



SPEC NO.: RFS-605M

Specification

TO:STE1108

Model Name: SAW FILTER

PART NO: SSF70N01D3512

CUSTOMER PART NO.:

STRONG ELECTRONICS&TECHNOLOGY LIMITED

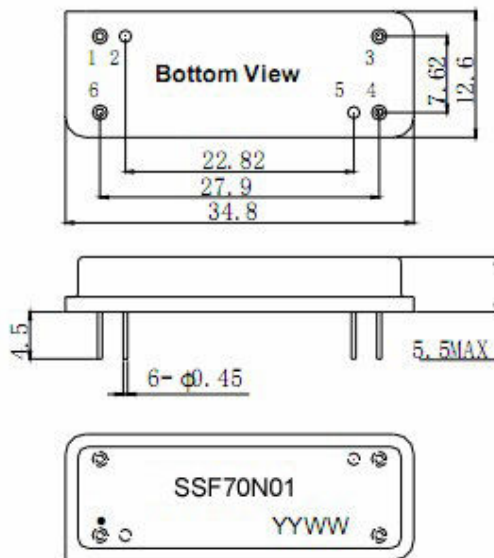
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www.strongelectronics.net

1. Package Dimension

(D3512)



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

Marking Description

S	Trademark
SF	SAW Filter
70N01	Part Number
●	Pin 1
YYWW	Year Code & Week Code

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

2. Performance

Maximum Rating

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

Electronic Characteristics

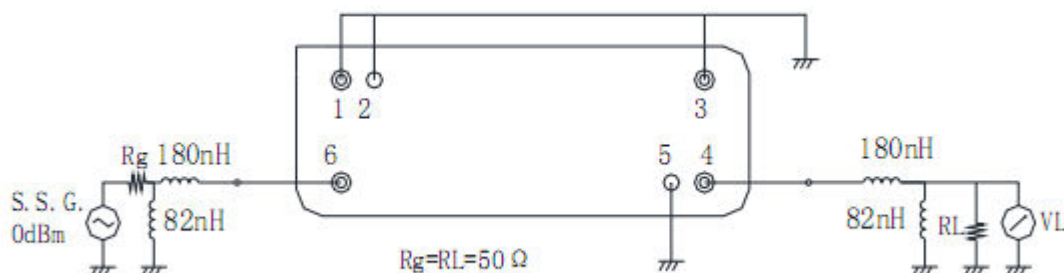
Test Temperature: $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Terminating source impedance: 50Ω

