



Total Solution Provider in Saw Device

SL07505CT

75.0MHz IF SAW Filter
5.42MHz Bandwidth
Revision 0 : 7. Nov. 2008



- 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	-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	T			
Length x Width	mm ²		9.1 x 4.8	
Height	mm			1.5

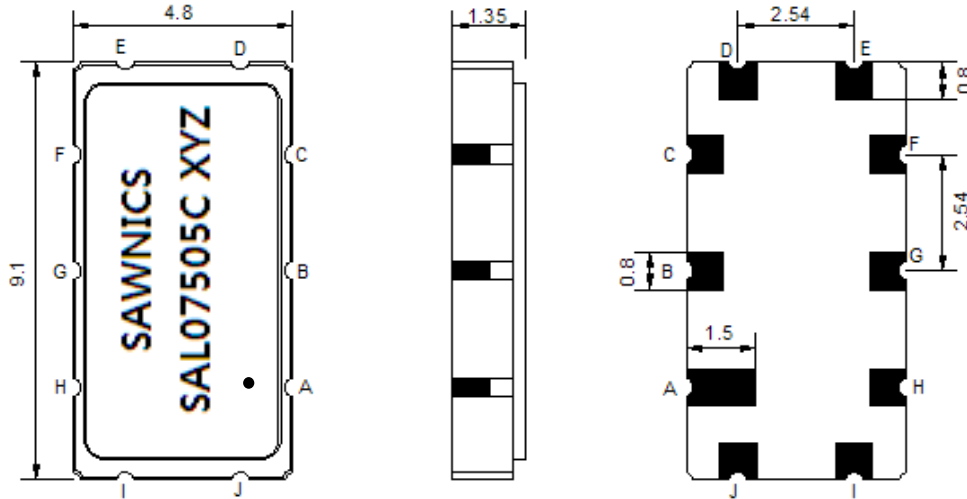
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	13.50	16.00
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple Variation(Fo+/-2.2MHz)	dB _{p-p}	-	0.30	0.70
Group Delay Variation(Fo+/-2.2MHz)	nsec	-	35	80
Absolute Delay at Fo	µsec	-	1.07	-
Bandwidth at -1.0 dB	MHz	-	5.42	-
Bandwidth at -3.0 dB	MHz	-	6.09	-
Bandwidth at -40.0 dB	MHz	-	8.70	-
Input VSWR at Fo	dB	-	2.1	-
Output VSWR at Fo	dB	-	1.2	-
Relative Attenuation				
Lower Sidelobe	dB	40	45	
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.

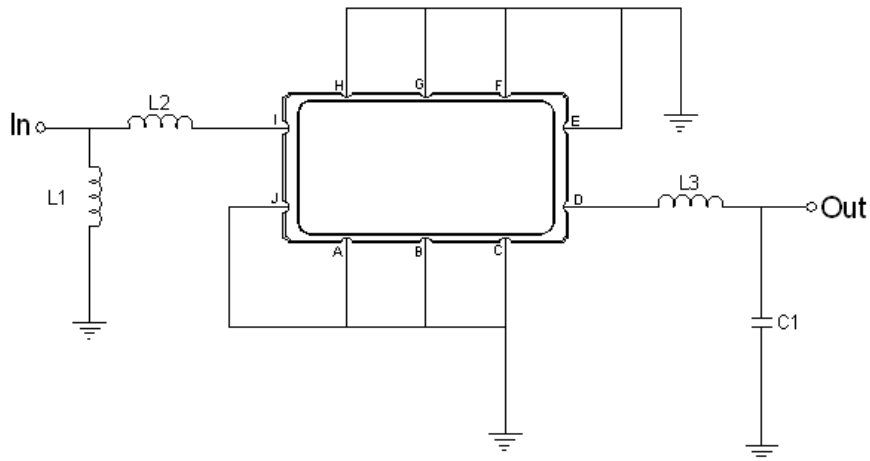
Package Dimensions



- ① SAWNICS: Brand
- ② SL07505C: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

Testing Environment



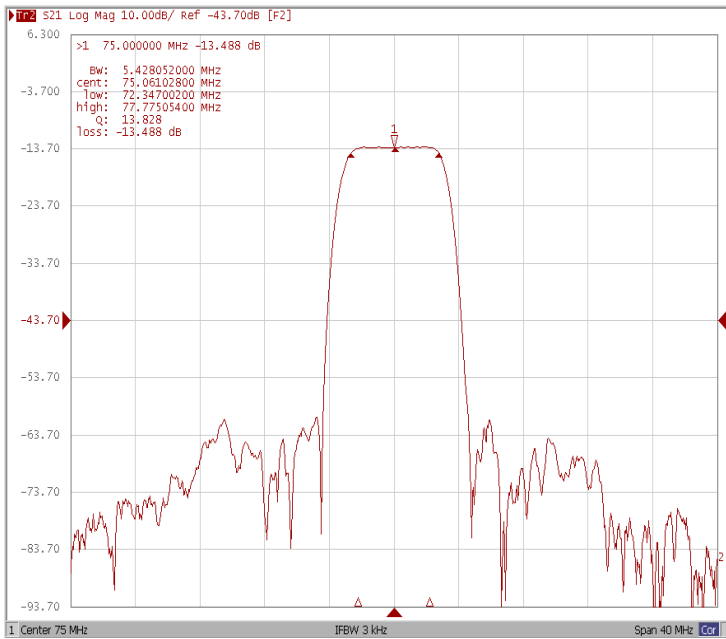
Test Fixture & Values	
Input	L1 = 47 nH ,L2 = 18 pF
Output	L3 = 100 nH ,C1 = 110 pF
Source/Load Impedance	50 Ω



