SA07511AD1

75.0 MHz IF SAW Filter
11.65 MHz Bandwidth
Revision 0: 19. DEC. 2007

RoHS compliance
Pb free

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

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❒ Electrical Characteristics

Maximum Ratings

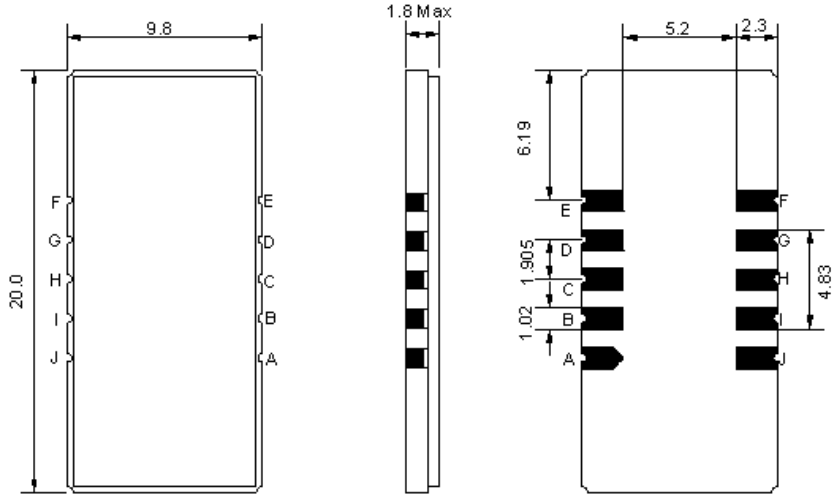
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0	-	60
Storage Temperature Range	°C	-20	-	70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length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

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.00	-
Insertion Loss at Fo	dB	-	20.5	23.5
Group Delay Variation (Fo±5.5MHz)	ns	-	42	100
Absolute Delay	us	-	2.40	-
Temperature Coefficient	ppm/°C	-	-72	-
Passband Ripple (Fo±5.5MHz)	dB	-	0.56	1.00
Bandwidth at -1dB	MHz	11.00	11.65	-
Bandwidth at -30dB	MHz	-	13.13	-
Bandwidth at -45dB	MHz	-	13.40	15.00
Ultimate Rejection	dB	-	55	-
Relative Attenuation Fo±6.5MHz /Fo±7.5MHz	dB		24 / 55	

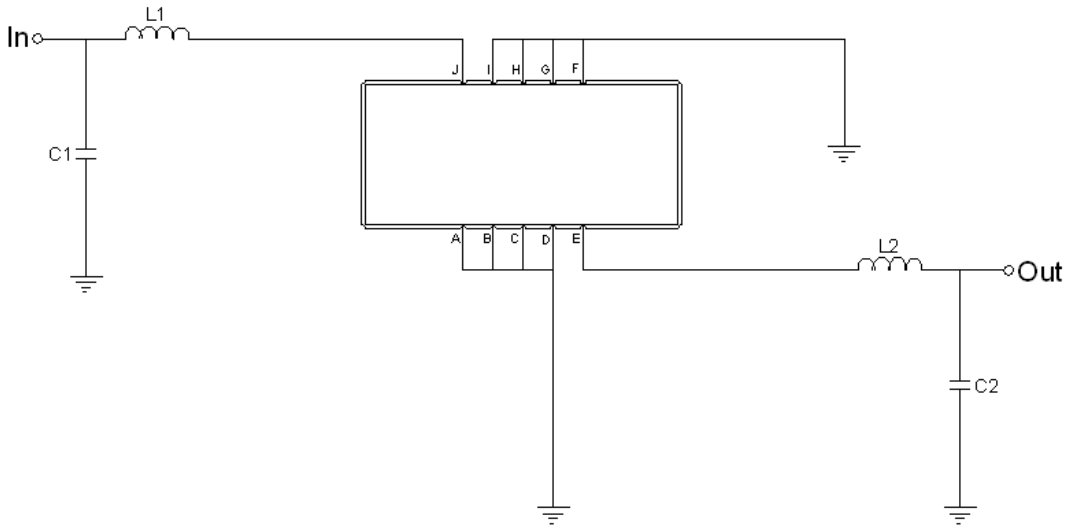
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