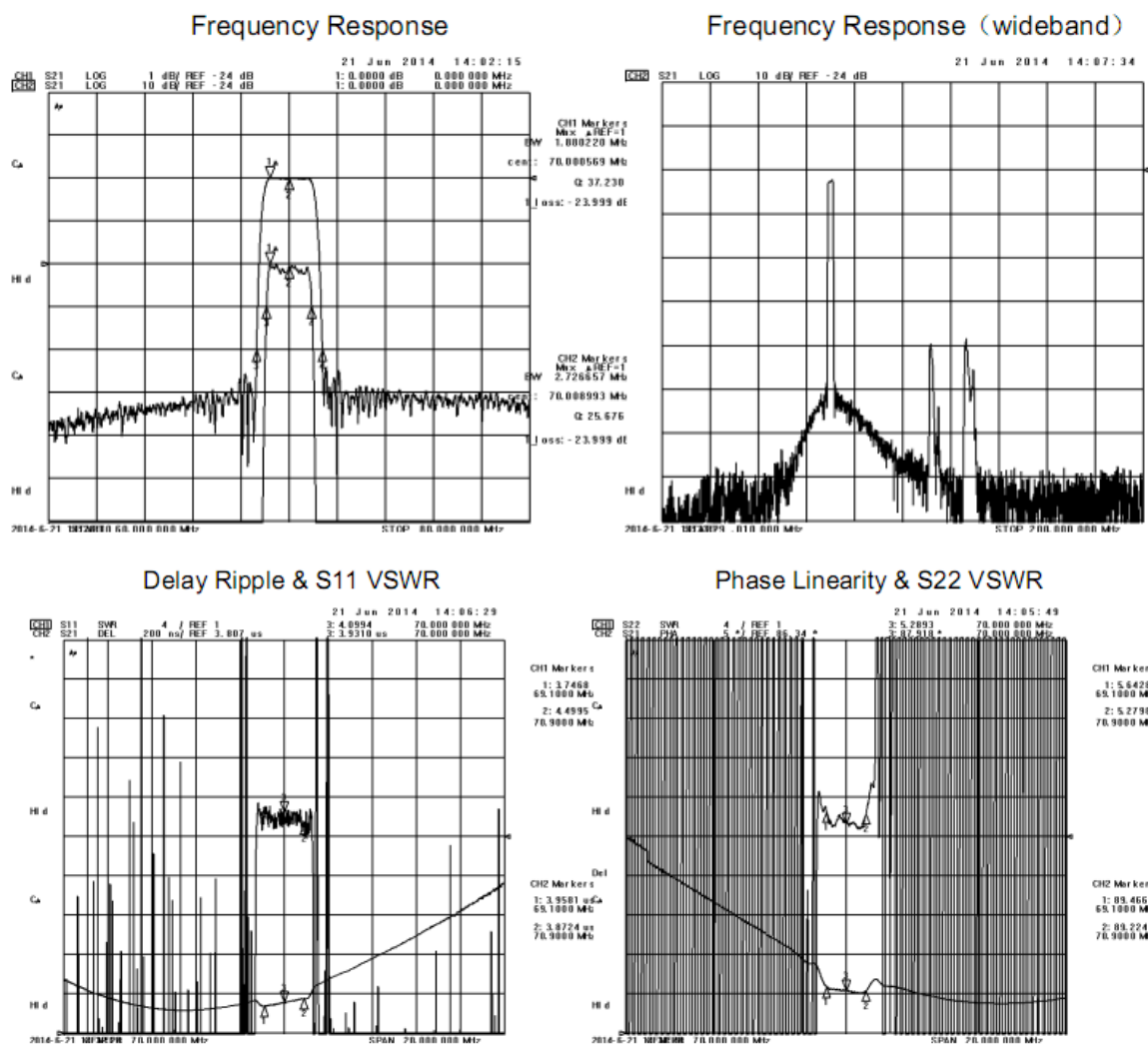
Terminating load impedance: 50Ω

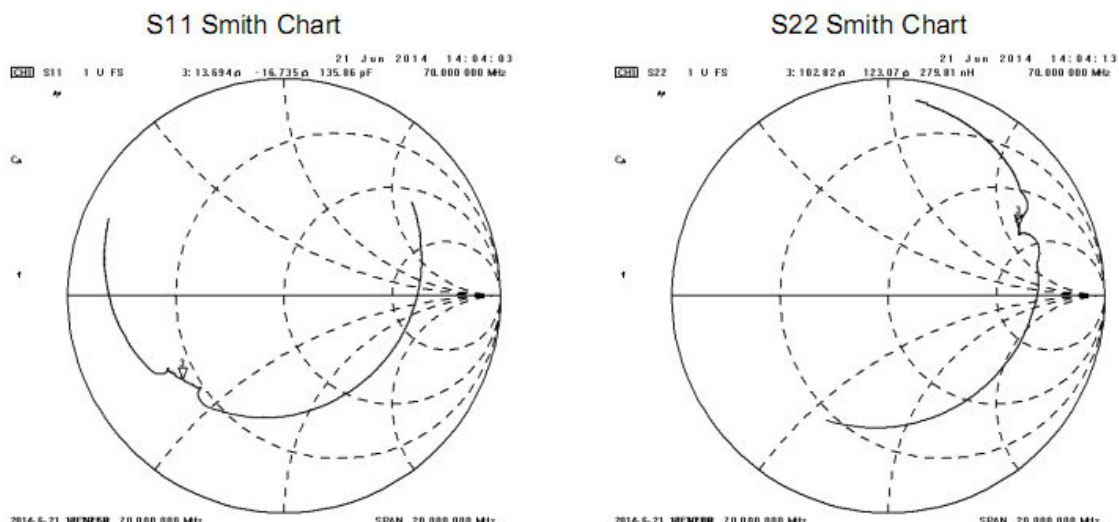
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f_c	69.95	70.00	70.05	MHz
Insertion Loss(min)	IL		24.0	28.0	dB
Amplitude Ripple (p-p)	$\Delta\alpha$		0.3	1.0	dB
1 dB Bandwidth	BW_{1dB}	1.8	1.88		MHz
40 dB Bandwidth	BW_{40dB}		2.7	3.0	MHz
Absolute Attenuation	α				
	DC-68.00MHz	45.0	48.0		dB
	72.00-100.00MHz	45.0	48.0		dB

