JRC SAW FILTER

NSVA279

Application

927MHz US CORDLESS

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 (f0)		-	927MHz
Insertion Loss	925.8~928.2MHz	3.5dB max.	2.5dB
Response Variation	925.8~928.2MHz	1.5dB max.	0.5dB
Input and Output VSWR	925.8~928.2MHz	2.5 max.	1.8
Out of Band Rejection (Relative to Through Level)	DC~<847MHz	55dB min.	60dB
	847~885MHz	45dB min.	50dB
	902~904MHz	20dB min.	50dB
	969~987MHz	30dB min.	32dB
	<987~1500MHz	55dB min.	60dB

(Operating Temperature Range: -10~+60ºC)

Maximum Rating: (Table 2)

Table 2. Maximum Ratings

Item	Rating
Maximum Input Power	+20dBm
Maximum DC Voltage	7.5V
Operating Temperature Range	-10~+60ºC
Storage Temperature	-20~+70ºC

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)

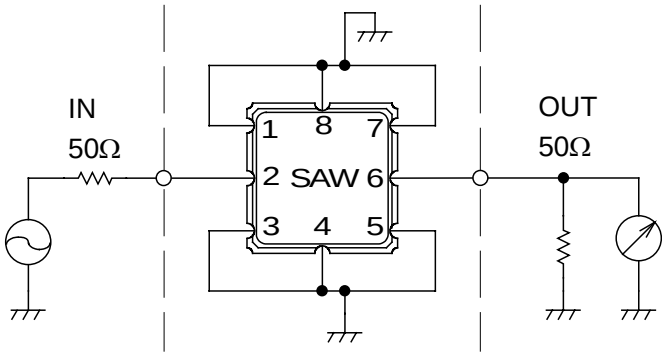
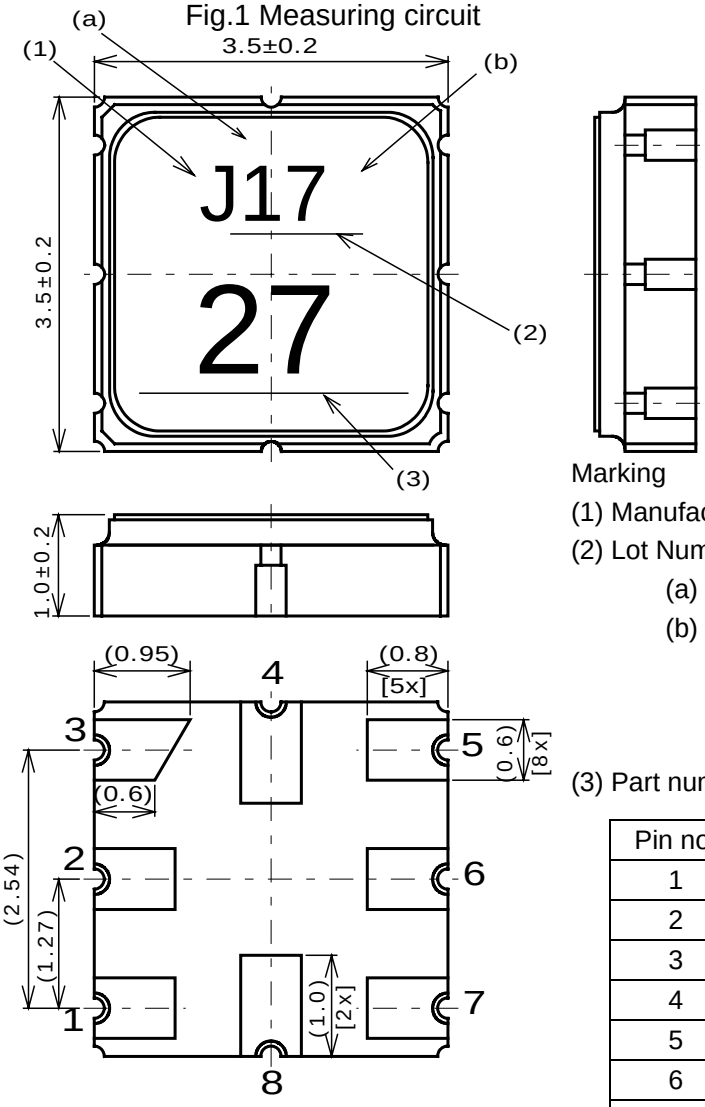


