



Total Solution Provider in Saw Device

SL19811AS1

198.50MHz IF SAW Filter
10.90 MHz Bandwidth
Revision 0: 4. May. 2011



- 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	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (Balanced) ⁽¹⁾	Ω	-	50	-
Load Impedance (Balanced) ⁽¹⁾	Ω	-	50	-
Package type & size	S1			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.8

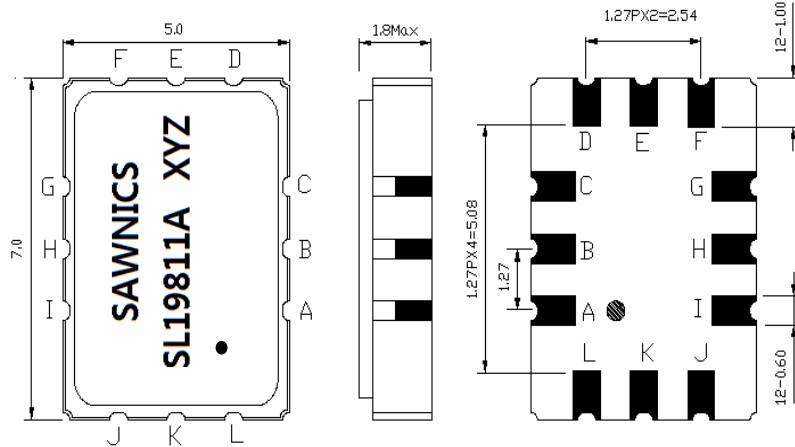
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	198.50	-
Insertion Loss at Fo	dB	-	12.00	15.00
Amplitude Ripple at Fo ± 4.50MHz	dB _{p-p}	-	0.35	1.0
Group Delay Variation at Fo ± 4.50MHz	ns	-	25	60
Absolute Delay at Fo	μs	-	0.64	-
Temperature Coefficient	ppm/°C	-	-20	-
Bandwidth at -1.0 dB	MHz	10.70	10.90	-
Bandwidth at -3.0 dB	MHz	-	12.25	-
Bandwidth at -40.0 dB	MHz	-	16.85	17.10
Ultimate Rejection	dB	-	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.

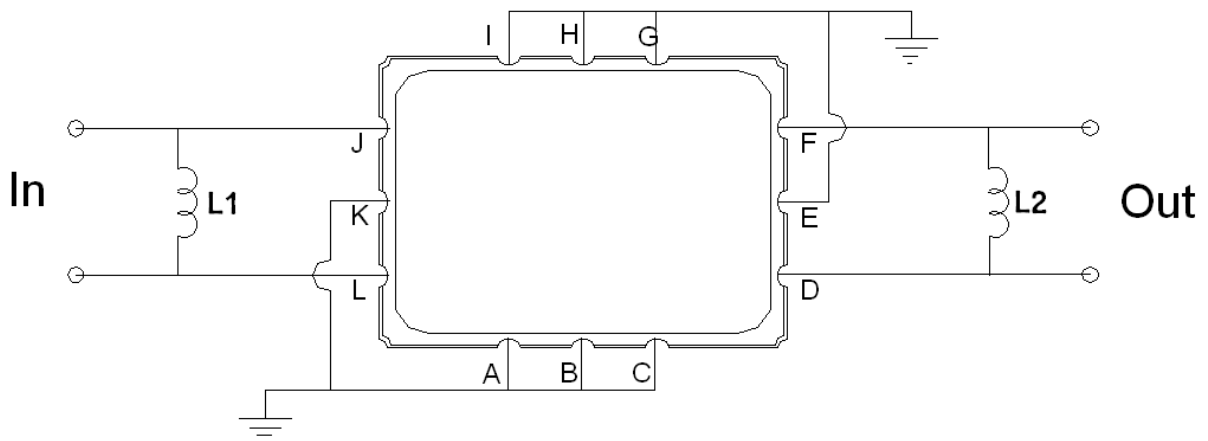
Package Dimensions



- ① SAWNICS: Brand
- ② SL19811A: 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,I,K,L	Ground
J	Input +
L	Input -
D	Output +
F	Output -

