



Total Solution Provider in Saw Device

SL11816AV

118.00 MHz IF SAW Filter
16.90 MHz Bandwidth
Revision 0: 15. April. 2011



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

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□ Electrical Characteristics

Maximum Ratings

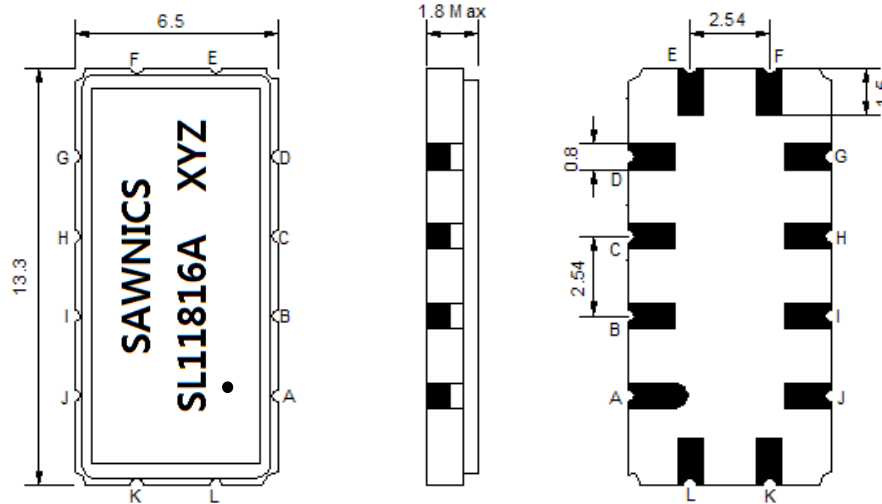
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
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	-	118.00	-
Insertion Loss at Fo	dB	-	13.50	15.50
Group Delay Variation (Fo±7.47MHz)	nsec	-	40	70
Absolute Delay at Fo	usec	-	0.97	1.00
Passband Ripple (Fo±7.47MHz)	dB	-	0.40	0.80
Bandwidth at -1dB	MHz	16.60	16.90	-
Bandwidth at -3dB	MHz	-	17.80	-
Bandwidth at -40dB	MHz	-	20.85	21.10
Ultimate Rejection	dB	40	47	-
Temperature coefficient	ppm/°C	-	-86	-

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.

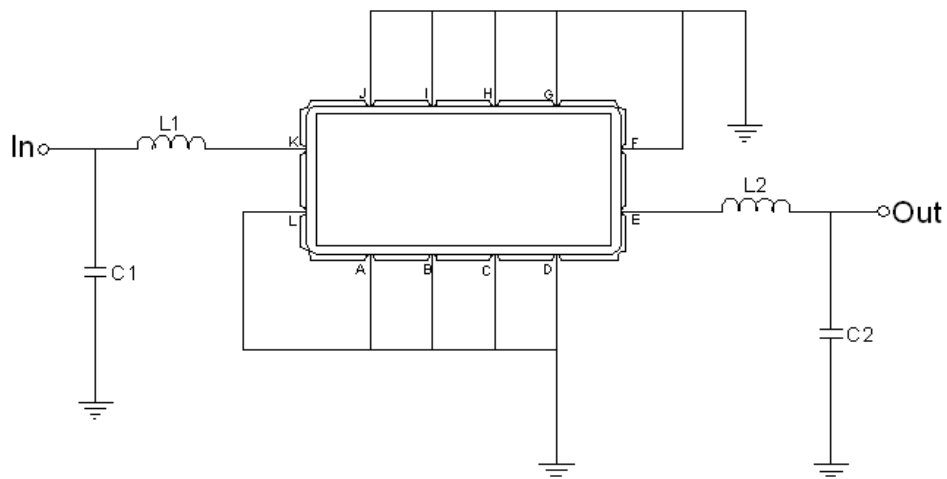
Package Dimensions



- ① SAWNICS: Brand
- ② SL11816A: 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

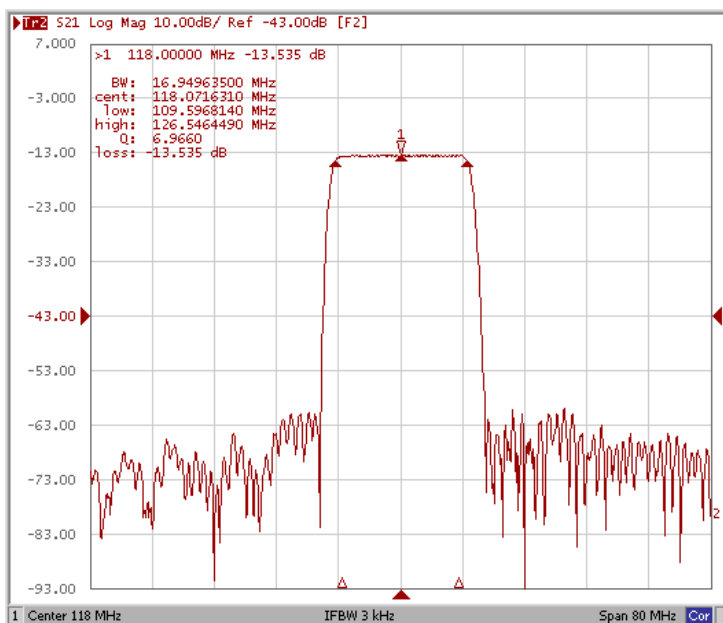


Test Fixture & Values	
Input	L1 = 120 nH, C1 = 33 pF
Output	L2 = 120 nH, C2 = 33 pF
Source/Load Impedance	50 Ω

