

# JRC SAW FILTER

## NSVS784

Application  
**GSM TX**

Electrical Specification: (Table 1)

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

Table 1. Electrical Specifications

Item		Spec.	Typical
Input and Output Impedance		-	50Ω
Nominal Center Frequency (f <sub>0</sub> )		-	902.5MHz
Insertion Loss	890~915MHz	3.8dB max.	3.1dB
Response Variation	890~915MHz	1.5dB max.	0.8dB
Group Delay Variation	890~915MHz	2.5 max.	2.0
Out of Band Rejection (Relative to Through Level)	DC~870MHz	30dB min.	45dB
	870~880MHz	6dB min.	20dB
	925~935MHz	8dB min.	13dB
	935~980MHz	25dB min.	33dB
	980~1200MHz	45dB min.	60dB
	1200~2000MHz	10dB min.	25dB
	2000~3000MHz	8dB min.	17dB

(Operating Temperature Range: -30~+85°C)

Maximum Rating: (Table 2)

Table2.Maximum Ratings

Item	Rating
Maximum Input Power	+20dBm
Maximum DC Voltage	7.5V
Operating Temperature Range	-30~+85°C
Storage Temperature	-40~+95°C

Mechanical Specifications: (Fig.2)

Package is designed as small as 3.0x3.0x1.15[mm<sup>3</sup>] for SMD (Surface Mount Device) type.

**Notice:**

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

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[http://www.jrc.co.jp/product/comm/deveice/saw/saw\\_top.html](http://www.jrc.co.jp/product/comm/deveice/saw/saw_top.html) (Japanese)

[http://www.jrc.co.jp/product/comm/device/saw/saw\\_top\\_e.html](http://www.jrc.co.jp/product/comm/device/saw/saw_top_e.html) (English)

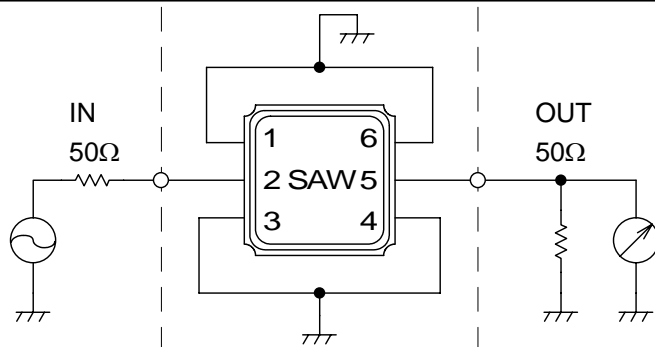
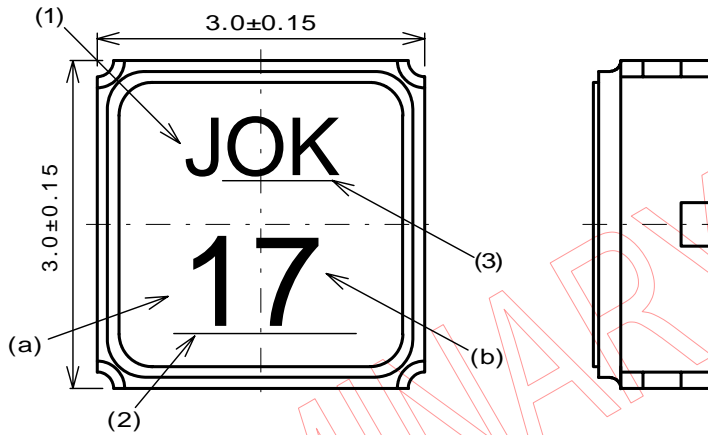


Fig.1 Measuring circuit



Marking

(1) Manufacturer's Mark

(2) Lot Number

(a) Year

(b) Month

\*Oct.--- X

Nov.--- Y

Dec.--- Z

(3) Part number Mark

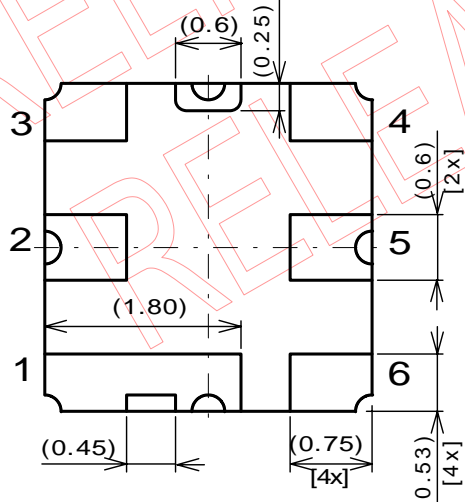


Fig.2 Package dimensions (in mm)

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

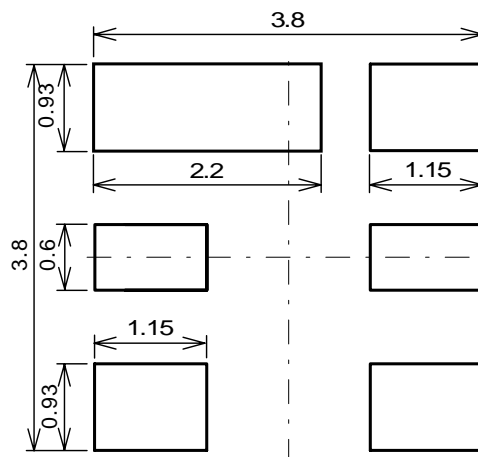


Fig.3 Desirable land area (in mm)

**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  $-30^{\circ}\text{C}$  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.

GSM RX 947.5MHz SAW FILTER NSVS784  
 FREQUENCY CHARACTERISTICS