❒ Package Dimensions



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

❒ Testing Environment

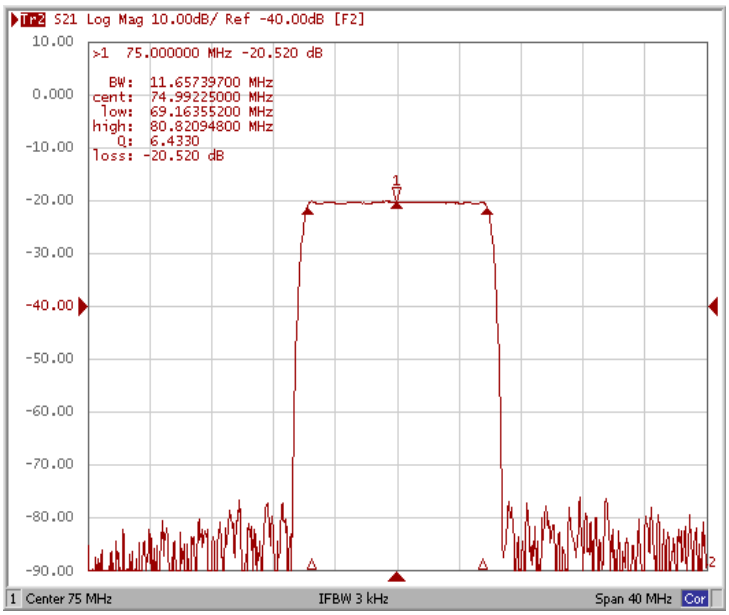


Test Fixture & Values	
Input	L1=68nH, C1=20pF
Output	L2=68nH ,C2=20pF
Source/Load Impedance	50 Ω

