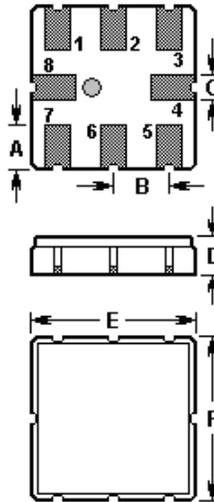


### ACTDF8137-865.0-QCC8C SAW Filter :Features

- Low-loss Bandpass filter.
- Ceramic Package for Surface Mounted Technology (SMT)
- Lead-free Production and RoHS Compliance

### Package Dimensions



Pin	Configuration
2	Input / Output
6	Output / Input
others	Case Ground

Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.00	D	1.50
B	1.27	E	3.80
C	0.60	F	3.80

Top View, Laser Marking

### Marking

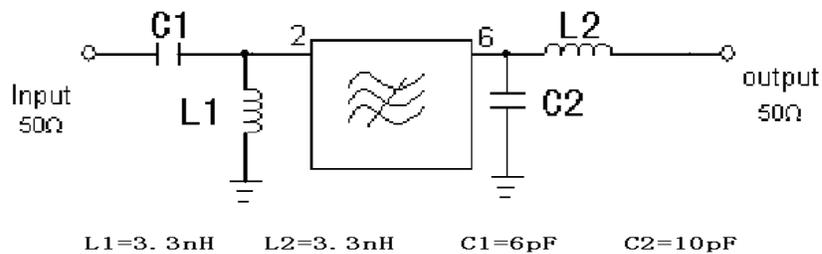
ACTF  
8137

"ACT": Manufacturer's mark

"F": SAW filter

"8137": Part number

### Matching Configuration(single ended---- single ended)



In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

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## Maximum Ratings

Rating		Value	Unit
Source Power	$P$	15	dBm
DC Voltage	$V_{DC}$	0	V
Operating Temperature Range	$T_A$	-40 ~ +85	°C
Storage Temperature Range	$T_{stg}$	-40 ~ +85	°C

## Electrical Characteristics

Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50\text{ } \Omega$

Characteristic		Min.	Typ.	Max.	Unit
Center frequency	$f_c$	—	865.0	—	MHz
Insertion attenuation	$IL$	—	10.3	13.0	dB
Pass band Ripple (863.8MHz~866.2MHz)	$Pr$		0.3	1.0	dB
Group delay Ripple (863.75MHz~866.25MHz)	$Gr$		60	200	ns
1 dB Bandwidth	$B_{1dB}$	3.0	3.3		MHz
3 dB Bandwidth	$B_{3dB}$		3.6		MHz
20 dB Bandwidth	$B_{20dB}$		5.9	6.5	MHz
Absolute attenuation	10 MHz ~840 MHz	30	42		dB
	900 MHz ~1000 MHz	30	40		

 **RoHS Compliant**

 **Electrostatic Sensitive Device**

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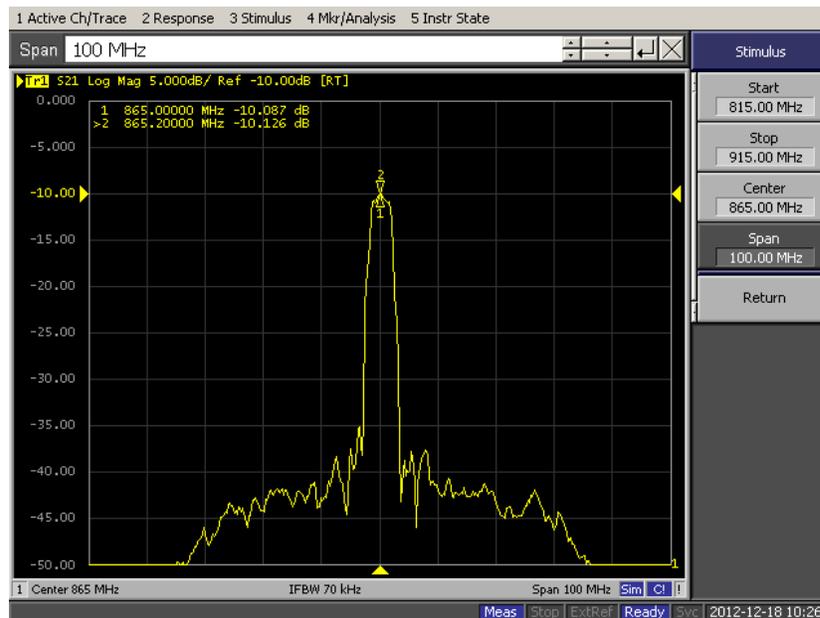
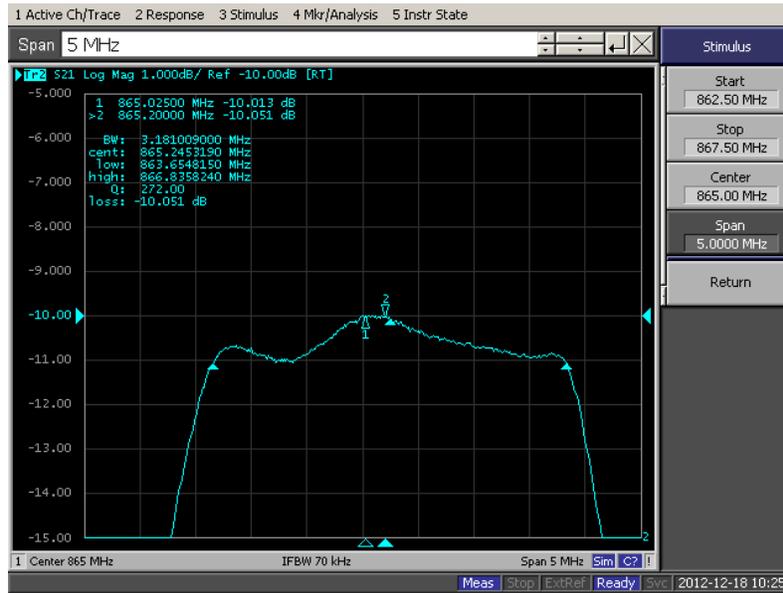
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## Typical Frequency Response



