



Total Solution Provider in Saw Device

SA08202AD1

82.5 MHz IF SAW Filter
2.69 MHz Bandwidth
Revision 0: 28. JUNE. 2008



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

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□ Electrical Characteristics

Maximum Ratings

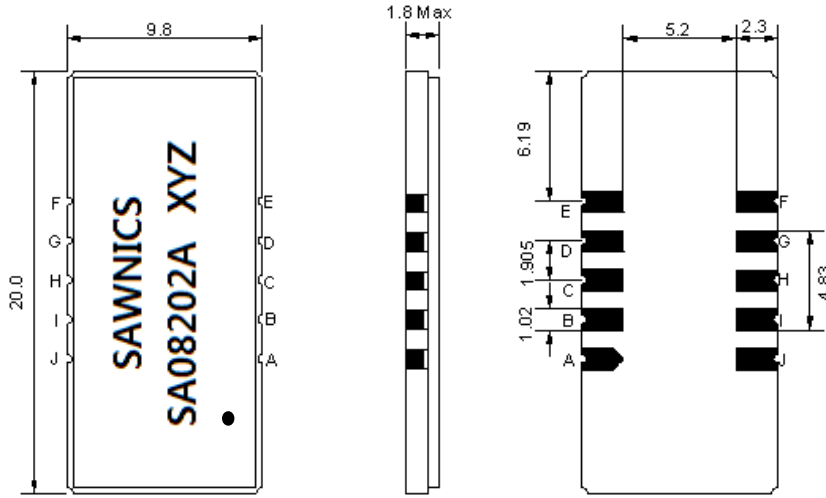
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
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	82.42	82.50	82.58
Insertion Loss at Fo	dB	-	20.00	21.60
Group Delay Variation	ns	-	60	150
Absolute Delay at Fo	us	-	1.69	-
Passband Ripple Variation	dB	-	0.40	0.95
Bandwidth at -1dB	MHz	-	2.69	-
Bandwidth at -3dB	MHz	2.95	3.05	-
Bandwidth at -50dB	MHz	-	4.62	4.80
Ultimate Rejection	dB	50	53	-
Temperature coefficient	ppm/°C	-	-20	-

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.

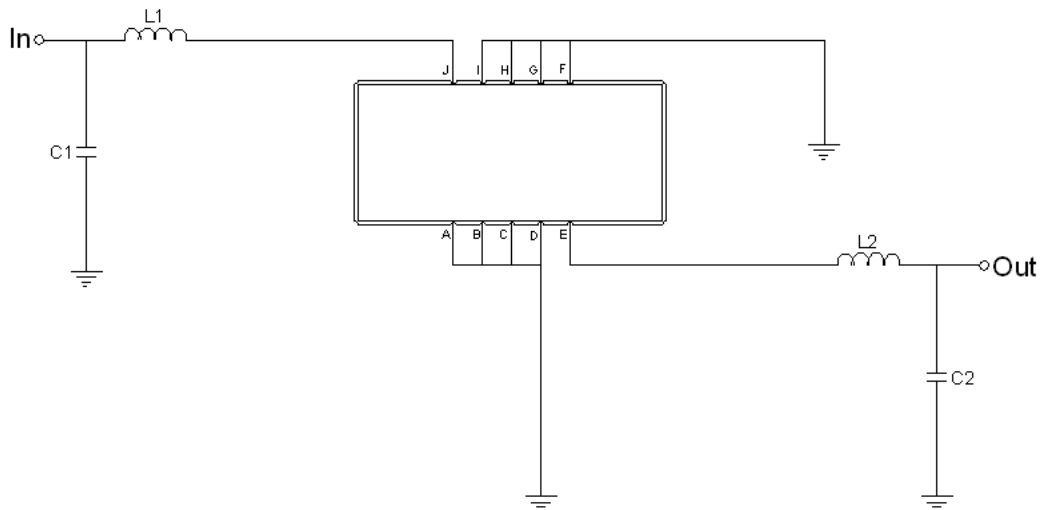
Package Dimensions



- ① SAWNICS: Brand
- ② SA08202A: 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

