JRC SAW FILTER

NSVS680

Application

European keyless

Electrical Specification: (Table 1)

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

Table 1. Electrical Specifications

Item		Spec.
Input and Output Impedance		50Ω
Nominal Center Frequency (f0)		447 MHz
Insertion Loss	446~448MHz	3.0dB max.
Response Variation	446~448MHz	1.5dB max.
Input and Output VSWR	446~448MHz	2.5 max.
Out of Band Rejection (Relative to Through Level)	425.3MHz	45dB min.

(Operating Temperature Range: -20~+70ºC)

PRELIMINARY RELEASE

Maximum Rating: (Table 2)

Table 2. Maximum Ratings

Item	Rating
Maximum Input Power	+20dBm
Maximum DC Voltage	7.5V
Operating Temperature Range	-20~+70ºC
Storage Temperature	-30~+80ºC

Mechanical Specifications: (Fig.2)

Package is designed as small as 3.5x3.5x1.0[mm^3] 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/jp/product/device/saw/index.html (Japanese)
http://www.jrc.co.jp/eng/product/comm/device/saw/saw_top_e.html (English)

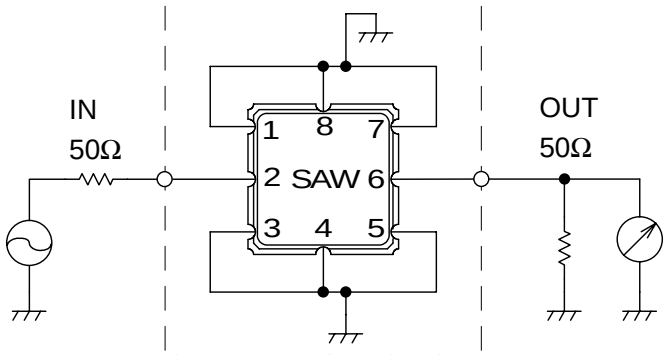
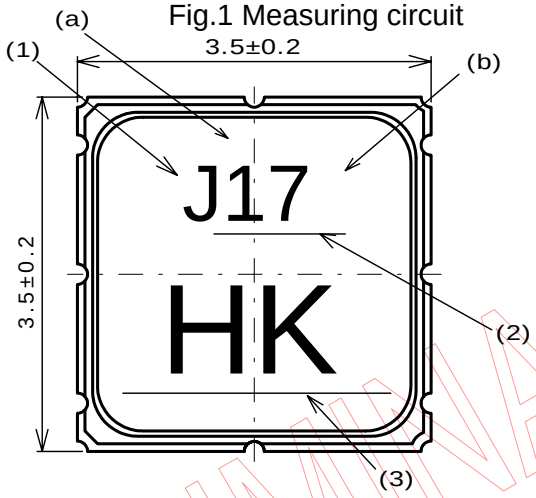


Fig.1 Measuring circuit



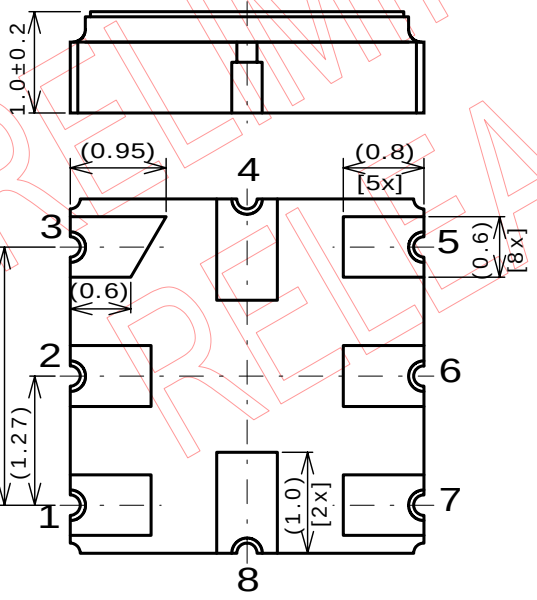


Fig.2 Package dimensions (in mm)