Fig.1 Measuring circuit



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.2 Package dimensions (in mm)

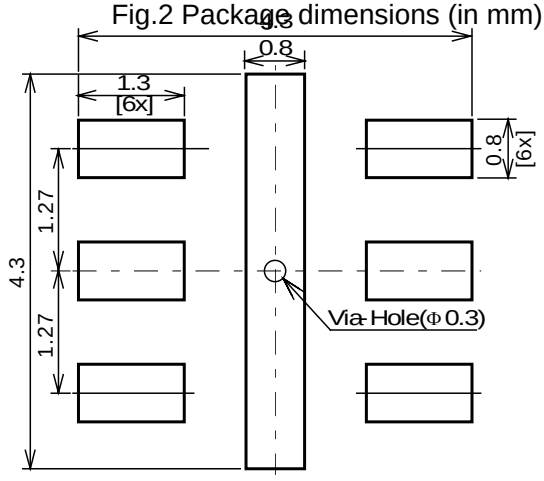


Fig.3 Desirable land area (in mm)

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 -10ºC or more than +60ºC, 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.

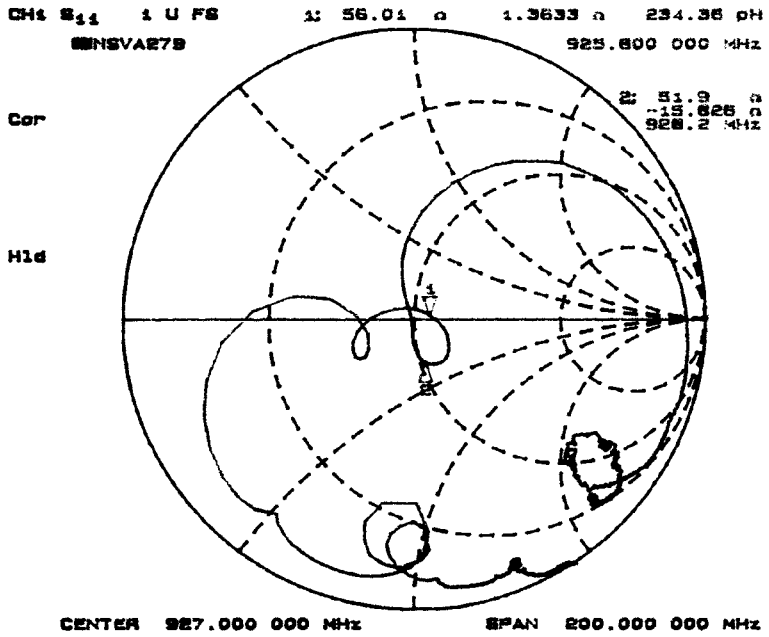
5. Confirm that there are not any influence for qualification to this component in mounting on PCB when this component is cleaned.

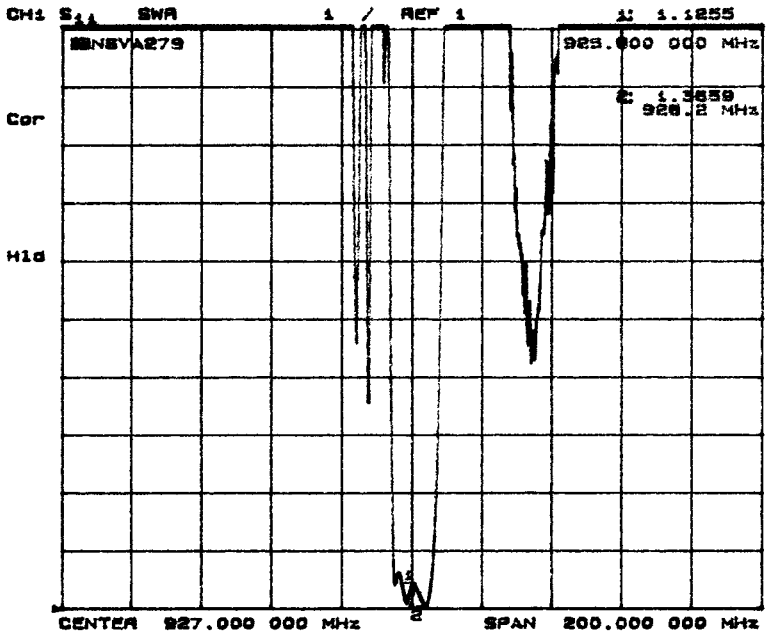
6. As it might be a cause of degradation of destruction to apply static electricity to this component, do not apply static electricity or excessive voltage while assembling and measuring. And do not transport this component with bare hand.