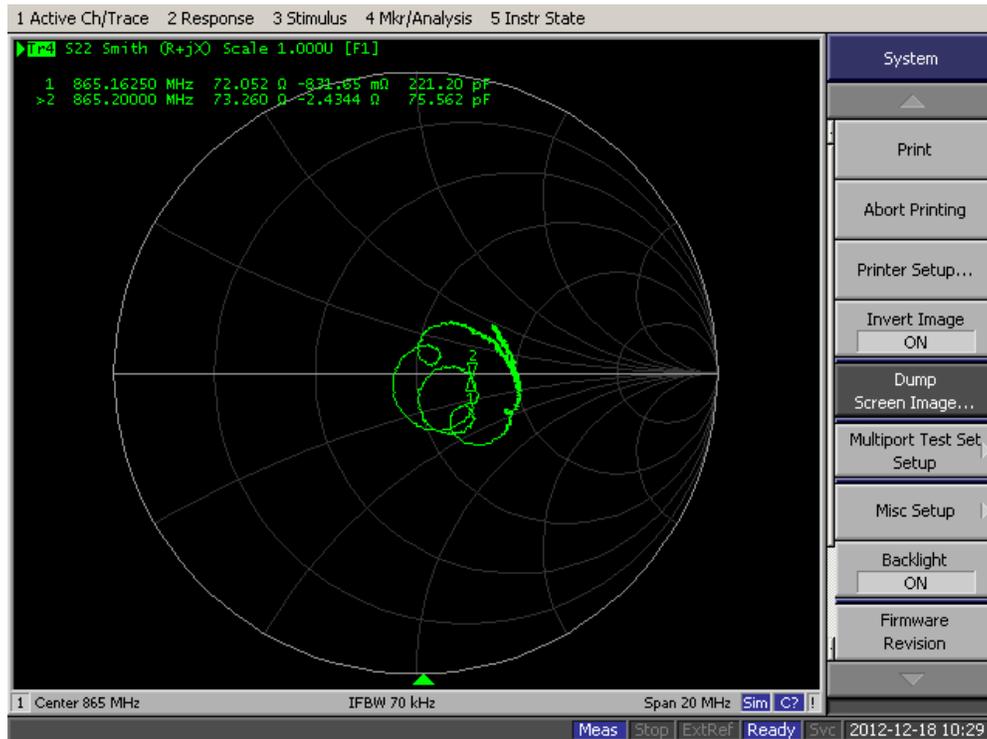
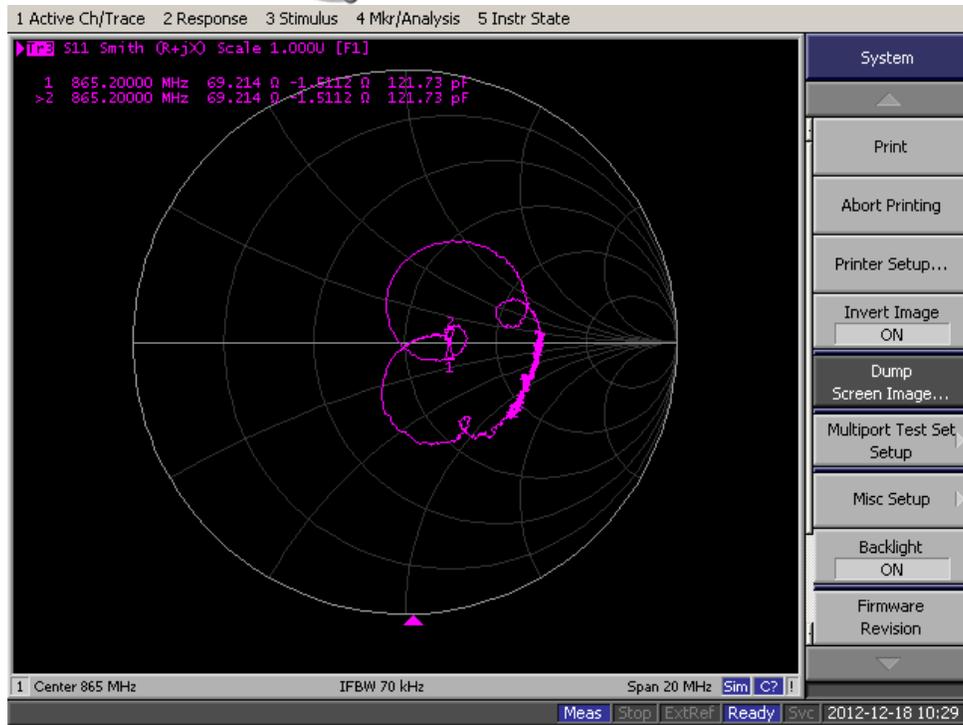
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## Environmental Characteristics

