



*Total Solution Provider in Saw Device*

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# SF-122904-S21

Wireless, Balanced RF SAW Filter  
Revision 0: March 2014



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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**SAWNICS Inc.**

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460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.  
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / [www.sawnics.com](http://www.sawnics.com)

## □ Electrical Characteristics

### Maximum Ratings

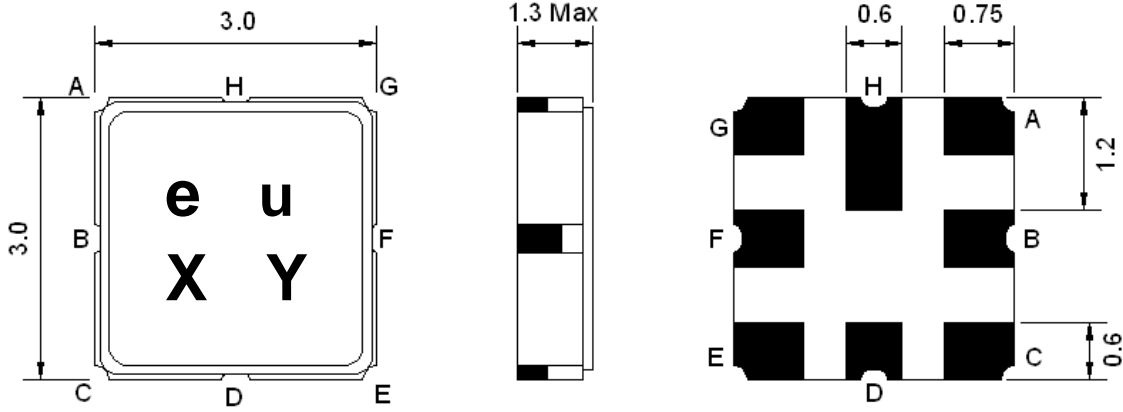
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	10
Source Impedance (balanced) <sup>(1)</sup>	Ω	-	200	-
Load Impedance (balanced) <sup>(1)</sup>	Ω	-	200	-
Package type & size	S21			
Length x Width	mm <sup>2</sup>	-	3.0 x 3.0	-
Height	mm	-	-	1.3

### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	1229.5	-
Insertion Loss within 1205.0 ~ 1254.0 MHz	dB	-	3.6	5.0
Amplitude Ripple within 1205.0 ~ 1254.0 MHz	dB <sub>p-p</sub>	-	1.0	3.0
Group Delay Variation within 1205.0 ~ 1228.0 MHz within 1237.0 ~ 1254.0 MHz	ns <sub>p-p</sub>	-	4	12
Return Loss within 1205.0 ~ 1254.0 MHz	dB	10	12	-
<b>Relative Attenuation:</b>				
0.3 ~1150.0 MHz	dB	30	32	-
1150.0 ~ 1160.0 MHz	dB	20	41	-
1160.0 ~ 1170.0 MHz	dB	10	25	-
1290.0 ~ 1298.0 MHz	dB	10	27	-
1298.0 ~ 1306.0 MHz	dB	20	44	-
1306.0 ~ 3000.0 MHz	dB	30	37	-

