



Total Solution Provider in Saw Device

SL07507BV

75.0 MHz IF SAW Filter
7.12 MHz Bandwidth
Revision 0: 24. Nov. 2008



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

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Electrical Characteristics

Maximum Ratings

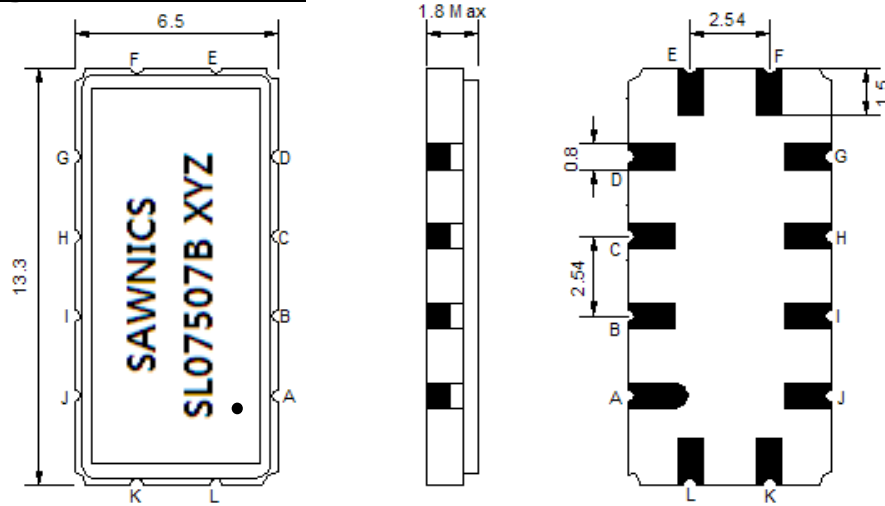
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
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	-	14.0	17.0
Group Delay Variation (Fo±3.15MHz)	nsec	-	38	70
Absolute Delay at Fo	usec	-	1.23	-
Passband Ripple Variation (Fo±3.15MHz)	dB	-	0.32	0.80
Bandwidth at -1dB	MHz	6.90	7.12	-
Bandwidth at -3dB	MHz	-	7.85	-
Bandwidth at -40dB	MHz	-	10.35	10.60
Ultimate Rejection	dB	40	45	-
VSWR	dB	-	2.3	-
Temperature Coefficient	ppm/°C	-	-18	-

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.

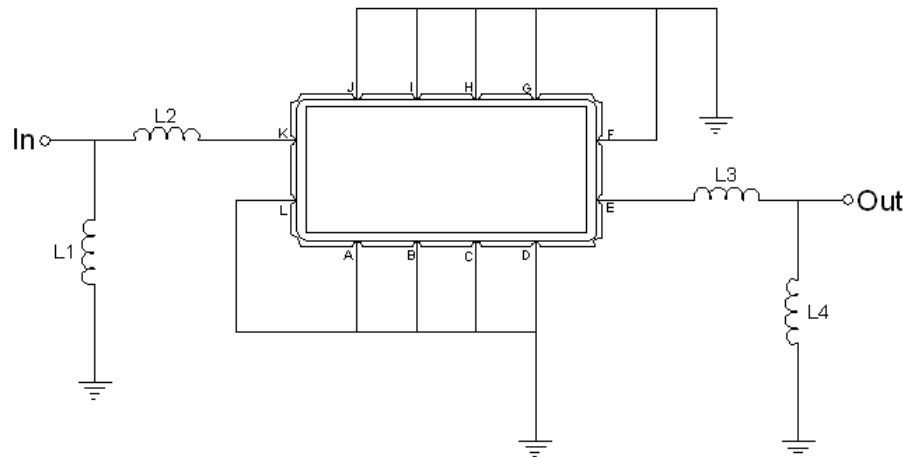
Package Dimensions



- ① SAWNICS: Brand
- ② SL07507B: 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



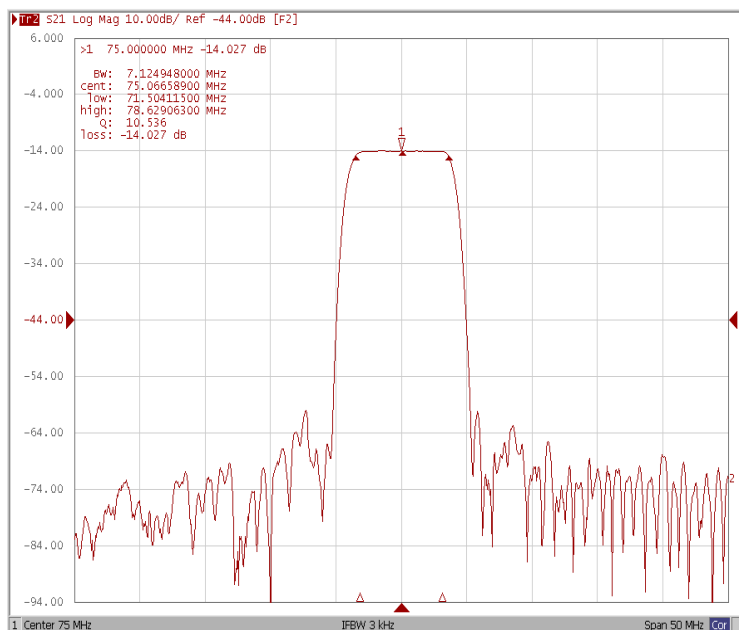
Test Fixture & Values	
Input	L1 = 33 nH, L2 = 8.2 nH
Output	L3 = 12 nH, L4 = 39 nH
Source/Load Impedance	50 Ω



