



# APPROVAL SHEET

Approval Specification	Customer's Approval Certificate
<b>TO:</b>	Please return this copy as a certification of your approval
<b>Part No.:</b>	<b>Checked &amp; Approved by:</b>
<b>Customer's Part No.:</b>	<b>Date:</b>

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Part No.	:	SF0322
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<b>Prepared by:</b>	梁浩
<b>Checked by:</b>	
<b>Approved by:</b>	

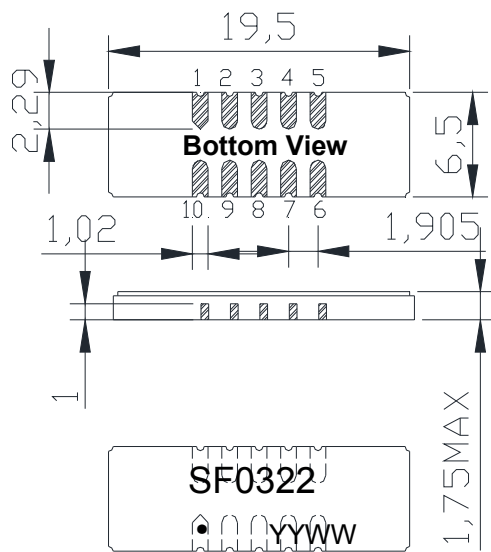
### Application

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 600 KHz

### Features

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 19.50x6.50x1.75mm<sup>3</sup>
- Package Code SMD19
- **Electrostatic Sensitive Device(ESD)**

### Package Dimensions (Unit: mm)



### Pin Configuration

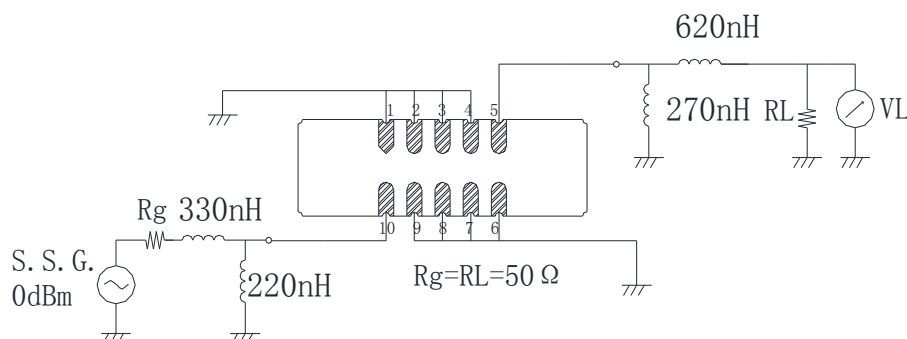
Pin No.	Description
10	Input
5	Output
1,2,3,4,6,7,8,9	Ground

### Marking Description

<b>S</b>	Trademark
<b>F</b>	SAW Filter
<b>0322</b>	Part Number
●	Pin 1
<b>YYWW</b>	Year Code & Week Code

\*Fig: If the products produced in 06<sup>th</sup> week of 2012,  
The year code & week code is 1206.

### Test Circuit (Bottom View)



**Performance****Maximum Rating**

Item		Value	Unit
DC Voltage	V <sub>DC</sub>	3	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +125	°C
RF Power Dissipation	P	10	dBm

**Electronic Characteristics**

Test Temperature: 25°C ± 2°C

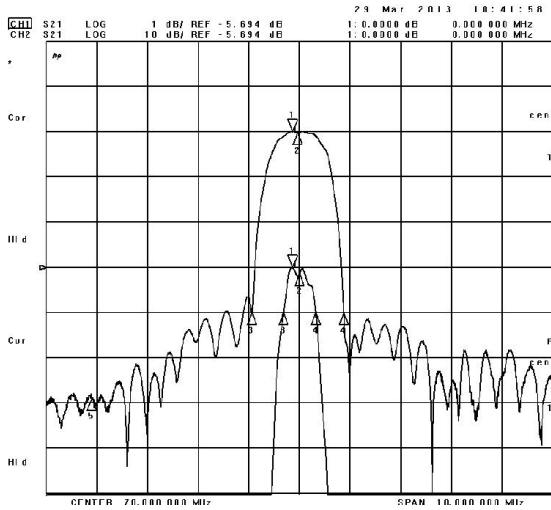
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

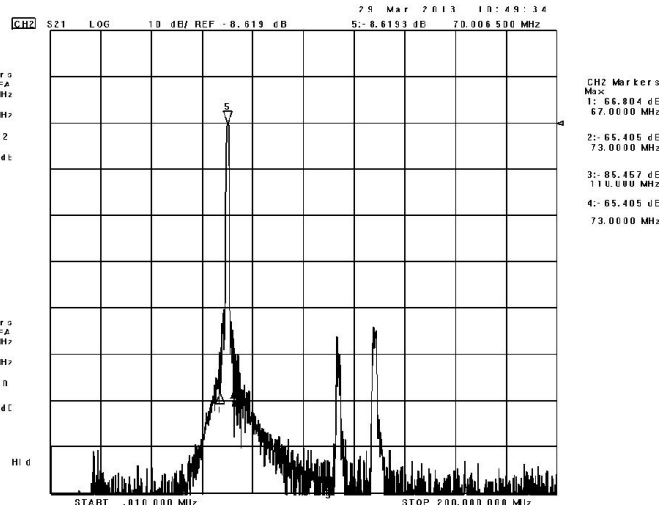
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f <sub>c</sub>	69.97	70.00	70.03	MHz
Insertion Loss(min)	IL		6.0	9.0	dB
Amplitude Ripple (p-p)	Δα		0.7	1.0	dB
1 dB Bandwidth	BW <sub>1dB</sub>	600.0	640.0		KHz
40 dB Bandwidth	BW <sub>40dB</sub>		1.9	2.0	MHz
Phase Linearity	Pha		8.0	10.0	deg
Absolute Attenuation	α				
	20.00-67.00 MHz	45.0	48.0		dB
	67.00-68.40 MHz	40.0	42.0		dB
	71.60-73.00 MHz	40.0	42.0		dB
	73.00-110.00 MHz	45.0	48.0		dB
	110.00-130.00 MHz	40.0	42.0		dB
Input VSWR	69.70-70.30 MHz		1.8:1	3.0:1	/
Output VSWR	69.70-70.30 MHz		1.8:1	3.0:1	/

