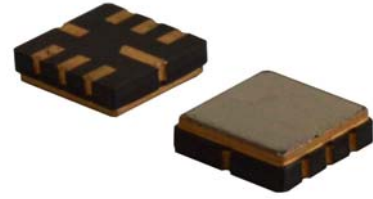


Application

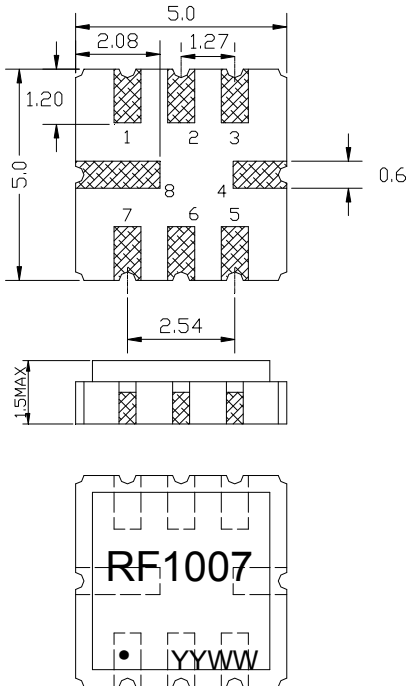
- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 4.0 MHz



Features

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 5.00x5.00x1.50mm³
- Package Code QCC8C
- **Electrostatic Sensitive Device(ESD)**

Package Dimensions (Unit: mm)



Pin Configuration

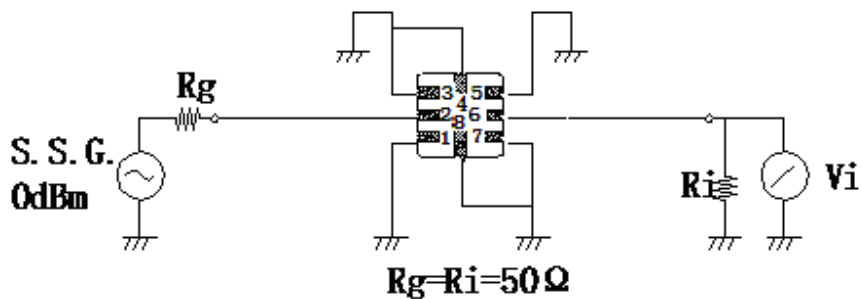
Pin No.	Description
2	Input
6	Output
1,3,5,7,	To be Grounded
4,8	Case Ground

Marking Description

RF	R	Trademark & Manufacturer
	F	SAW Filter
1007	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: $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$

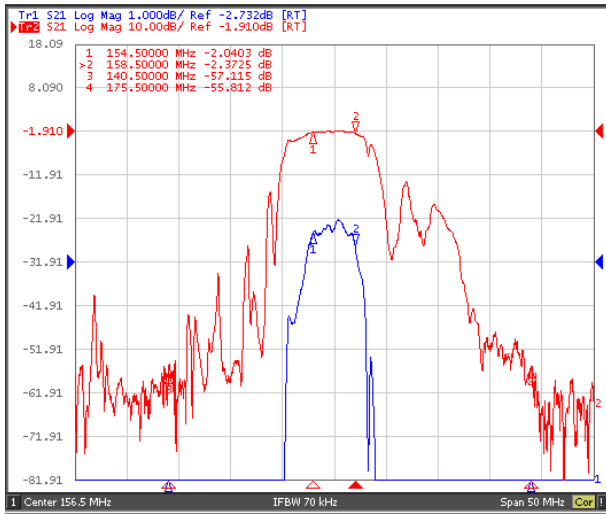
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

