SA09207AD1

92.20 MHz IF SAW Filter
8.65 MHz Bandwidth
Revision 0: 07. September. 2010

RoHS compliance
Pb free

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

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❒ Electrical Characteristics

Maximum Ratings

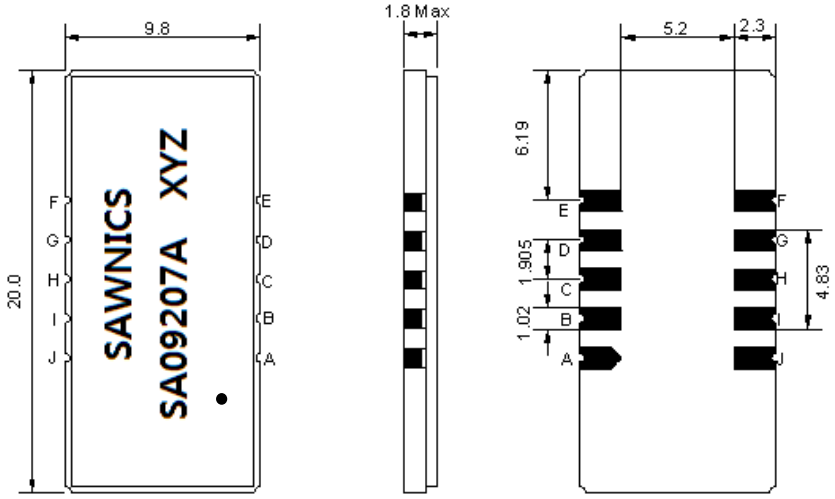
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	92.20	-
Insertion Loss at Fo	dB	-	24.00	26.00
Group Delay Variation (Fo±3.925MHz)	nsec	-	35	80
Absolute Delay at Fo	usec	-	3.00	-
Passband Ripple Variation(Fo±3.925MHz)	dB	-	0.40	0.90
Bandwidth at -1dB	MHz	7.85	8.65	-
Bandwidth at -3dB	MHz	-	9.00	-
Bandwidth at -40dB	MHz	-	10.49	10.65
Ultimate Rejection	dB	50	54	-
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.

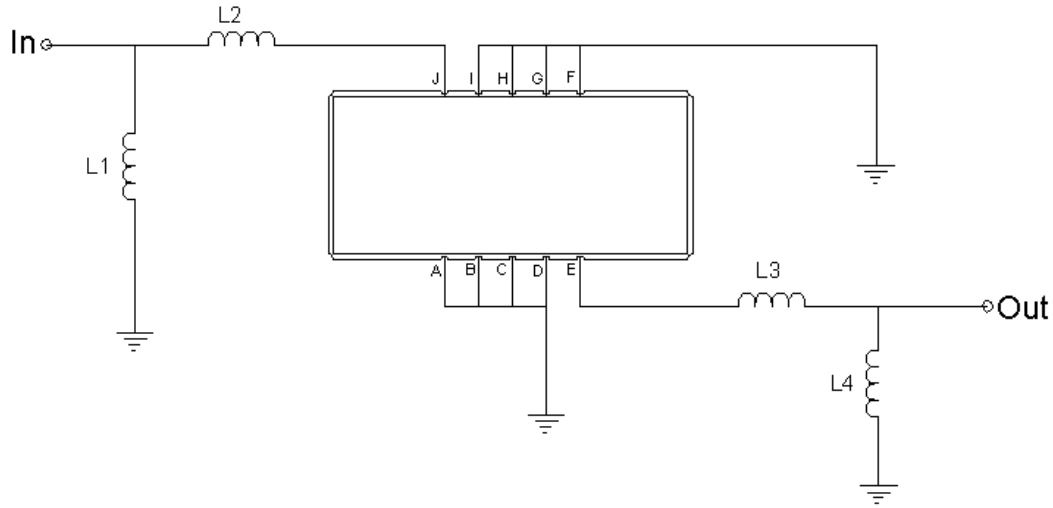
❒ Package Dimensions



① SAWNICS: Brand
② SA09207A: 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