3. Test Circuit



4. Frequency Characteristics

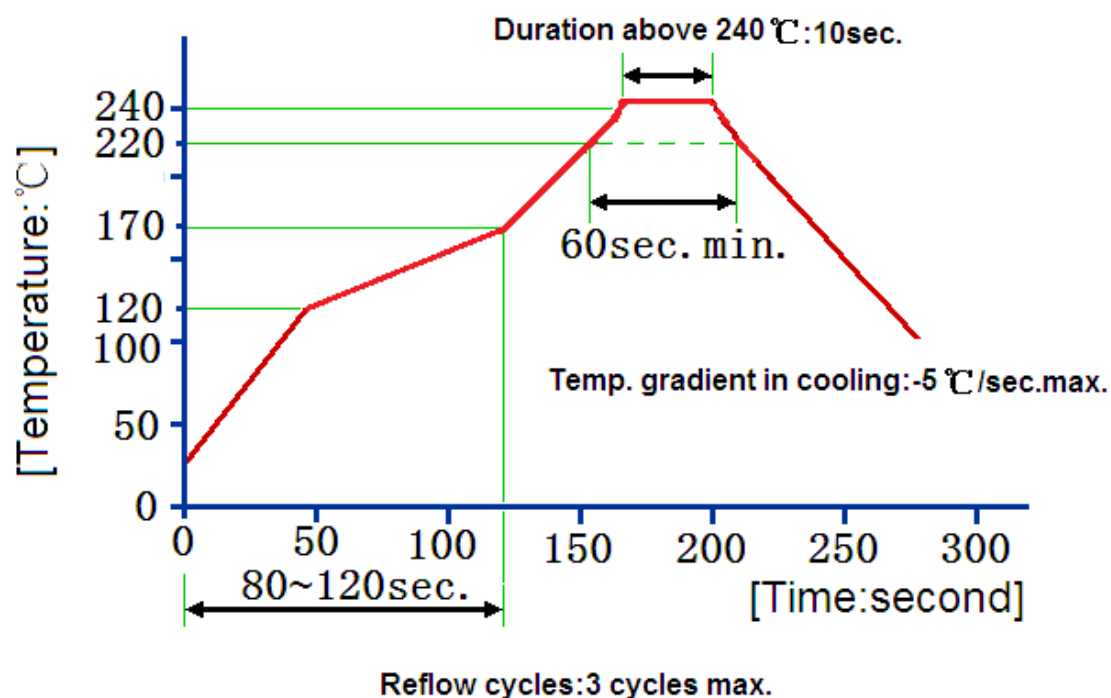




Reliability (The SAW components shall remain electrical performance after tests)

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: $85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, Duration: 250h, Recovery time: $2\text{h}\pm 0.5\text{h}$ (2) Temperature: $-55^{\circ}\text{C}\pm 3^{\circ}\text{C}$, Duration: 250h, Recovery time: $2\text{h}\pm 0.5\text{h}$
2	Humidity Test	Conditions: $60^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 90~95% RH Duration: 250h
3	Thermal Shock	Heat cycle conditions: $\text{TA}=-55^{\circ}\text{C}\pm 3^{\circ}\text{C}$, $\text{TB}=85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, $t_1=t_2=30\text{min}$, Switch time: $\leq 3\text{min}$, Cycle time: 100 times, Recovery time: $2\text{h}\pm 0.5\text{h}$.
4	Vibration Fatigue	Frequency of vibration: 10~55Hz Amplitude: 1.5mm
5	Drop Test	Cycle time: 10 times Height: 1.0m
6	Solder Ability Test	Temperature: $245^{\circ}\text{C}\pm 5^{\circ}\text{C}$ Duration: 3.0s--5.0s Depth: DIP--2/3, SMD--1/5
7	Resistance to Soldering Heat	(1) Thickness of PCB: 1mm, Solder condition: $260^{\circ}\text{C}\pm 5^{\circ}\text{C}$, Duration: $10\pm 1\text{s}$ (2) Temperature of Soldering Iron: $350^{\circ}\text{C}\pm 10^{\circ}\text{C}$, Duration: 3~4s,

Recommended Reflow Soldering Diagram



Notes

1. As a result of the particularity of inner structure of SAW products, it is 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.