



Total Solution Provider in Saw Device

SL12510AV

125.0 MHz IF SAW Filter
10.85 MHz Bandwidth
Revision 0: 1. September. 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	-20	-	70
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

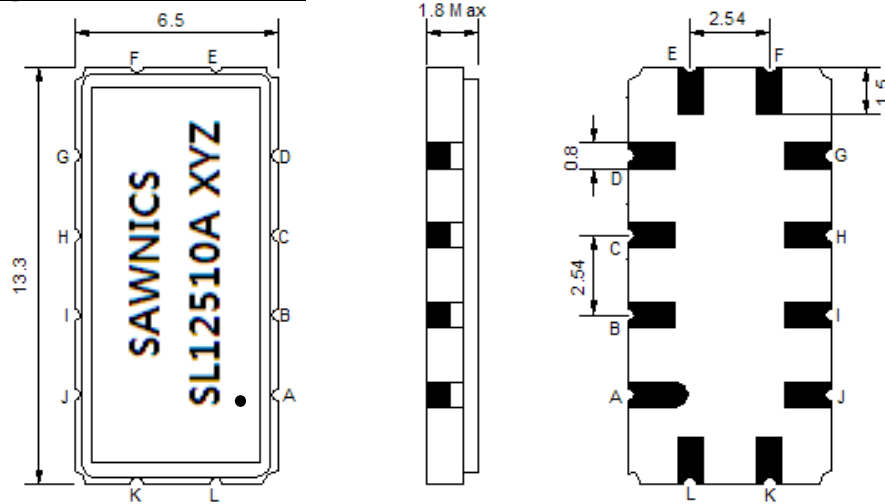
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	125.0	-
Insertion Loss at Fo	dB	-	17.5	20.0
Group Delay Variation at Fo ± 4.7 MHz	nsec	-	20	70
Absolute Delay at Fo	usec	-	1.34	-
Passband Ripple Variation at Fo ± 4.7 MHz	dB	-	0.30	0.70
Bandwidth at -1dB	MHz	10.00	10.85	-
Bandwidth at -3dB	MHz	-	11.45	-
Bandwidth at -40dB	MHz	-	13.80	14.50
Relative Attenuation				
@Fo± 55 MHz	dB	50	60	
Lower Sidelobe	dB	40	50	-
Upper Sidelobe	dB	40	50	-
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.

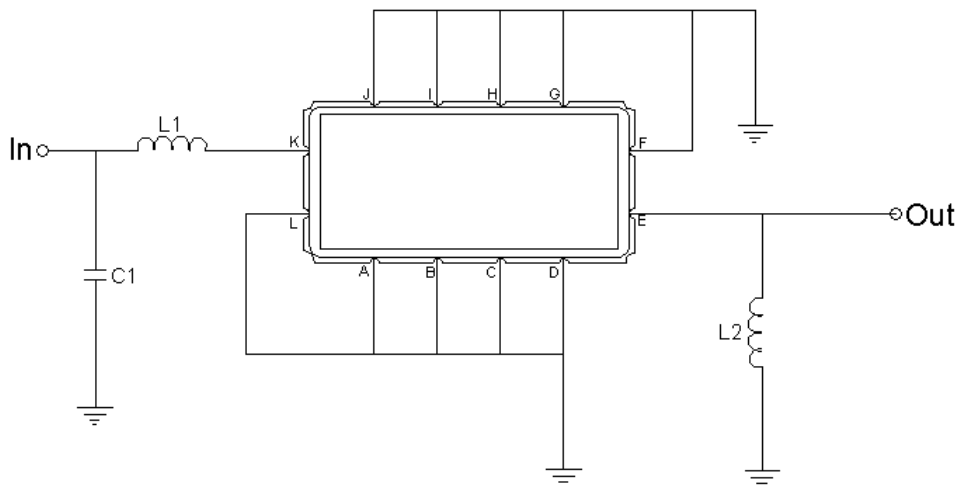
Package Dimensions



- ① SAWNICS: Brand
- ② SL12510A: 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



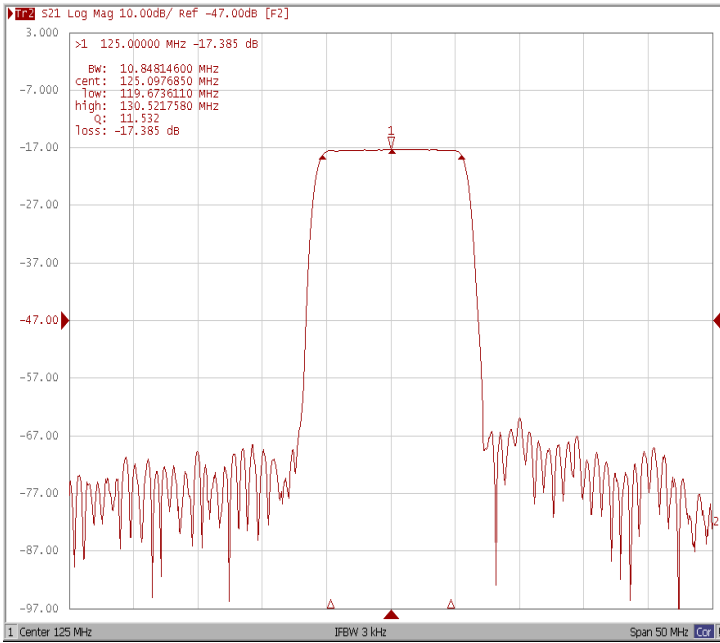
Test Fixture & Values	
Input	L1 = 56 nH, C1 = 51pF
Output	L2 = 33 nH
Source/Load Impedance	50 Ω



