



Total Solution Provider in Saw Device

SL07505BT

75.0MHz IF SAW Filter
5.59MHz Bandwidth
Revision 0 : 13. Oct. 2008



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

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□ Electrical Characteristics

Maximum Ratings

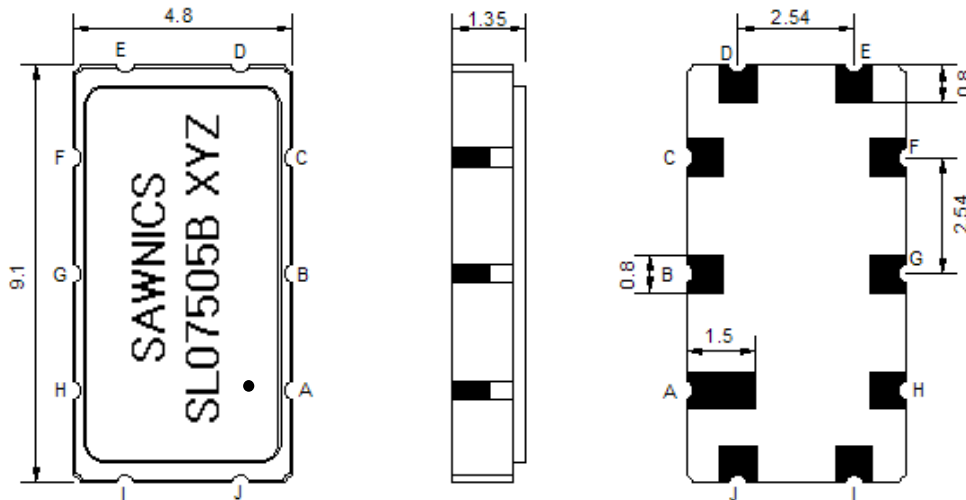
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	T			
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	-	8.9	12.00
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple Variation(Fo+/-1.94MHz)	dB _{p-p}	-	0.4	0.9
Group Delay Variation(Fo+/-1.94MHz)	nsec	-	56	100
Absolute Delay at Fo	μsec	-	0.8	-
Bandwidth at -1.0 dB	MHz	-	5.6	-
Bandwidth at -3.0 dB	MHz	-	6.6	-
Bandwidth at -30.0 dB	MHz	-	9.92	-
VSWR	-	-	3.8	-

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.

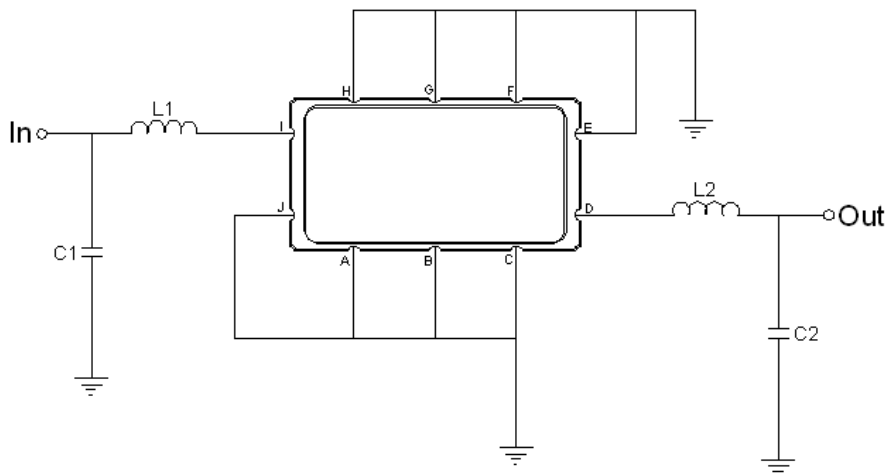
□ Package Dimensions



- ① SAWNICS: Brand
- ② SL07505B: 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



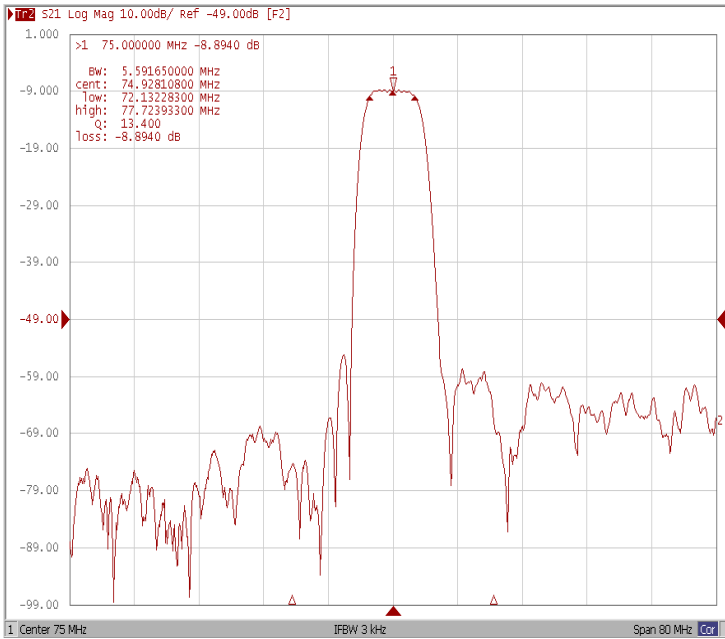
Test Fixture & Values	
Input	L1 = 100 nH , C1 = 7 pF
Output	L2 = 100 nH , C2 = 7 pF
Source/Load Impedance	50 Ω



