



*Total Solution Provider in Saw Device*

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# SL07521CT

75.0MHz IF SAW Filter  
21.60 MHz Bandwidth  
Revision 0: 16. June. 2009



- 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	T			
Length x Width	mm <sup>2</sup>	-	9.1 x 4.8	-
Height	mm	-	1.5	-

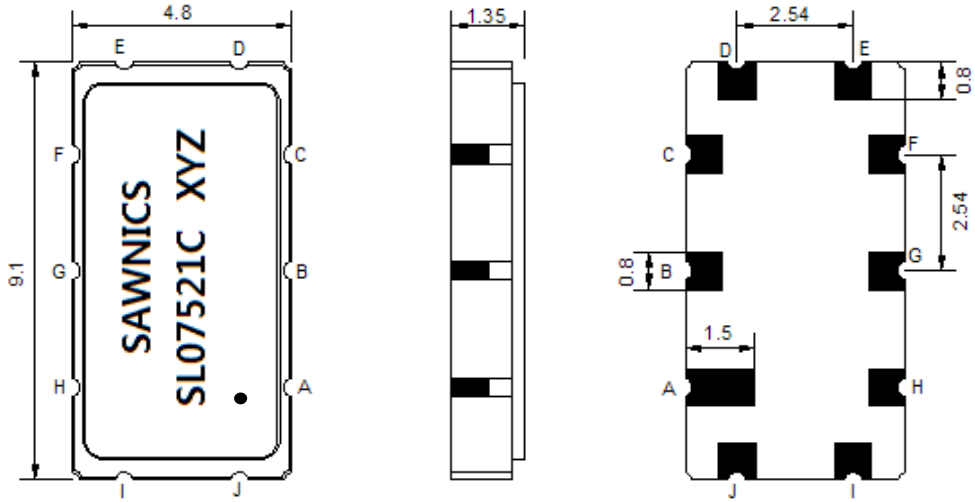
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	14.0	16.0
Amplitude Ripple Variation at Fo ± 9.75 MHz	dB <sub>p-p</sub>	-	0.3	0.8
Group Delay Variation at Fo ± 9.75 MHz	nsec	-	22	40
Absolute Delay at Fo	µsec	-	0.607	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	21.30	21.60	-
Bandwidth at -3.0 dB	MHz	-	23.00	-
Bandwidth at -20.0 dB	MHz	-	26.90	27.20
Bandwidth at -40.0 dB	MHz	-	29.35	-
<b>Relative Attenuation</b>				
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.

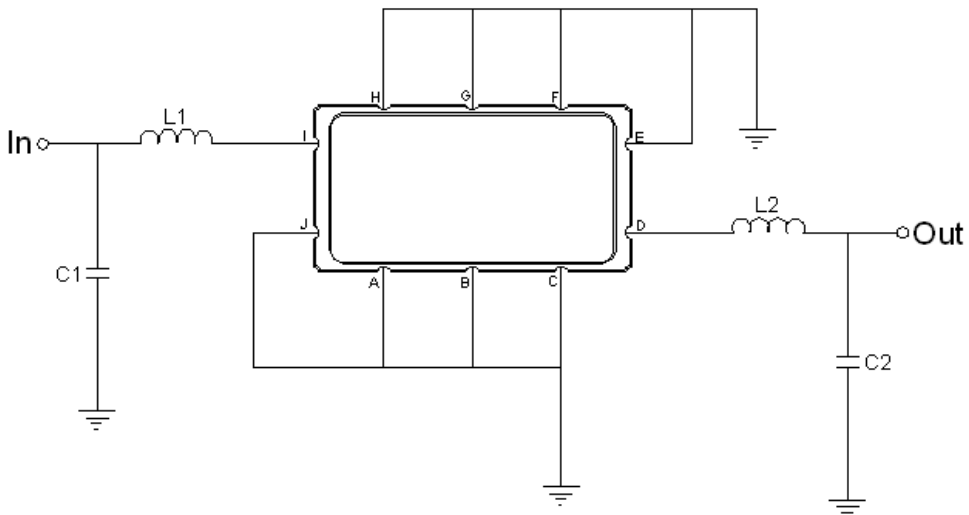
### Package Dimensions



- ① SAWNICS: Brand
- ② SL07521C: 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

