



# APPROVAL SHEET

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

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Part No.	:	SF0597
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<b>Prepared by:</b>	梁浩
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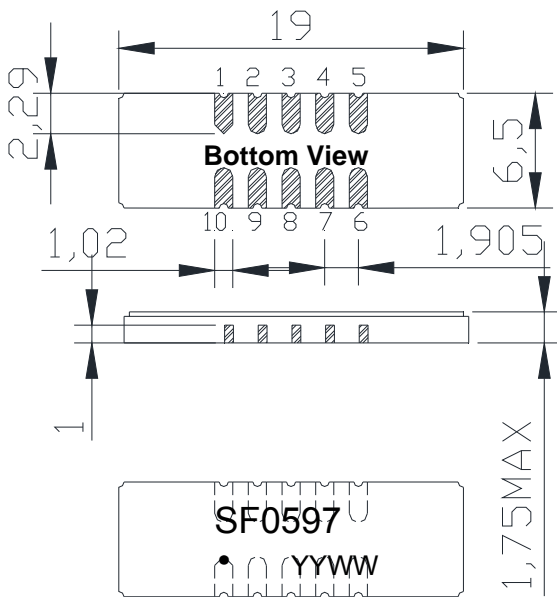
**Application**

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Passband 2.2 MHz

**Features**

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 19.00x6.50x1.75mm<sup>3</sup>
- Package Code SMD19
  
- **Electrostatic Sensitive Device(ESD)**

**Package Dimensions (Unit: mm)**



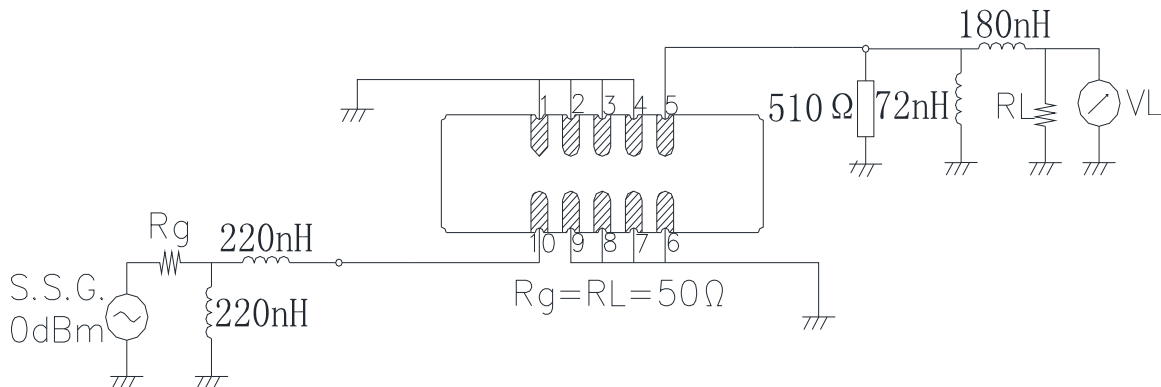
**Pin Configuration**

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>0597</b>	Part Number
●	Pin 1
YYWW	Year Code & Week Code

**Test Circuit(Bottom View)**



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

**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

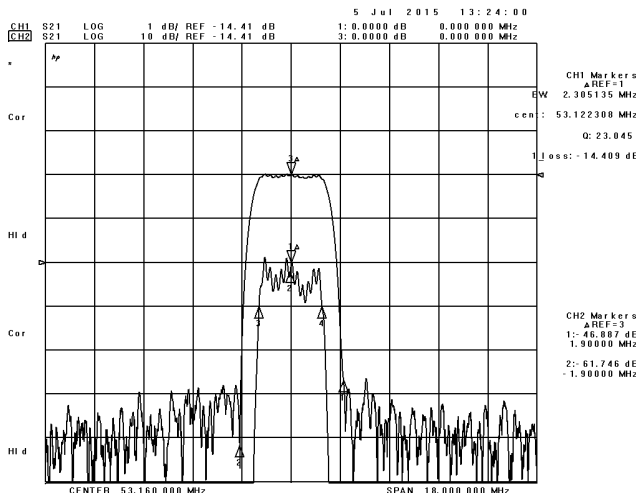
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

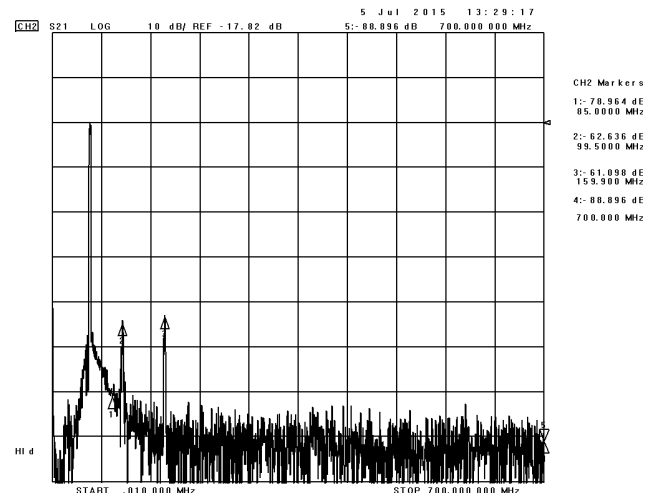
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f <sub>c</sub>		53.16		MHz
Insertion Loss(Fc)	IL		14.4	16.0	dB
1 dB Bandwidth(Relative to Fc)	BW <sub>1dB</sub>	2.20	2.30	2.40	MHz
Absolute Attenuation(With a base of Fc)	α				
	51.26MHz	46.5	61.7		dB
	55.06MHz	46.5	46.8		dB
	43.16-51.26MHz	45.0	48.0		dB
	55.06-63.16MHz	45.0	47.0		dB
	85.00-700.00MHz	25.0	43.0		dB
Phase Linearity	52.06-54.26MHz		7.0	10.0	deg
Input VSWR	53.16MHz		2.1:1	2.5:1	/
Output VSWR	53.16MHz		1.7:1	2.0:1	/