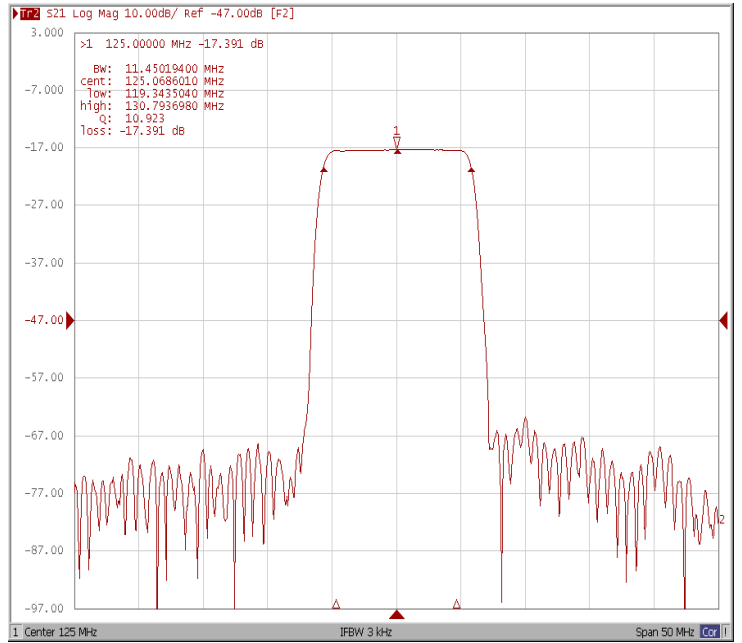
Frequency Characteristics

Frequency Response

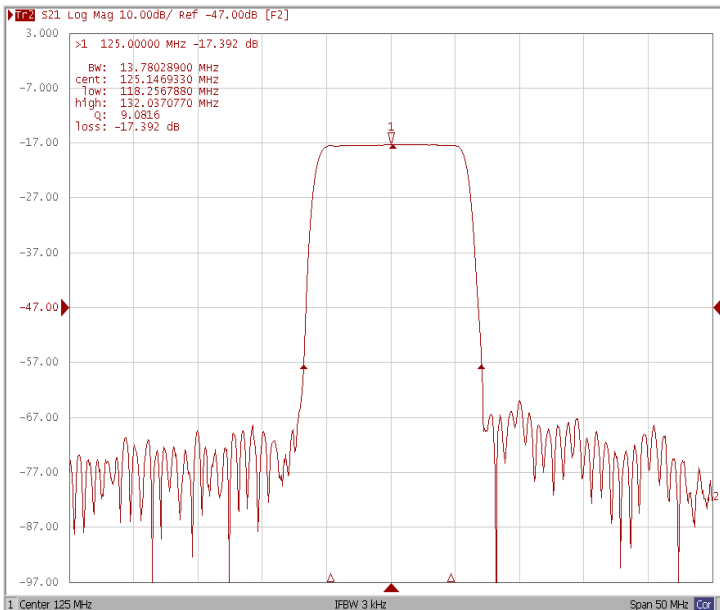
Bandwidth at -1.0 dB



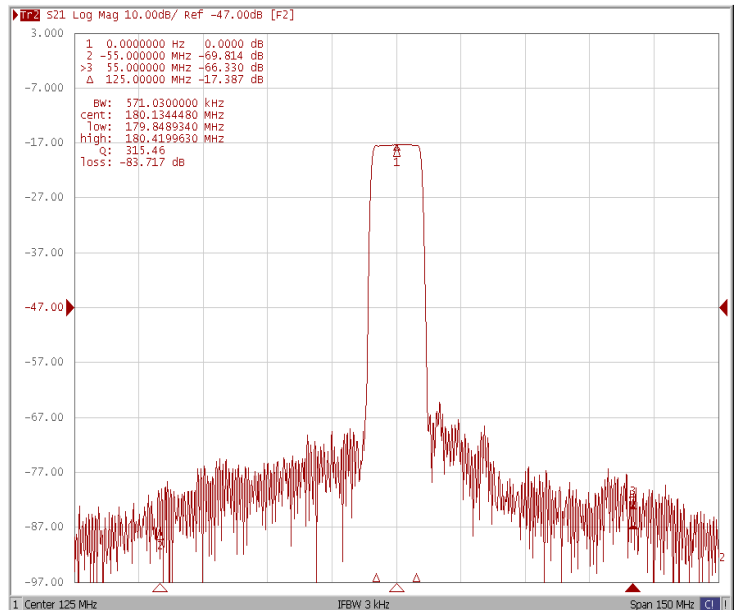
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Relative Attenuation Fo±55MHz

