



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:

BEIJING ZHONGXUN SIFANG SCIENCE & TECHNOLOGY CO.,LTD.

Tel: +86-010-58937383
Fax: +86-010-58937263
E-mail: bjzxsf@bjzxsf.net
Website: <http://www.bjzxsf.net>
Add: No 201, Block A. Building 3. Yongjie Beilu
Yongfeng high-tech industrial base
Haidian District Beijing city

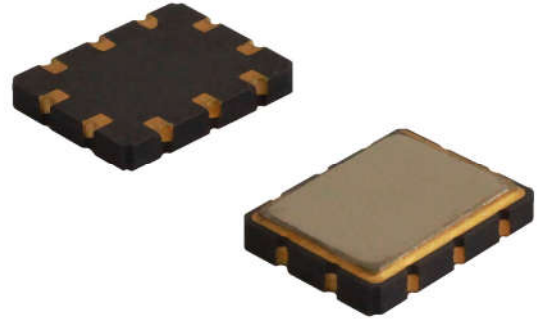


Part No.	:	SF1645
Pages	:	6
Date	:	2017/4/12
Revision	:	1.0

Prepared by:	刘菲
Checked by:	卢翠
Approved by:	高亚京

Application

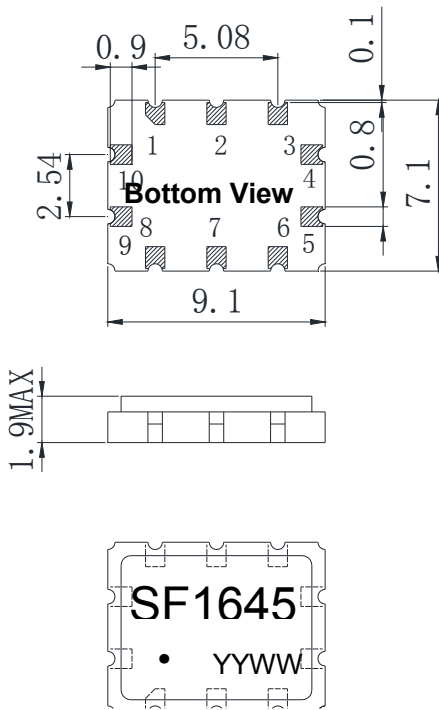
- High-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Passband 54 MHz



Features

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 7.00x9.00x1.90mm³
- **Electrostatic Sensitive Device(ESD)**

Package Dimensions(Unit: mm)



Pin Configuration

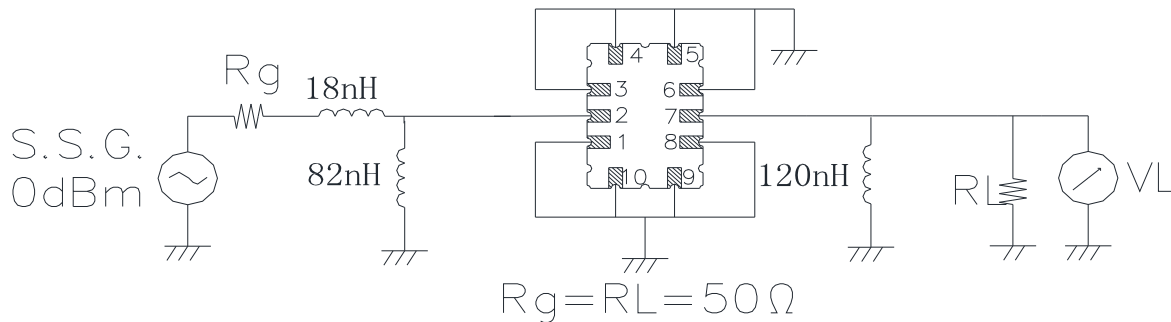
Pin No.	Description
2	Input
7	Output
1,3,4,5,6, 8,9,10	Ground

Marking Description

S	Trademark
F	SAW Filter
1645	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.