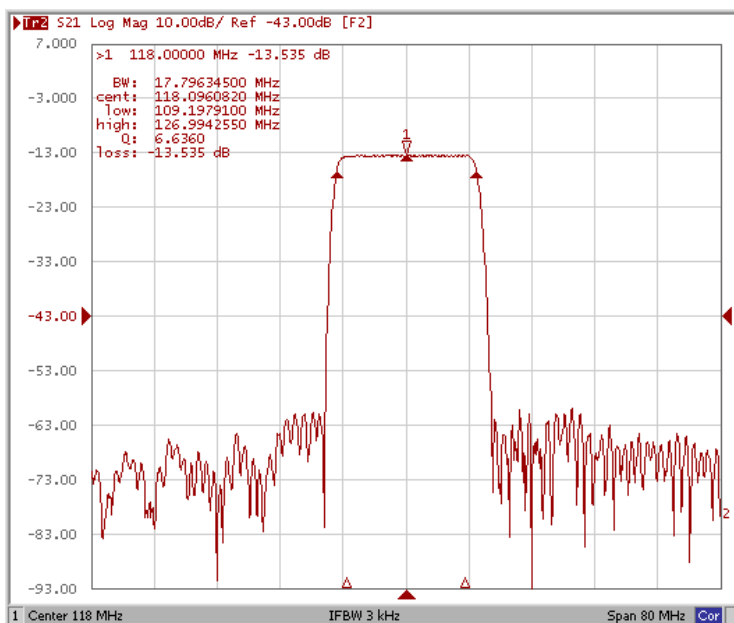
Frequency Characteristics

Frequency Response

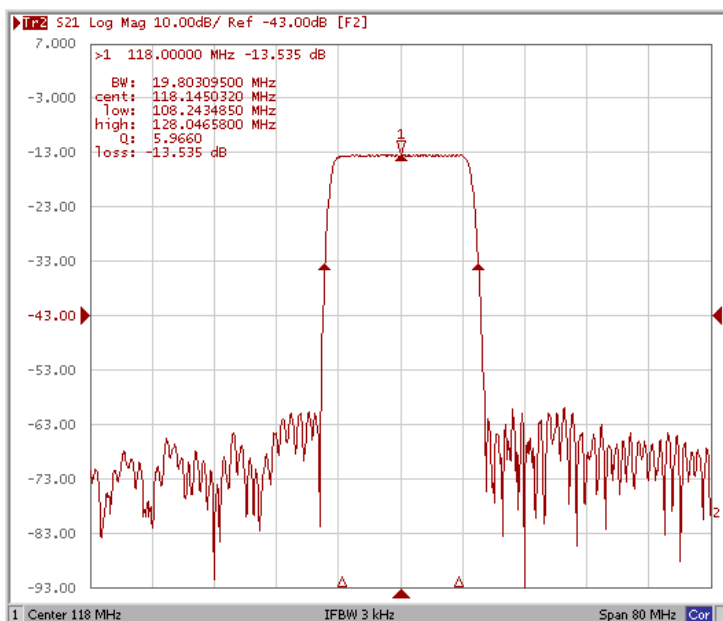
Bandwidth at -1.0 dB



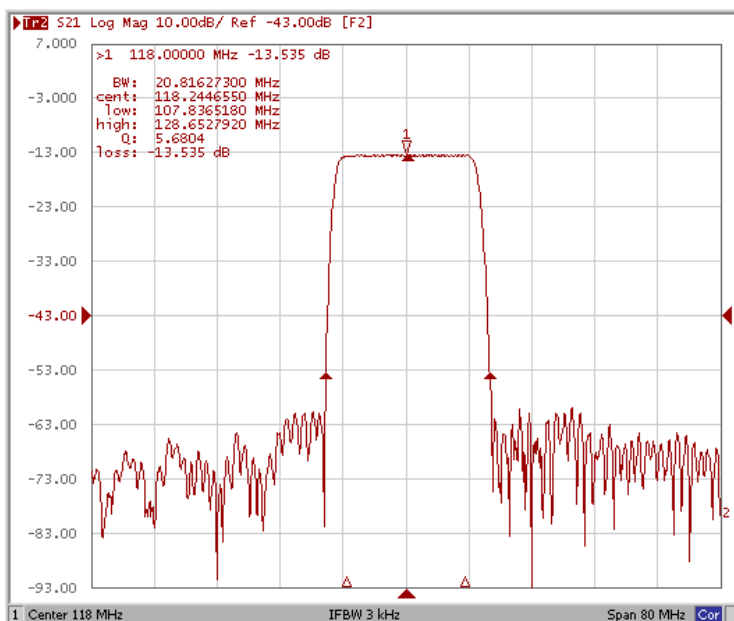
Bandwidth at -3.0 dB



Bandwidth at -20.0 dB



Bandwidth at -40.0 dB

