



Total Solution Provider in Saw Device

SA07510AV

75.3MHz IF SAW Filter
10.20MHz Bandwidth
Revision 0 : 24.August.2009



- 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
Operating 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

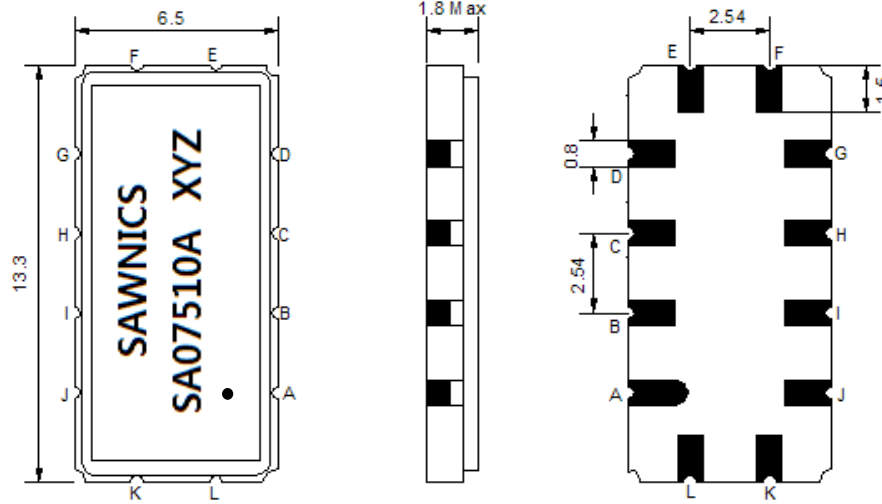
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.3	-
Insertion Loss at Fo	dB	-	21.3	23.0
Group Delay Variation	ns	-	50	90
Absolute Delay Time	us	-	1.65	-
Amplitude Ripple	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	10.00	10.20	-
Bandwidth at -3dB	MHz	-	10.66	-
Bandwidth at -25dB	MHz	-	12.20	12.40
Bandwidth at -40dB	MHz	-	12.63	-
Relative Attenuation				
Lower Sidelobe	dB	50	53	-
Upper Sidelobe	dB	50	53	-
Temperature Coefficient	ppm/°C	-	-72	-

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.

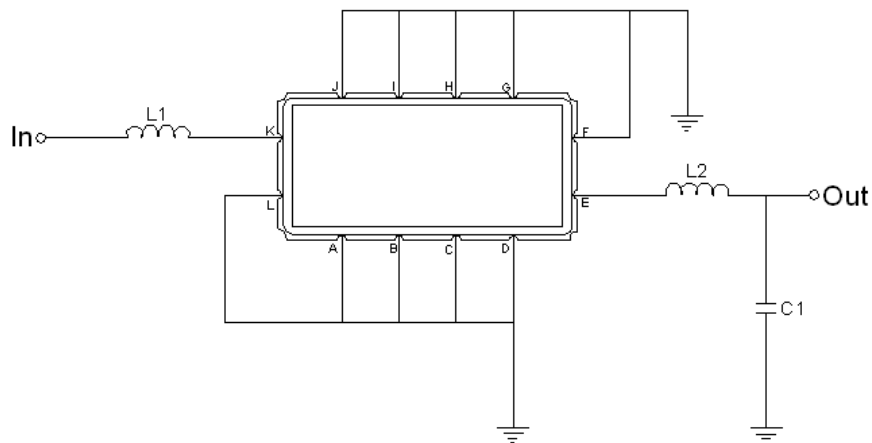
Package Dimensions



- ① SAWNICS: Brand
- ② SA07510A: 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



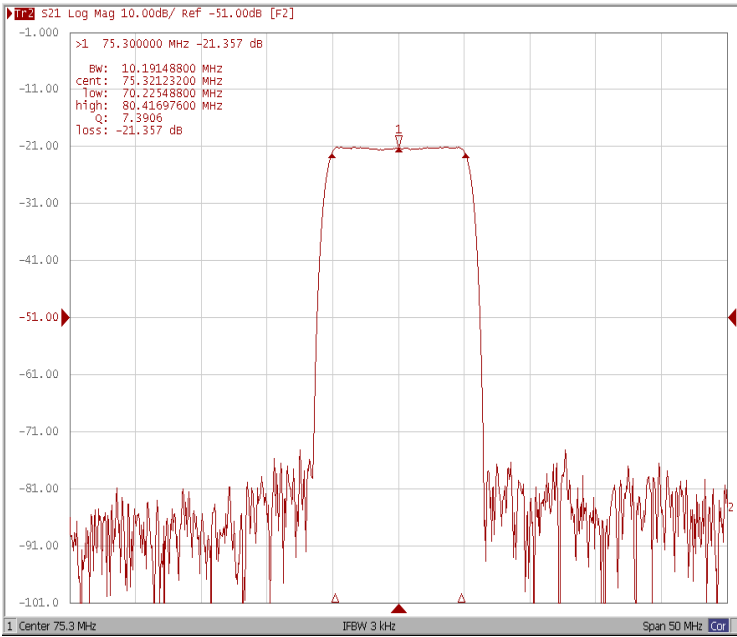
Test Fixture & Values	
Input	L1 = 56 nH,
Output	L2 = 56 nH , C1 = 20 pF
Source/Load Impedance	50 Ω