	Test item	Condition of test	Requirements
1	Mechanical shock	(a) Drops: 3 times on concrete floor (b) Height: 1.0m	The SAW filter shall remain within the electrical specifications after tests.
2	Vibration resistance	(a) Frequency of vibration: 10~55Hz (b) Amplitude: 1.5mm (c) Directions: X,Y and Z (d) Duration: 2 hours	
3	Moisture resistance	(a) Condition: 40°C, 90~95% R.H. (b) Duration: 96 hours (c) Wait 4 hours before measurement	
4	Climatic sequence	(a) +70°C for 16 hours (b) +55°C for 24 hours, 90~95% R.H. (c) -25°C for 2 hours (d) +40°C for 24 hours, 90~95% R.H. (e) Wait 4 hours before measurement	
5	High Temperature Exposure	(a) Temperature: 70°C (b) Duration: 250 hours (c) Wait 4 hours before measurement	
6	Thermal impact	(a) +70°C for 30 minutes ⇒ -25°C for 30 minutes repeated 3 times (b) Wait 4 hours before measurement	

### Remarks

#### 8-1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the SAW filter. Please avoid static voltage.

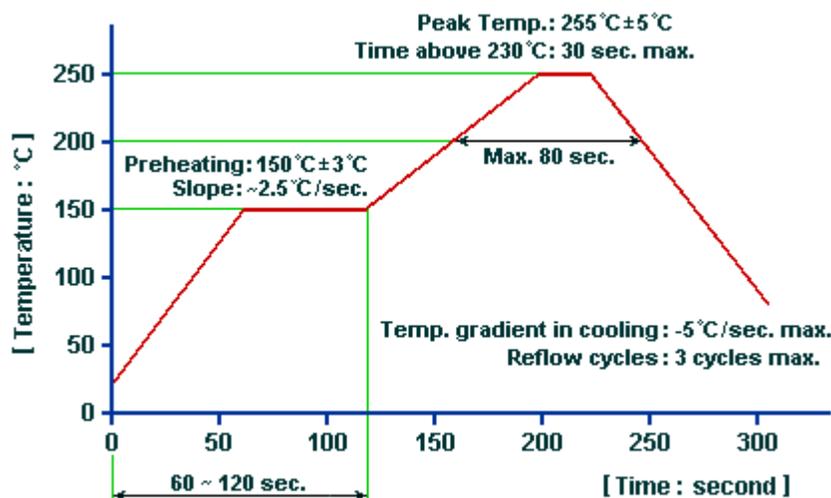
#### 8-2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the SAW filter. Please avoid ultrasonic cleaning.

#### 8-3 Soldering

Only terminals of the SAW filter may be soldered. Please avoid soldering other parts of the SAW filter.

### Soldering Profile



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