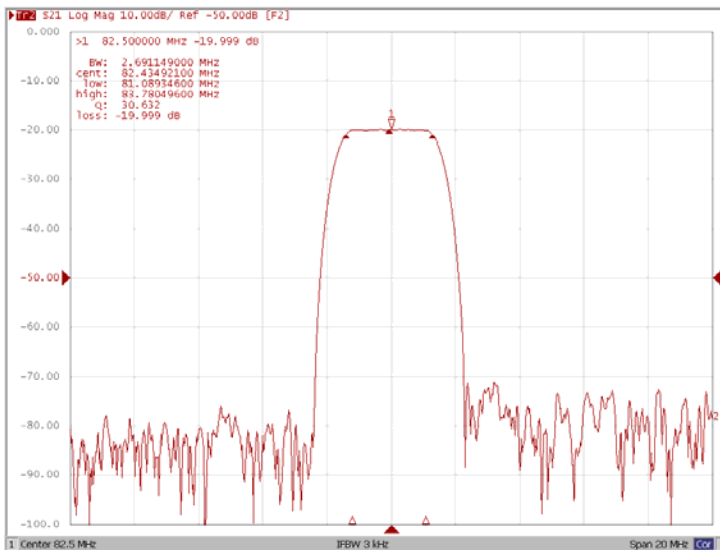


Test Fixture & Values	
Input	L1=39nH, C1=100pF
Output	L2=47nH, C2=100pF
Source/Load Impedance	50 Ω

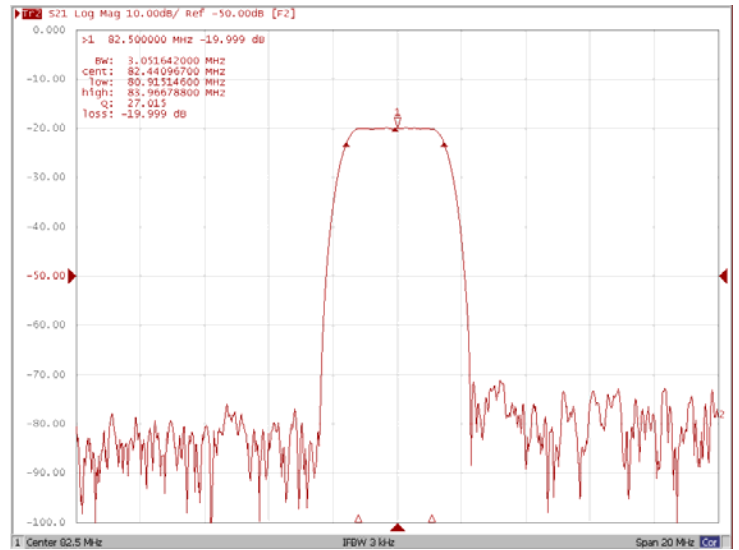
□ Frequency Characteristics

Frequency Response

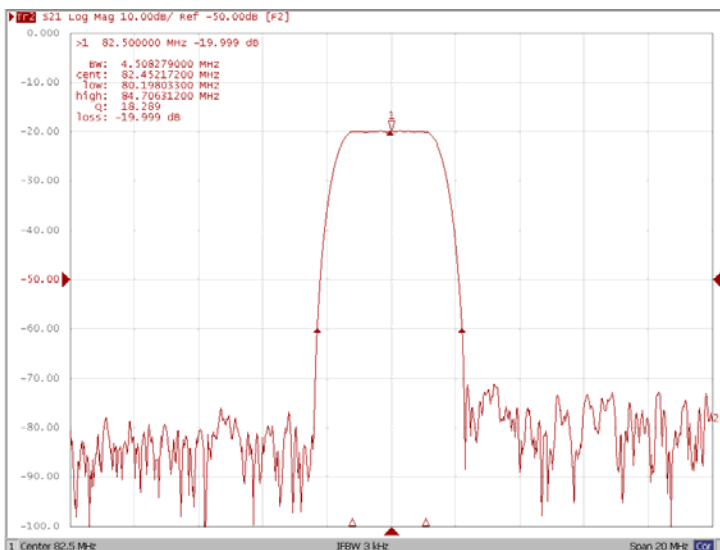
Bandwidth at -1.0 dB



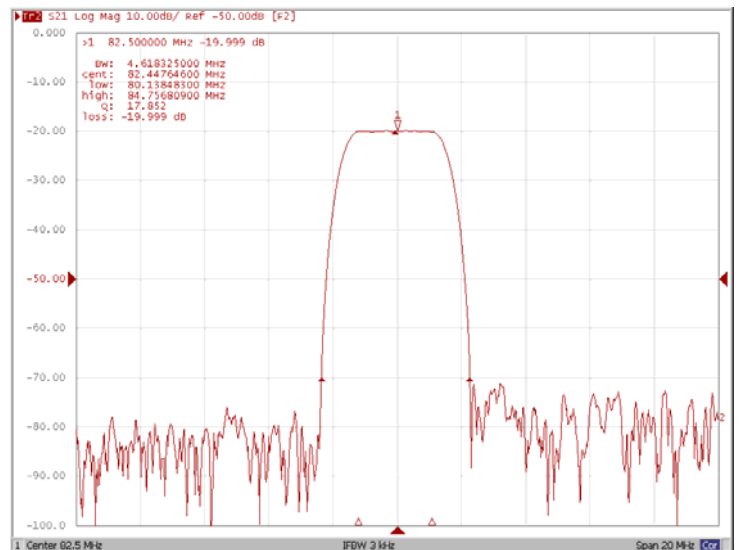
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