Marking

(1) Manufacture's Mark

(2) Lot Number

(a) Year

(b) Month

*Oct.--- X

Nov.--- Y

Dec.--- Z

(3) Part number Mark

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

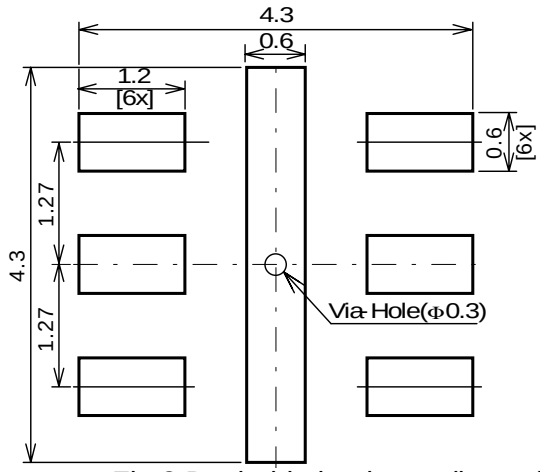


Fig.3 Desirable land area (in mm)

PRELIMINARY RELEASE

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 -20ºC or more than +70ºC, 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 influence 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.

PRELIMINARY RELEASE

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.

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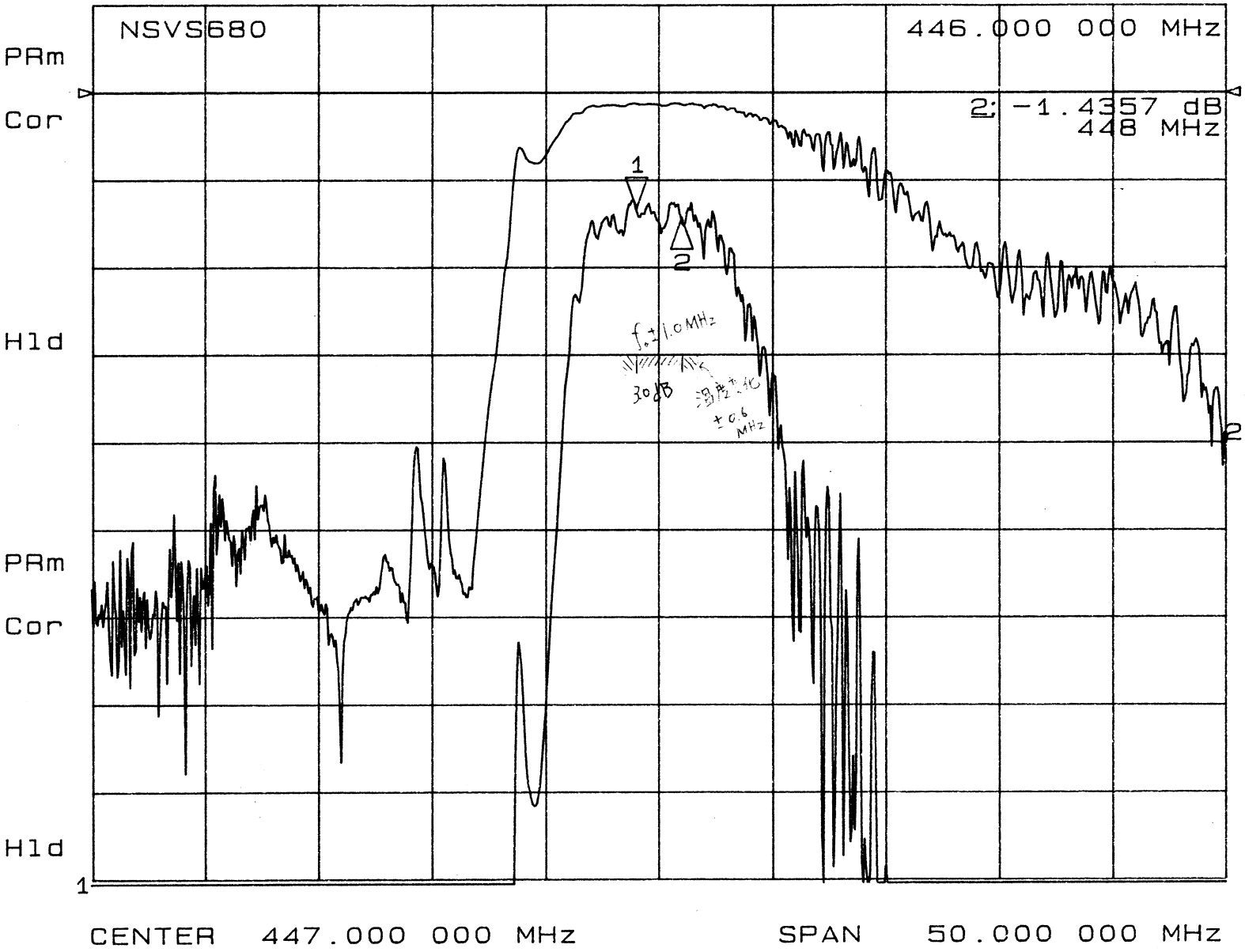
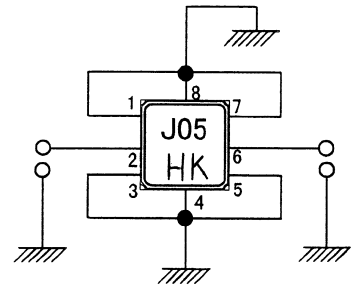
CH1 S_{21} log MAG 1 dB/ REF 0 dB 1: −1.3276 dB

