



Total Solution Provider in Saw Device

SA11505AD1

115.0 MHz IF SAW Filter
5.30 MHz Bandwidth
Revision 0: 27. March. 2008



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

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□ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
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	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

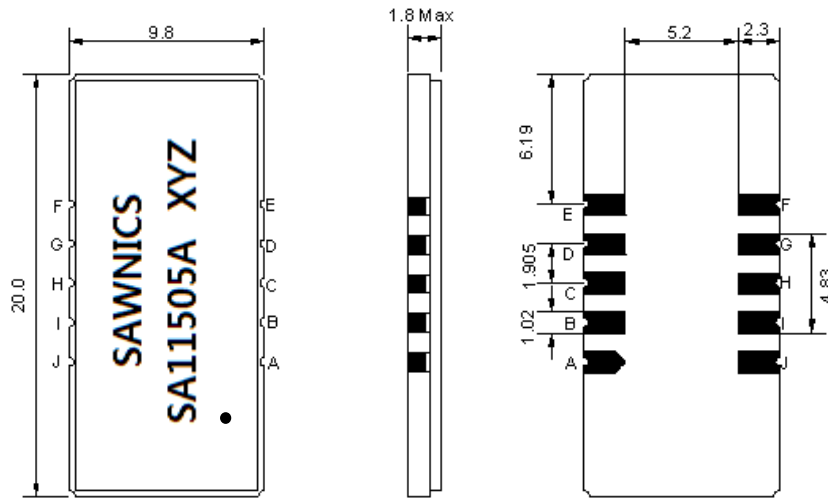
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	115.0	-
Insertion Loss at Fo	dB	-	22.0	23.5
Group Delay Variation at Fo ±2.4 MHz	nsec	-	120	200
Absolute Delay at Fo	usec	-	1.64	-
Passband Ripple Variation at Fo ±2.4 MHz	dB	-	0.55	1.0
Bandwidth at -1dB	MHz	5.00	5.30	-
Bandwidth at -3dB	MHz	-	5.57	-
Bandwidth at -40dB	MHz	-	6.73	7.00
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-20	-

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

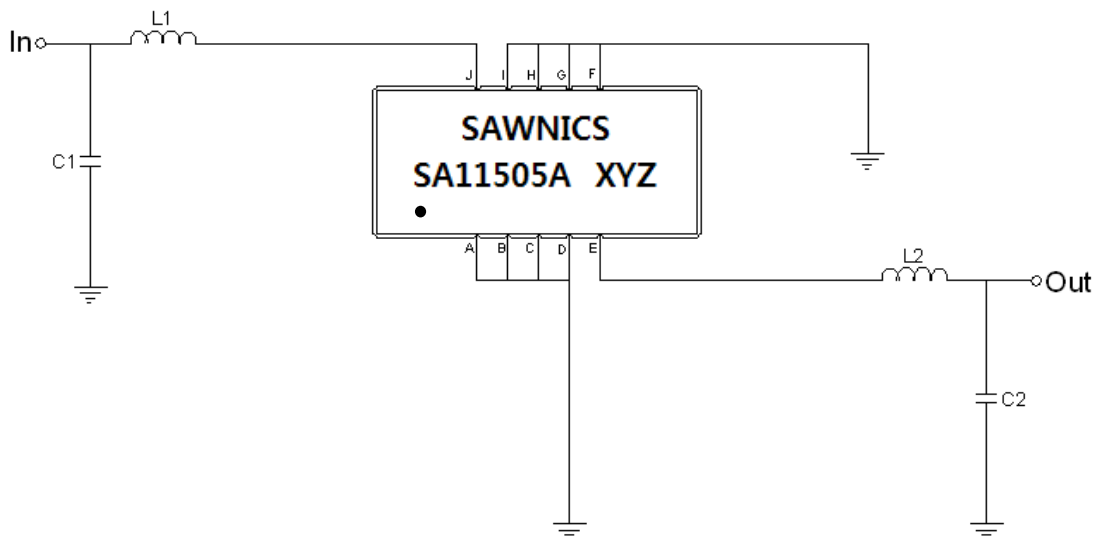
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment



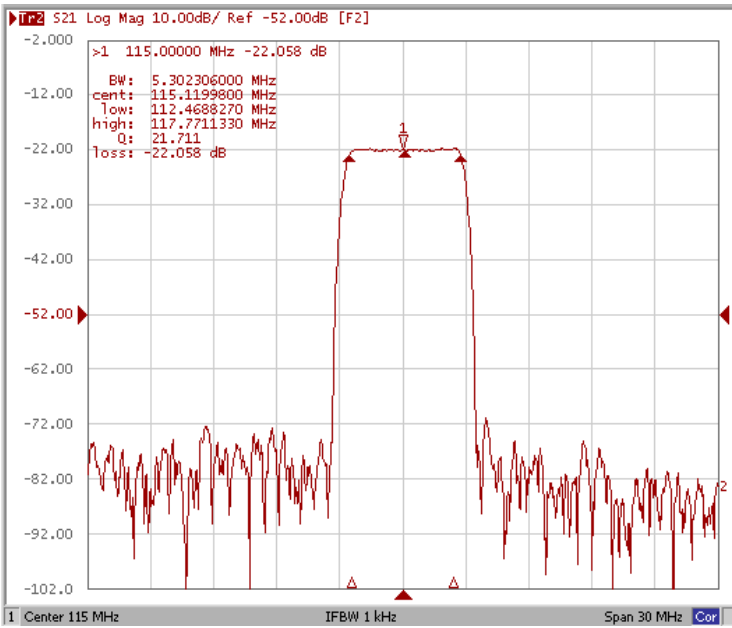
Test Fixture & Values	
Input	L1 = 27 nH , C1 = 40 pF
Output	L2 = 33 nH , C2 = 120 pF
Source/Load Impedance	50 Ω