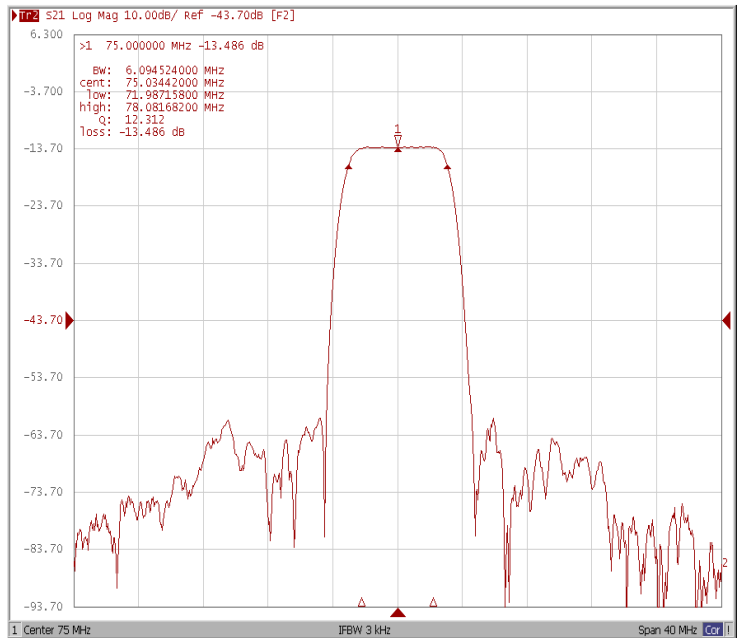
Frequency Characteristics

Frequency Response

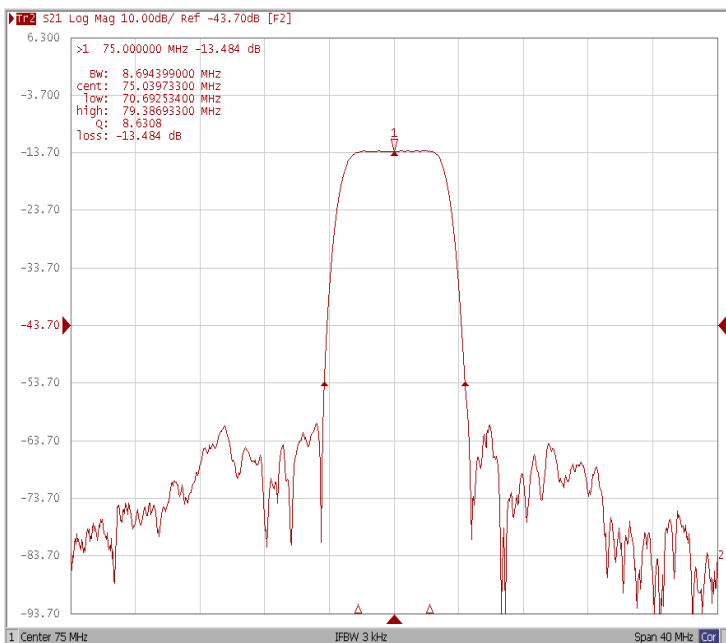
Bandwidth at -1.0 dB



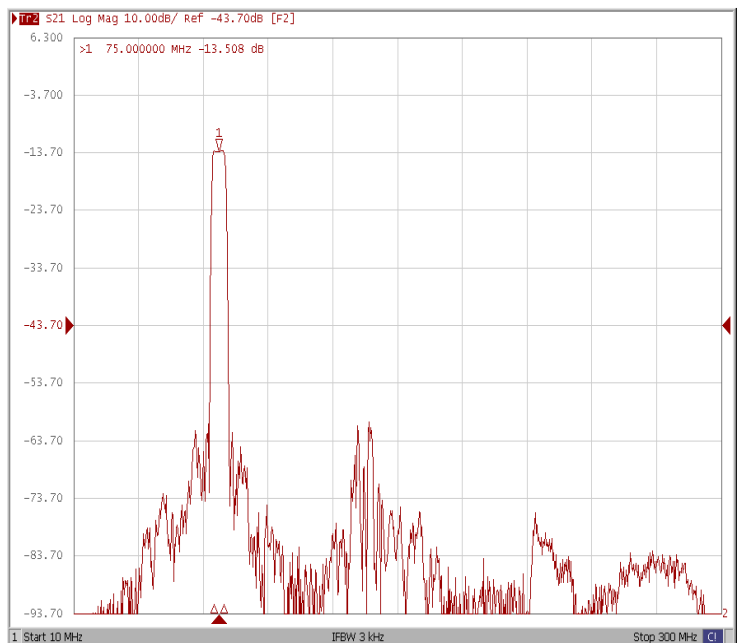
Bandwidth at -3.0 dB



Bandwidth at -40 dB