Testing Environment

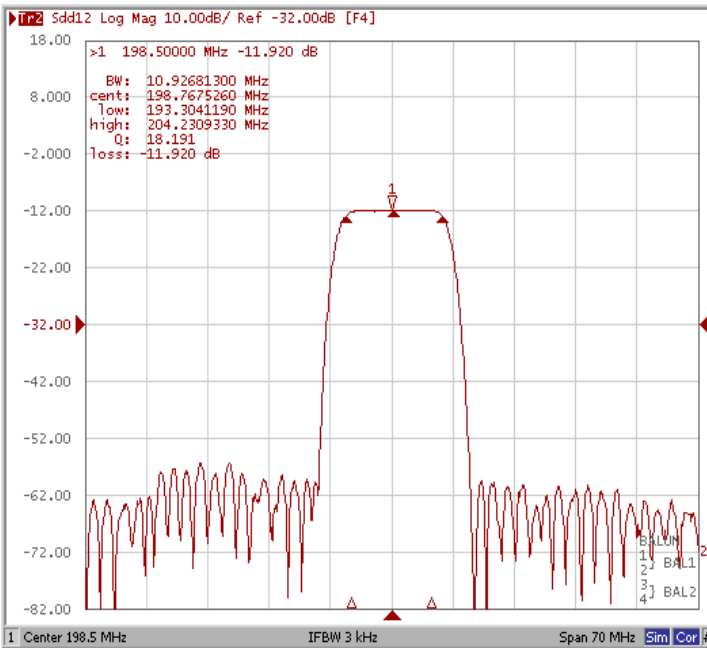


Test Fixture & Values	
Input	L1=22 nH,
Output	L2=33 nH,
Source/Load Impedance	50 Ω