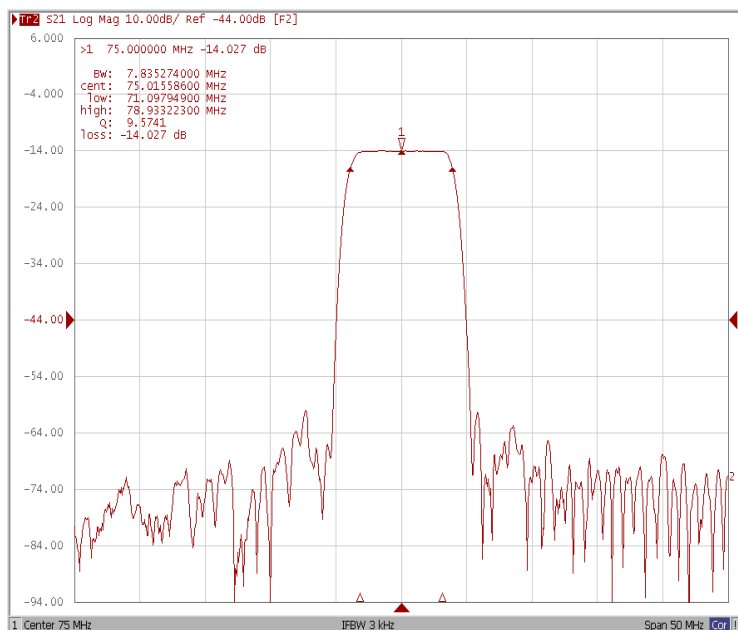
Frequency Characteristics

Frequency Response

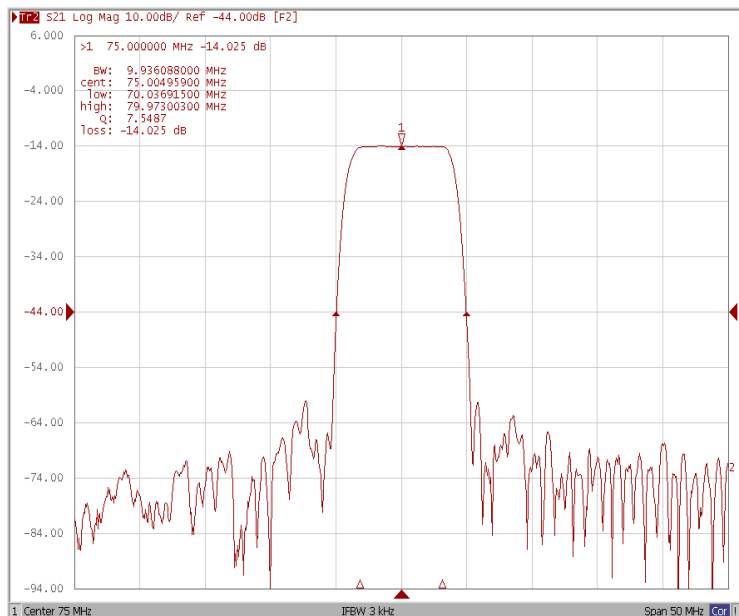
Bandwidth at -1.0 dB



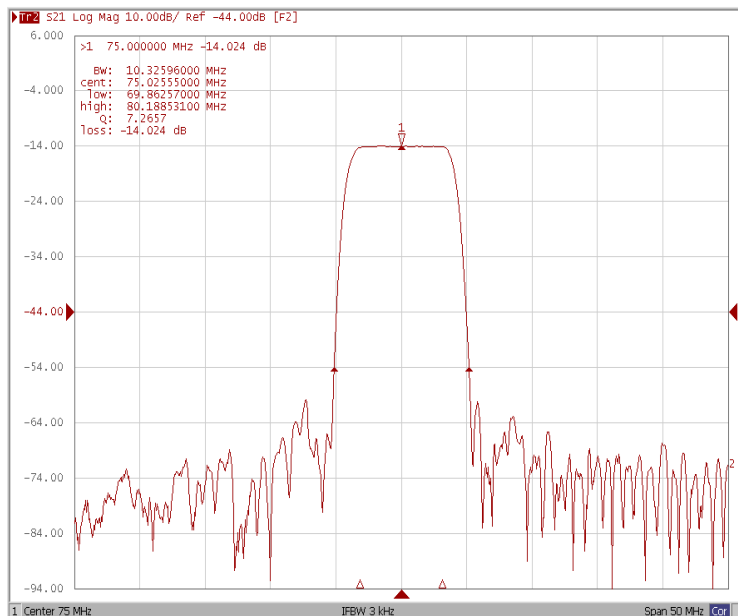
Bandwidth at -3.0 dB



Bandwidth at -30 dB



Bandwidth at -40 dB