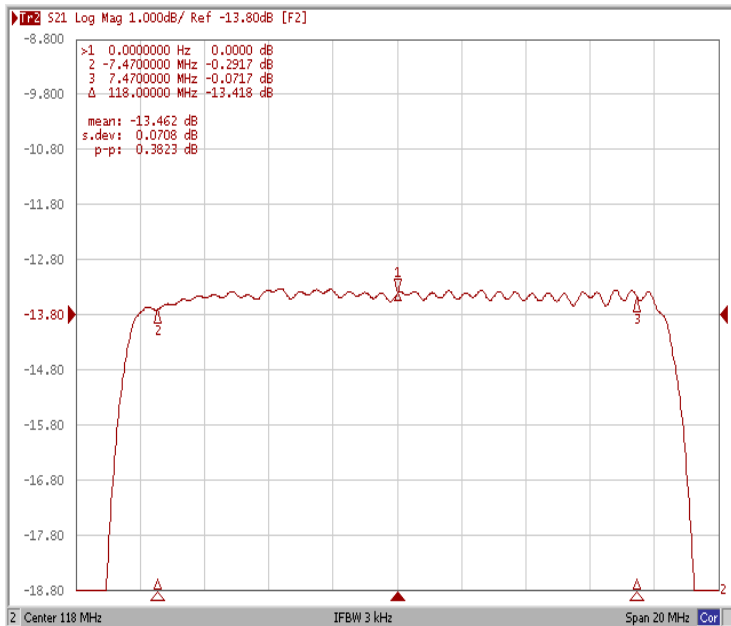




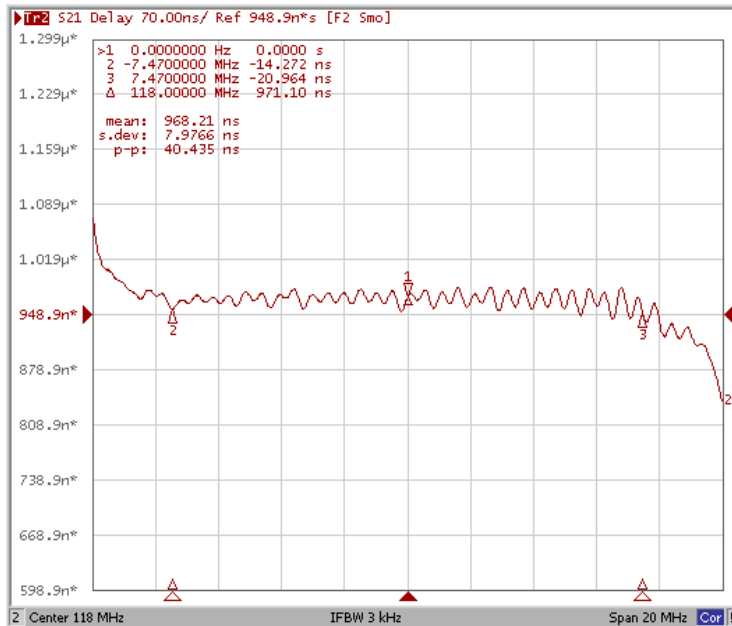
Frequency Characteristics

Frequency Response

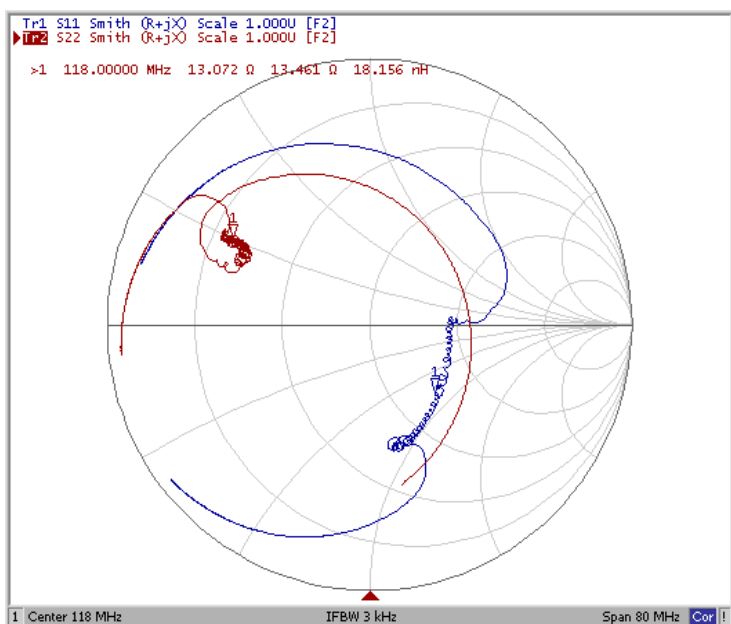
Ripple Variation at Fo ±7.47MHz



Group Delay Variation at Fo ±7.47MHz



Smith Chart



VSWR