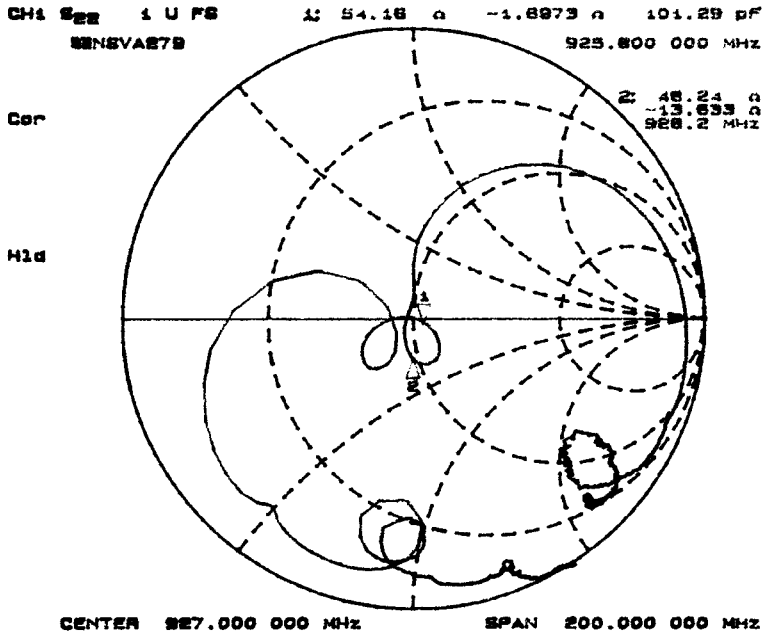
7. As it might be a cause of degradation or destruction to apply D.C. voltage between each terminal, apply D.C. voltage 7.5V max. in actual circuit.

