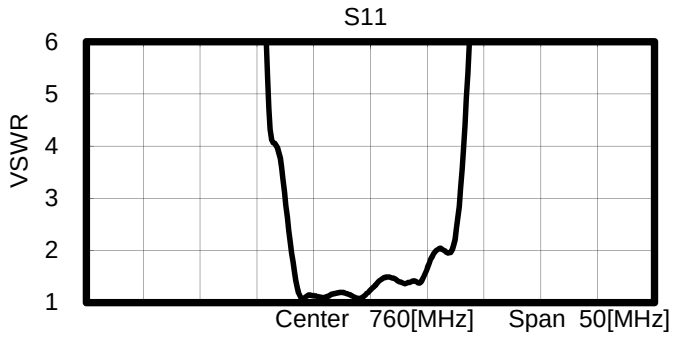
3. The products are designed to be used with ordinary electronic equipment (data and communications equipment, office equipment, audio-video equipment, measuring instruments, etc). New Japan Radio Company does not assume any liability for the case using the products with the application required high 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.

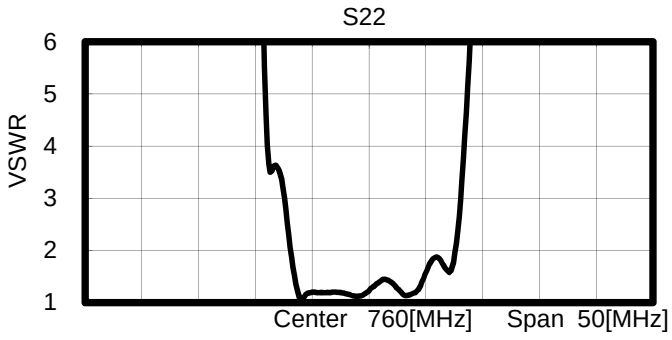

S21
Insertion Loss [dB]
0
1
2
3
4
5
6
7
8
9
10
Center 760[MHz]
Span 50[MHz]

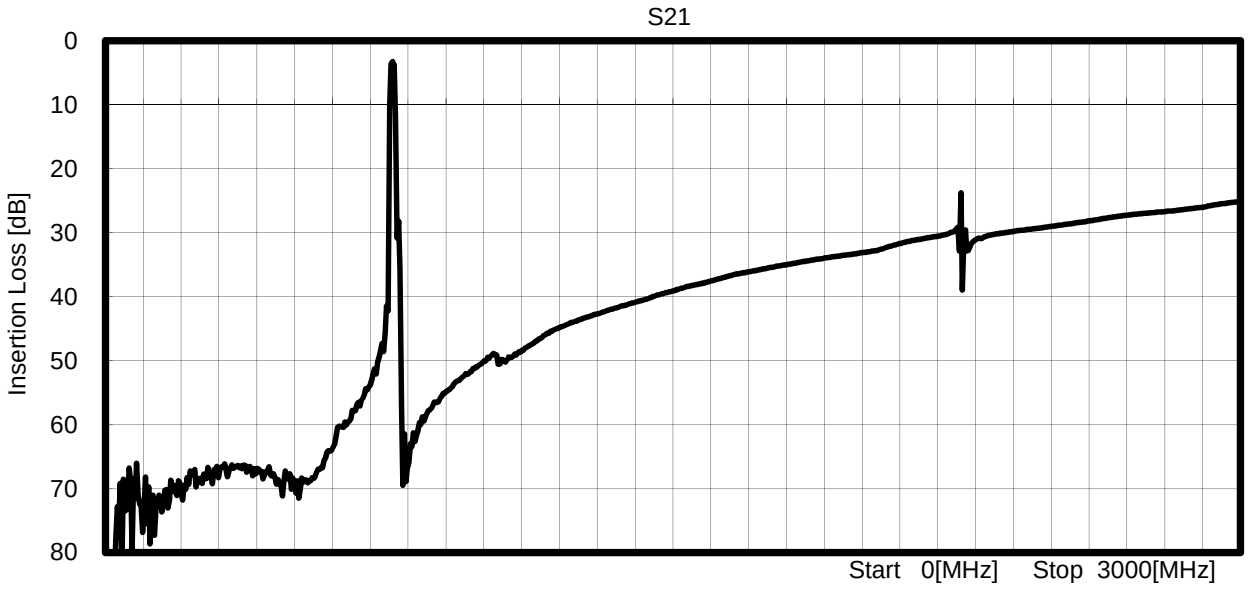

S21
Insertion Loss [dB]
0
5
10
15
20
25
30
35
40
45
50
Center 760[MHz]
Span 50[MHz]


S11
Center 760[MHz]
Span 200[MHz]


S22
Center 760[MHz]
Span 200[MHz]


S11
VSWR
6
5
4
3
2
1
Center 760[MHz]
Span 50[MHz]


S22
VSWR
6
5
4
3
2
1
Center 760[MHz]
Span 50[MHz]


S21
Insertion Loss [dB]
0
10
20
30
40
50
60
70
80
Start 0[MHz]
Stop 3000[MHz]