



Total Solution Provider in Saw Device

SL09512AV

95.00 MHz IF SAW Filter
12.75 MHz Bandwidth
Revision 0: 16. July. 2012



- 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	-	+25	-
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	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

Operating Temperature : +25 °C

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	95.00	-
Insertion Loss at Fo	dB	-	9.80	11.50
Group Delay Variation at Fo ± 5.00 MHz	nsec	-	26	70
Absolute Delay at Fo	usec	-	1.17	-
Passband Ripple Variation at Fo ± 5.00 MHz	dB	-	0.30	1.00
Bandwidth at -1dB	MHz	12.40	12.75	-
Bandwidth at -3dB	MHz	-	13.40	-
Bandwidth at -40dB	MHz	-	15.90	16.40
Ultimate Rejection	dB	40	47	-
Relative Attenuation				
Fo ±8.70MHz	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-86	-

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.



□ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-40	-	+55
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	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

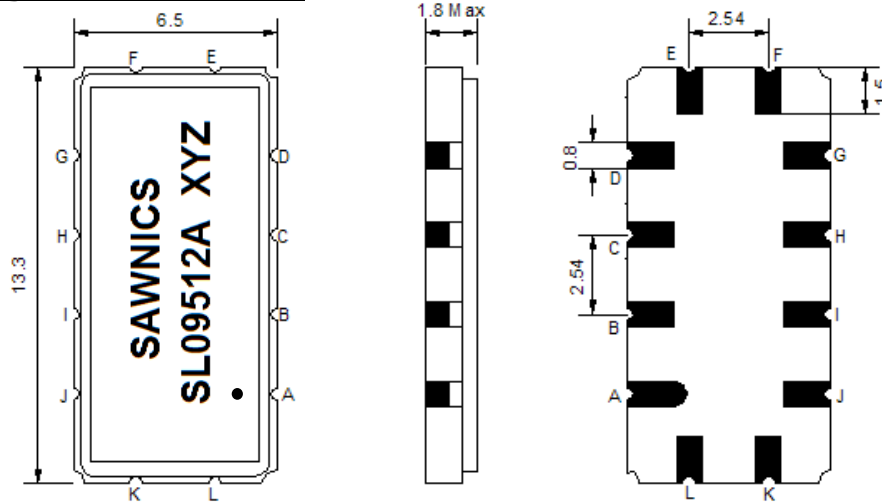
Operating Temperature : -40°C ~ +55 °C

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	95.00	-
Insertion Loss at Fo	dB	-	10.30	12.00
Group Delay Variation at Fo ± 5.00 MHz	nsec	-	35	70
Absolute Delay at Fo	usec	-	1.17	-
Passband Ripple Variation at Fo ± 5.00 MHz	dB	-	0.50	1.00
Bandwidth at -1dB	MHz	12.40	12.75	-
Bandwidth at -3dB	MHz	-	13.40	-
Bandwidth at -40dB	MHz	-	15.90	16.40
Ultimate Rejection	dB	40	47	-
Relative Attenuation				
Fo ±8.70MHz	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-86	-

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.