Test Circuit(Bottom View)



Performance**Maximum Rating**

Item		Value	Unit
DC Voltage	V _{DC}	3	V
Operation Temperature	T	-25 ~ +55	°C
Storage Temperature	T _{stg}	-50 ~ +70	°C
RF Power Dissipation	P	10	dBm

Electronic Characteristics

Test Temperature: 25°C ± 2°C

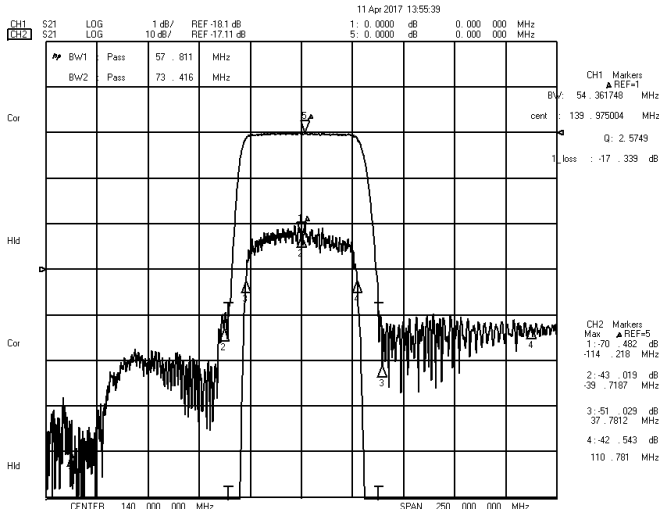
Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

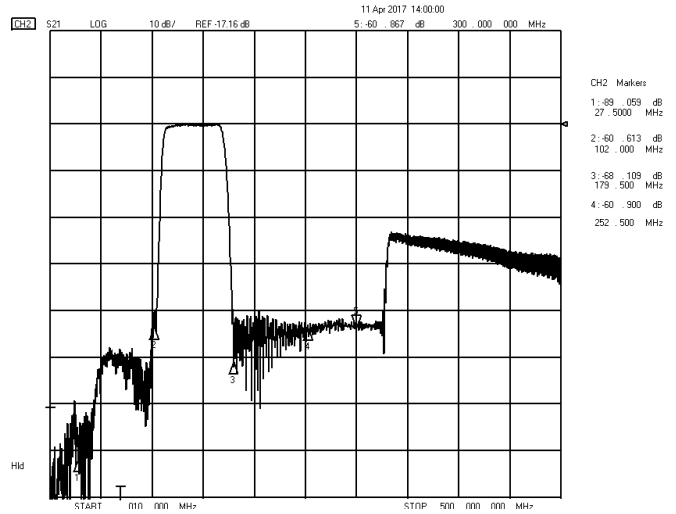
Item		Minimum	Typical	Maximum	Unit
Center Frequency	f _c		140.0		MHz
Insertion Loss(min)	IL		17.4	19.5	dB
Amplitude Ripple (p-p)	Δα		1.00	1.15	dB
1 dB Bandwidth rel. Fc	BW _{1dB}	54.0	54.3		MHz
3 dB Bandwidth	BW _{3dB}	54.4	57.8		MHz
40 dB Bandwidth	BW _{40dB}		73.5	75.6	MHz
Absolute Delay @Fc	AD		0.59		us
Absolute Attenuation	α				
10.0MHz-27.5MHz		49.0	55.0		dB
27.5 MHz-102.0 MHz		37.0	38.0		dB
179.5MHz-252.5 MHz		37.0	39.0		dB
252.5MHz -300.0 MHz		36.0	39.0		dB

