



APPROVAL SHEET

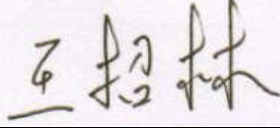
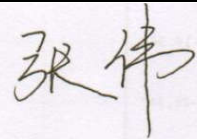
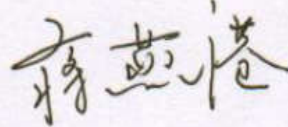
Approval Specification	Customer's Approval Certificate
TO:	Please return this copy as a certification of your approval
Part No.:	Checked & Approved by:
Customer's Part No.:	Date:

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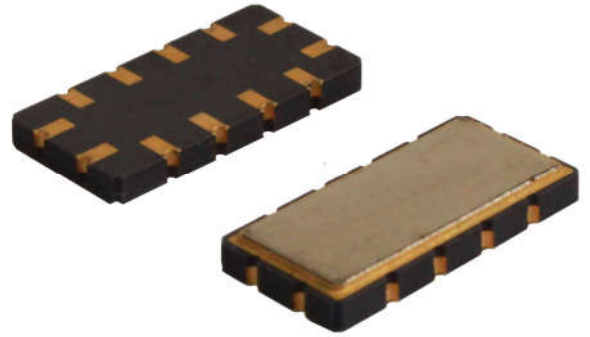


Part No.	:	SF1629
Pages	:	6
Date	:	2017/1/12
Revision	:	1.0

Prepared by:	
Checked by:	
Approved by:	

Application

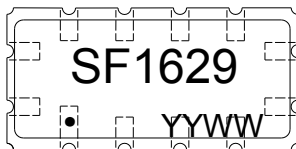
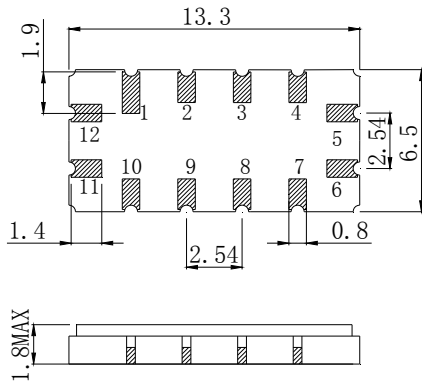
- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 4.30 MHz



Features

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 13.30x6.50x1.80mm³
- Package Code QCC12
- **Electrostatic Sensitive Device(ESD)**

Package Dimensions (Unit: mm)



Pin Configuration

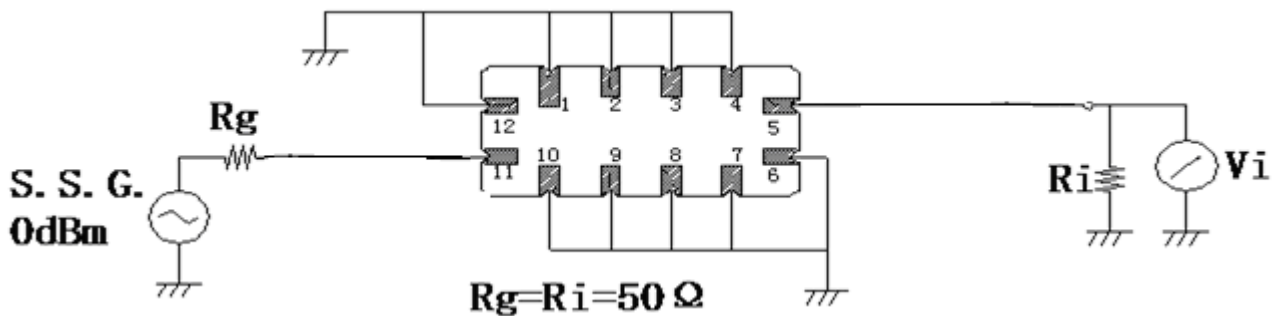
Pin No.	Description
11	Input
5	Output
1,2,3,4,7,8,9,10	Case Ground
6,12	To be Grounded

Marking Description

SF	SF	Trademark
	F	SAW Filter
1629	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