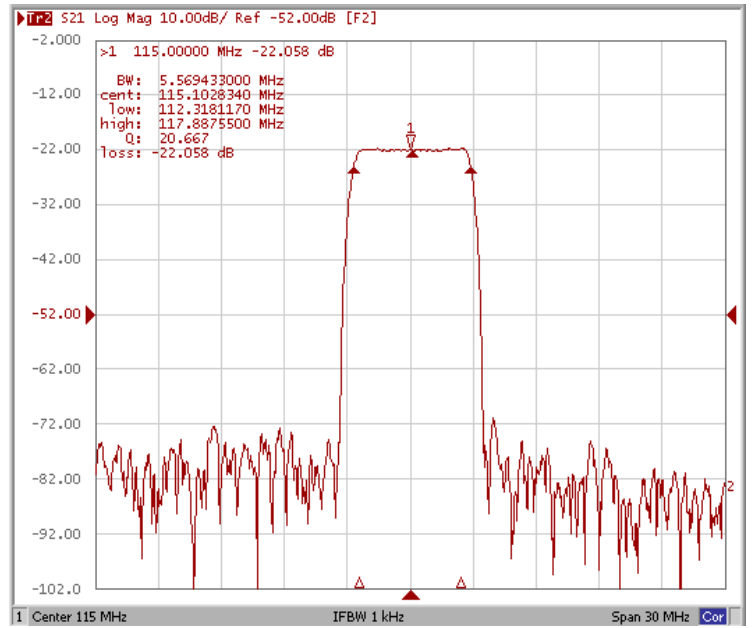
Frequency Characteristics

Frequency Response

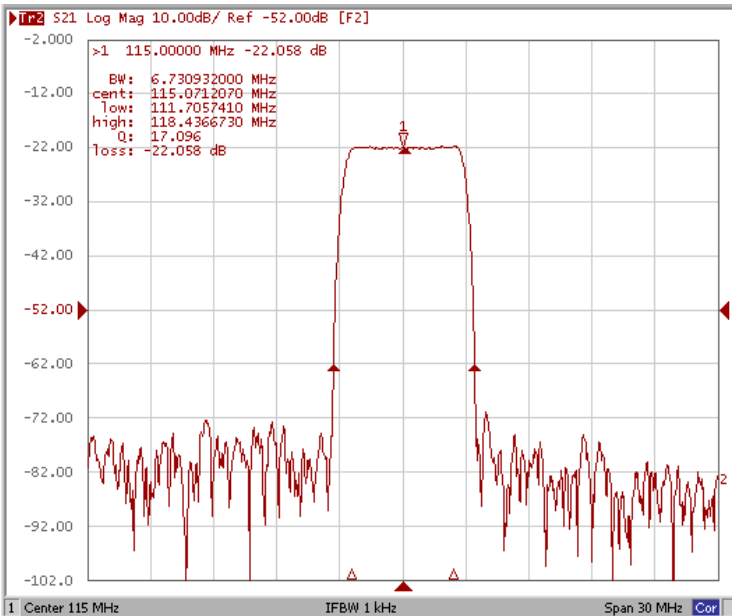
Bandwidth at -1.0 dB



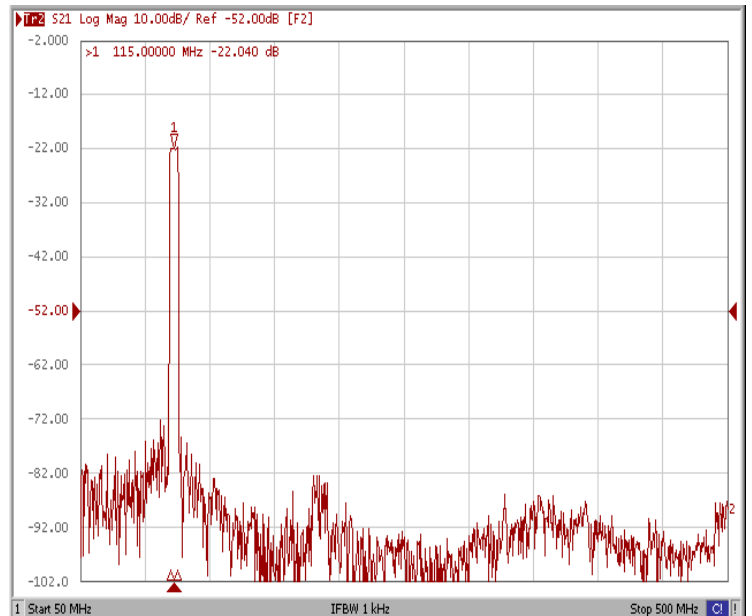
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Wide-Band