Frequency Characteristics

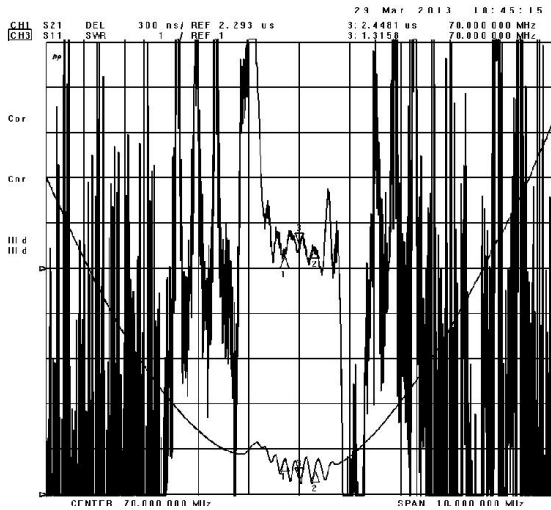
Frequency Response



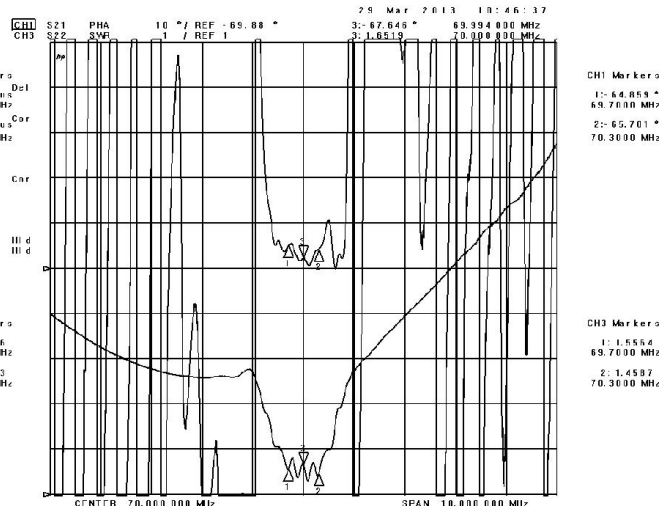
Frequency Response (wideband)



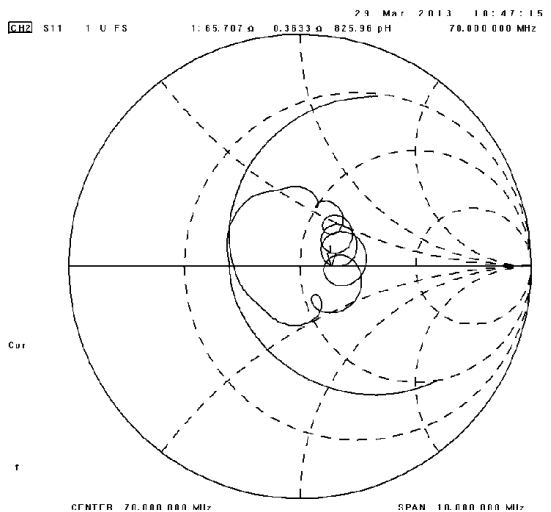
Delay Ripple & S11 VSWR



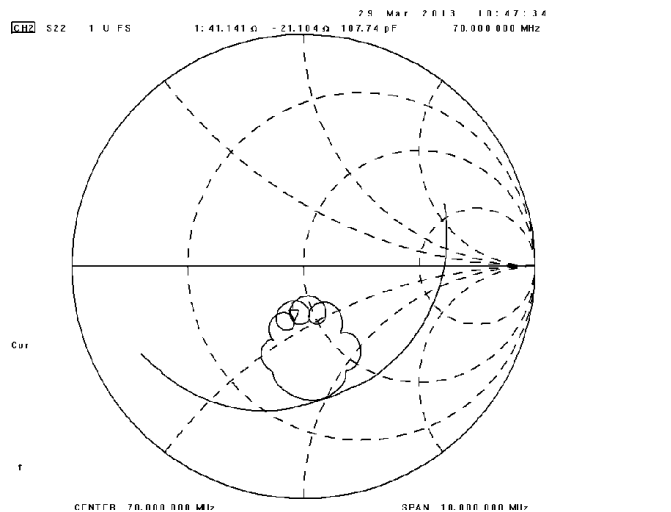
Phase Linearity & S22 VSWR



S11 Smith Chart



S22 Smith Chart





**Notes**

1. As a result of the particularity of inner structure of SAW products, it easy to be breakdown by electrostatic, so we should pay attention to **ESD protect** in the test.
2. **Static voltage** between signal load and ground may cause deterioration and destruction of the component. Please avoid static voltage.
3. **Ultrasonic cleaning** may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.
4. Only leads of component may **be soldered**. Please avoid soldering another part of component.
5. There is a close relationship between the device's performance and **matching network**. The specifications of this device are based on the test circuit shown above. L and C values may change depending on board layout. Values shown are intended as a guide only.