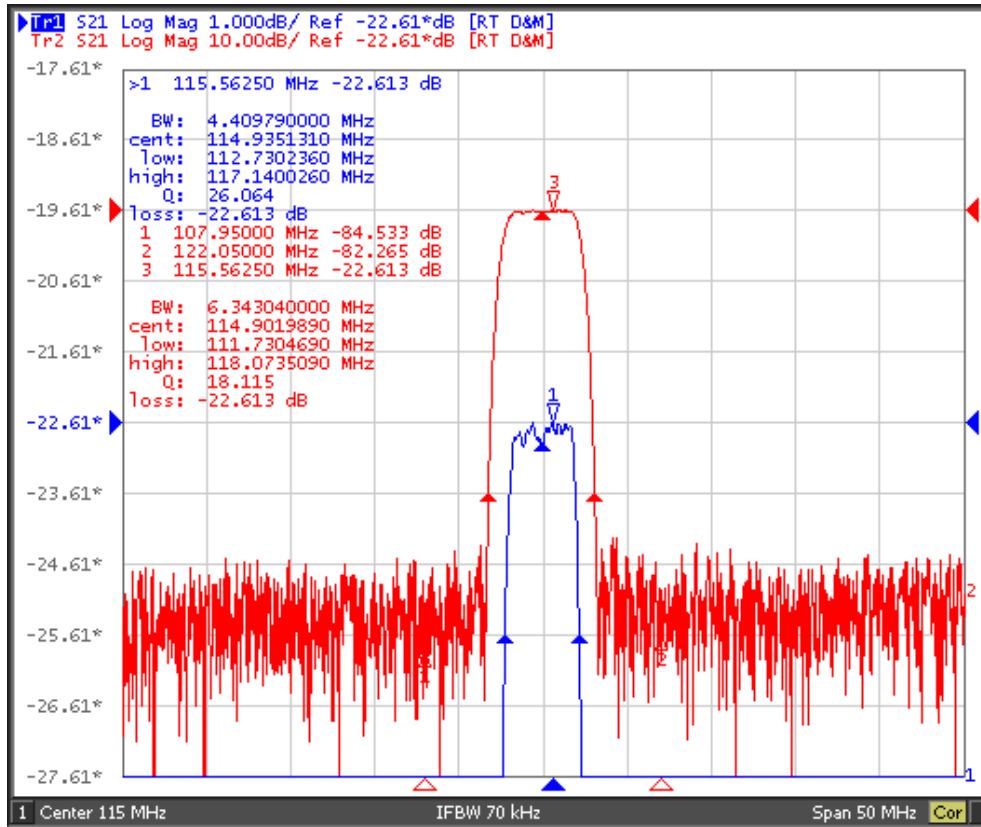
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

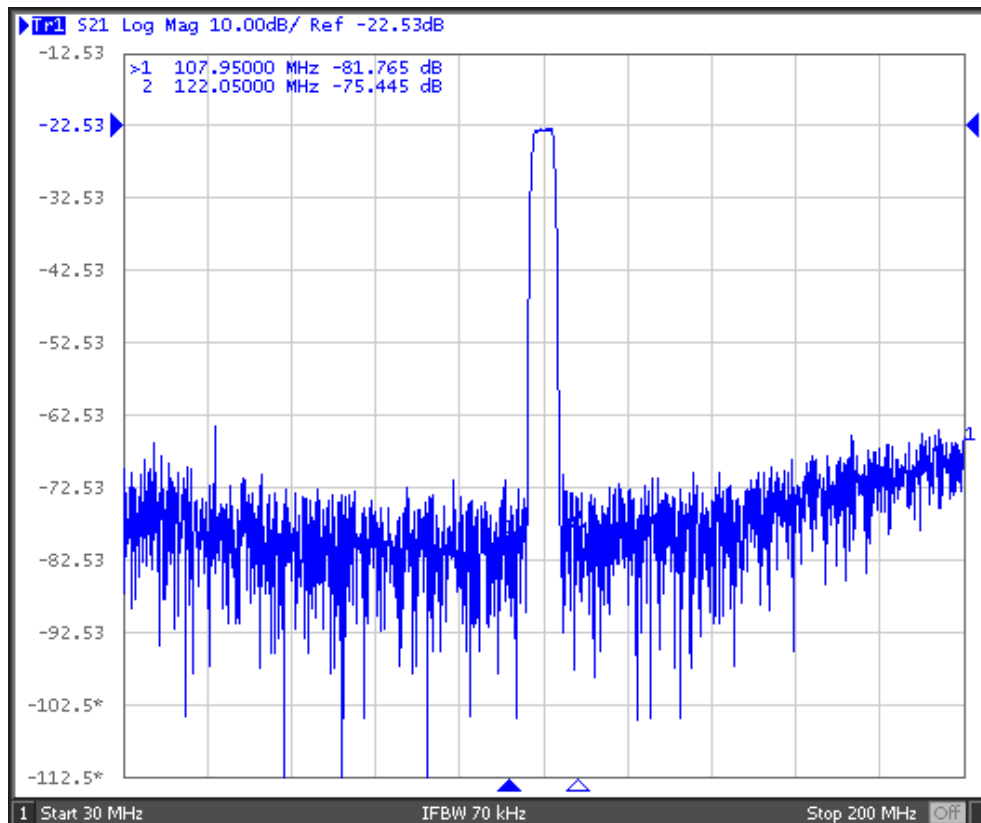
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f _c		115.00		MHz
Insertion Loss(min)	IL		23.0	25.0	dB
Amplitude Ripple (p-p)	Δα		0.7	1.0	dB
3 dB Bandwidth	BW _{3dB}	4.30	4.40		MHz
10 dB Bandwidth	BW _{10dB}		5.15	5.35	MHz
40 dB Bandwidth	BW _{40dB}		6.34	6.60	MHz
Absolute Group Delay @F _c	GDR		1.3	1.6	us
Absolute Attenuation	α				
F _c - (4.1/2+5) MHz		45.0	50.0		dB
F _c + (4.1/2+5) MHz		45.0	50.0		dB