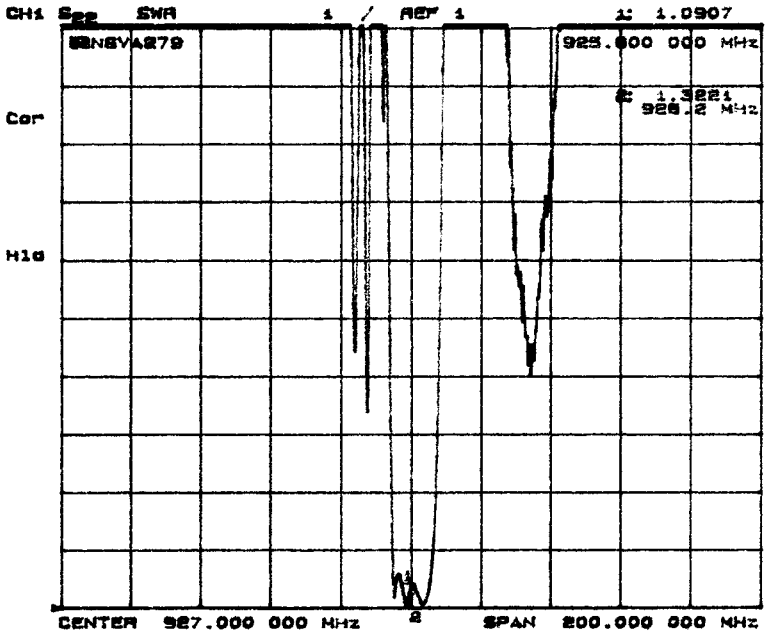
Note

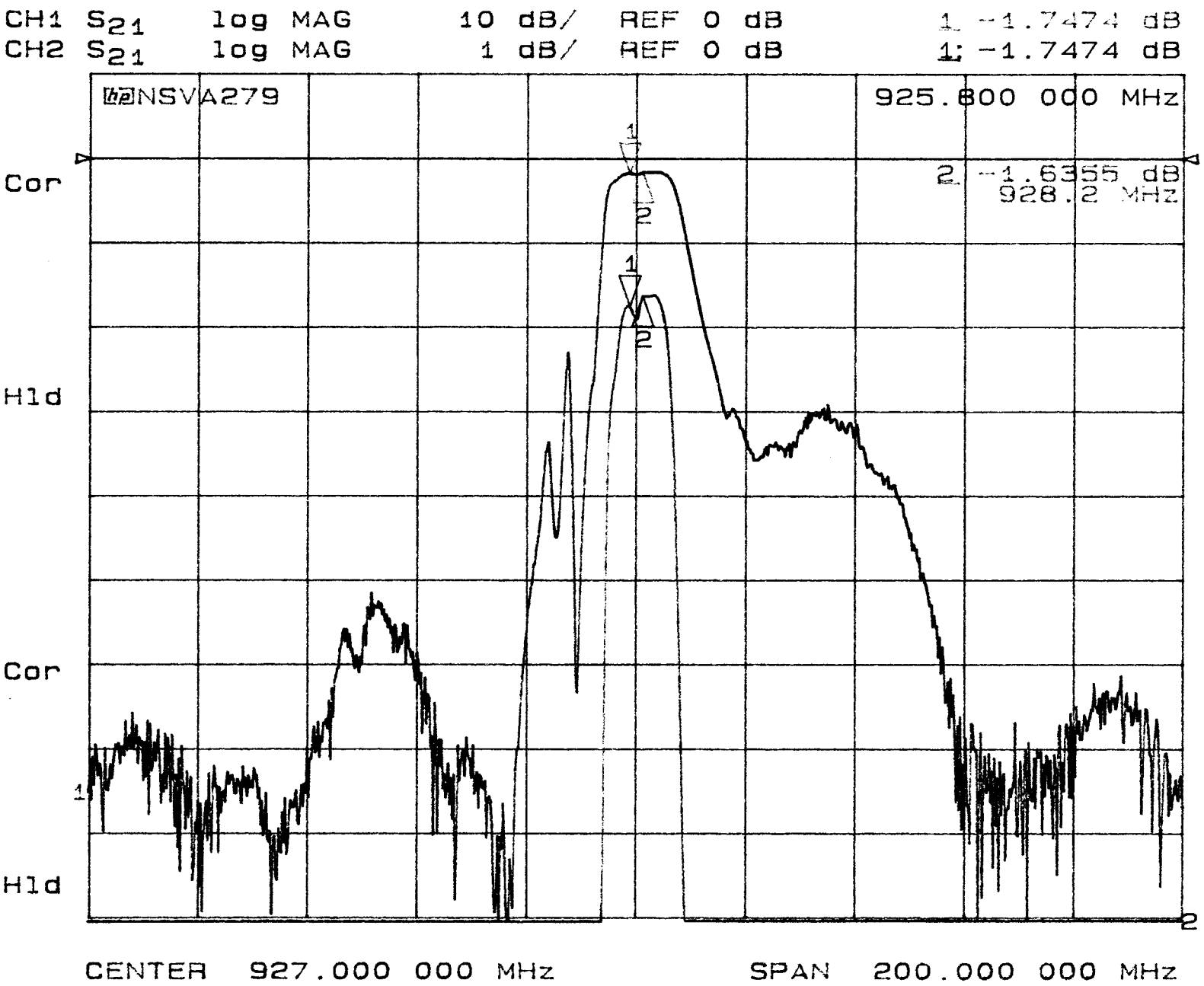
1. This specification specifies the quality of this component as a single unit. Make sure that this component is evaluated and confirmed against this specification when it is mounted to your products.

