APPROVAL SHEET

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

BEIJING ZHONGXUN SIFANG SCIENCE & TECHNOLOGY CO.,LTD.

Tel: +86-010-62968745
Fax: +86-010-62973654
E-mail: bjzxsf@bjzxsf.net
Website: http://www.bjzxsf.net
Add: NO.7 NieGeZhuang Rd,SuJiaTuo Town, HaiDian District,Beijing,P.R.China

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Prepared by:	郑宝琴
Checked by:	
Approved by:	

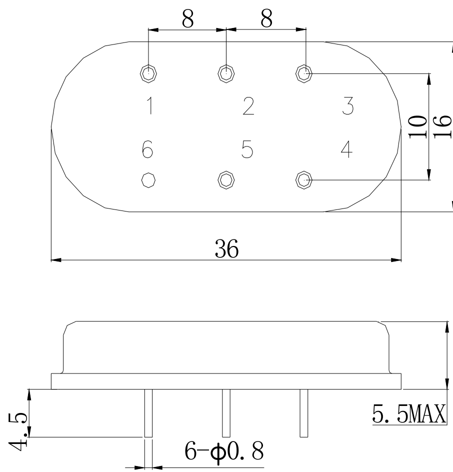
Application

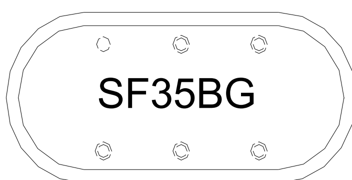
- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 4.5 MHz

Features

- **RoHS** compatible
- Package size 39.1x26.1x7.50mm^3
- Package Code SB01-02
- **E**lectrostatic **S**ensitive **D**evice(**ESD)**

Package Dimensions (Unit: mm)





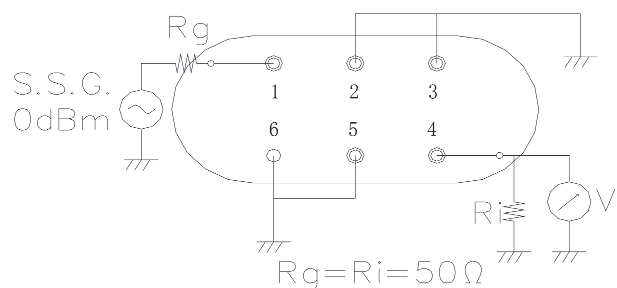
Pin Configuration

Pin No.	Description
1	Input
4	Output
1,2,3,5	Ground

Marking Description

S	Trademark
F	SAW Filter
35BG	Part Number

Test Circuit



Performance

Maximum Rating

Item		Value	Unit
DC Voltage	V_{DC}	3	V
Operation Temperature	T	-40 ~ +85	℃
Storage Temperature	T_{stg}	-55 ~ +125	℃
RF Power Dissipation	P	10	dBm

Electronic Characteristics

Test Temperature: 25℃±2℃

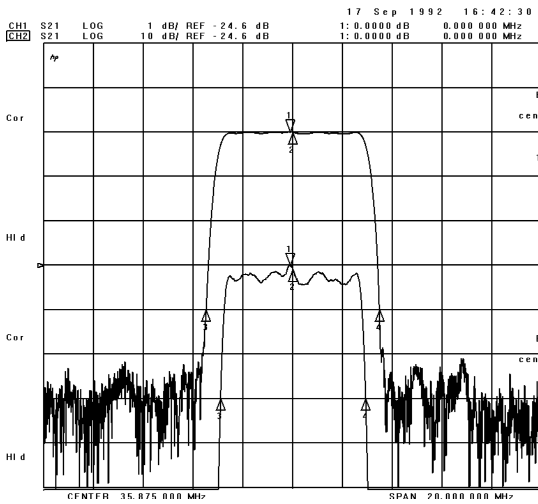
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