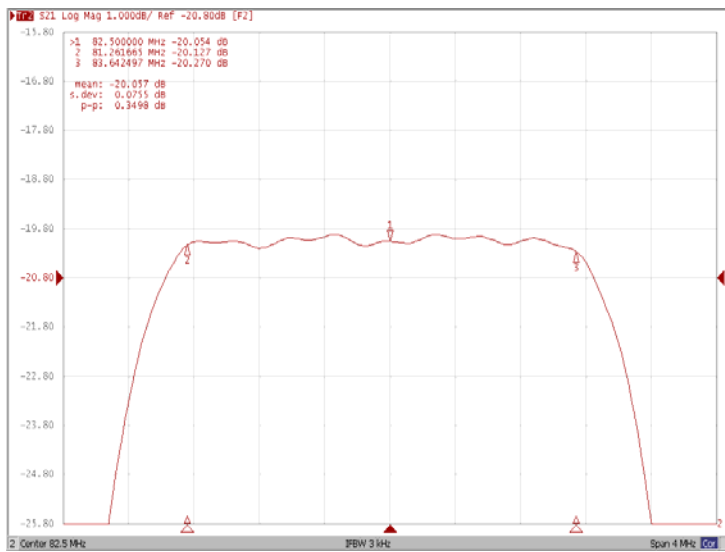
Bandwidth at -50.0 dB



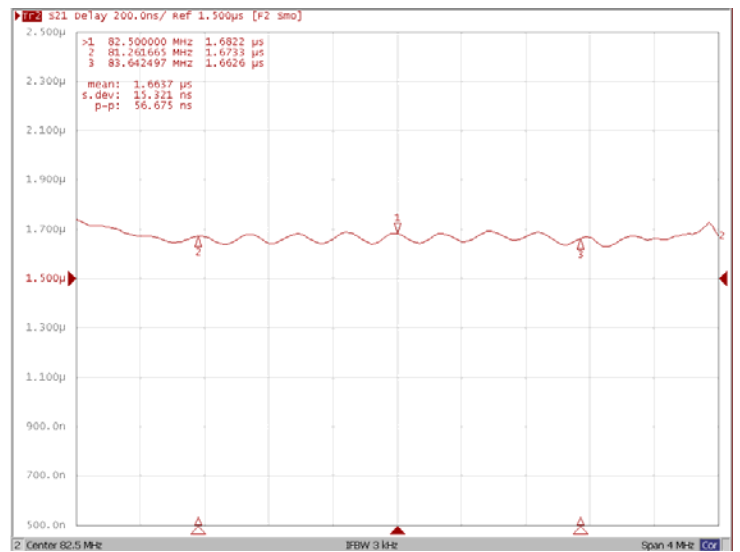
Frequency Characteristics

Frequency Response

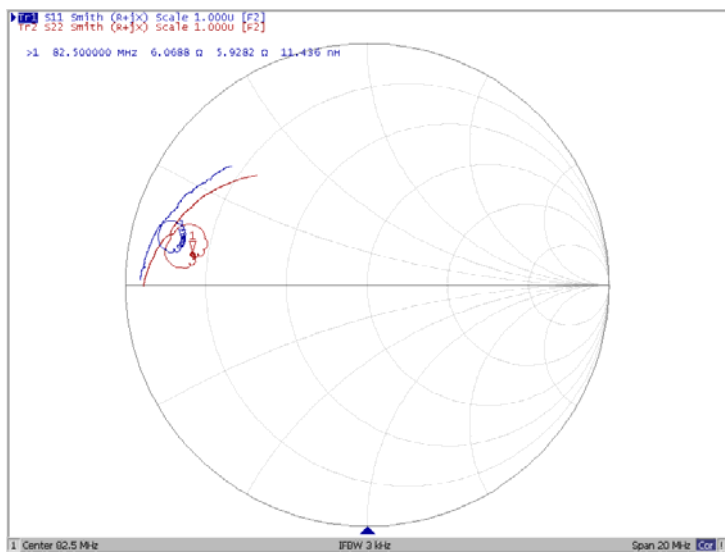
Ripple Variation



Group Delay Variation



Smith Chart



VSWR

