



Total Solution Provider in Saw Device

SA18410AD1

184.0 MHz IF SAW Filter
10.82 MHz Bandwidth
Revision 0: 2. April. 2008



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

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□ Electrical Characteristics

Maximum Ratings

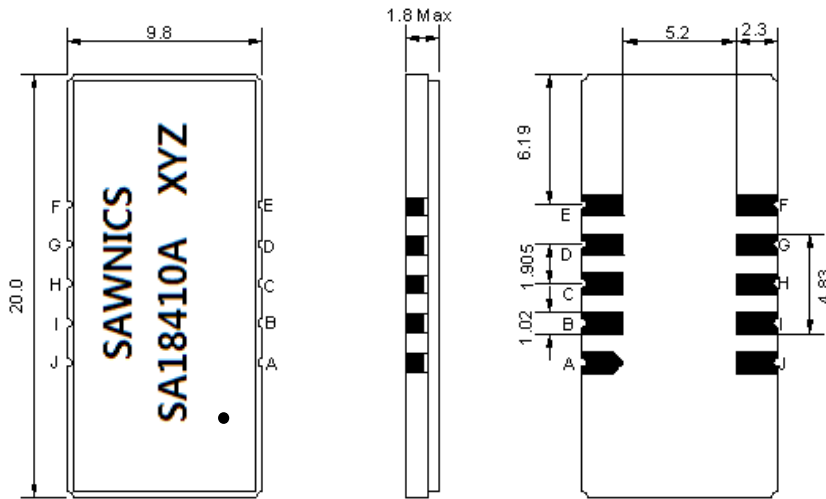
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0		70
Storage Temperature Range	°C	-45	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
Length x Width	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	184.0	-
Insertion Loss at Fo	dB	-	27.0	28.5
Group Delay Variation at Fo ±5.25MHz	nsec	-	35	80
Absolute Delay at Fo	usec	-	2.59	-
Passband Ripple Variation at Fo ±5.25MHz	dB	-	0.55	1.0
Bandwidth at -1dB	MHz	10.00	10.82	-
Bandwidth at -3dB	MHz	-	11.20	-
Bandwidth at -40dB	MHz	-	12.65	12.90
Ultimate Rejection	dB	45	50	-
Relative Attenuation Fo±6.5MHz	dB	45	55	-
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.

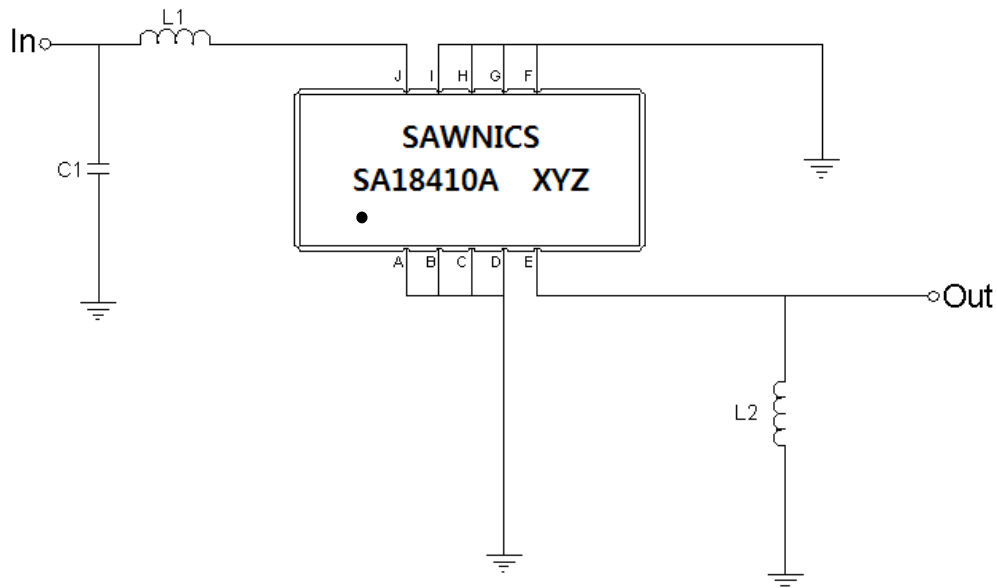
Package Dimensions



- ① SAWNICS: Brand
- ② SA18410A: 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	Ground
J	Input
E	Output