Frequency Characteristics

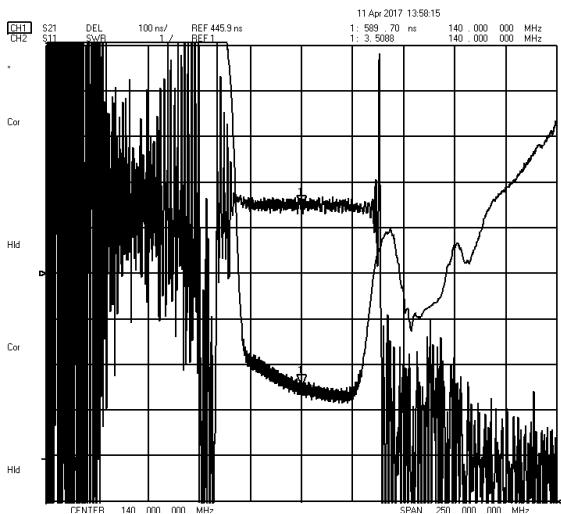
Frequency Response



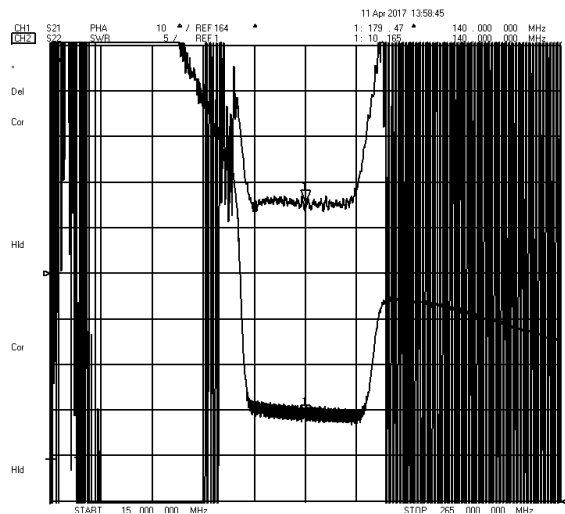
Frequency Response (wideband)



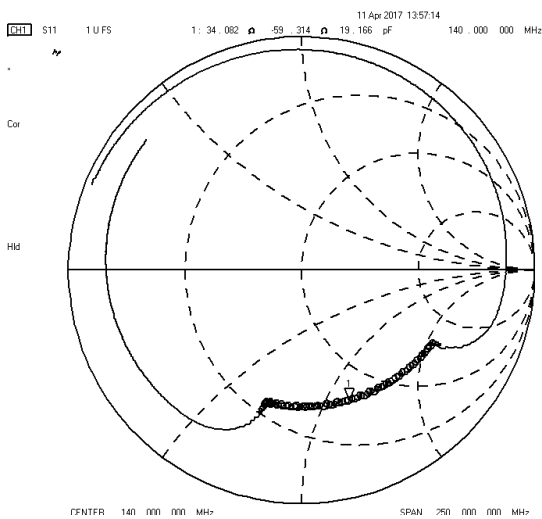
Delay Ripple & S11 VSWR



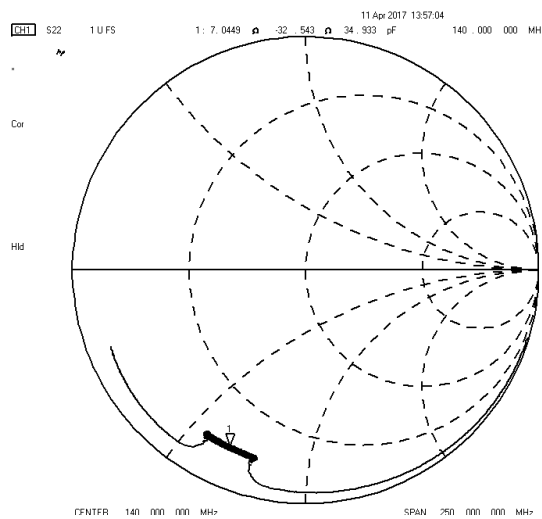
Phase Linearity & S22 VSWR



S11 Smith Chart



S22 Smith Chart



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.