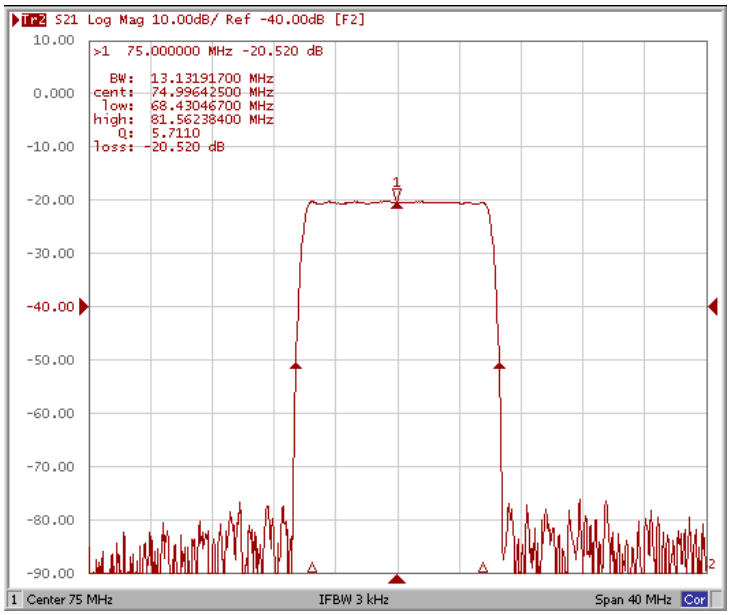
❒ Frequency Characteristics

Frequency Response

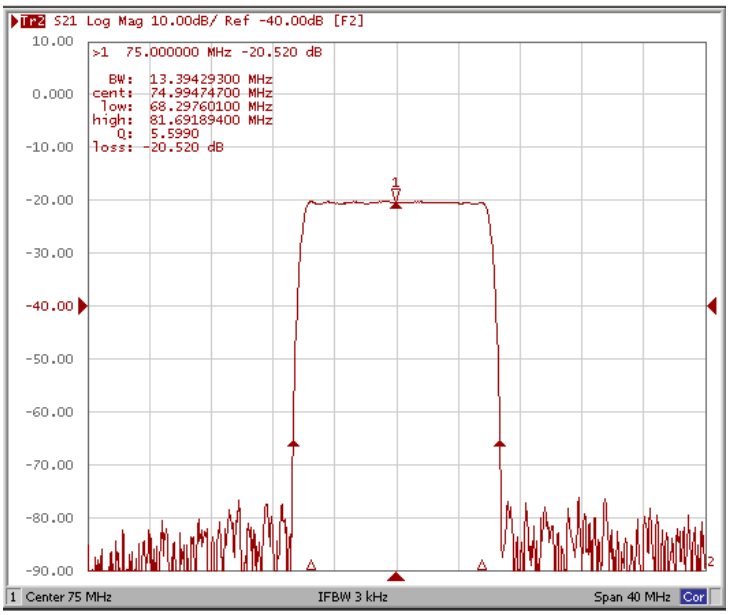
Bandwidth at –1.0 dB



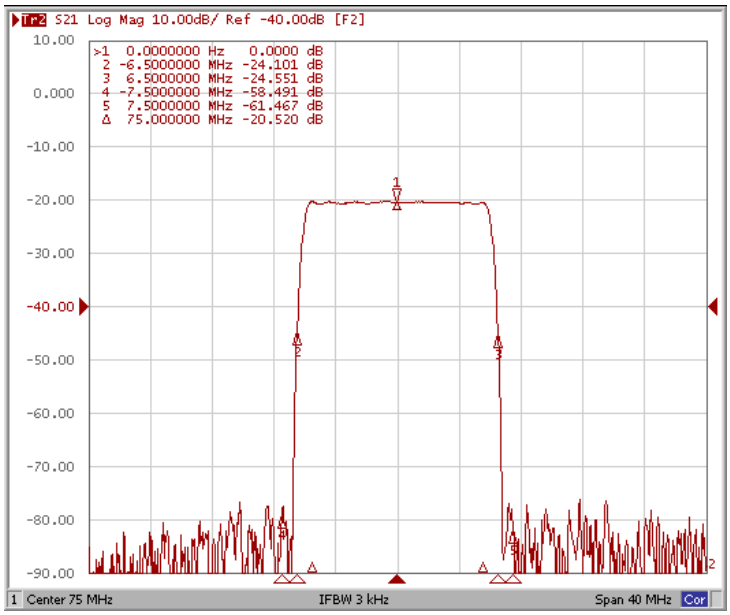
Bandwidth at –30.0 dB



Bandwidth at –45.0 dB



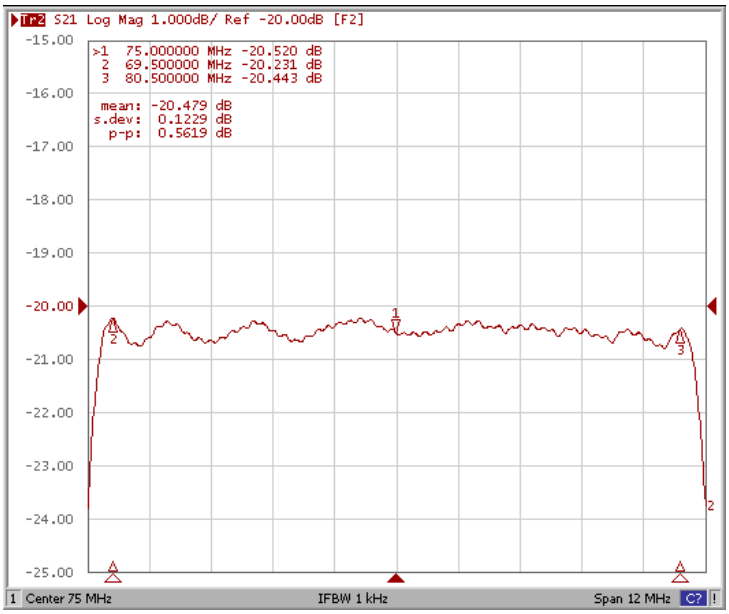
Relative Attenuation Fo±6.5MHz /Fo±7.5MHz



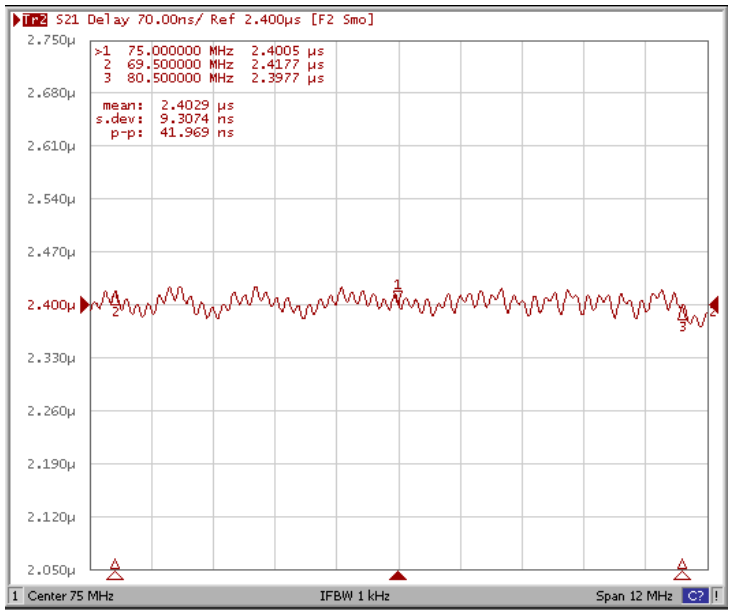
❒ Frequency Characteristics

Frequency Response

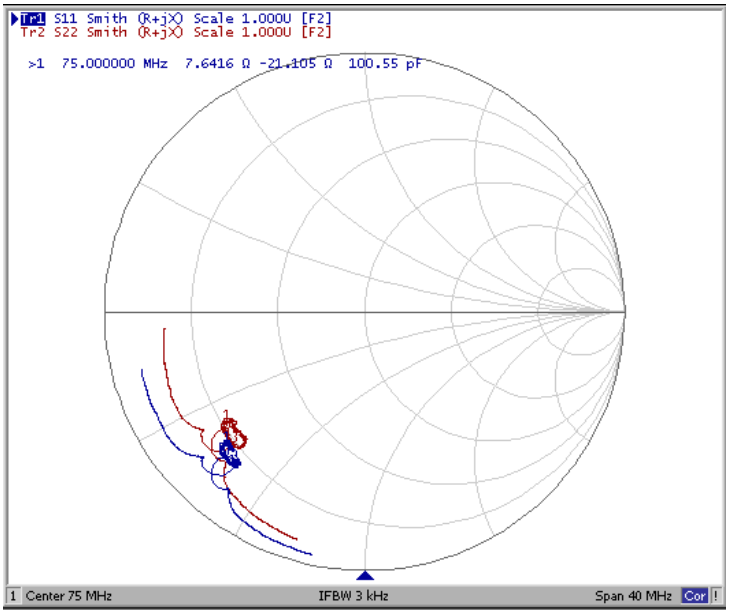
Ripple Variation Fo±5.5MHz



Group Delay Variation Fo±5.5MHz



Smith Chart



VSWR