

Application

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 2.0 MHz

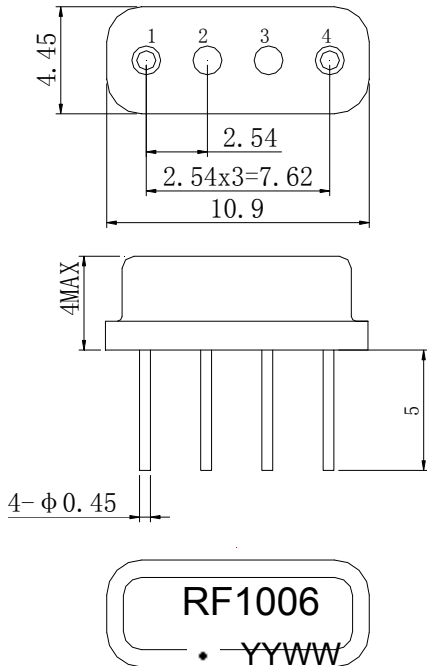
Features

- RoHS compatible
- Package size 10.9x4.45x5.00mm³
- Package Code SC04-06
- Electrostatic Sensitive Device(ESD)



SF1070Z

Package Dimensions (Unit: mm)



Pin Configuration

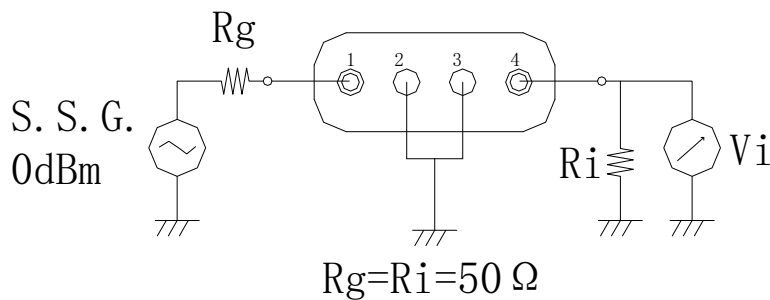
Pin No.	Description
1	Input
4	Output
2,3	Case Ground

Marking Description

RF	R	Manufacturer
	F	SAW Filter
1006	Part Number	
●	Pin 1	
YYWW	Year Code & Week Code	

*Fig: If the products produced in 06th week of 2015, The year code & week code is 1506.

Test Circuit (Bottom View)



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	15	dBm

Electronic Characteristics

Test Temperature: 25°C ± 2°C

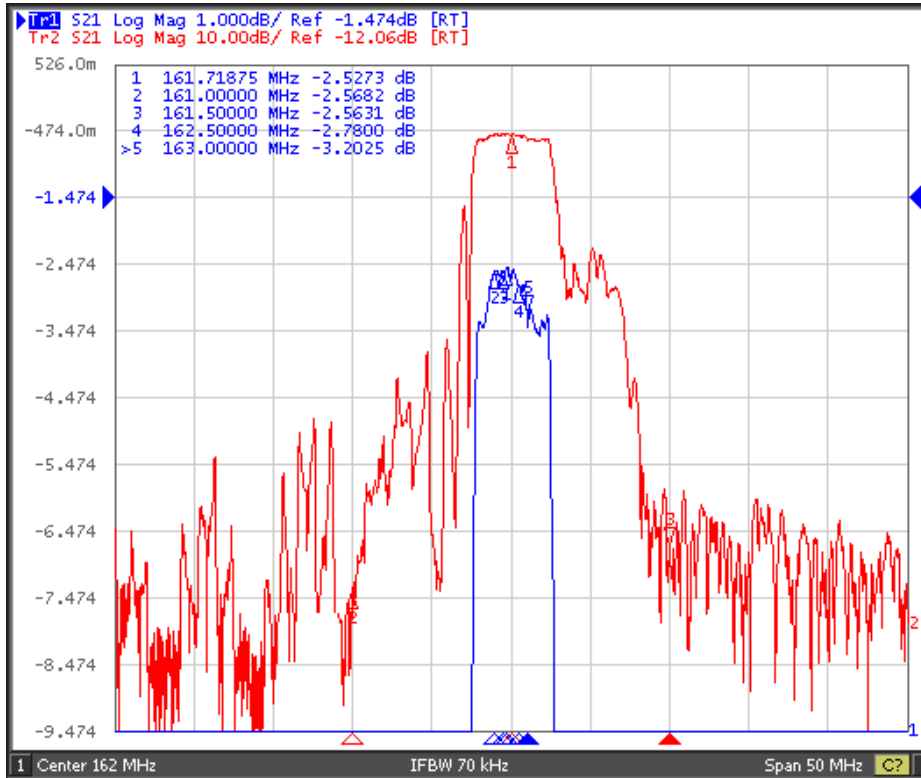
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

