SA11909AD1

119.6875 MHz IF SAW Filter
9.8 MHz Bandwidth
Revision 0: 5. DEC. 2007

RoHS compliance
Pb free

- ❒ Electrical Characteristics
- ❒ Package Dimensions
- ❒ Testing Environment
- ❒ Frequency Characteristics

SAWNICS Inc.
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

❒ Electrical Characteristics

Maximum Ratings

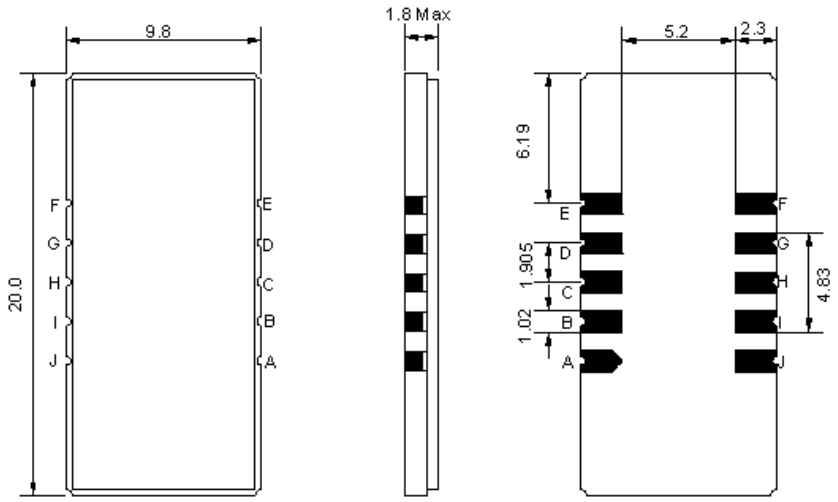
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0	-	60
Storage Temperature Range	°C	-20	-	70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	119.5675	119.6875	119.8075
Insertion Loss at Fo	dB	-	24.5	27.0
Group Delay Variation (Fo±4.6875MHz)	ns	-	35	100
Absolute Delay	us	-	3.24	-
Temperature Coefficient	ppm/°C	-	-20	-
Passband Ripple (Fo±4.6875MHz)	dB	-	0.50	1.00
Bandwidth at -1dB	MHz	9.375	9.83	-
Bandwidth at -30dB	MHz	-	11.25	-
Bandwidth at -40dB	MHz	-	11.40	12.10
Ultimate Rejection	dB	-	50	-
Relative Attenuation Fo±5.9125MHz	dB	30	60	

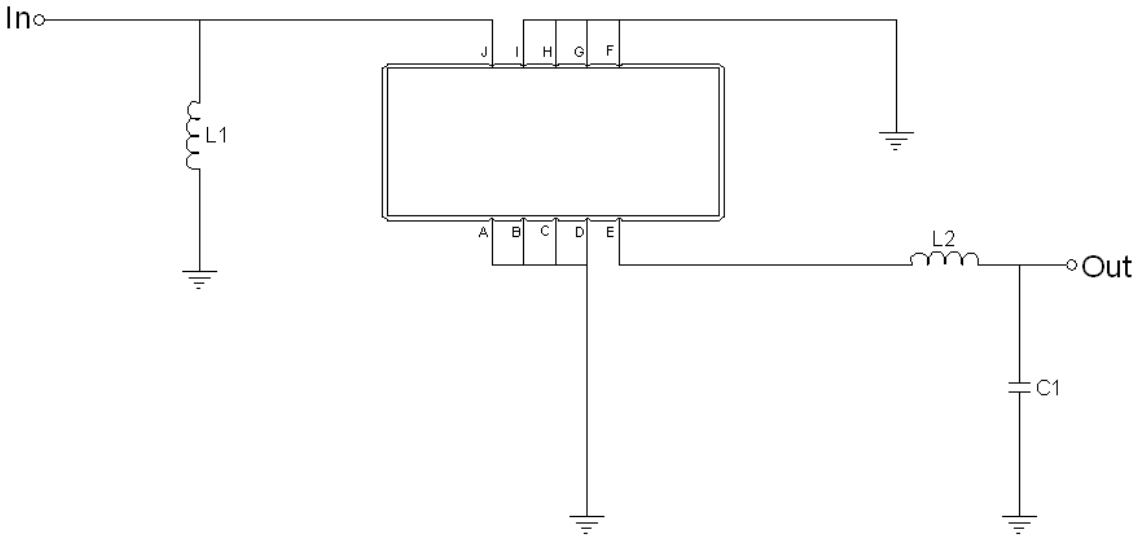
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