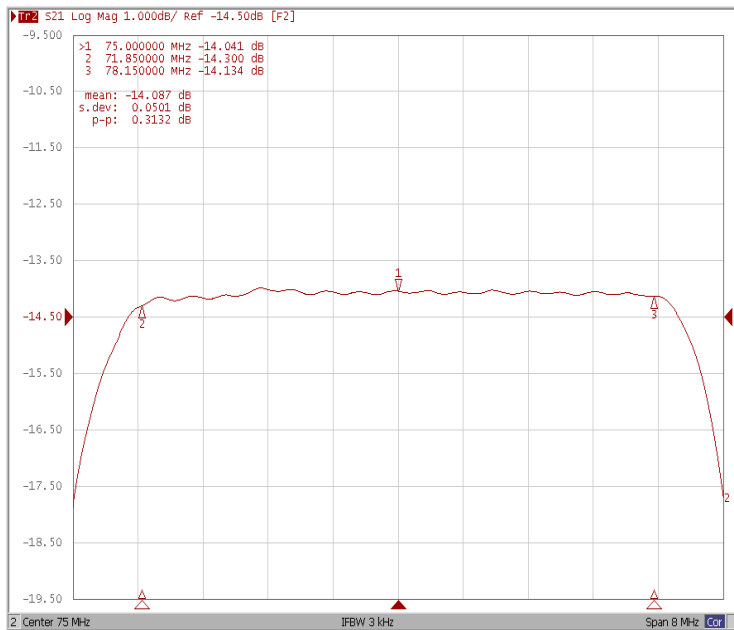




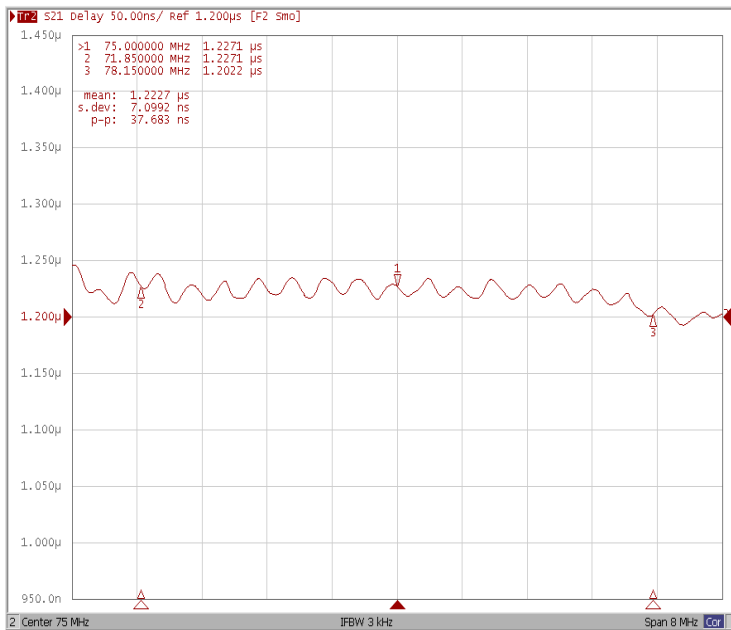
Frequency Characteristics

Frequency Response

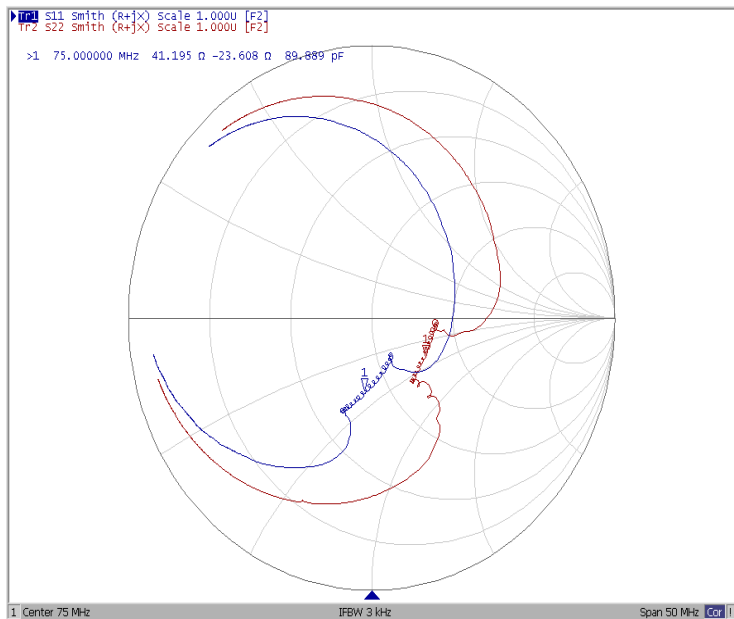
Ripple Variation Fo±3.15MHz



Group Delay Variation Fo±3.15MHz



Smith Chart



SWR