Frequency Characteristics

Frequency Response

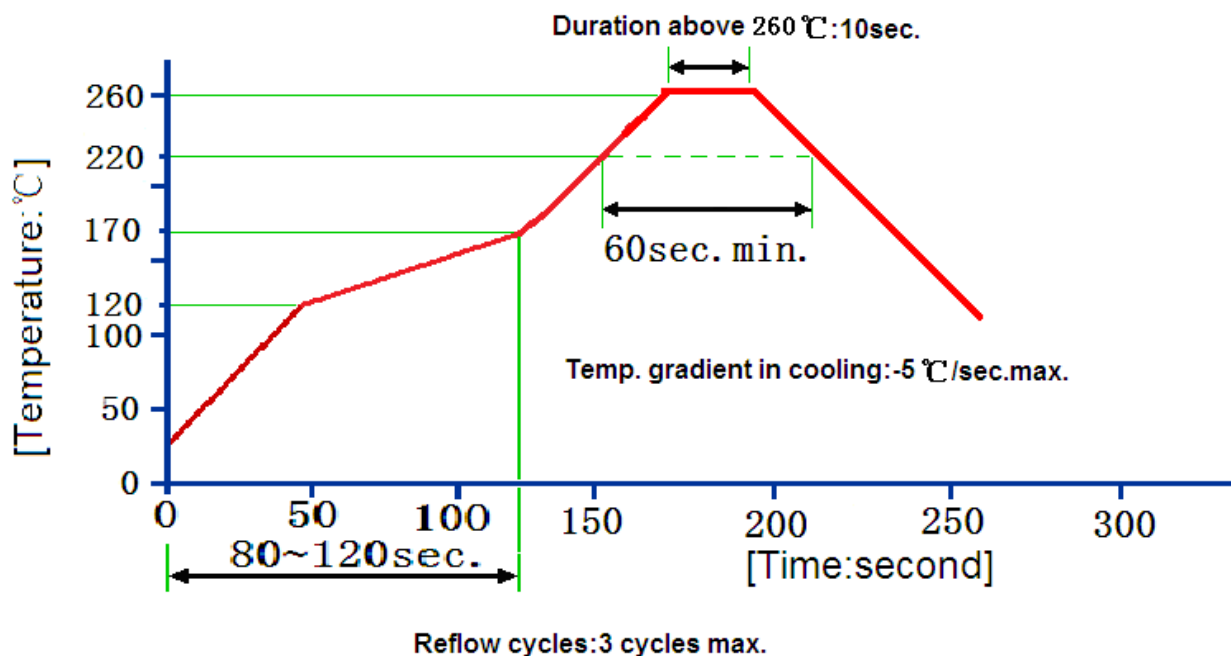


Frequency Response (wideband)



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

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: $85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 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: TA= $-55^{\circ}\text{C}\pm 3^{\circ}\text{C}$, TB= $85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, t1=t2=30min, 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 Directions: X,Y and Z Duration: 2h
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 , Recovery time : $2 \pm 0.5\text{h}$

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.