❒ Package Dimensions



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

❒ Testing Environment

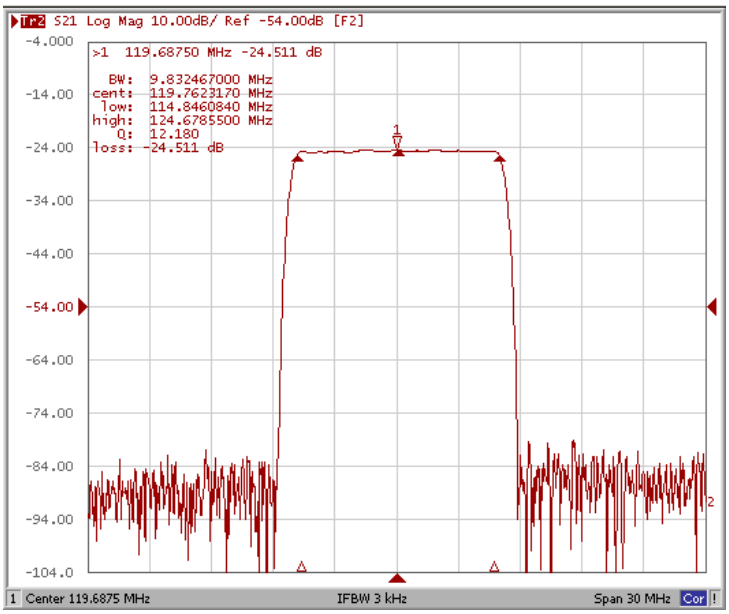


Test Fixture & Values	
Input	L1=39nH
Output	L2=47nH ,C1=36pF
Source/Load Impedance	50 Ω