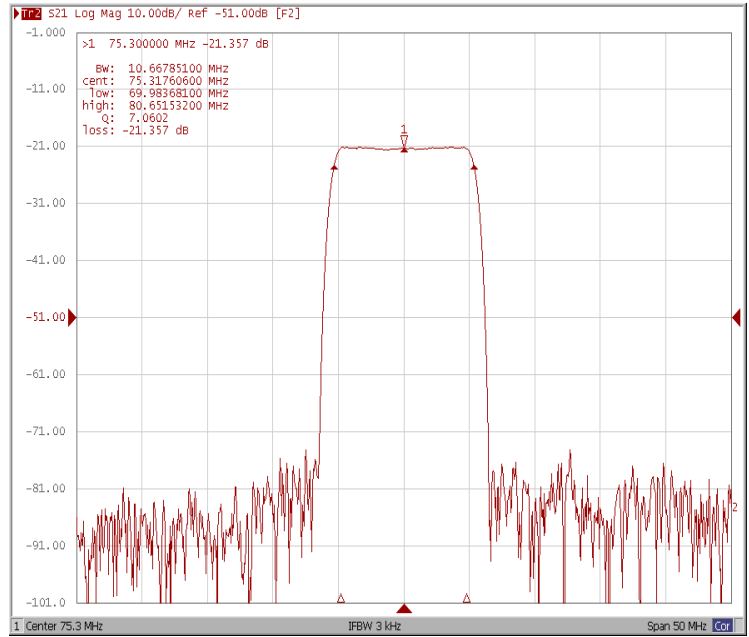
Frequency Characteristics

Frequency Response

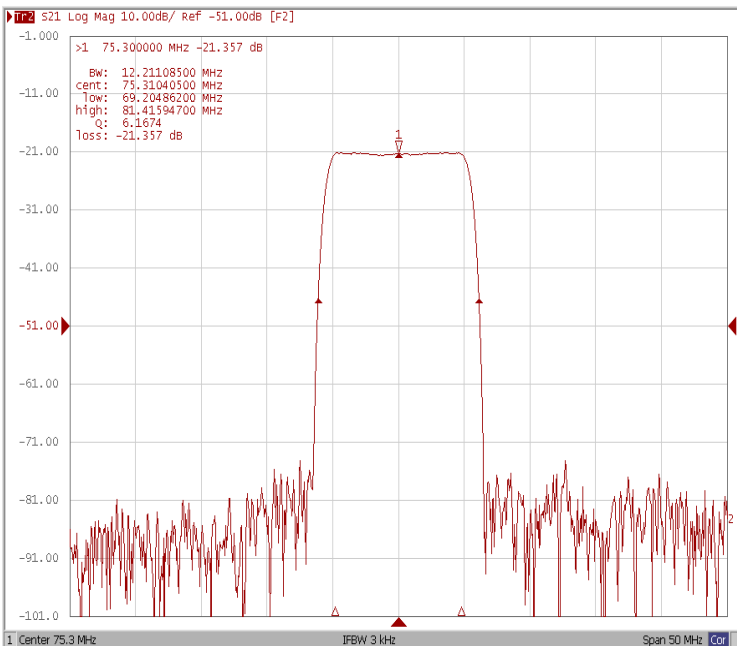
Bandwidth at -1.0 dB



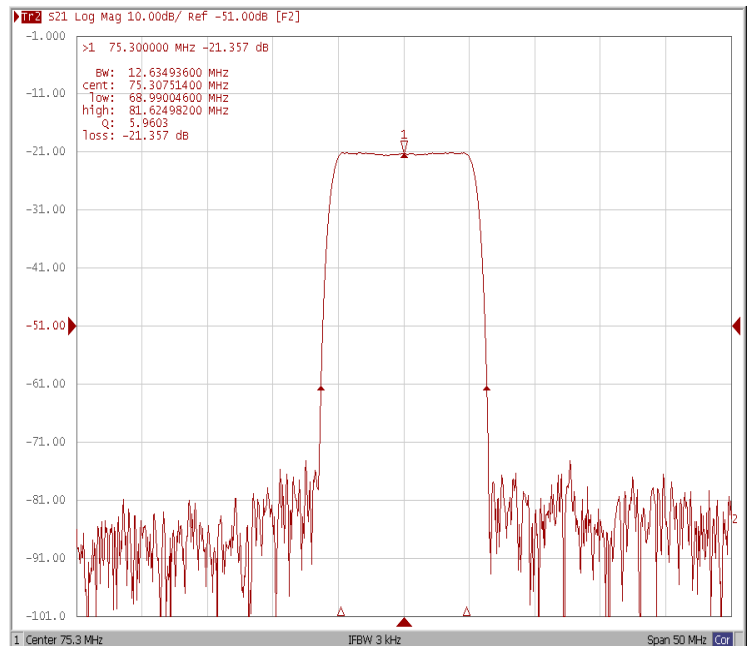
Bandwidth at -3.0 dB



Bandwidth at -25.0 dB