CH2 S_{21} log MAG 10 dB/ REF 0 dB



CENTER 447.000 000 MHz SPAN 50.000 000 MHz

NSVS680
447MHz SAWfilter
特性図
pass band



3.5mm□PKG
2, 6 – IN/OUT
1, 3, 4, 5, 7, 8 – GROUND

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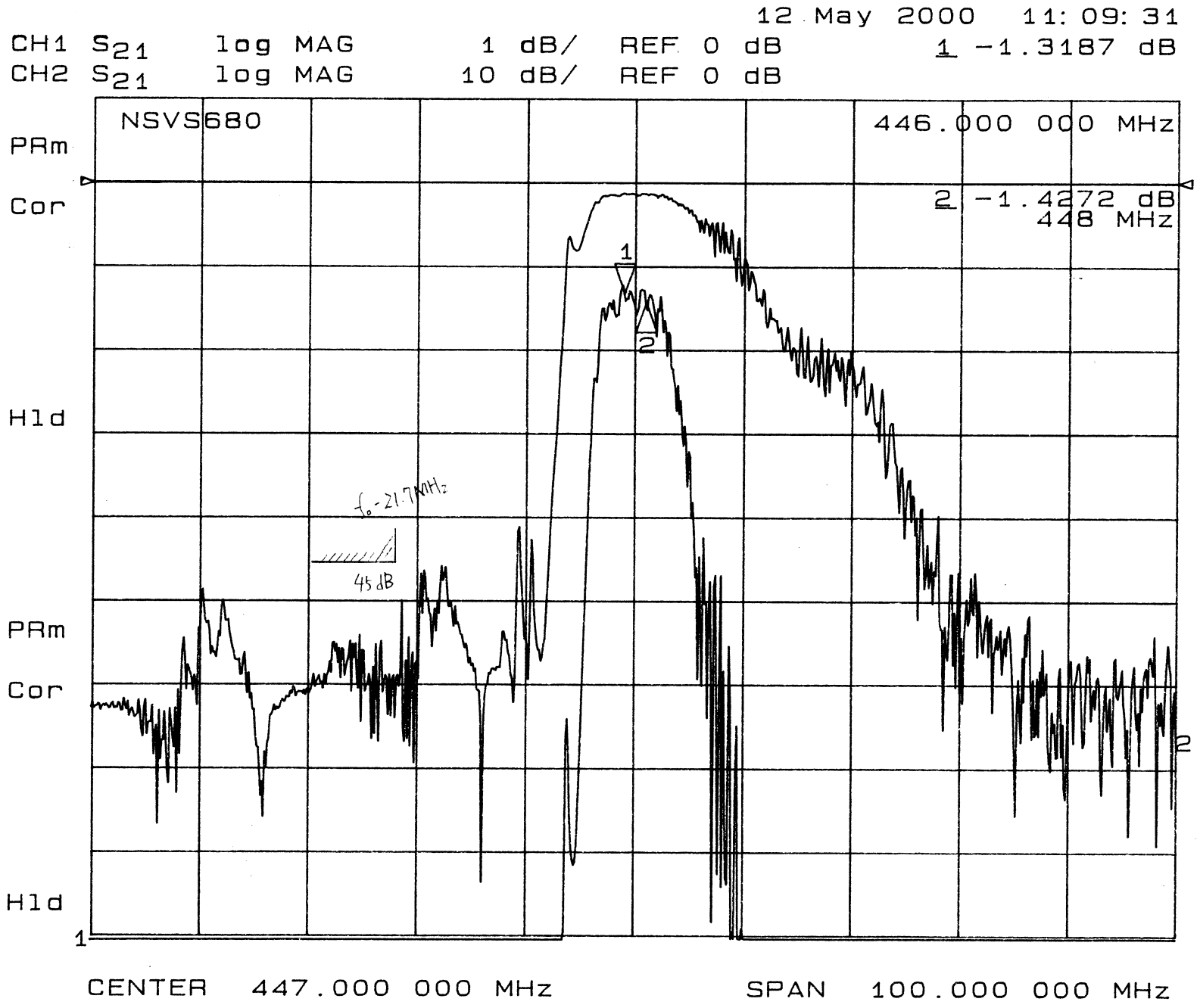
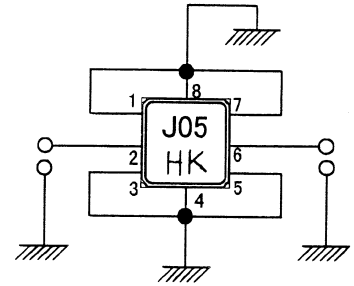