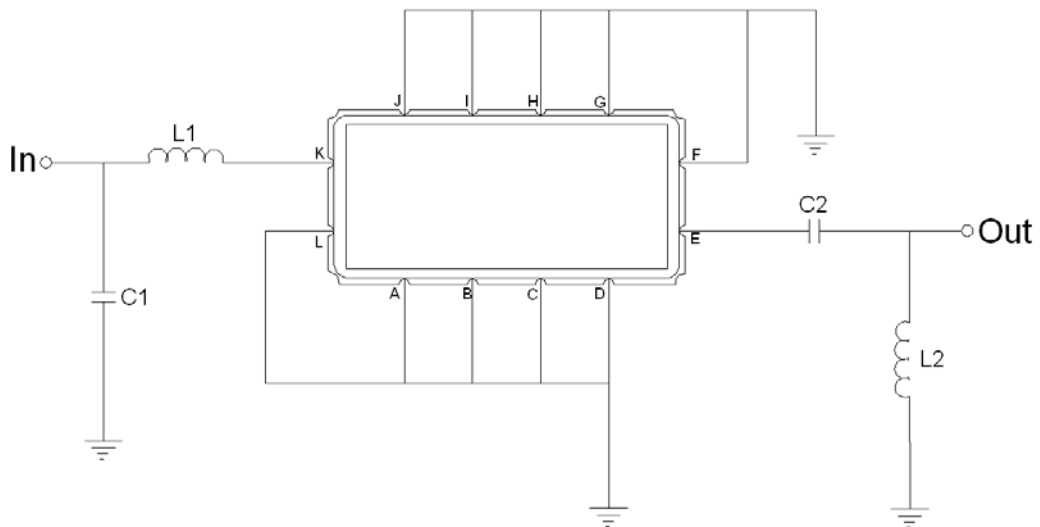
Package Dimensions



- ① SAWNICS: Brand
- ② SL09512A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

Testing Environment



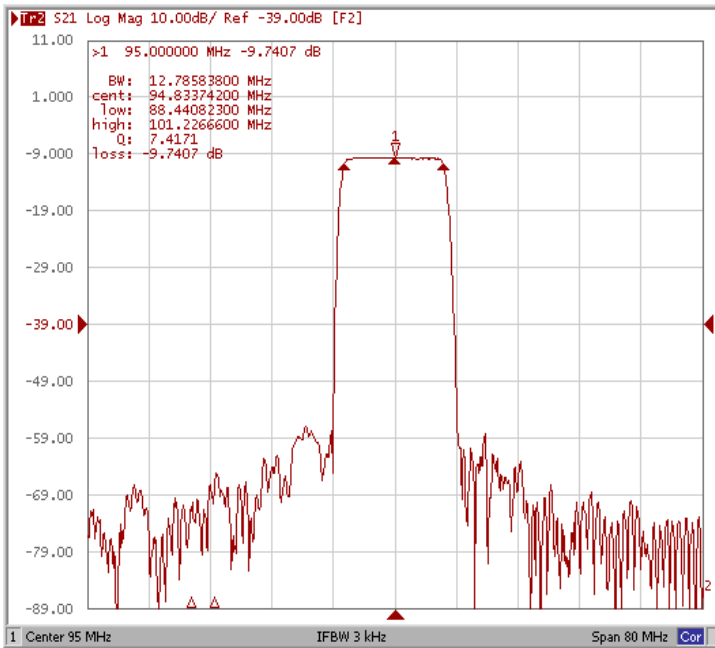
Test Fixture & Values	
Input	L1 = 47nH , C1=68pF
Output	L2 = 39nH , C2=130pF
Source/Load Impedance	50 Ω