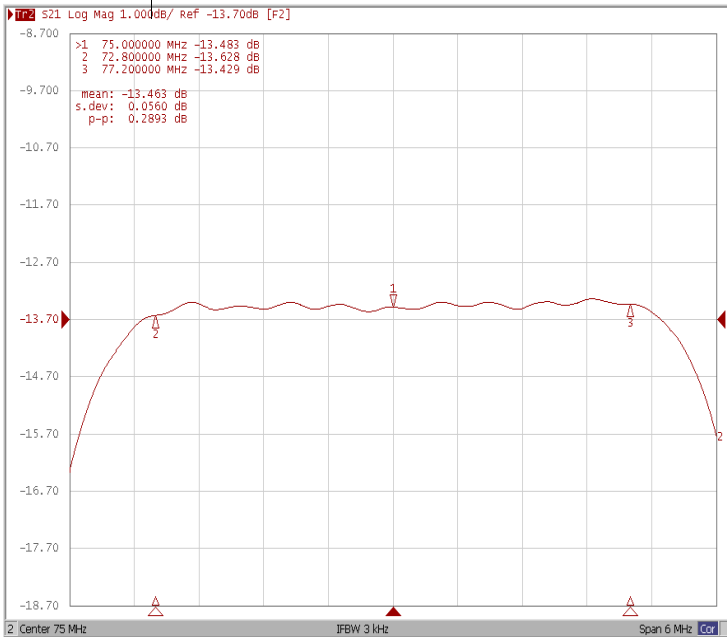
WIDE



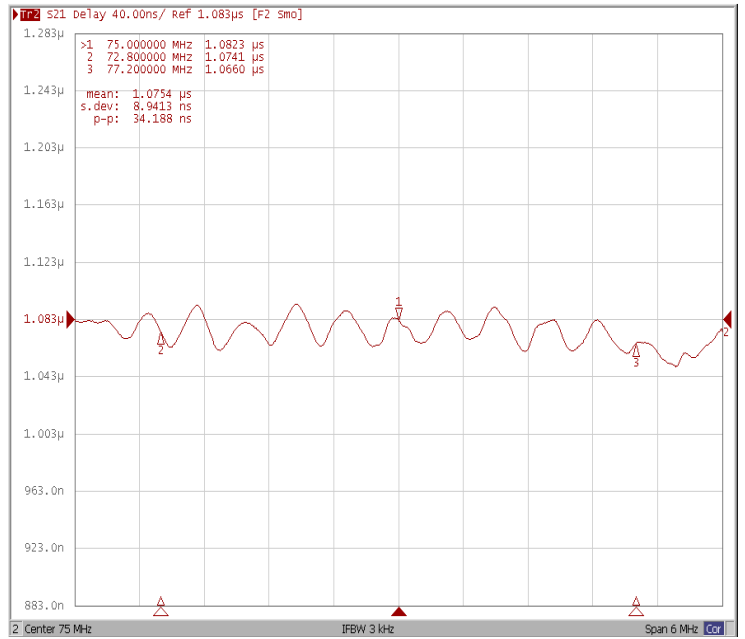


Frequency Response

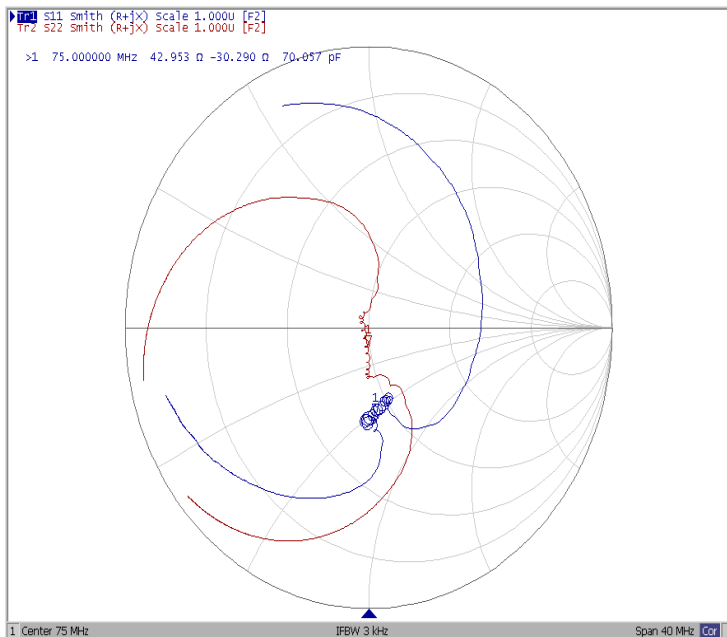
Ripple Variation($F_o \pm 2.2\text{MHz}$)



Group Delay Variation($F_o \pm 2.2\text{MHz}$)



Smith Chart



VSWR