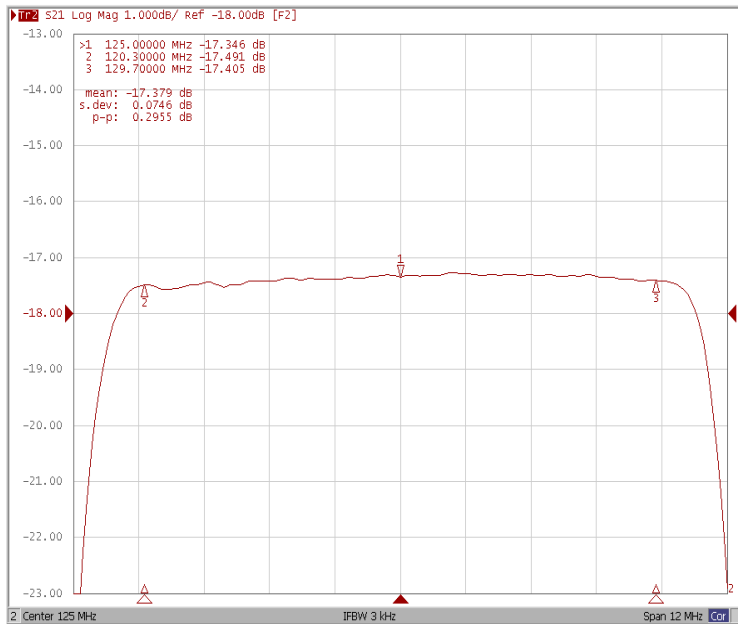




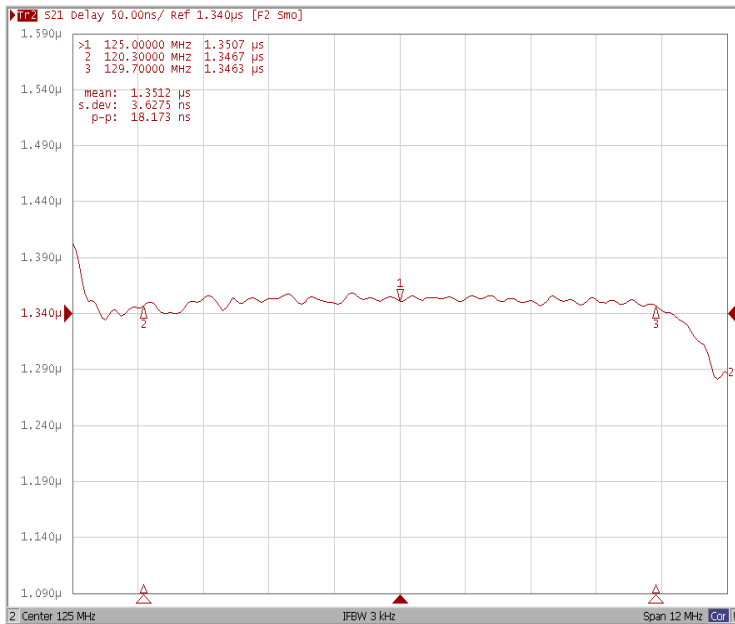
Frequency Characteristics

Frequency Response

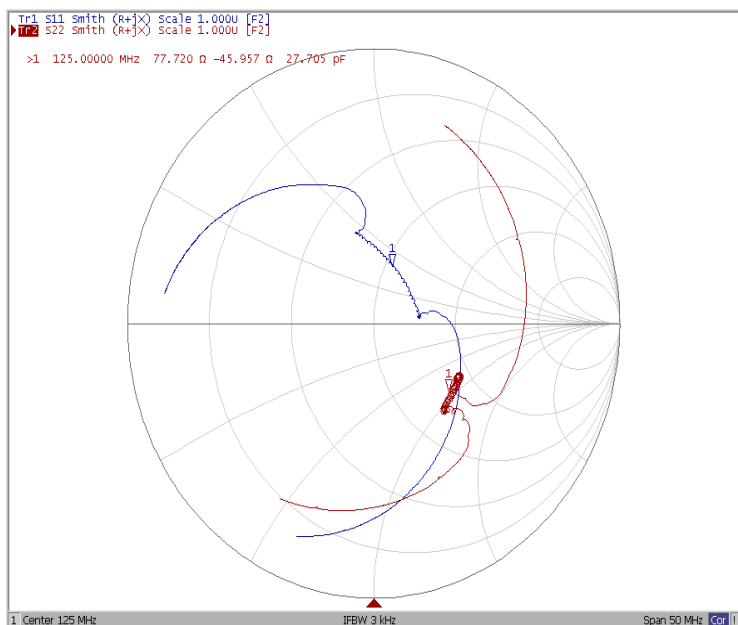
Ripple Variation Fo±4.7MHz



Group Delay Variation Fo±4.7MHz



Smith Chart



VSWR