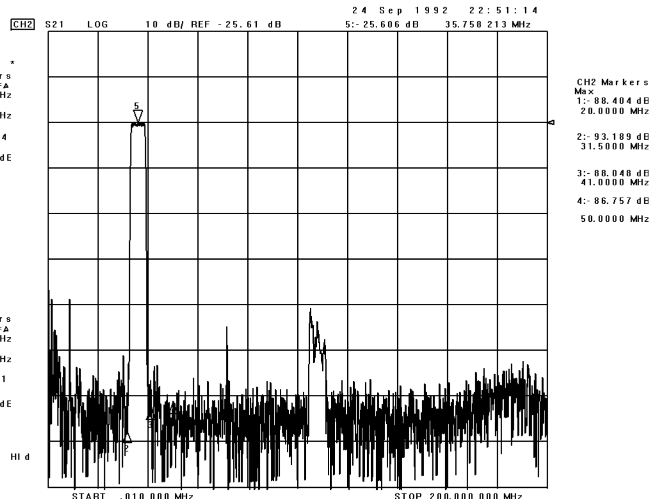
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		35.875		MHz
Insertion Loss(min)	IL		25.0	30.0	dB
Amplitude Ripple (p-p) 34.00-38.50MHz	△α		0.4	0.6	dB
Amplitude Ripple (p-p) 33.00-38.75 MHz	△α		2.3	2.5	dB
Group Delay Ripple(relative to 38.00 MHz) 34.00-38.50MHz	GDR		120.0	150.0	ns
Absolute Attenuation	α				
20.00-31.50 MHz		40.0	53.0		dB
32.50 MHz		26.0	28.0		dB
39.25 MHz		26.0	28.0		dB
41.00-60.00 MHz		40.0	53.0		dB
60.00-200.00 MHz		35.0	40.0		dB