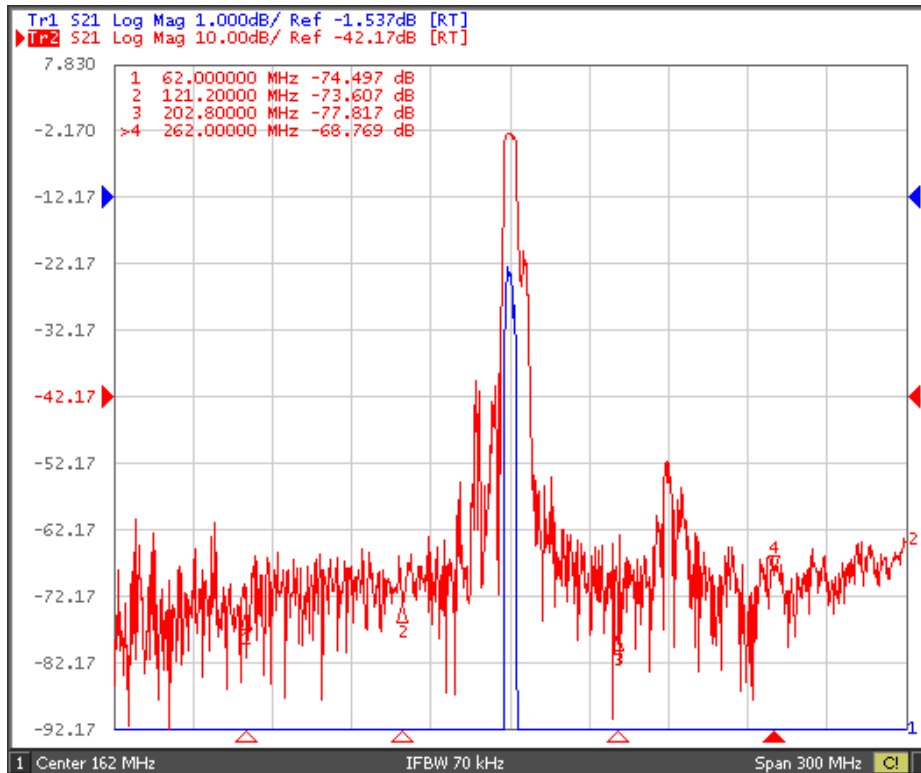
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f _c		162.0		MHz
Insertion Loss(min)	IL		2.5	3.0	dB
Insertion Loss	161.00-163.00 MHz IL		3.2	4.0	dB
Amplitude Ripple (p-p)	161.00-163.00 MHz Δa		0.8	1.5	dB
Group Delay Ripple	161.00-163.00 MHz		150.0	200.0	ns
Absolute Attenuation	a				
	DC-62.00 MHz	50.0	55.0		dB
	62.00-121.20 MHz	50.0	55.0		
	121.20-152.00 MHz	30.0	35.0		dB
	172.00-202.80 MHz	45.0	50.0		dB
	202.80-262.00 MHz	50.0	55.0		
	262.00-400.00 MHz	45.0	55.0		dB
	400.00-500.00 MHz	40.0	45.0		dB
	500.00-600.00 MHz	30.0	35.0		dB

Frequency Characteristics

Frequency Response



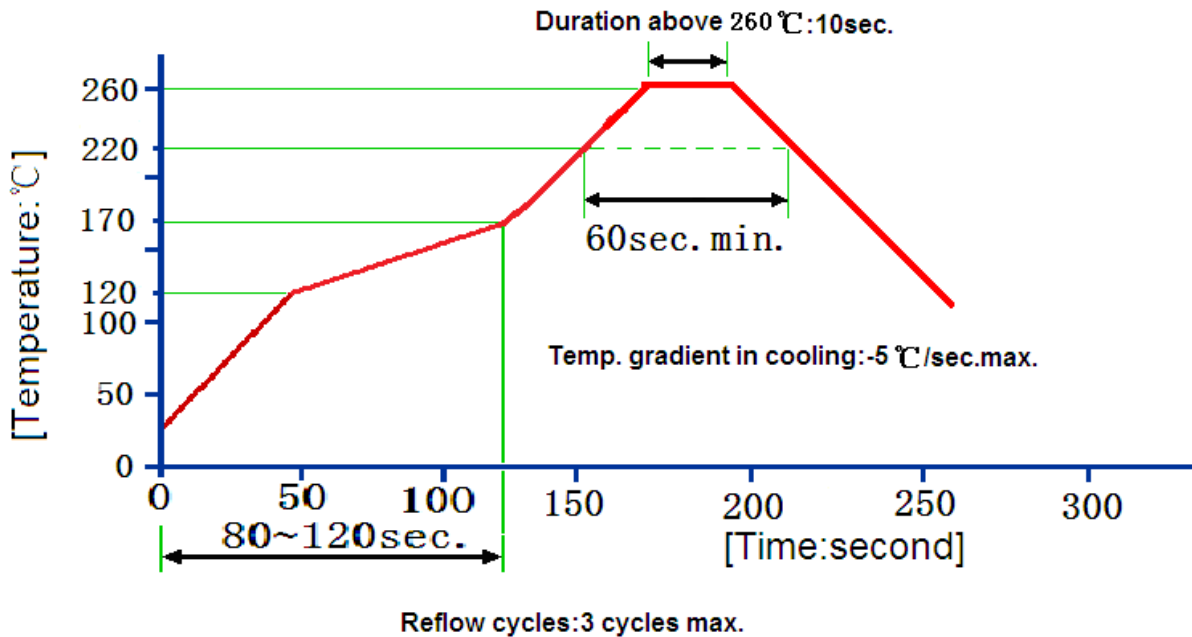
Frequency Response (wideband)



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

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: 85°C±2°C , Duration: 250h , Recovery time: 2h±0.5h (2) Temperature: -55°C±3°C , Duration: 250h ,Recovery time: 2h±0.5h
2	Humidity Test	Conditions: 60°C±2°C , 90~95% RH Duration: 250h
3	Thermal Shock	Heat cycle conditions: TA=-55°C±3°C, TB=85°C±2°C, 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°C±5°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°C±5°C , Duration: 10±1s (2)Temperature of Soldering Iron: 350°C±10°C , Duration: 3~4s , Recovery time : 2 ± 0.5h

Recommended Reflow Soldering Diagram



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.