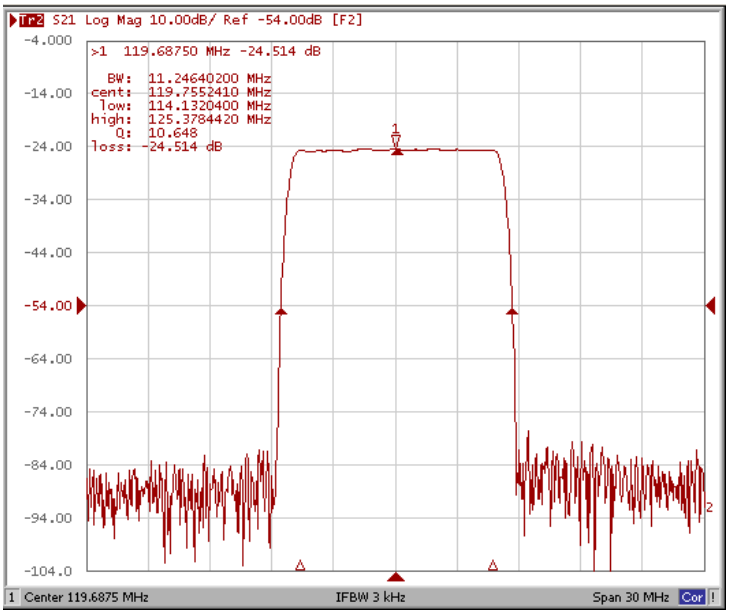
❒ Frequency Characteristics

Frequency Response

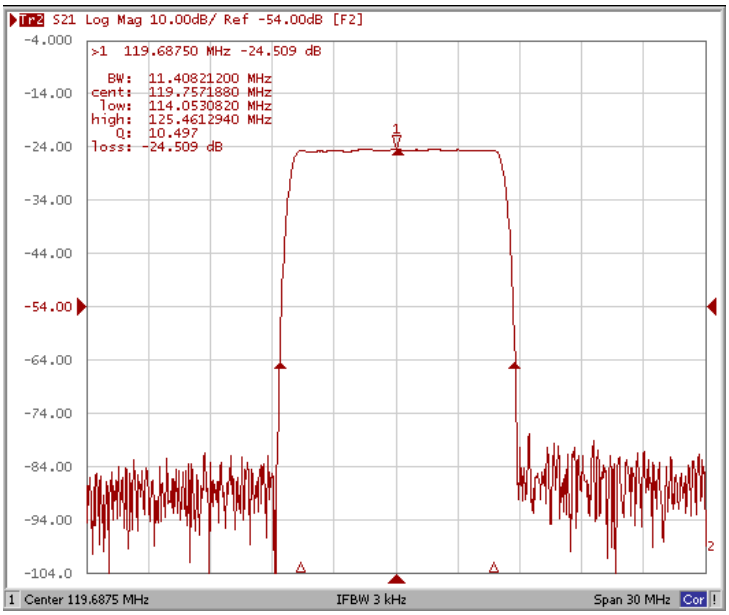
Bandwidth at –1.0 dB



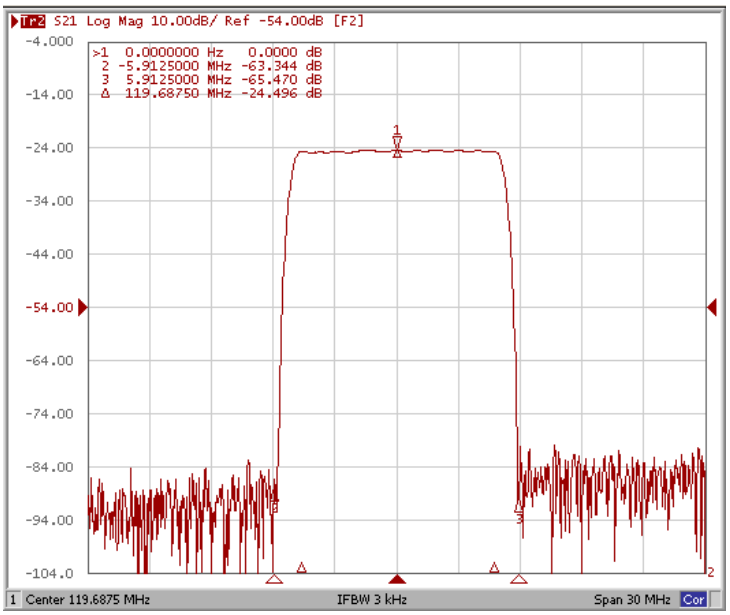
Bandwidth at –30.0 dB



Bandwidth at –40.0 dB



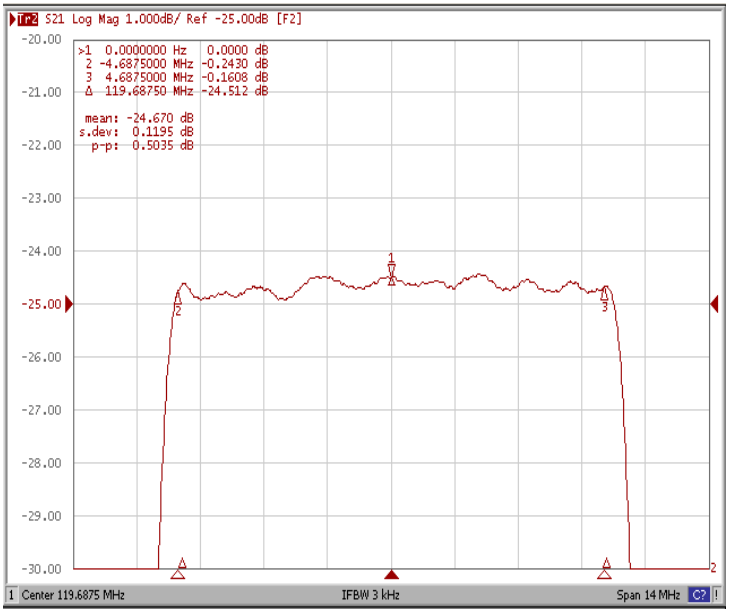