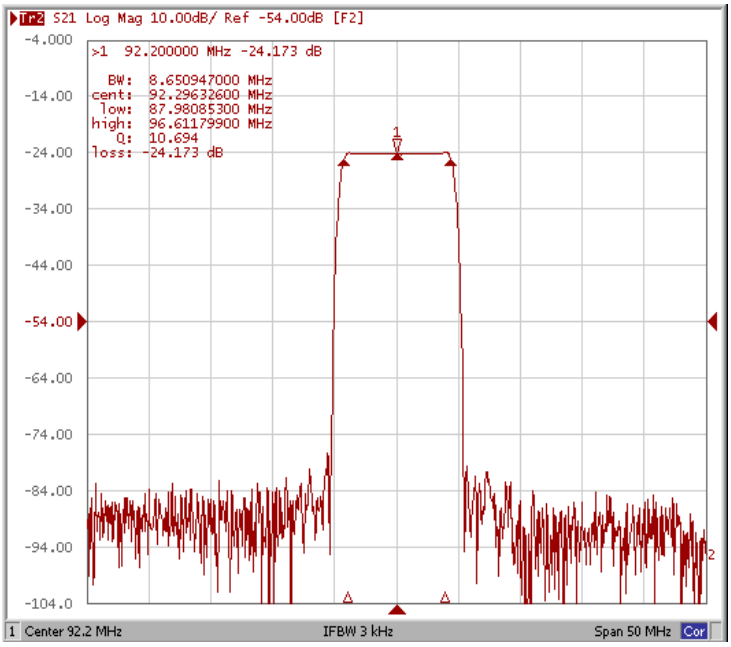
Test Fixture & Values	
Input	L1 = 68 nH, L2 = 27 nH
Output	L3 = 12 nH, L4 = 68 nH
Source/Load Impedance	50 Ω