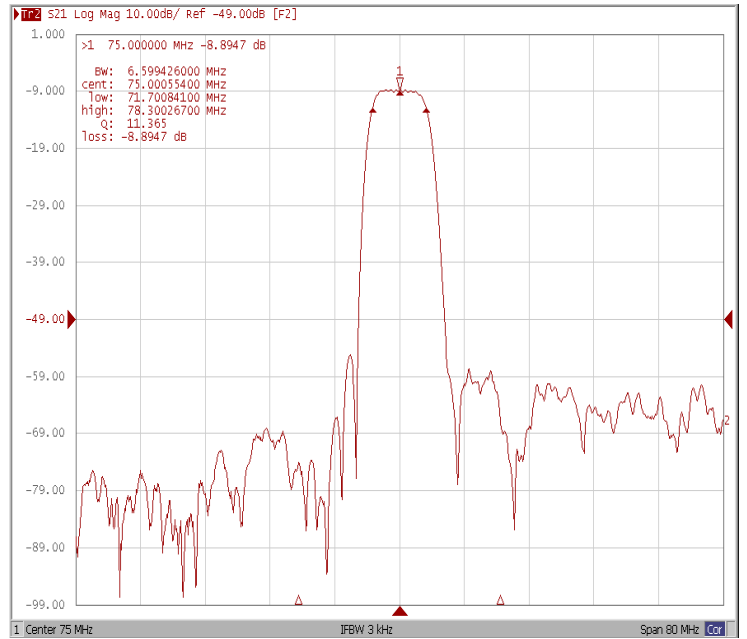
Frequency Characteristics

Frequency Response

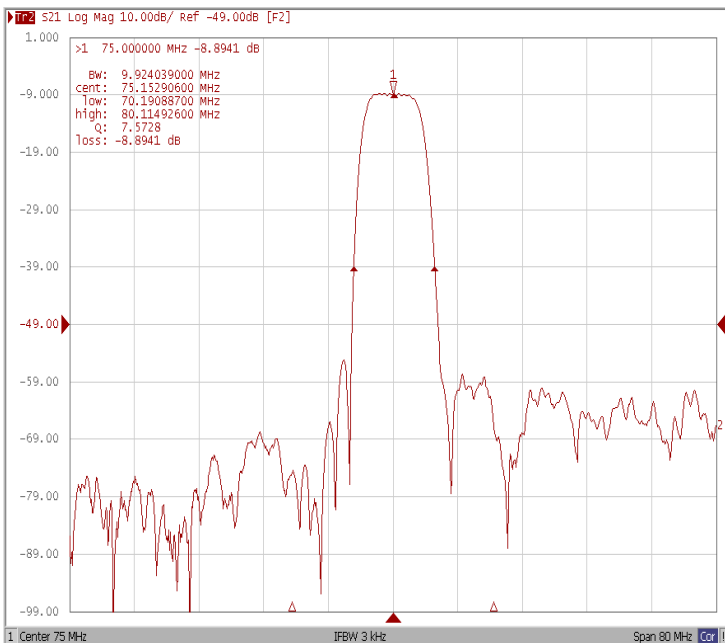
Bandwidth at -1.0 dB



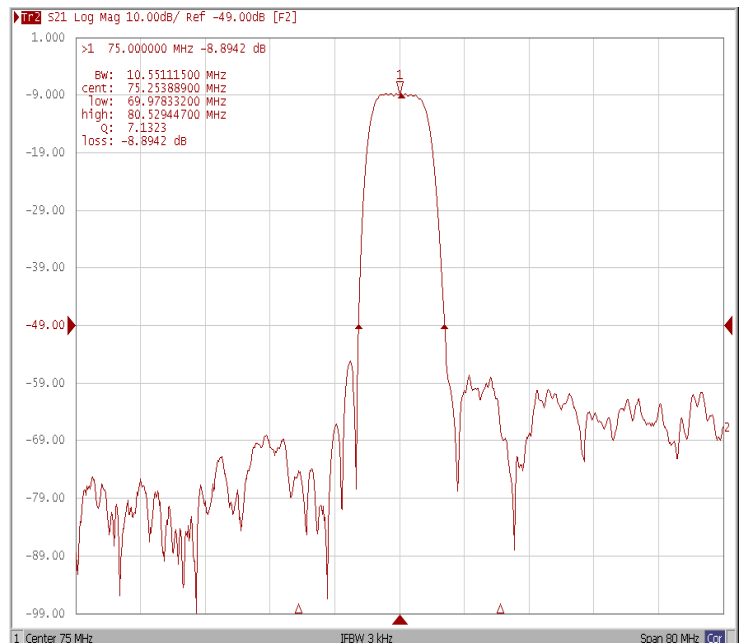
Bandwidth at -3.0 dB



Bandwidth at -30 dB



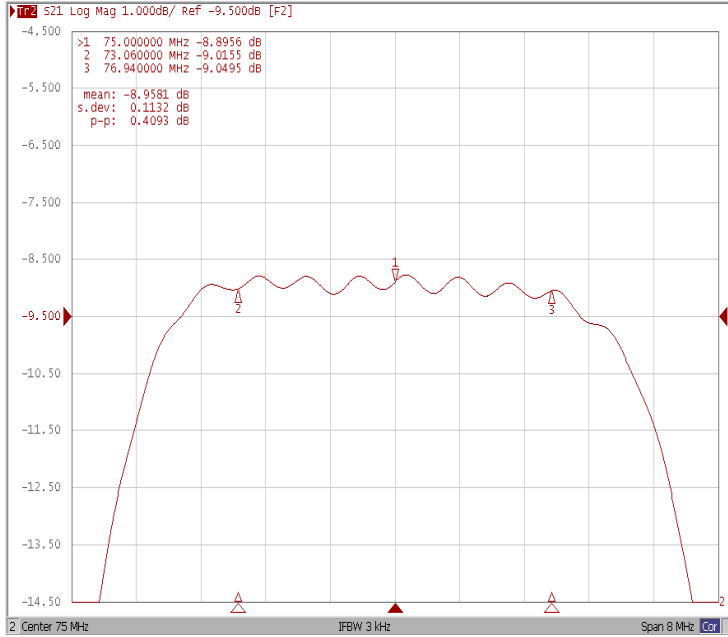