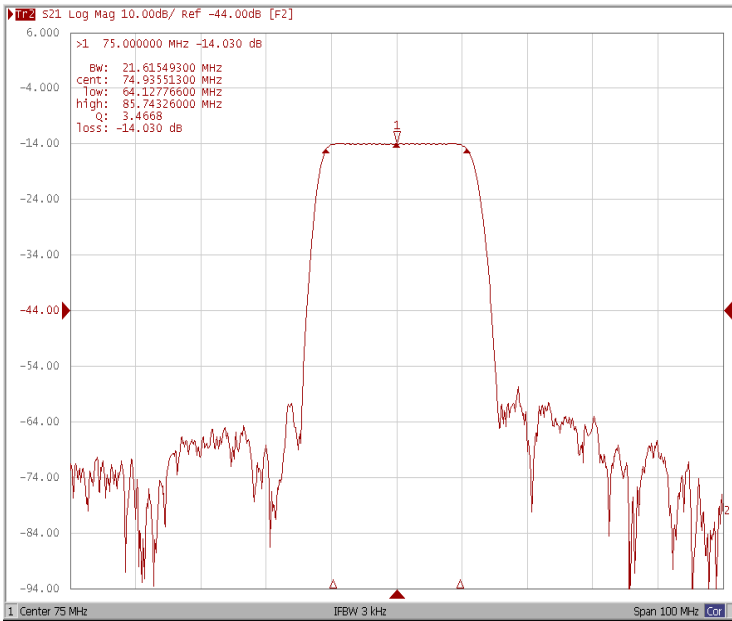


Test Fixture & Values	
Input	L1=180 nH , C1=10 pF
Output	L2=180 nH , C2=10 pF
Source/Load Impedance	50 $\Omega$