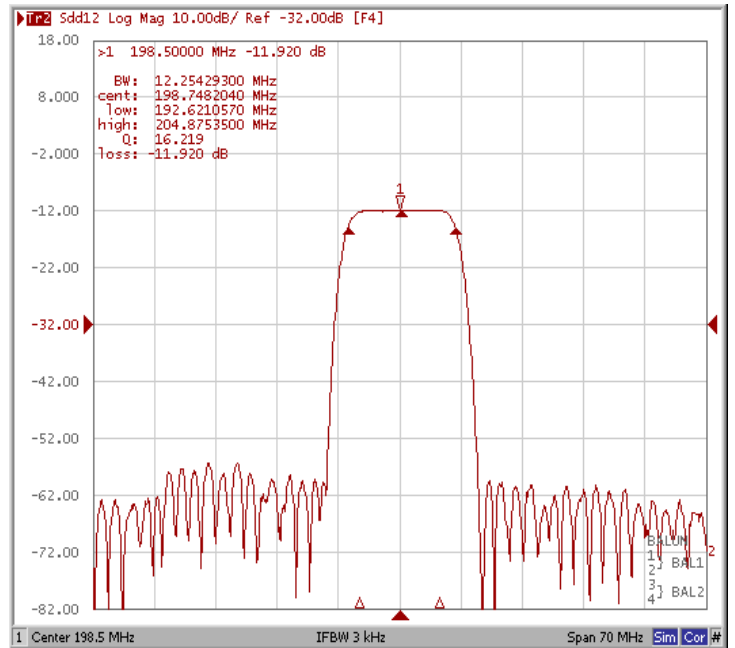
□ Frequency Characteristics

Frequency Response

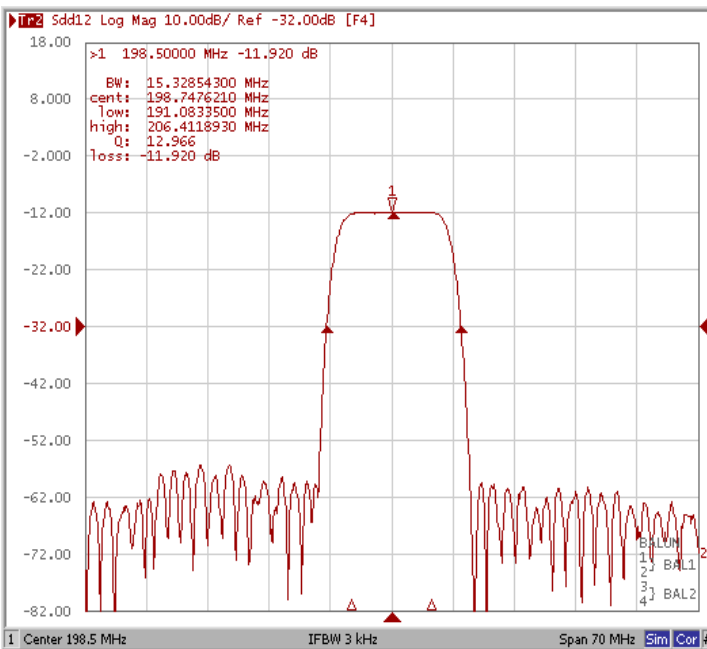
Bandwidth at -1.0 dB



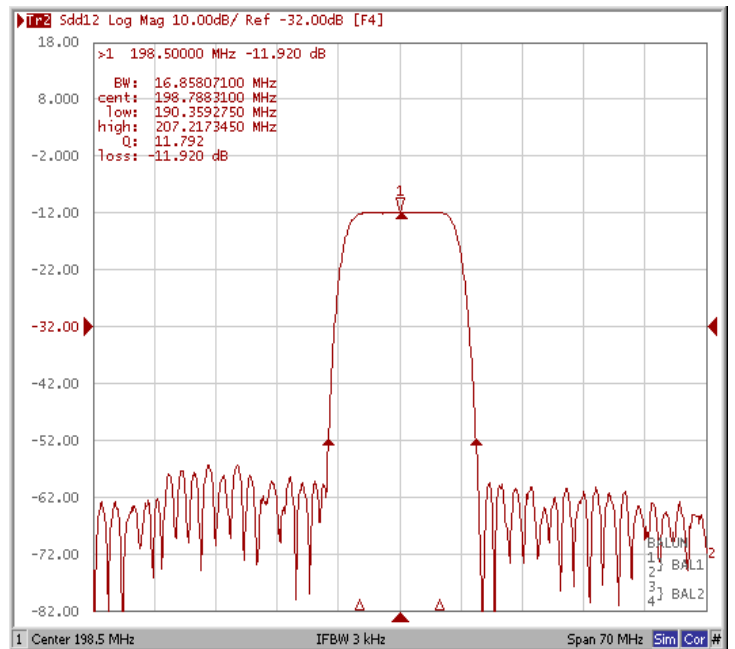
Bandwidth at -3.0 dB



Bandwidth at -20.0 dB



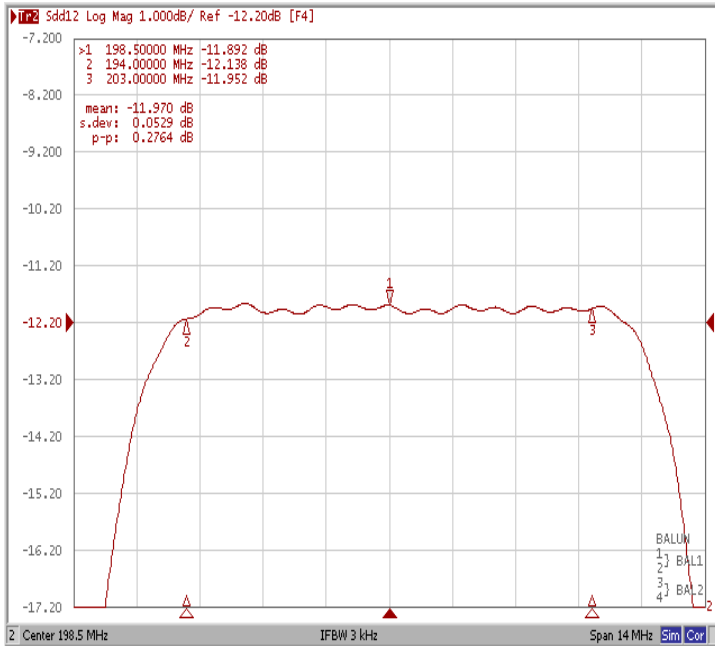