Frequency Characteristics

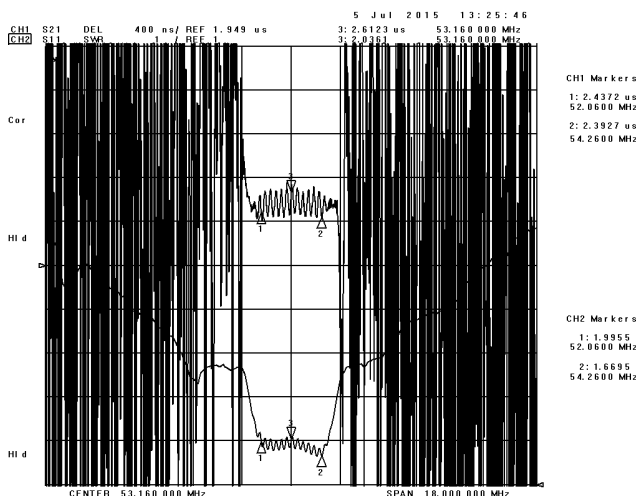
Frequency Response



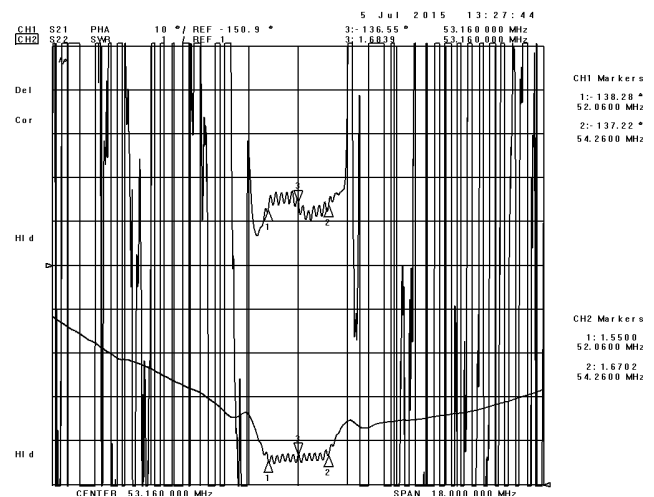
Frequency Response (wideband)



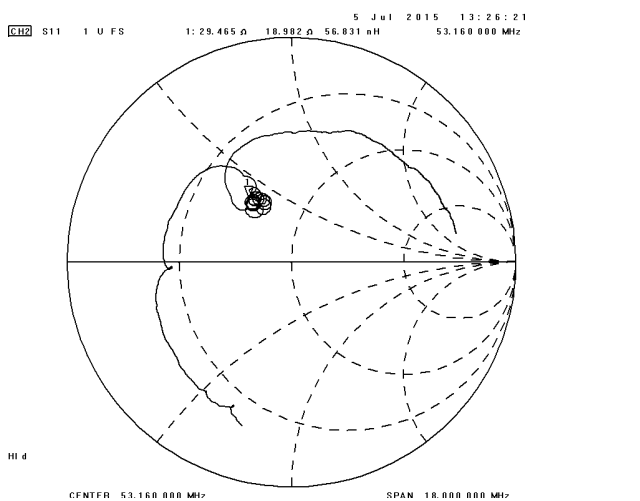
Delay Ripple & S11 VSWR



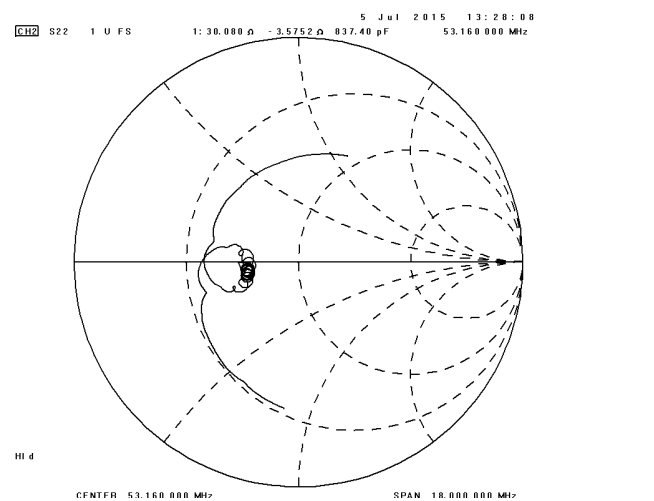
Phase Linearity & S22 VSWR



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.