



Total Solution Provider in Saw Device

SL07510AV

75.0MHz IF SAW Filter
10.5MHz Bandwidth
Revision 0 : 4. February. 2008



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

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□ Electrical Characteristics

Maximum Ratings

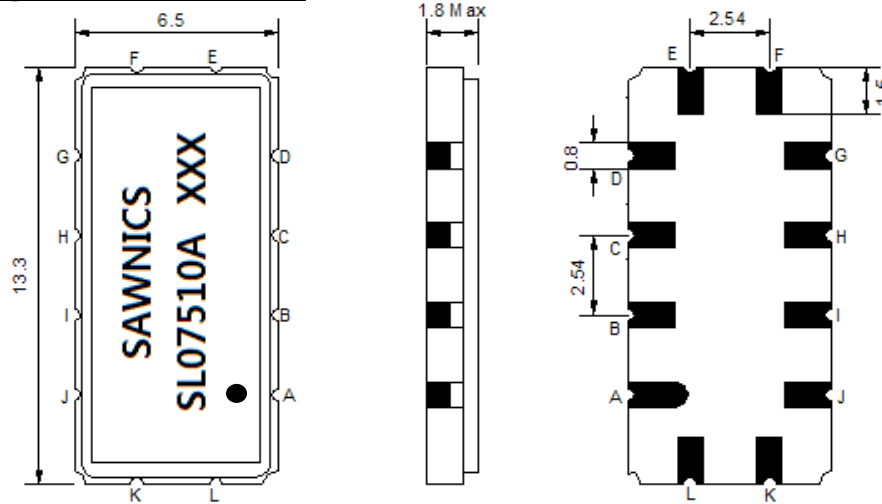
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	30
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	12.0	14.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±4.5 MHz	dB _{p-p}	-	0.4	0.65
Group Delay Variation within fo ±4.5 MHz	nsec	-	45	80
Absolute Delay at Fo	µsec	-	1.16	-
Bandwidth at -1.0 dB	MHz	-	10.50	-
Bandwidth at -3.0 dB	MHz	-	11.20	-
Bandwidth at -40.0 dB	MHz	-	13.90	14.20
Input VSWR at Fo	dB	-	5.8	-
Output VSWR at Fo	dB	-	1.5	-
Relative Attenuation:				
Lower Sidelobe	dB	40	48	-
Upper Sidelobe	dB	40	45	-

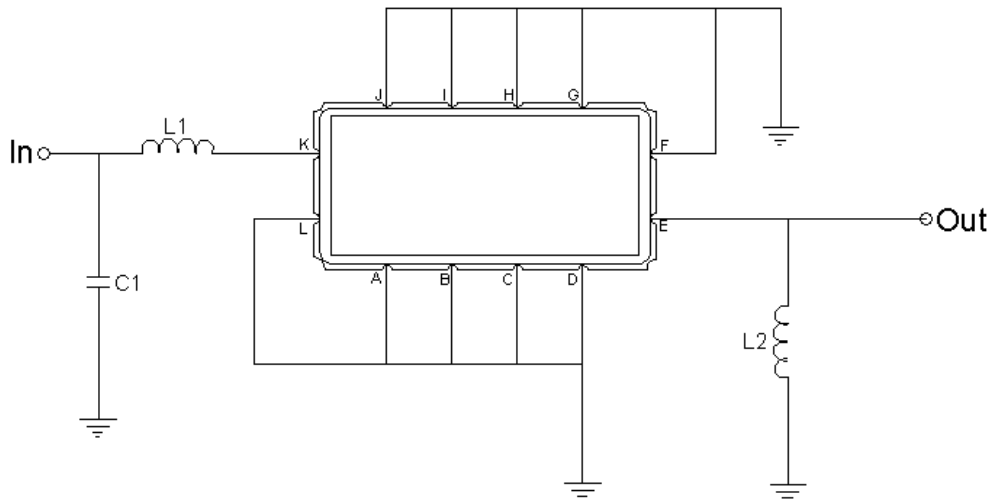
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment



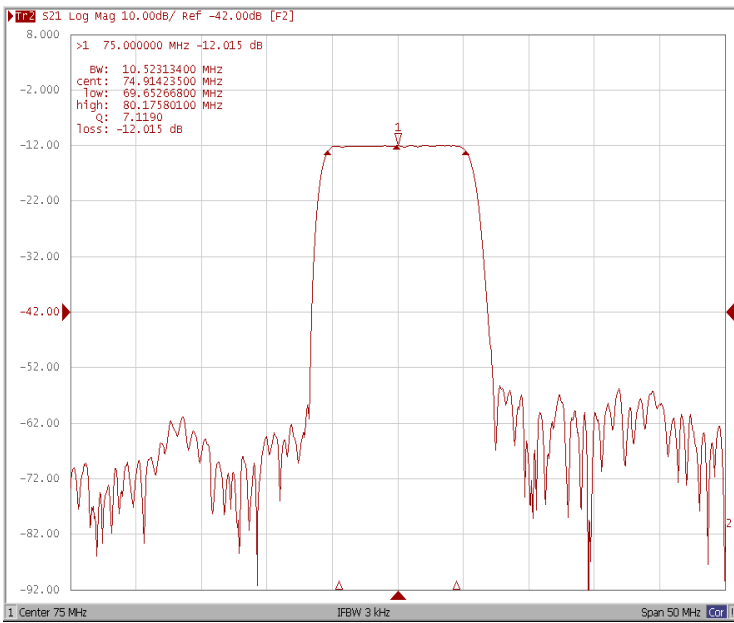
Test Fixture & Values	
Input	L1=68nH , C1=22pF
Output	L2=39nH ,
Source/Load Impedance	50 Ω