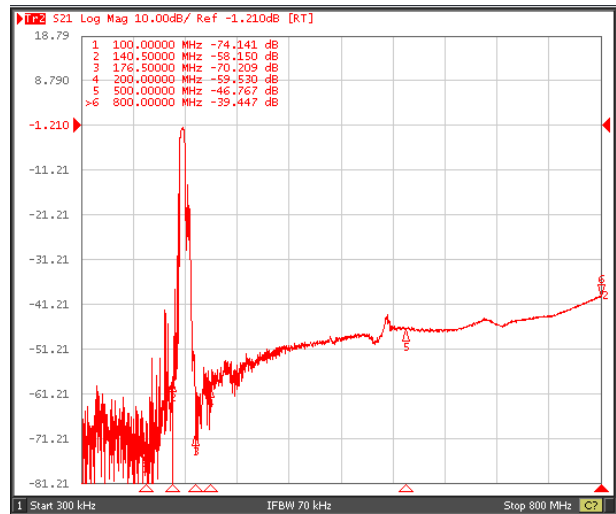
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		156.50		MHz
Insertion Loss(min)	IL		2.0	2.5	dB
Insertion Loss	154.50-158.50MHz		2.5	3.5	dB
Amplitude Ripple (p-p)	154.50-158.50MHz	$\Delta\alpha$	0.6	1.5	dB
Group Delay Ripple	154.50-158.50MHz	GDR	30.0	100.0	ns
Absolute Attenuation	α				
	DC-100.00 MHz	50.0	55.0		dB
	100.00-140.50 MHz	30.0	35.0		dB
	176.50-200.00 MHz	45.0	50.0		dB
	200.00-500.00 MHz	40.0	45.0		dB
	500.00-800.00 MHz	35.0	40.0		dB
Input VSWR	154.50-158.50MHz		1.6:1	2.1:1	/
Output VSWR	154.50-158.50MHz		1.6:1	2.1:1	/

Frequency Characteristics

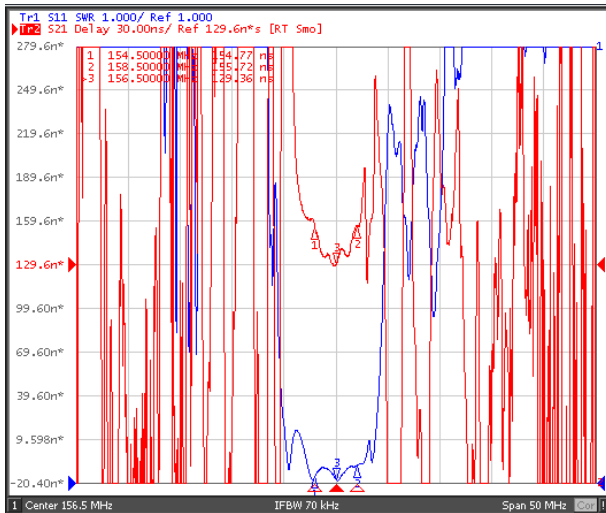
Frequency Response



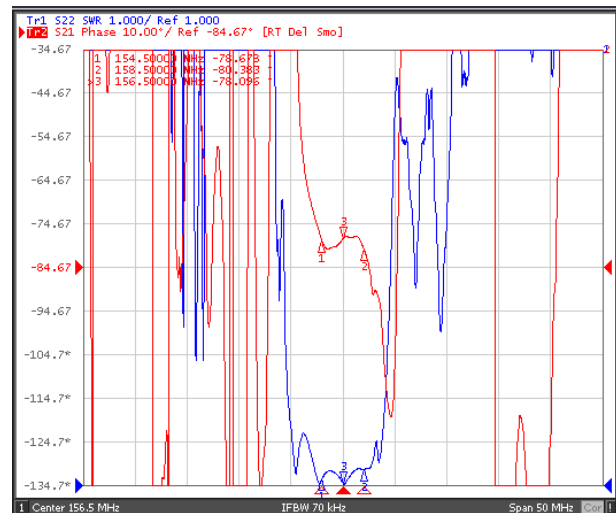
Frequency Response (wideband)