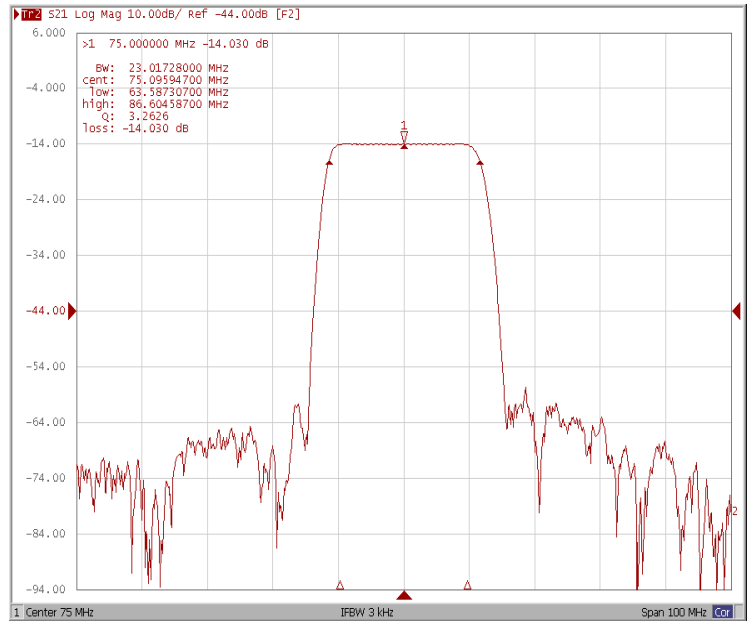
### Frequency Characteristics

#### Frequency Response

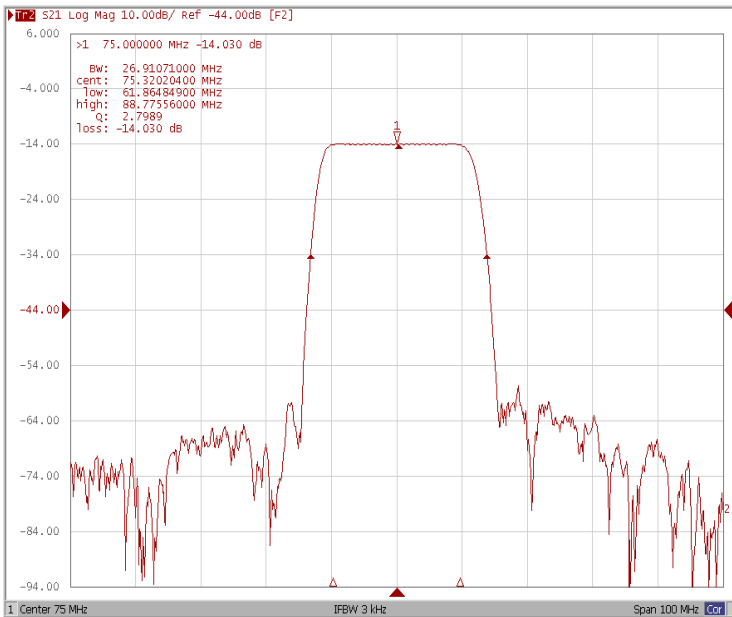
**Bandwidth at -1.0 dB**



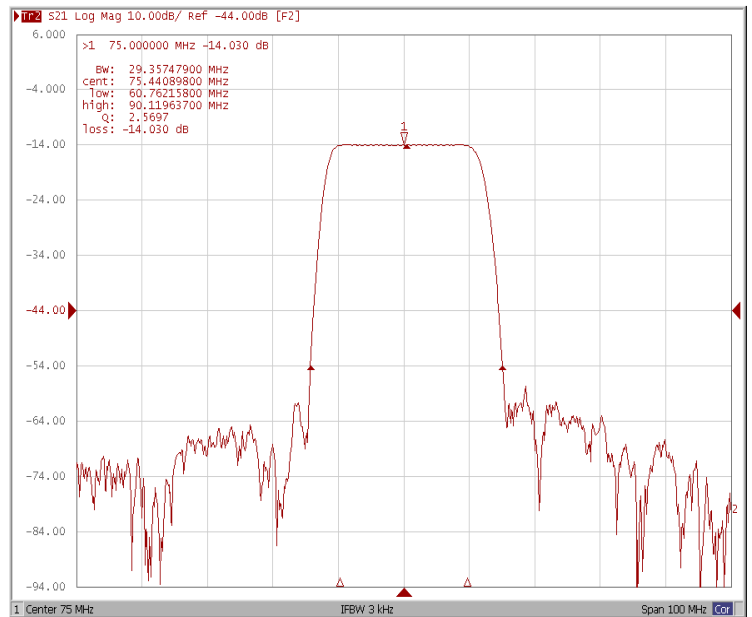
**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**