**Notes :** (1) With Matching Network.

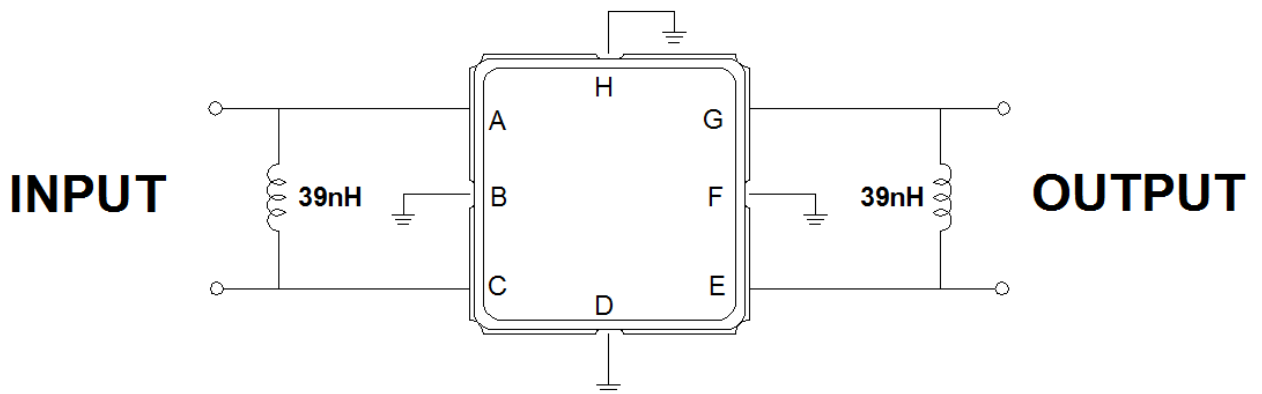
**Package Dimensions**



Marking Descriptions	
e	Wireless Application
u	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
B,D,F,H	Ground
A,C	Balanced Input
E,G	Balanced Output

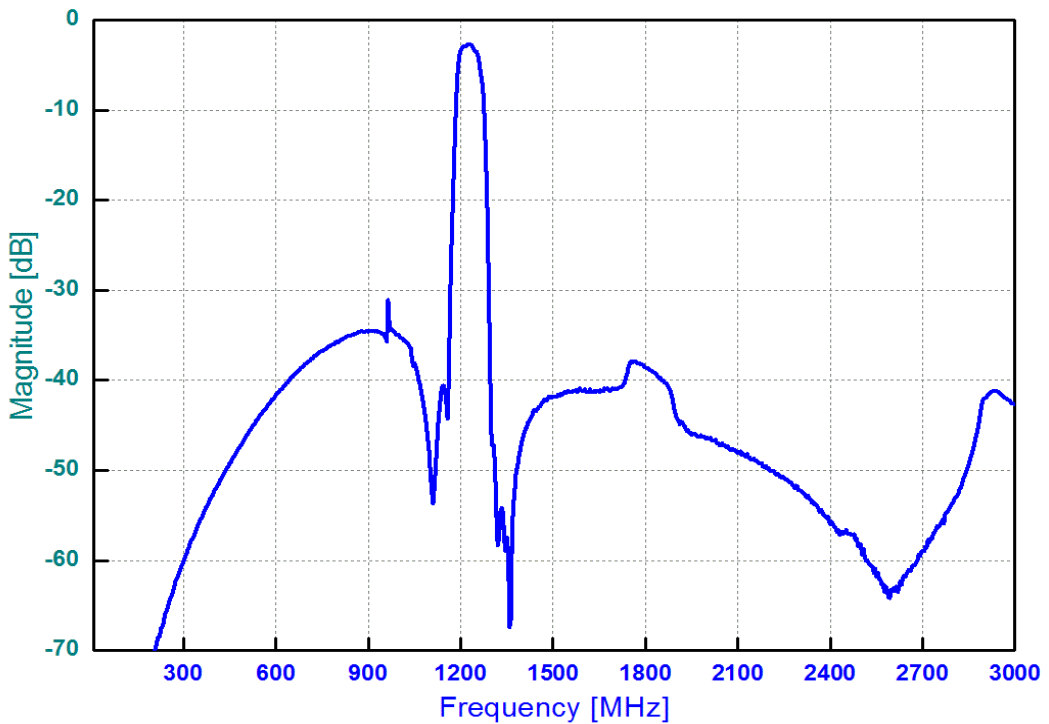
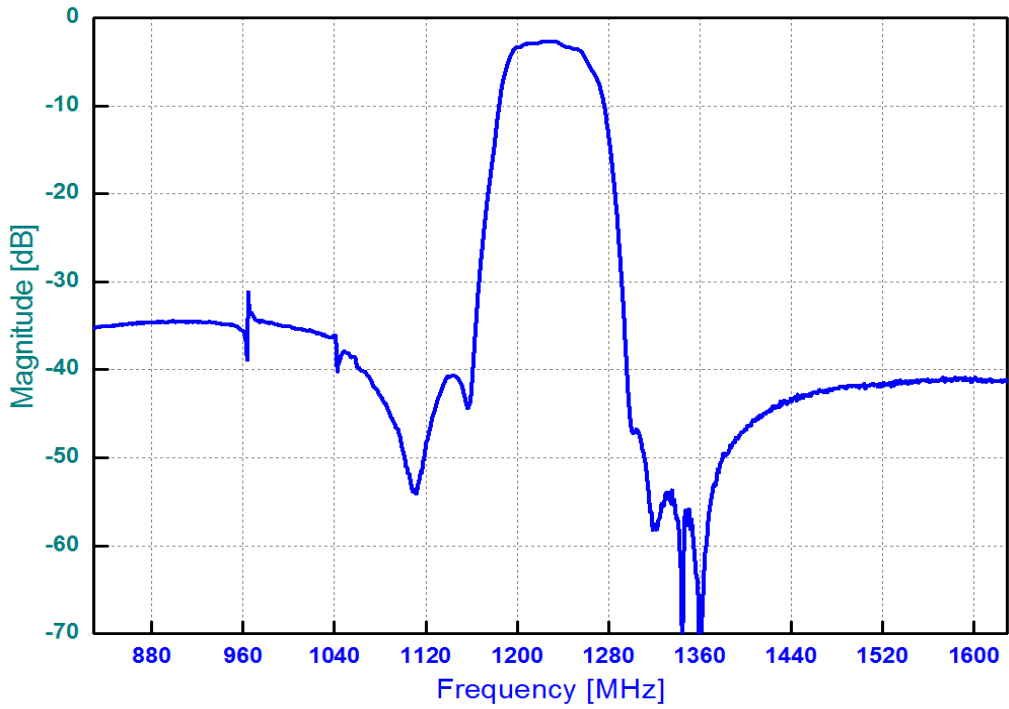
**Testing Environment**