Bandwidth at -40 dB



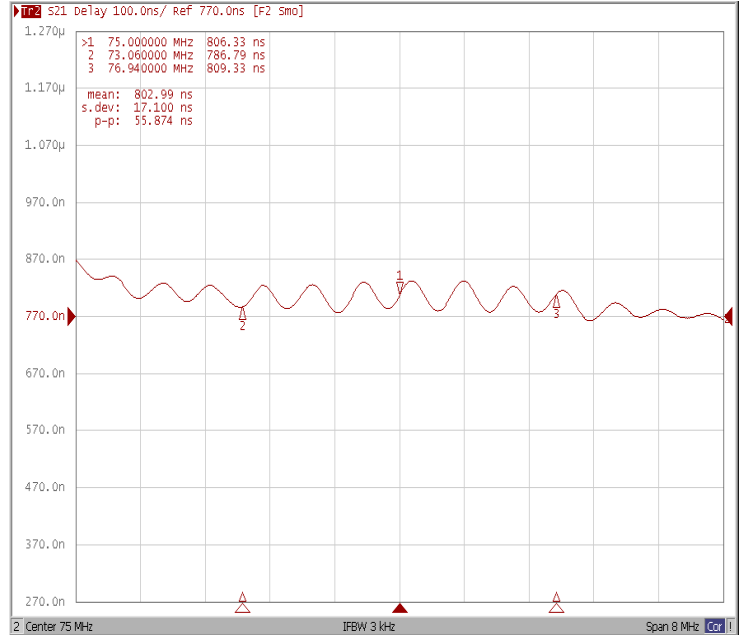


Frequency Response

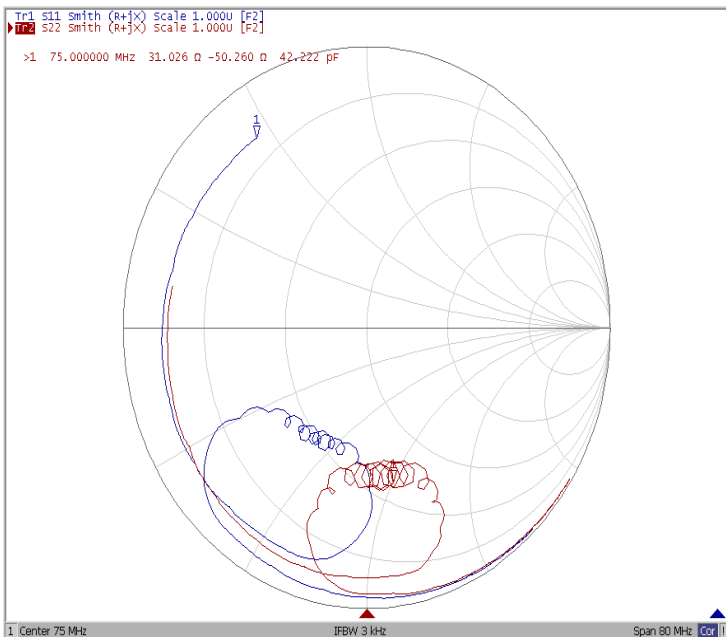
Ripple Variation($F_o \pm 1.94\text{MHz}$)



Group Delay Variation($F_o \pm 1.94\text{MHz}$)



Smith Chart



VSWR