Testing Environment



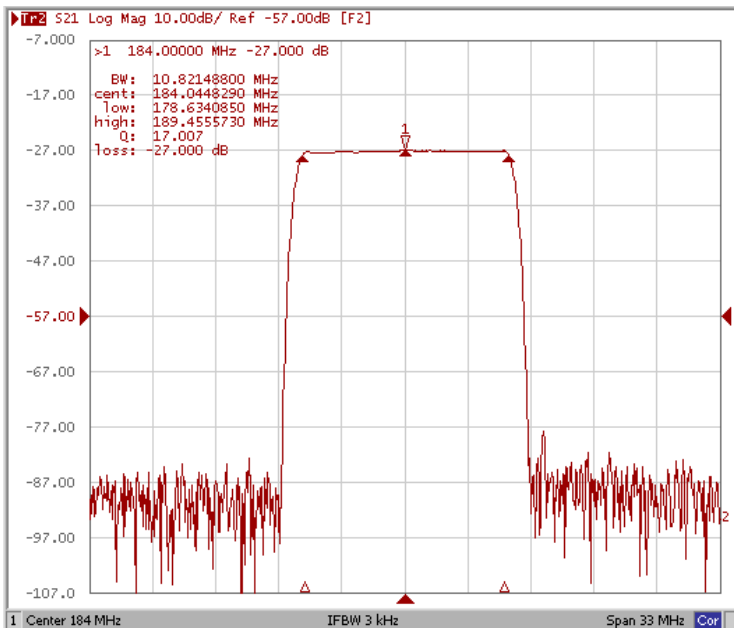
Test Fixture & Values	
Input	L1 = 27 nH , C1 = 24 pF
Output	L2 = 22nH
Source/Load Impedance	50 Ω