Bandwidth at -40.0 dB



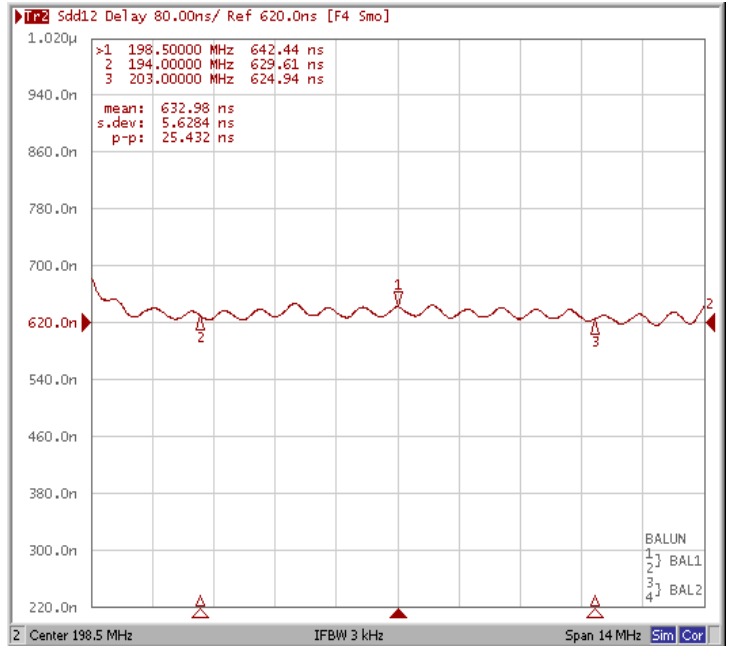
□ Frequency Characteristics

Frequency Response

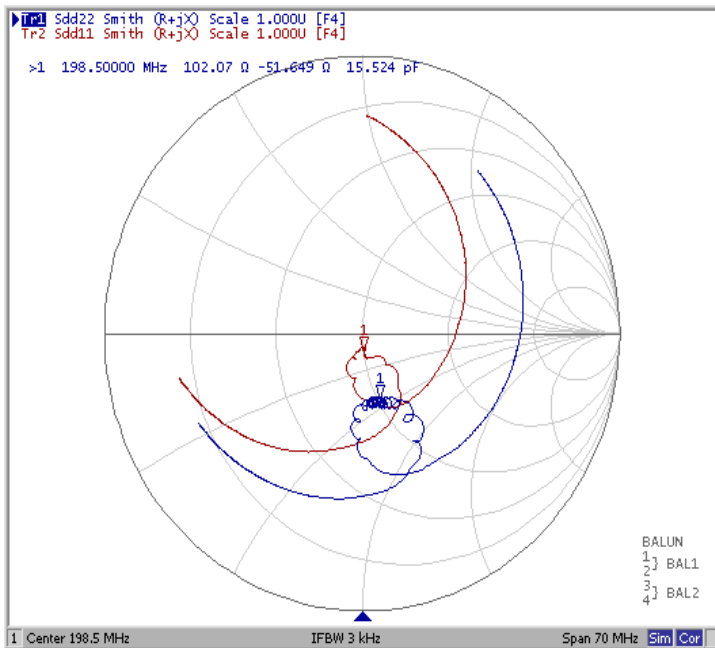
Ripple Variation at Fo ±4.50MHz



Group Delay Variation at Fo ±4.50MHz



Smith Chart



VSWR