Relative Attenuation Fo±5.9125MHz



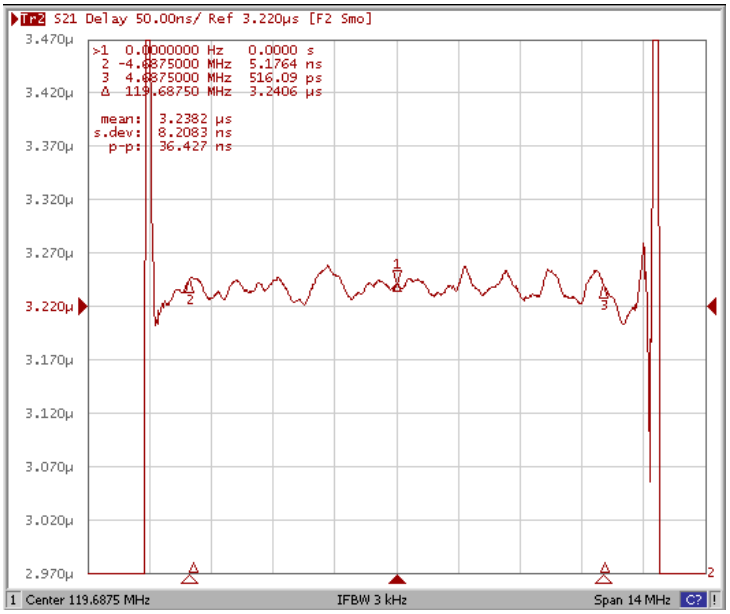
❒ Frequency Characteristics

Frequency Response

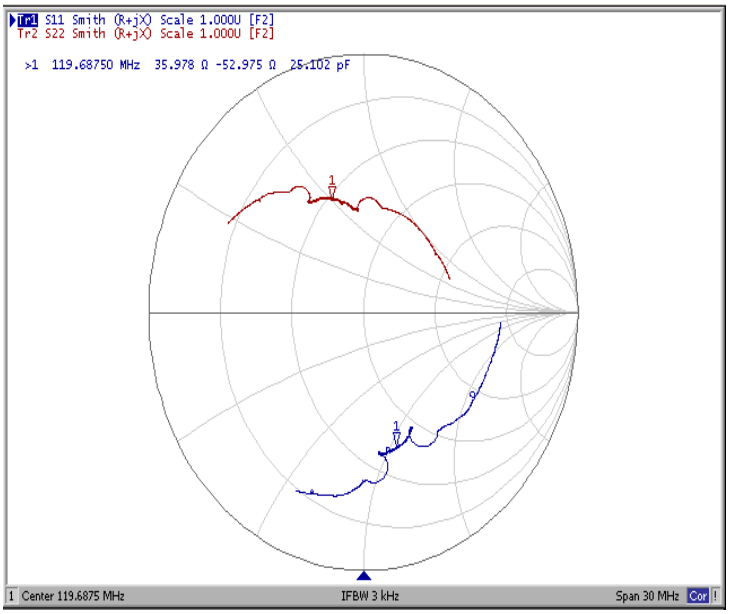
Ripple Variation Fo±4.6875MHz



Group Delay Variation Fo±4.6875MHz



Smith Chart



VSWR