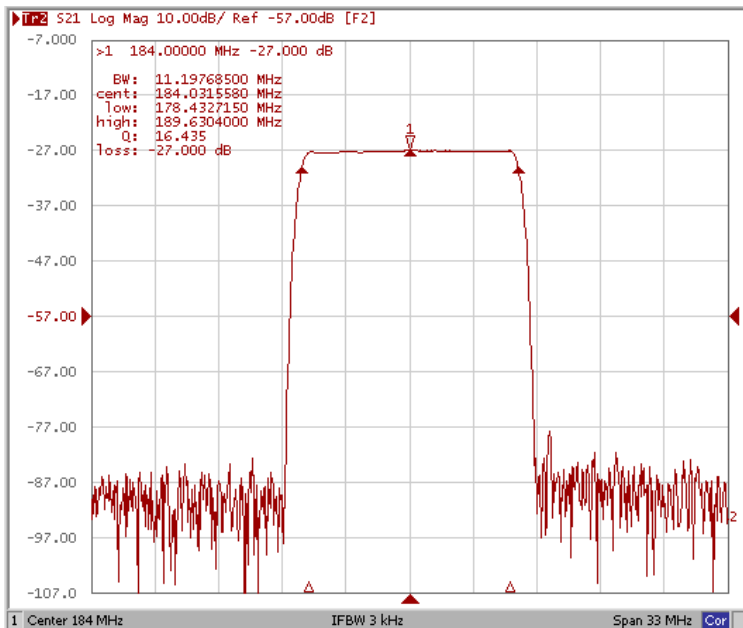
Frequency Characteristics

Frequency Response

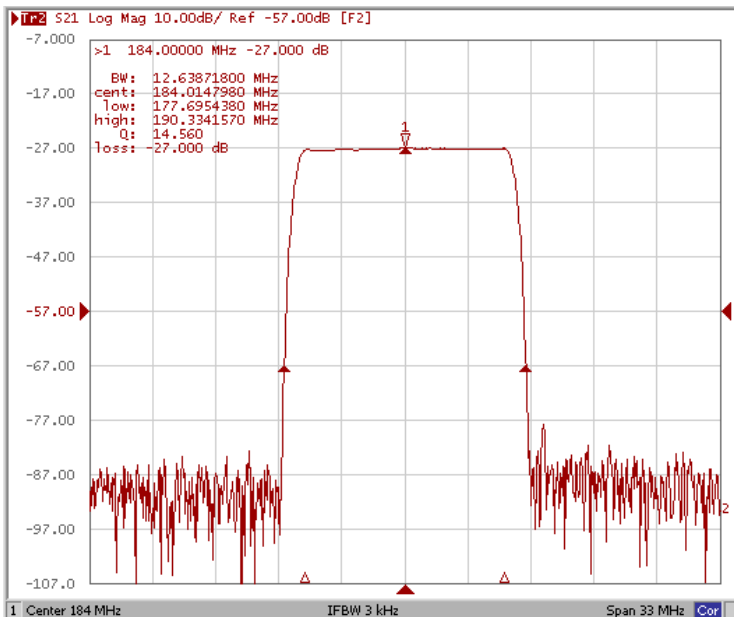
Bandwidth at -1.0 dB



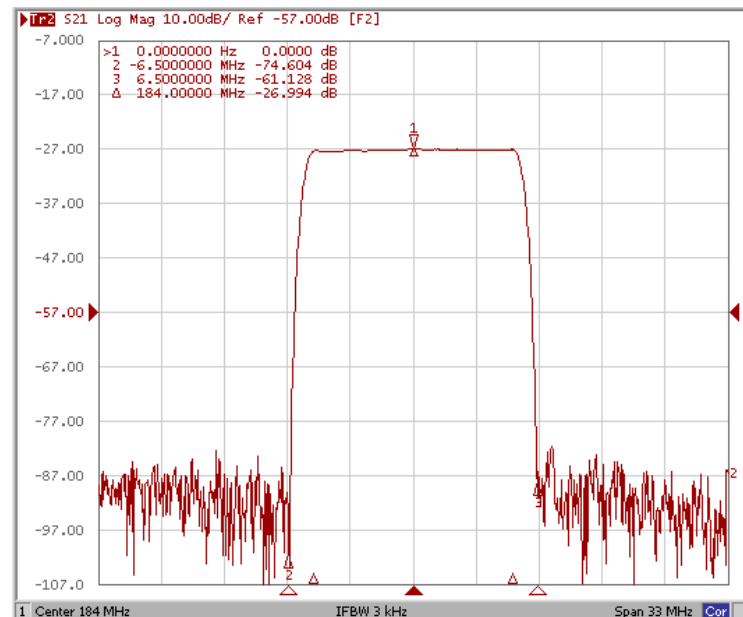
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Relative Attenuation Fo±6.5MHz