□ Frequency Characteristics

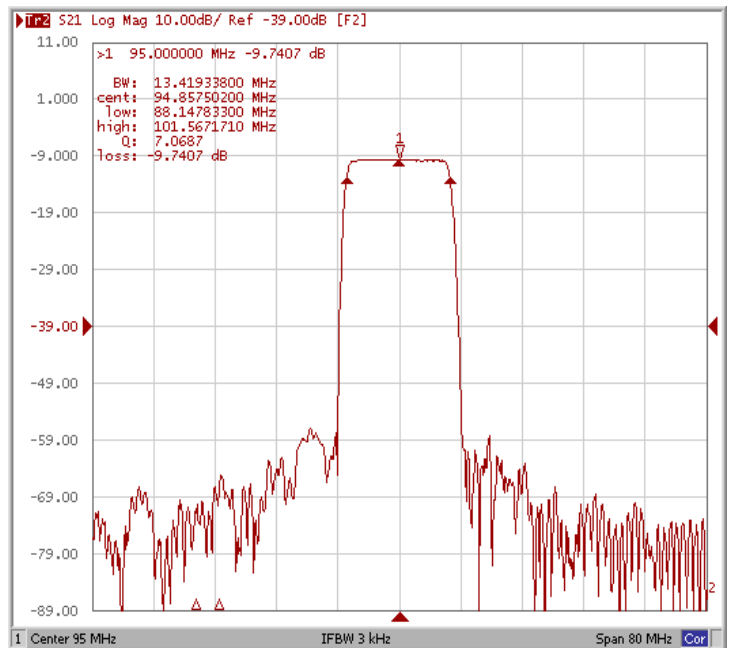
Frequency Response

Operating Temperature : +25 °C

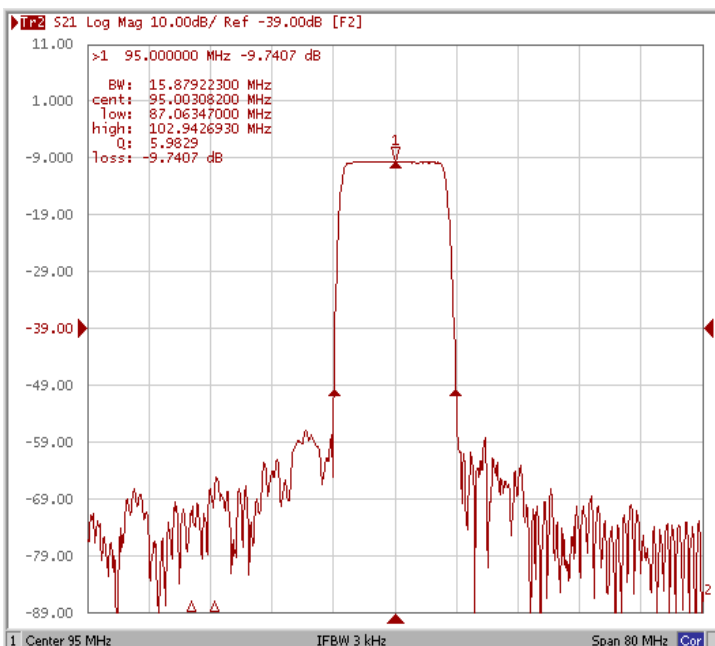
Bandwidth at -1.0 dB



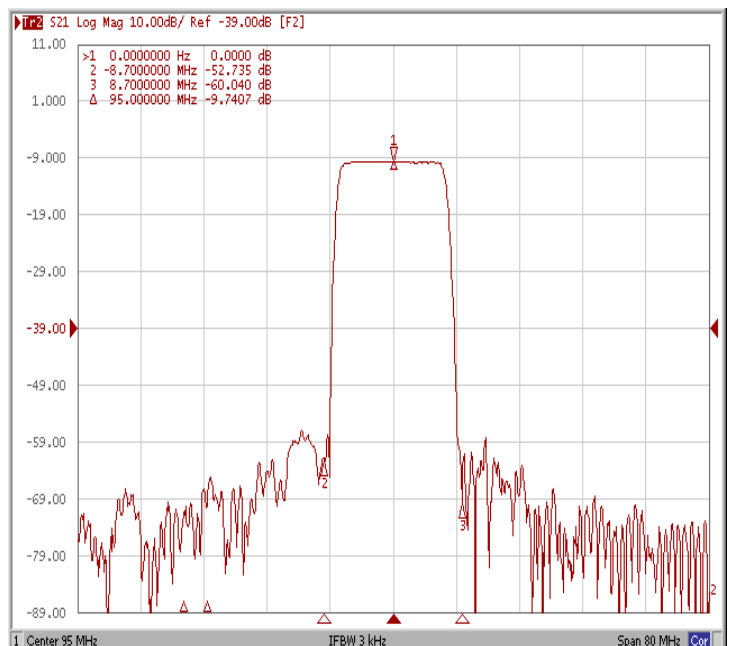
Bandwidth at -3.0 dB



Bandwidth at -40 dB