NSVS680
447MHz SAWfilter
特性図
pass band



3.5mm□PKG
2, 6 – IN/OUT
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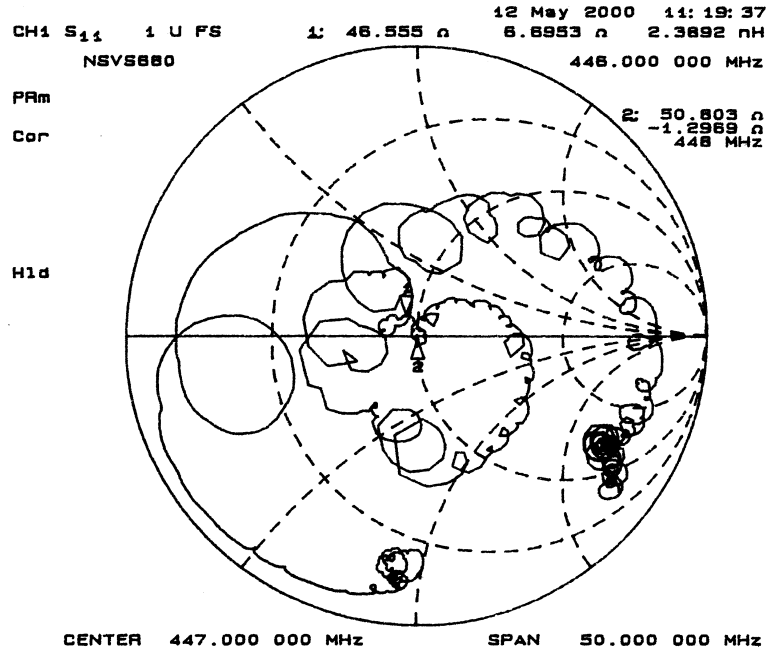
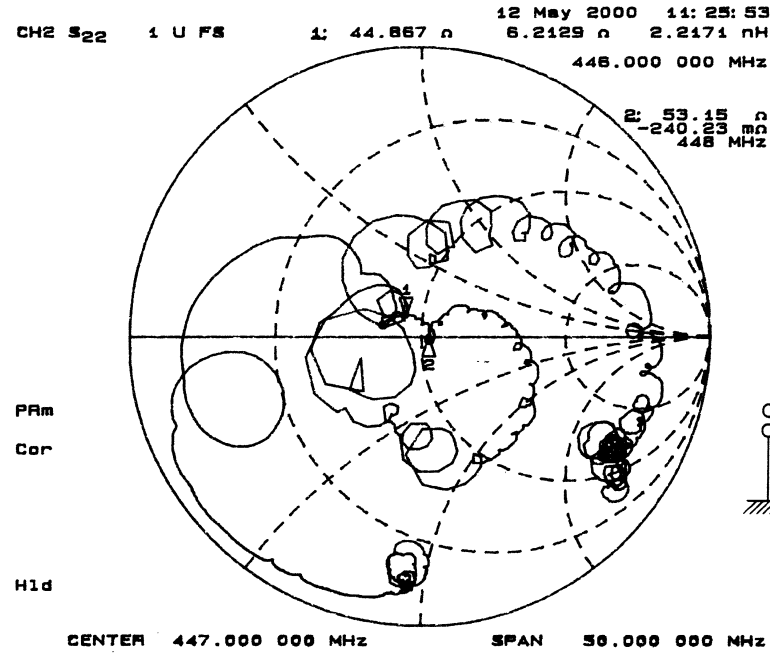
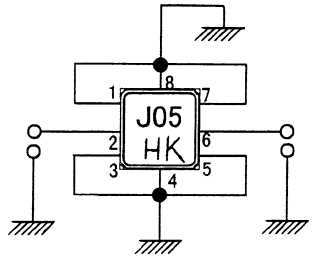
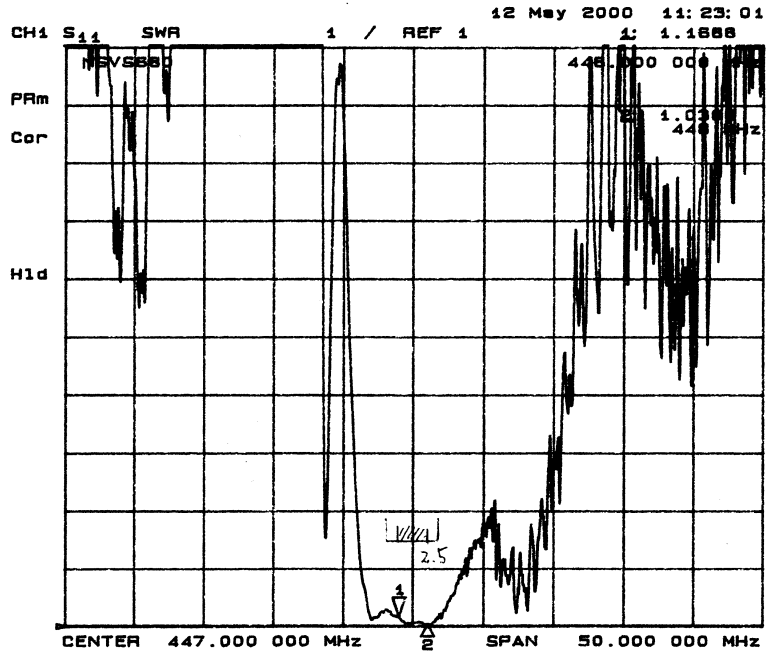
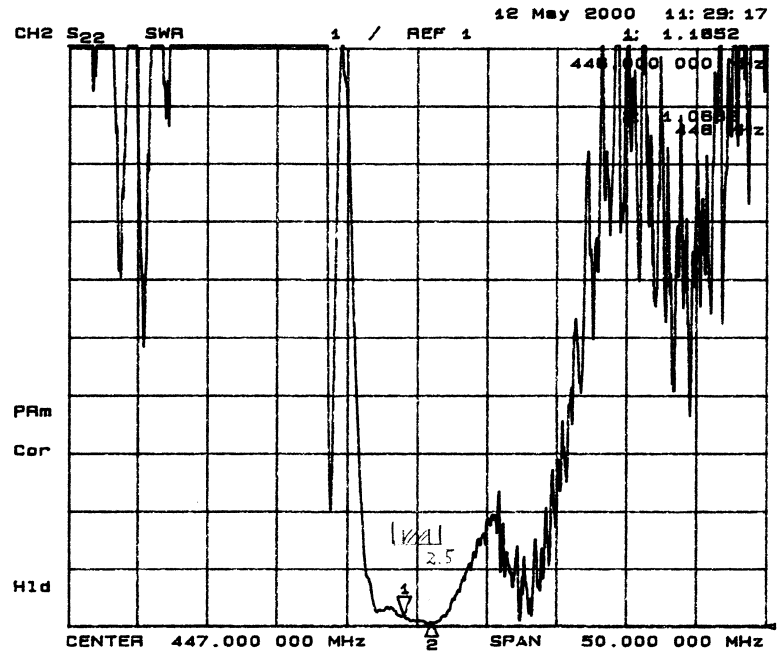




NSVS680
447MHz SAWfilter
特性図
smith-chart
VSWR







Japan Radio Co.,Ltd.

12 May 2000 11: 32: 27

CH1 S_{21} log MAG 10 dB/ REF 0 dB

NSVS680

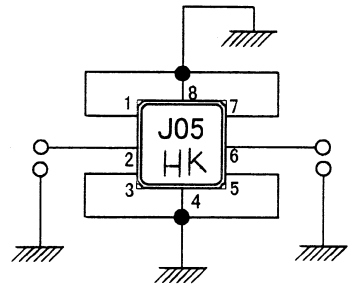
PRm

Cor

Hld

START .010 000 MHz STOP 2 000.000 000 MHz

NSVS680
447MHz SAWfilter
特性図
100kHz～2.0GHz



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