Bandwidth at -40.0 dB

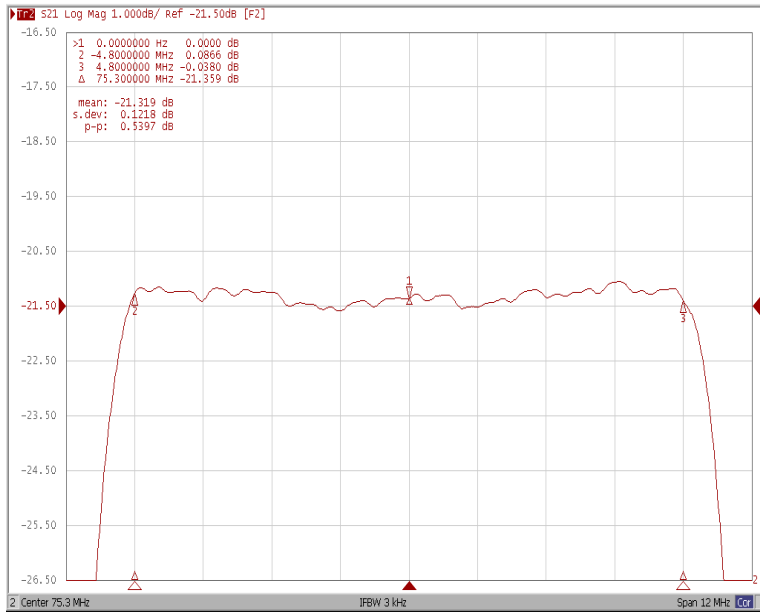




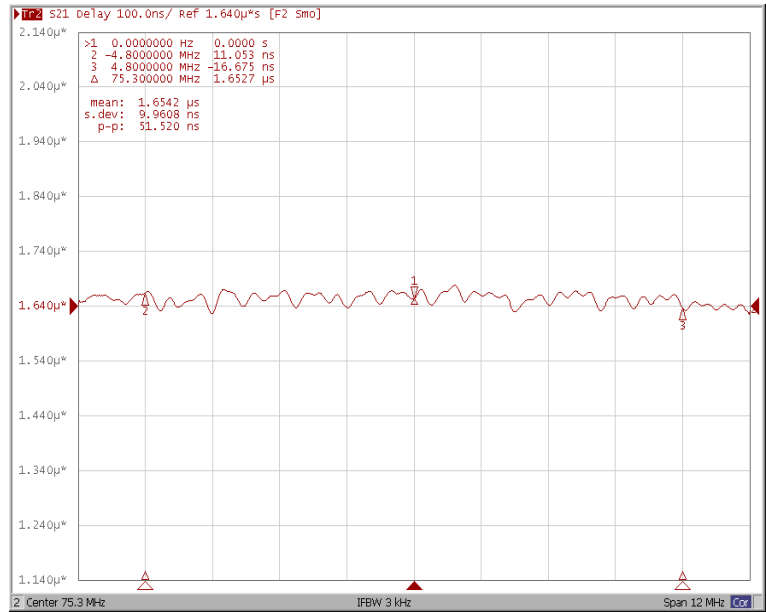
Frequency Characteristics

Frequency Response

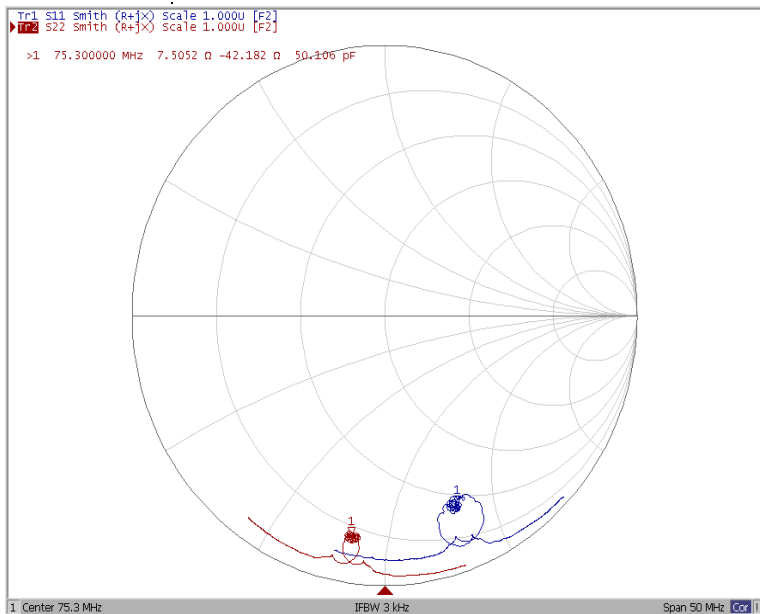
Ripple Variation



Group Delay Variation



Smith Chart



VSWR