Relative Attenuation Fo±8.70MHz

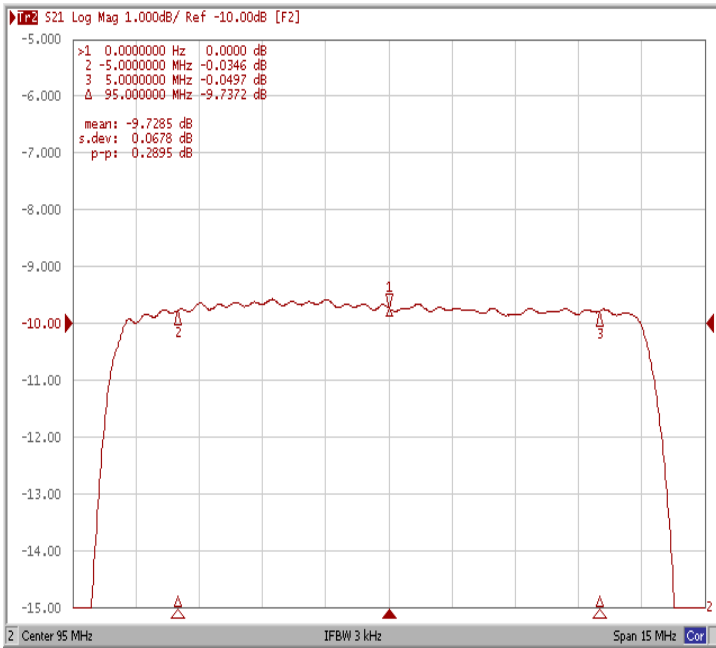




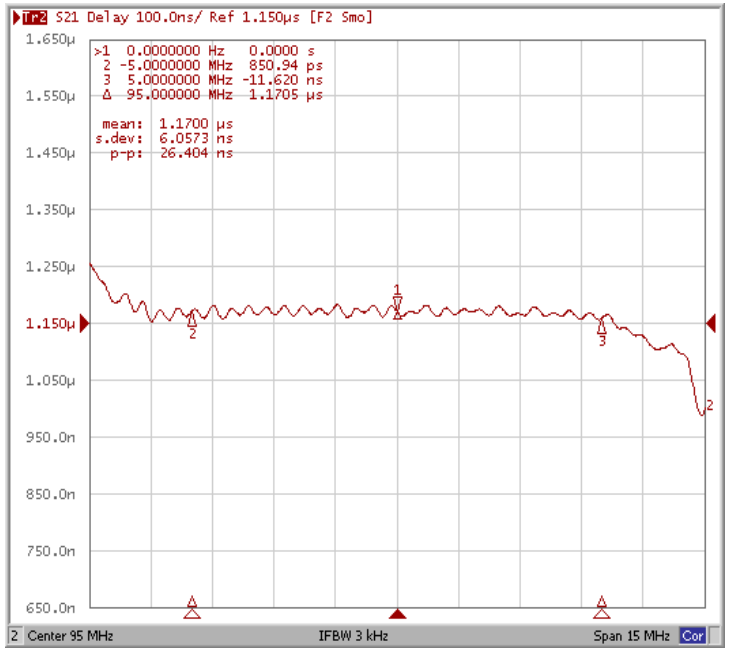
Frequency Characteristics

Frequency Response

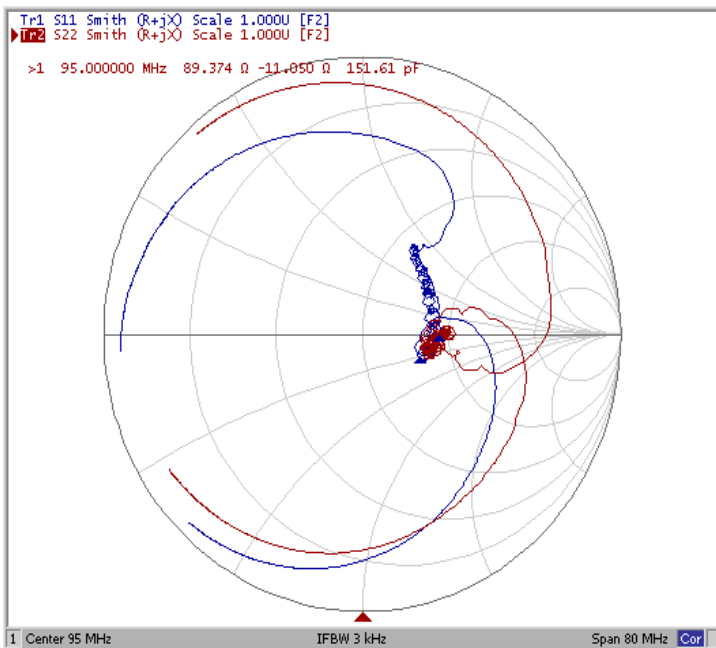
Ripple Variation Fo±5.00MHz



Group Delay Variation Fo±5.00MHz



Smith Chart



VSWR