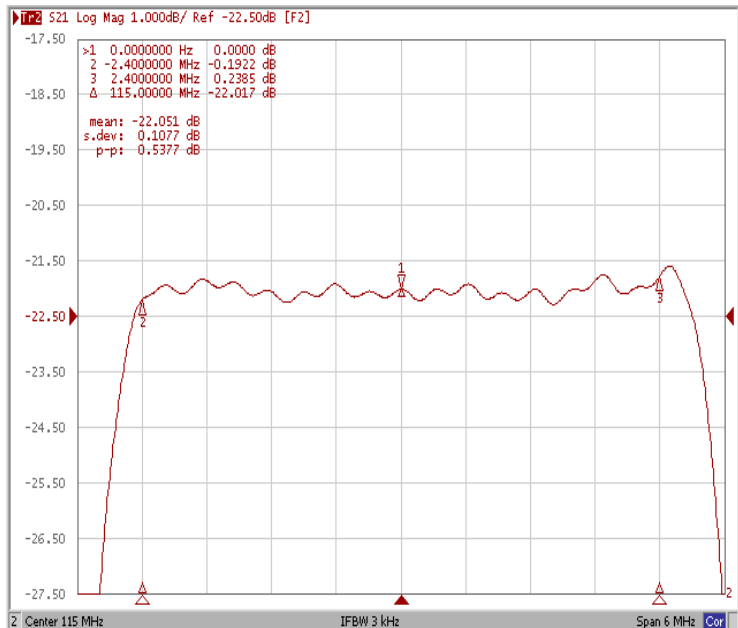




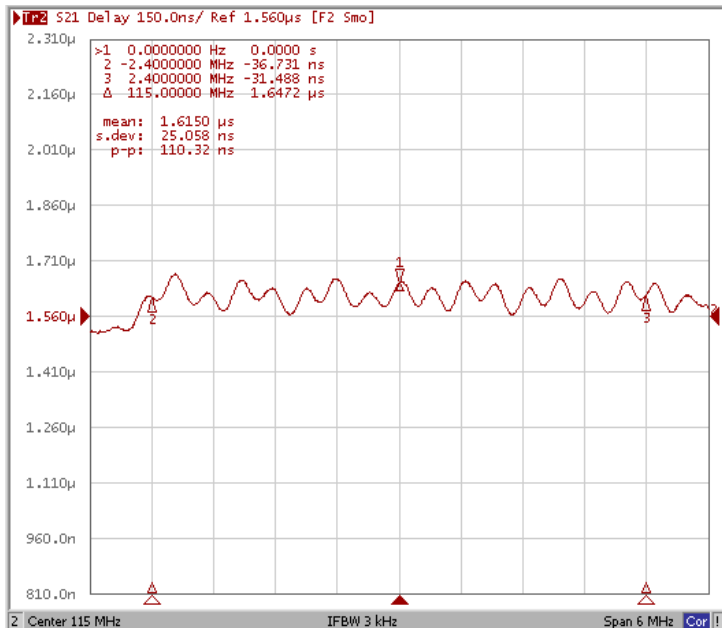
Frequency Characteristics

Frequency Response

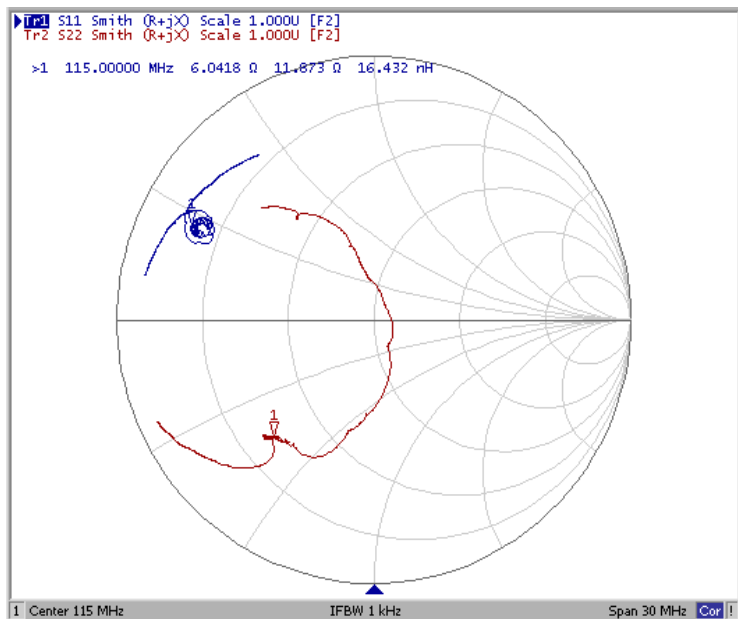
Ripple Variation Fo±2.4MHz



Group Delay Variation Fo±2.4MHz



Smith Chart



SWR