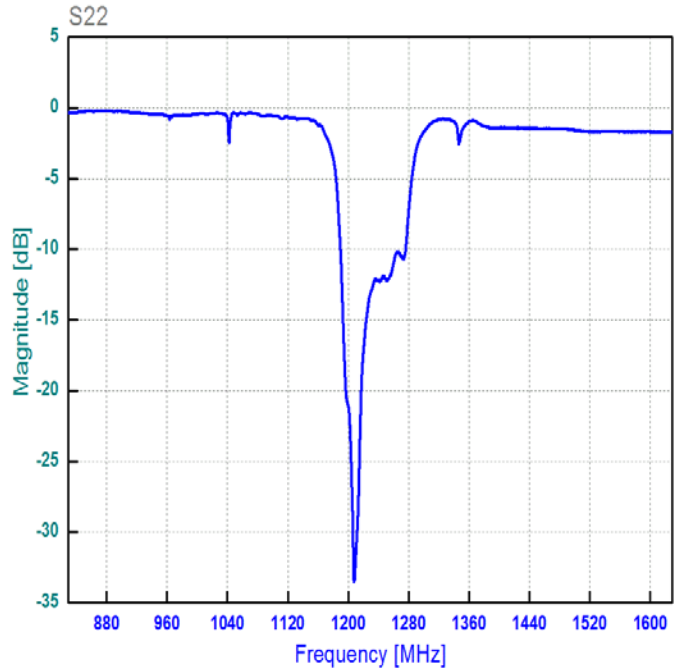
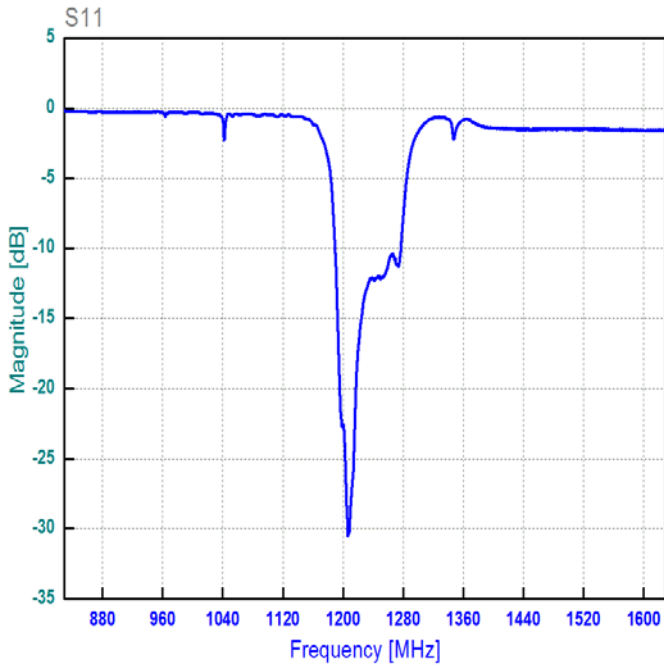
Source & Load Impedance: 200 Ω

**□ Frequency Characteristics**

Frequency Response



### Return Loss



### Smith Chart