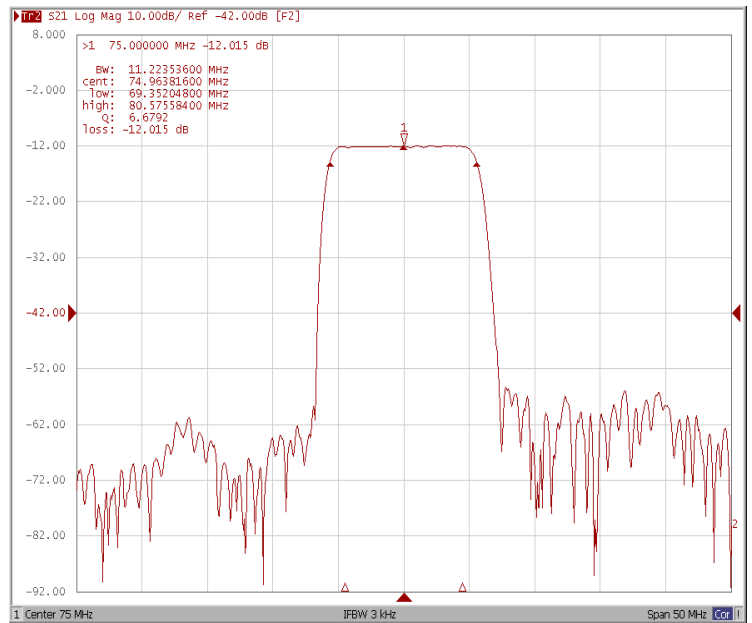
Frequency Characteristics

Frequency Response

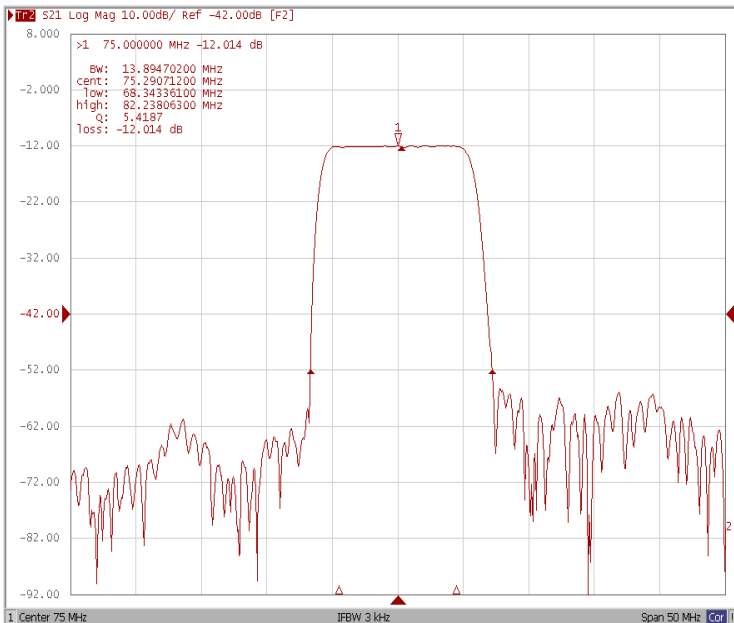
Bandwidth at -1.0 dB



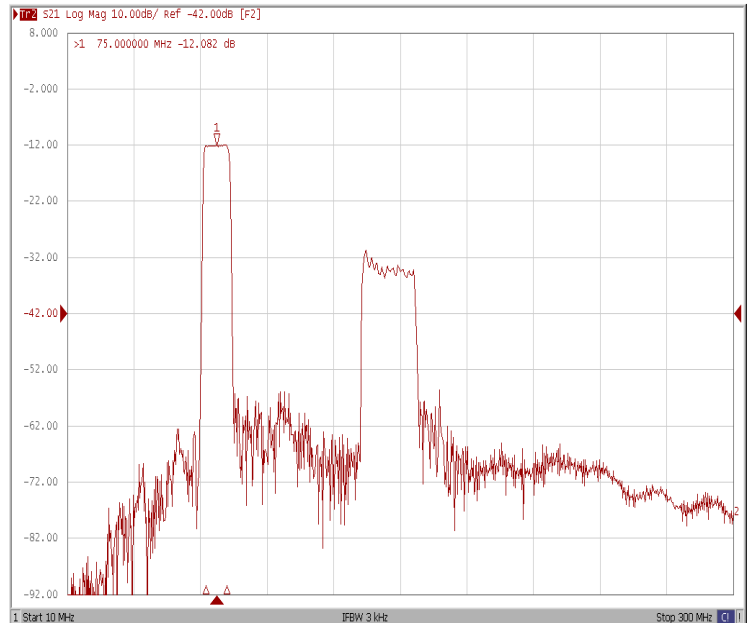
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Wide-Band

