SAW Filter

RF1022

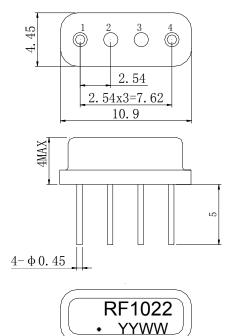
Application

- 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)

Package Dimensions (Unit: mm)



Pin Configuration

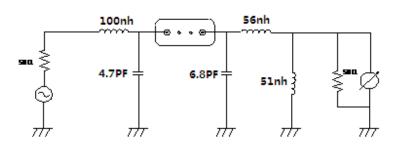
Pin No.	Description
1	Input
4	Output
2,3	Case Ground

Marking Description

RF	R	Manufacturer	
	F SAW Filter		
1022	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	т	-40 ~ +85	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C
RF Power Dissipation	Р	15	dBm

Electronic Characteristics

Test Temperature: 25℃±2℃

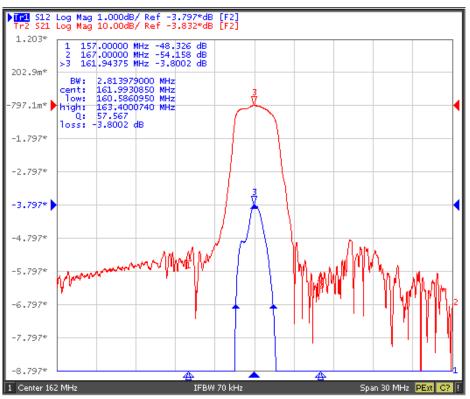
Terminating source impedance: 300Ω

Terminating load impedance: 300Ω

ltem		Minimum	Typical	Maximum	Unit	
Center Frequency		fc		162.00		MHz
Insertion Loss(min)		IL		3.8	5.0	dB
Amplitude Ripple (p-p) 161.00-163.00MHz		∆a		2.0	3.0	dB
3dB Bandwidth		BW_{3dB}	2.0	2.8		MHz
Absolute Attenuation		a				
	DC-157.00MHz		35.0	43.0		dB
	167.00-200.00MHz		35.0	40.0		dB
	200.00-262.00MHz		40.0	45.0		dB

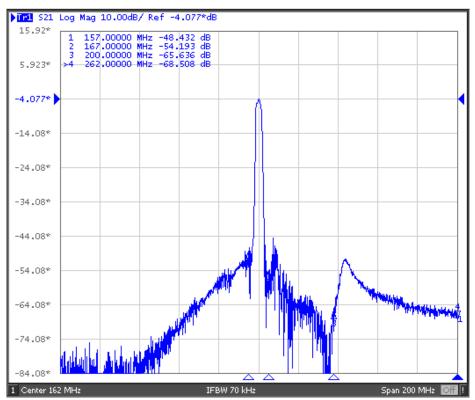
SAW Filter

Frequency Characteristics



Frequency Response

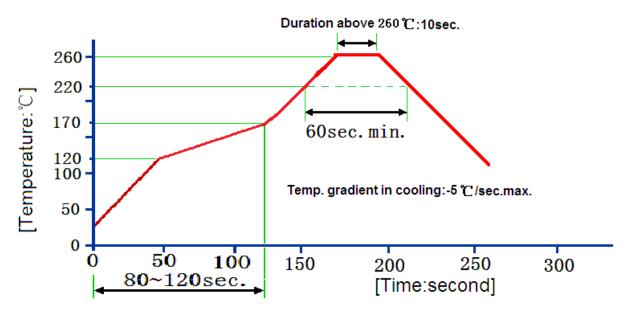






REYC	CONNS	SAW Filter	RF1022	
No.	Test item	Test condition		
1	Temperature Storage	 (1) Temperature: 85℃±2℃, Duration (2) Temperature: -55℃±3℃, Duration 		
2	Humidity Test	Conditions: 60℃±2℃ , 90~95% RH	Duration: 250h	
3	Thermal Shock	Heat cycle conditions: TA=-55℃±3° time: ≤3min, Cycle time: 100 times, F	℃, TB=85℃±2℃, t1=t2=30min, Switch Recovery time: 2h±0.5h.	
4	Vibration Fatigue	Frequency of vibration: 10~55Hz Directions: X,Y and Z	Amplitude:1.5mm Duration: 2h	
5	Drop Test	Cycle time: 10 times He	eight: 1.0m	
6	Solder Ability Test	Temperature: 245℃±5℃ Du Depth: DIP2/3 , SMD1/5	ıration: 3.0s5.0s	
7	Resistance to Soldering Heat	(1)Thickness of PCB:1mm , Solder c (2)Temperature of Soldering Iron: 35 Recovery time : 2 ± 0.5h	condition: 260℃±5℃,Duration: 10±1s i0℃±10℃,Duration: 3~4s,	

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.