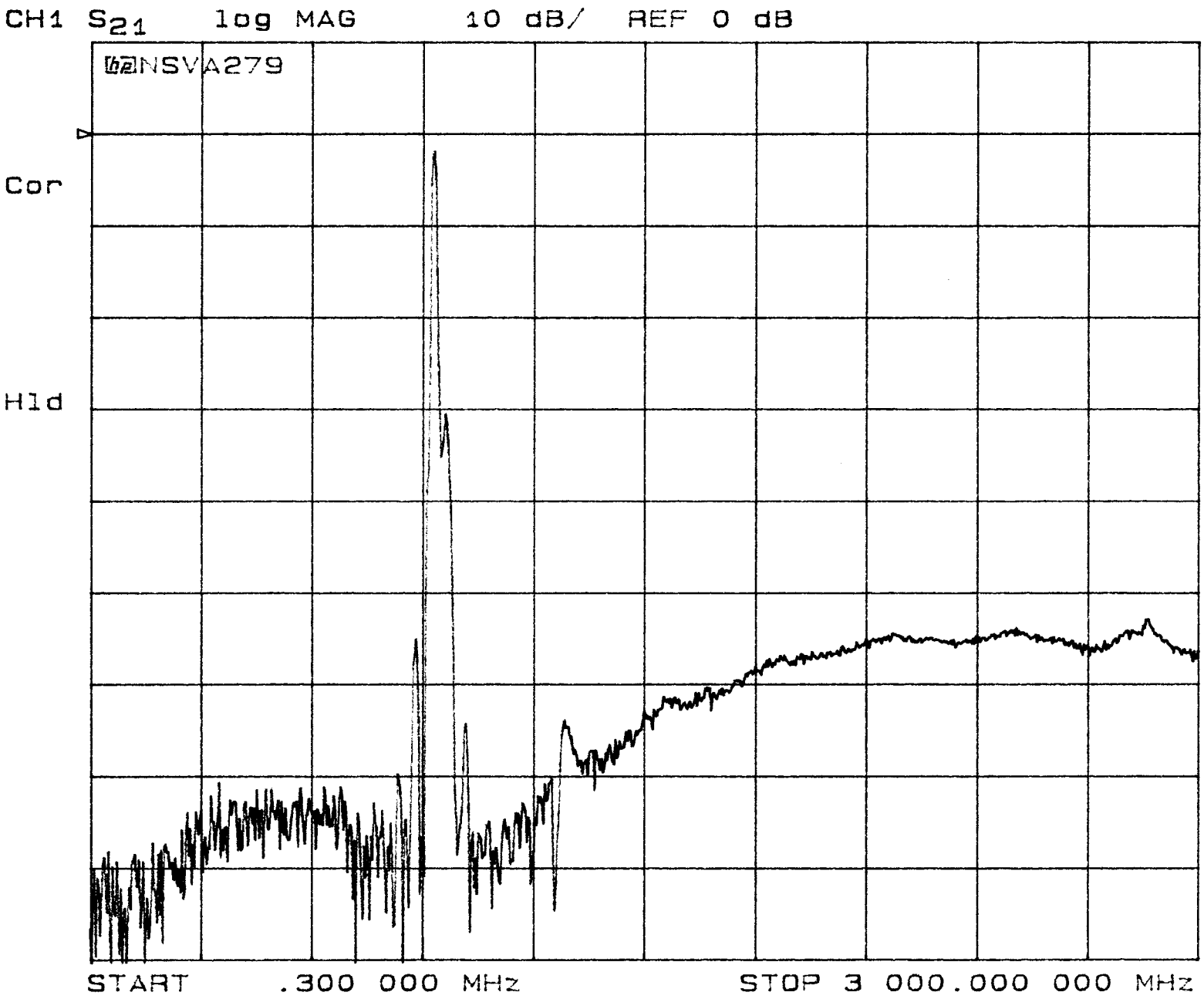

CH1 S11 1 U FS
1: 56.01 Ω 1.3633 Ω 234.36 pH
925.800 000 MHz
2: 51.9 Ω
-15.626 Ω
928.2 MHz
Cor
H1d
CENTER 927.000 000 MHz
SPAN 200.000 000 MHz


CH1 S11 SWR 1 / REF 1 1: 1.1255
925.800 000 MHz
2: 1.3659
928.2 MHz
Cor
H1d
CENTER 927.000 000 MHz
SPAN 200.000 000 MHz


CH1 S22 1 U FS
1: 54.16 Ω -1.8973 Ω 101.29 pF
925.800 000 MHz
2: 48.24 Ω
-13.633 Ω
928.2 MHz
Cor
H1d
CENTER 927.000 000 MHz
SPAN 200.000 000 MHz


CH1 S22 SWR 1 / REF 1 1: 1.0907
925.800 000 MHz
2: 1.3221
928.2 MHz
Cor
H1d
CENTER 927.000 000 MHz
SPAN 200.000 000 MHz


CH1 S21 log MAG 10 dB/ REF 0 dB
1: -1.7474 dB
CH2 S21 log MAG 1 dB/ REF 0 dB
1: -1.7474 dB
HP8NSVA279
925.800 000 0 MHz
2: -1.6355 dB
928.2 MHz
Cor
Hld
Cor
Hld
CENTER 927.000 000 MHz
SPAN 200.000 000 MHz


CH1 S21 log MAG 10 dB/ REF 0 dB
hpNSVA279
Cor
Hld
START .300 000 MHz
STOP 3 000.000 000 MHz