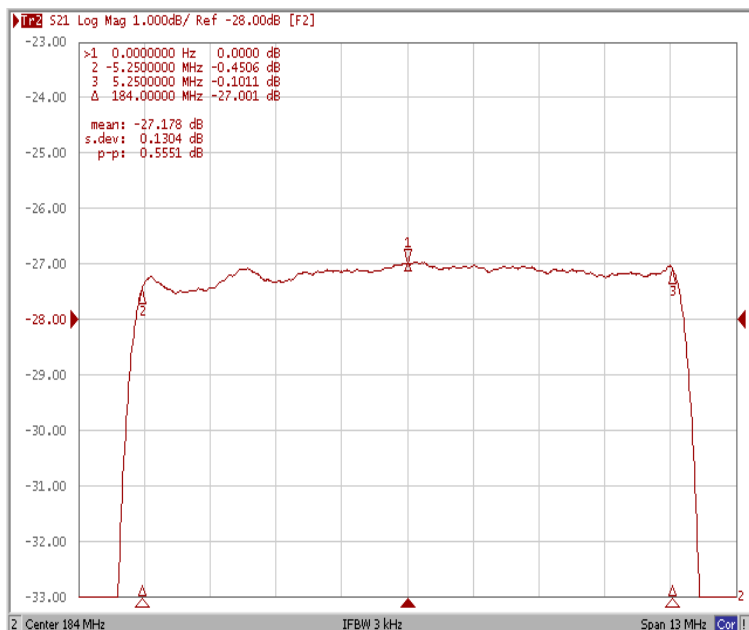




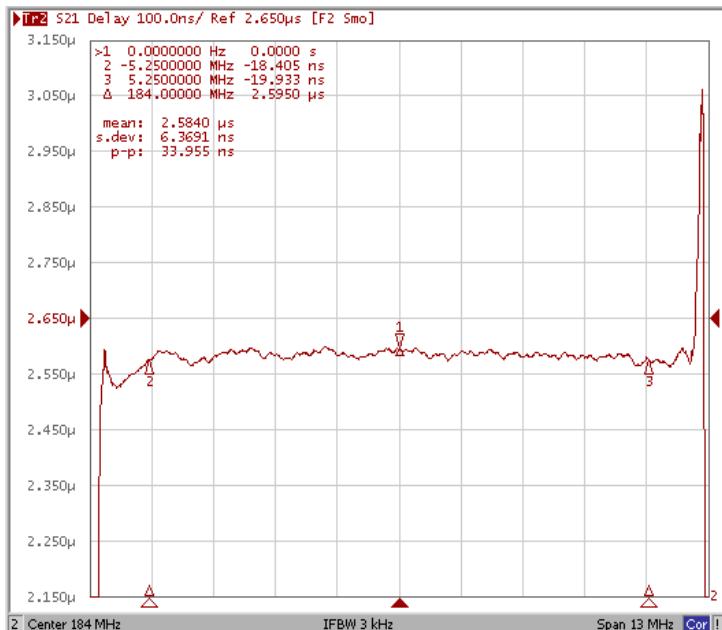
Frequency Characteristics

Frequency Response

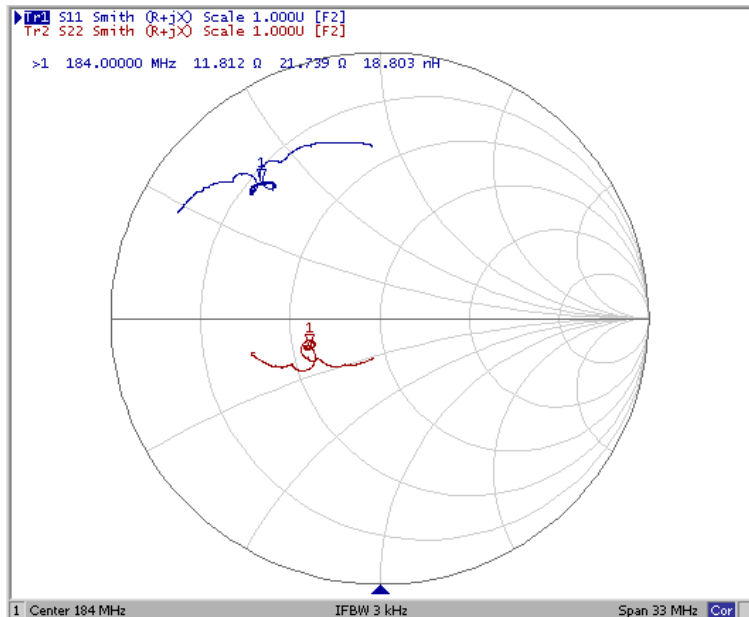
Ripple Variation Fo±5.25MHz



Group Delay Variation Fo±5.25MHz



Smith Chart



SWR