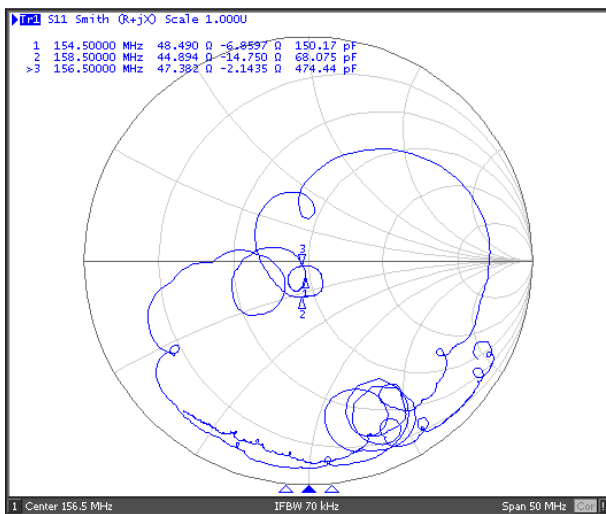
Delay Ripple & S11 VSWR



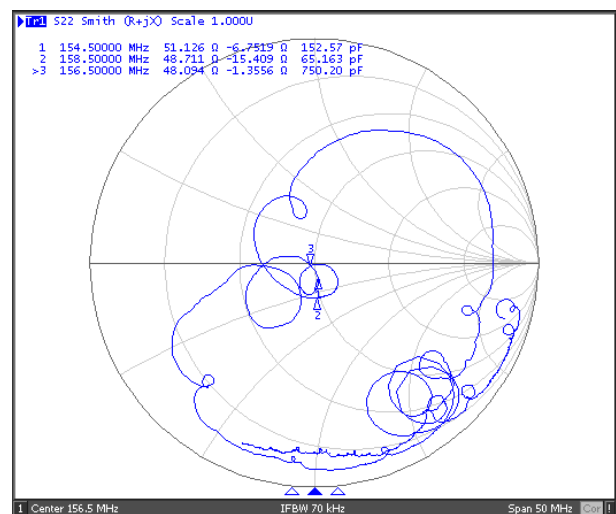
Phase Linearity & S22 VSWR



S11 Smith Chart

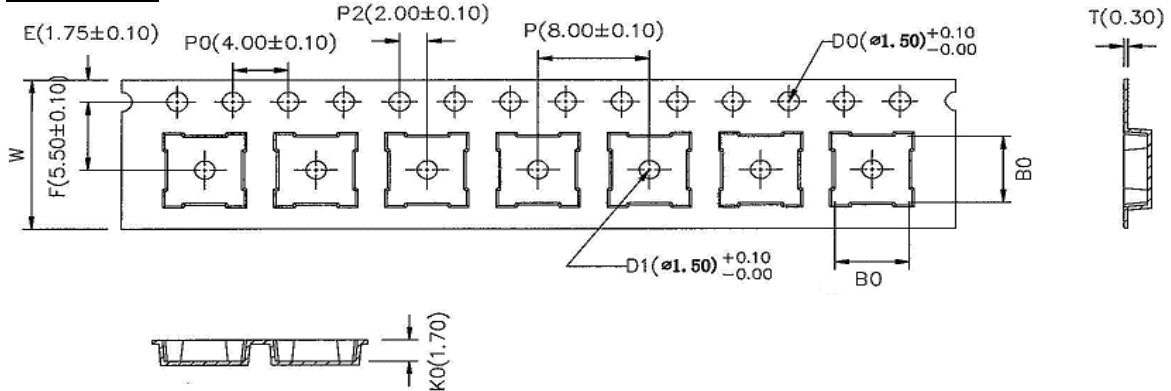


S22 Smith Chart



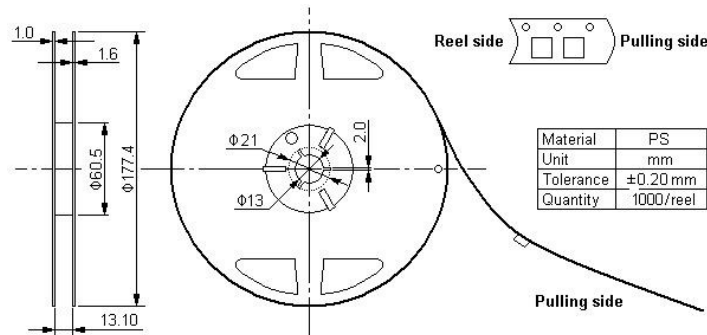
Packing Information

Carrier Tape



* B0: 5.35 for QCC8C; 4.15 for DCC6/QCC8B; 3.35 for DCC6C/QCC8D

Reel Dimensions



Outer Packing

Type	Quantity	Dimension	Description	Weight
Internal box	1000	190×188×42	carton box 2 reel / internal box 5 boxes / external box	0.18
External box	10000	235×205×210		1.80

Unit: mm

Unit: kg

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.