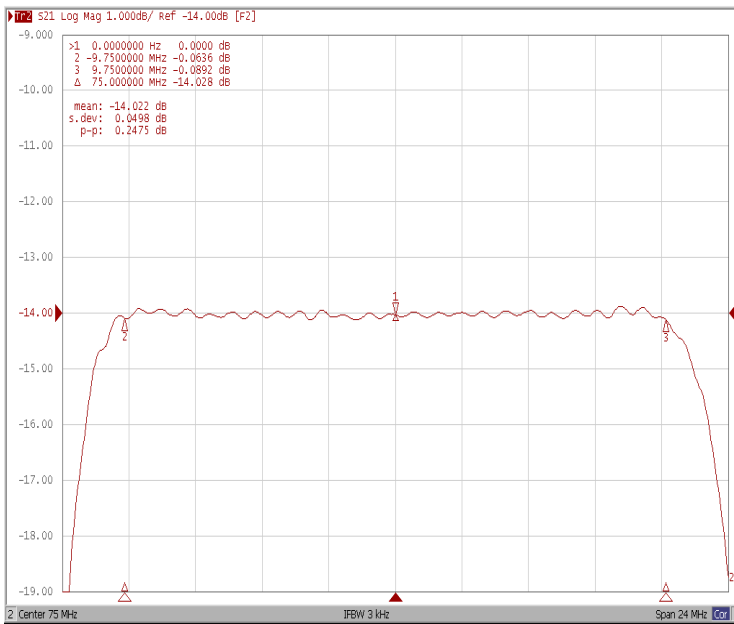
**Bandwidth at -40.0 dB**



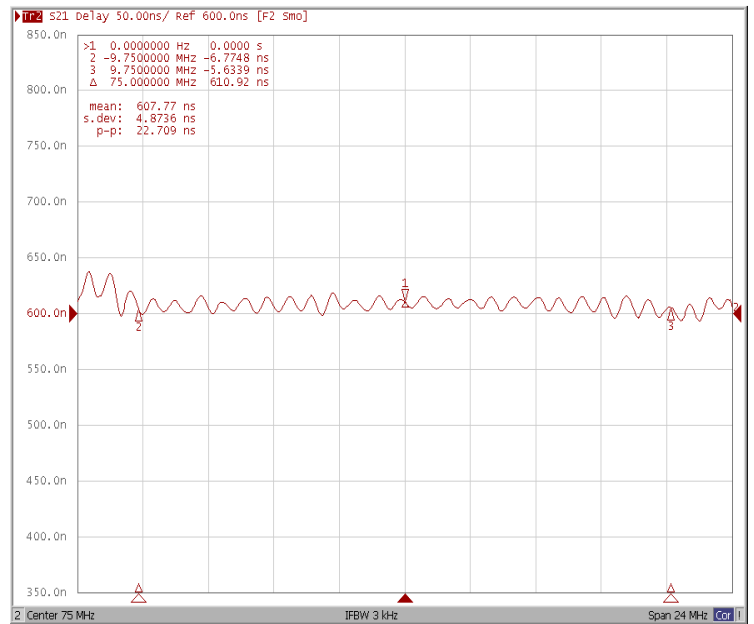
### Frequency Characteristics

#### Frequency Response

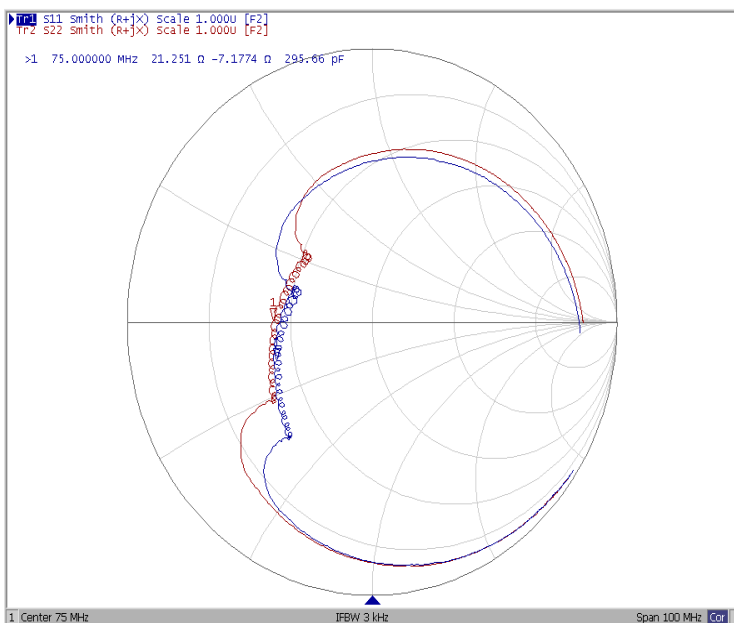
Ripple Variation  $Fo \pm 9.75\text{MHz}$



Group Delay Variation  $Fo \pm 9.75\text{MHz}$



Smith Chart



SWR