Frequency Characteristics

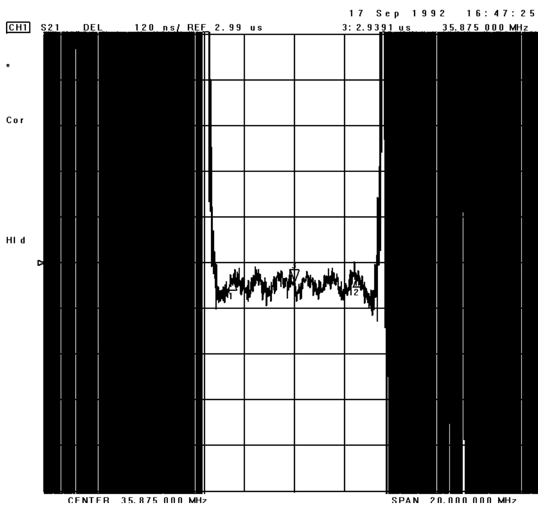
Frequency Response



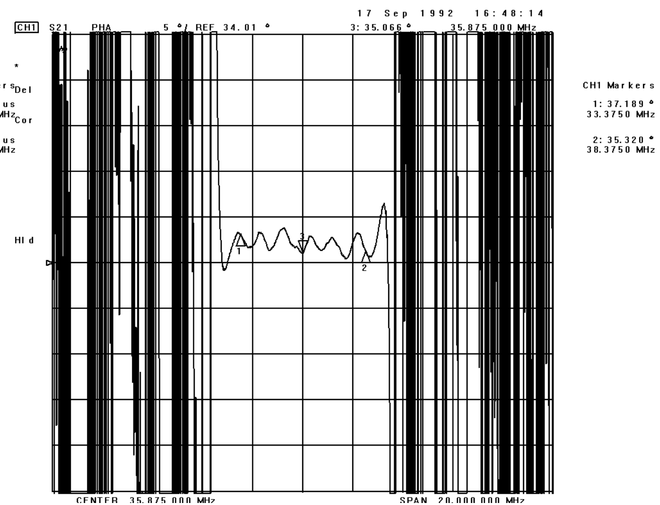
Frequency Response（wideband）



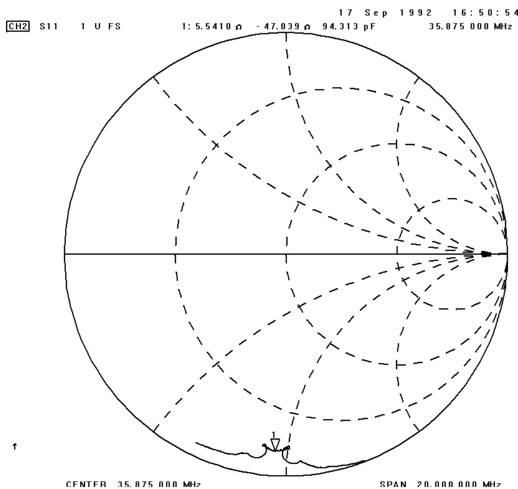
Delay Ripple



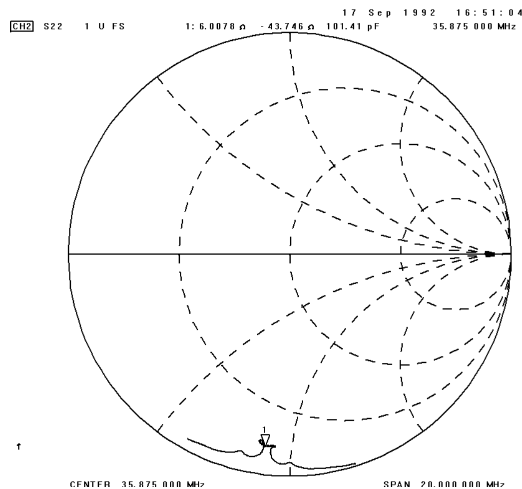
Phase Linearity



S11 Smith Chart



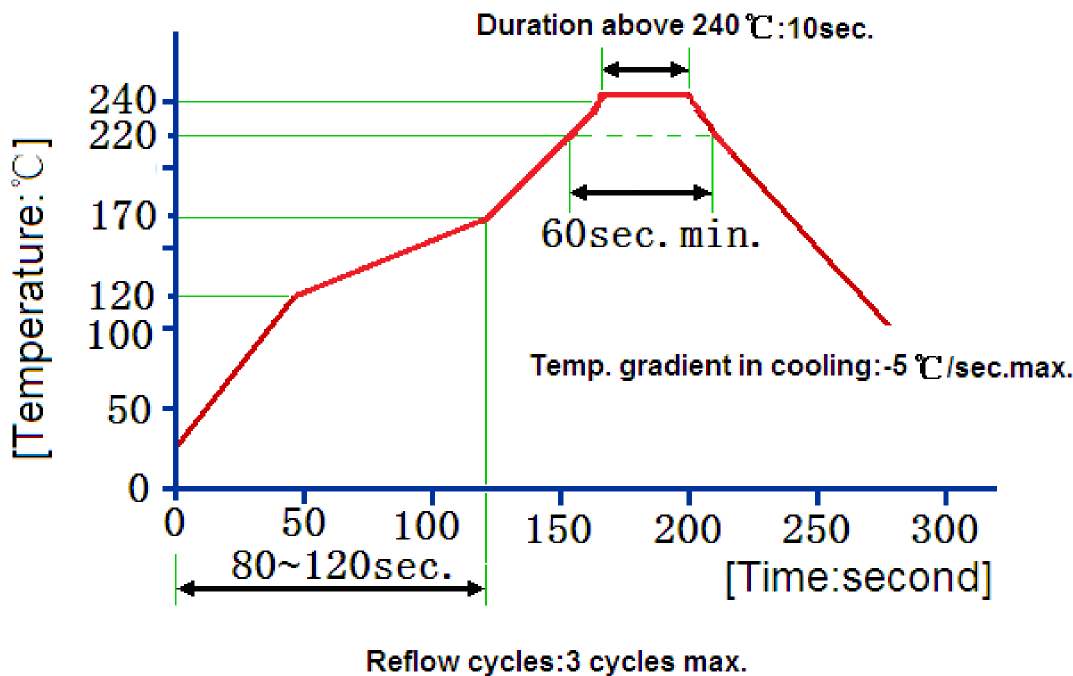
S22 Smith Chart



Reliability（The SAW components shall remain electrical performance after tests）

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: 85℃±2℃ , Duration: 250h , Recovery time: 2h±0.5h (2) Temperature: –55℃±3℃ , Duration: 250h ,Recovery time: 2h±0.5h
2	Humidity Test	Conditions: 60℃±2℃ , 90~95% RH Duration: 250h
3	Thermal Shock	Heat cycle conditions: TA=-55℃±3℃, TB=85℃±2℃, t1=t2=30min, Switch time: ≤3min, Cycle time: 100 times, Recovery time: 2h±0.5h.
4	Vibration Fatigue	Frequency of vibration: 10~55Hz Amplitude:1.5mm Directions: X,Y and Z Duration: 2h
5	Drop Test	Cycle time: 10 times Height: 1.0m
6	Solder Ability Test	Temperature: 245℃±5℃ Duration: 3.0s--5.0s Depth: DIP--2/3 , SMD--1/5
7	Resistance to Soldering Heat	(1)Thickness of PCB:1mm , Solder condition: 260℃±5℃ , Duration: 10±1s (2)Temperature of Soldering Iron: 350℃±10℃ , Duration: 3~4s , Recovery time : 2 ± 0.5h

Recommended Reflow Soldering Diagram



Reflow cycles:3 cycles max.

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.