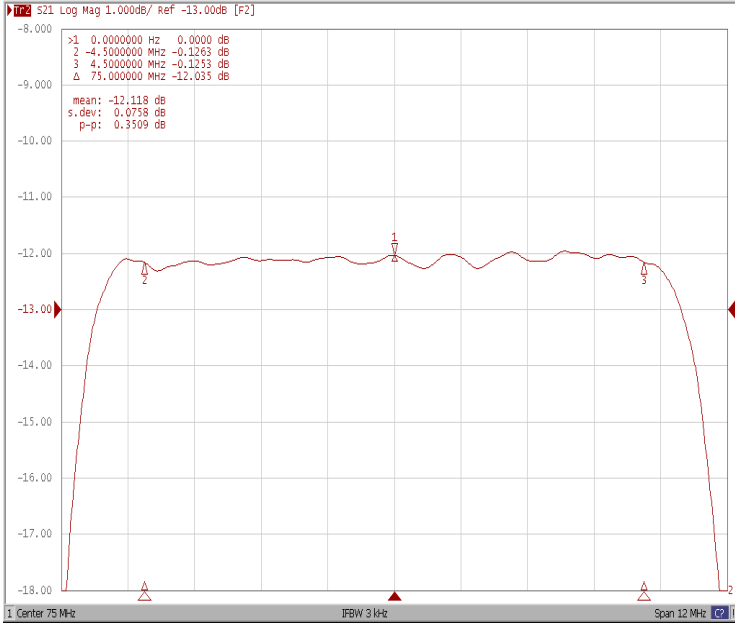




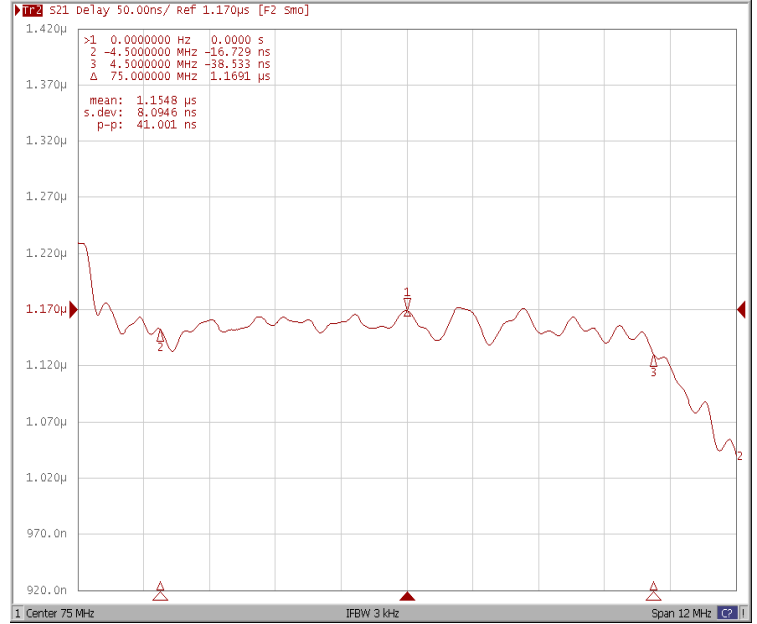
Frequency Characteristics

Frequency Response

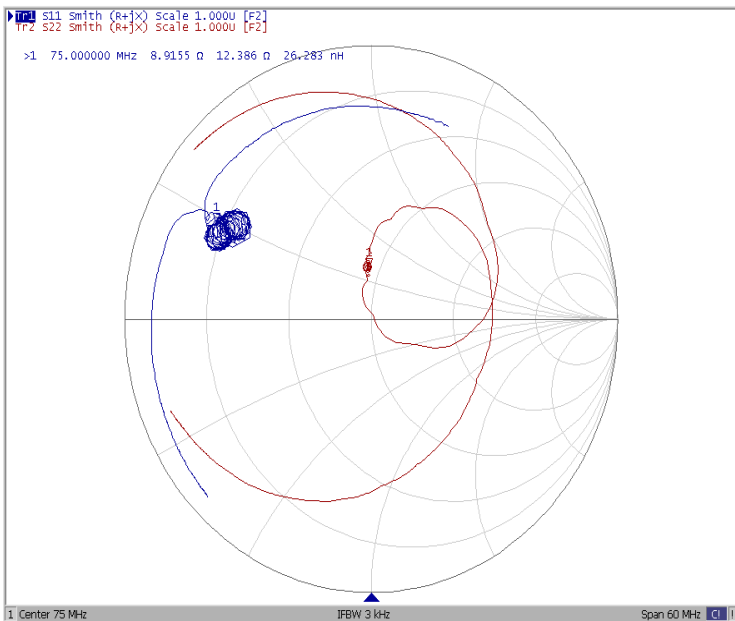
Ripple Variation Fo±4.5MHz



Group Delay Variation Fo±4.5MHz



Smith Chart



SWR