❒ Frequency Characteristics

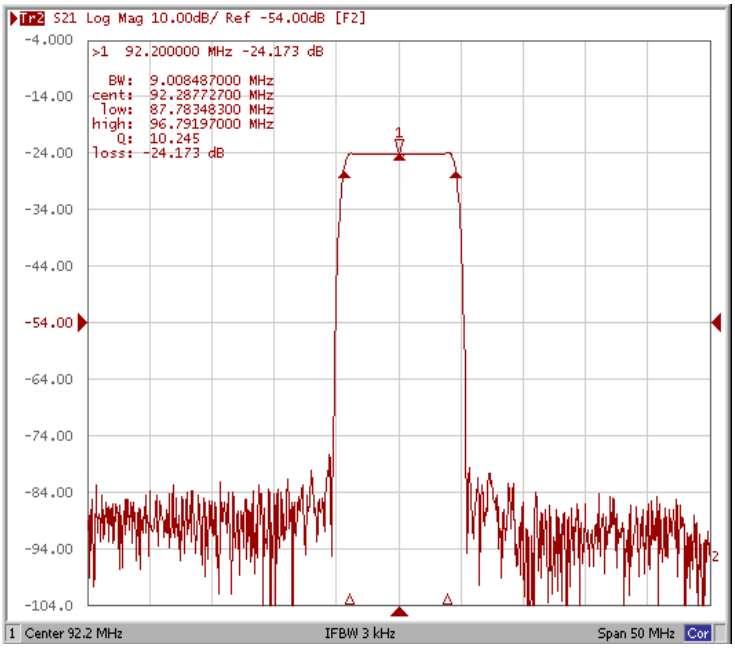
Frequency Response

Operating Temperature : +25 ℃

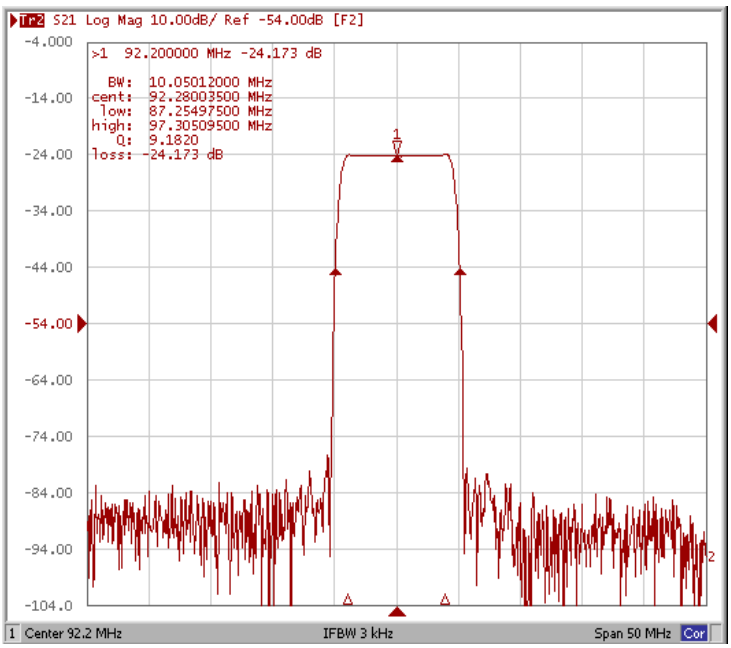
Bandwidth at –1.0 dB



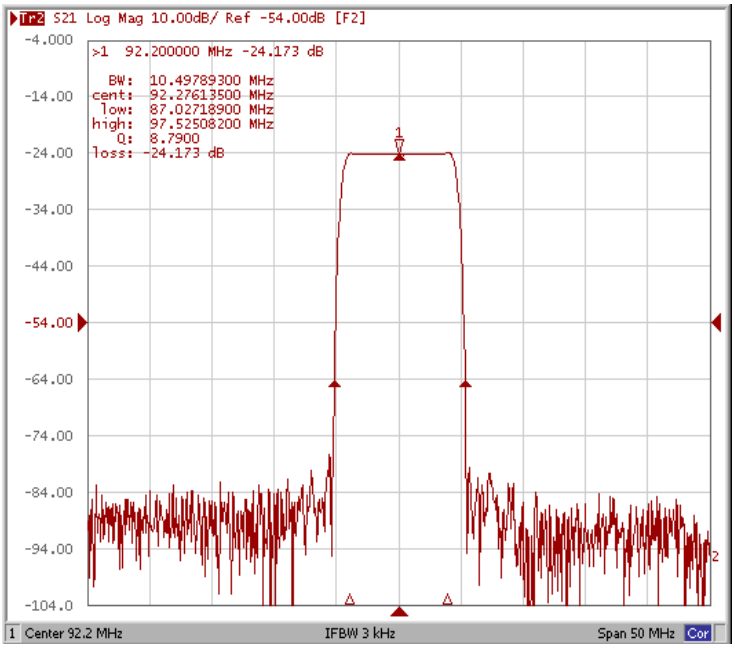
Bandwidth at –3.0 dB



Bandwidth at –20.0 dB



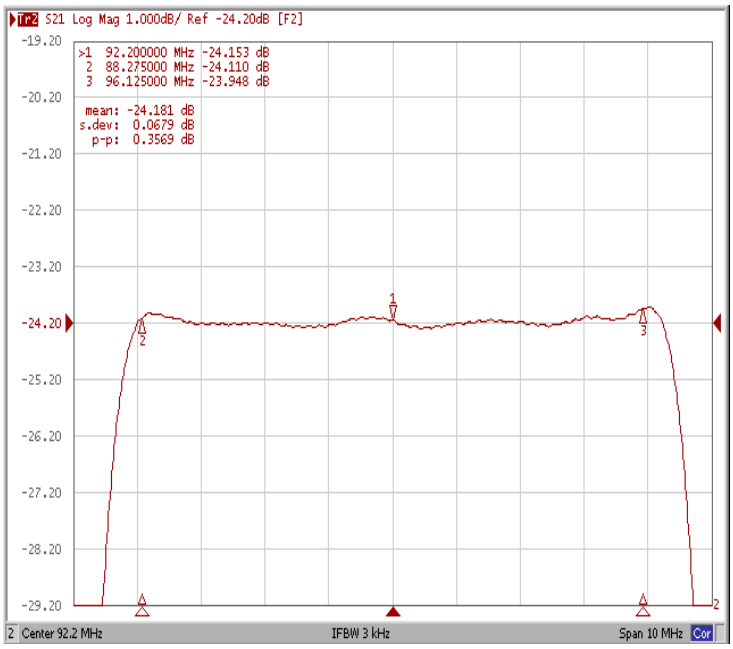
Bandwidth at –40.0 dB



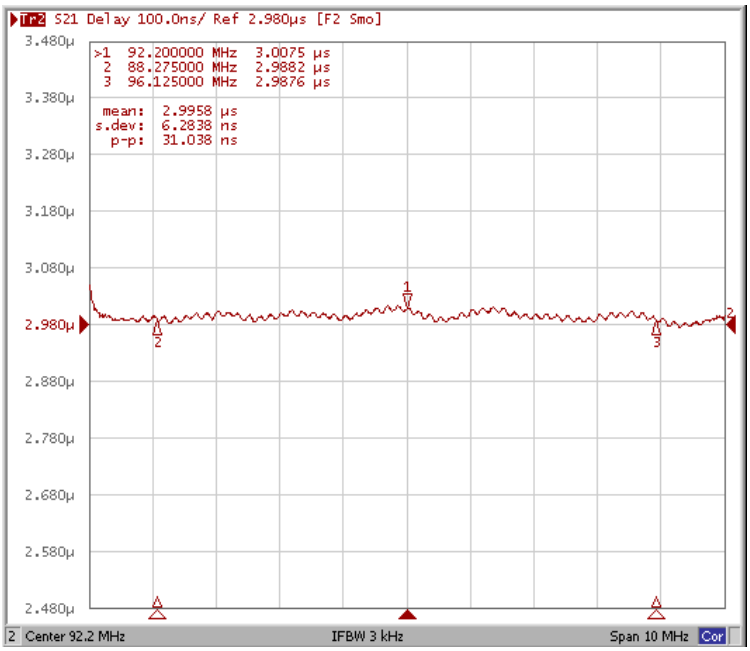
❒ Frequency Characteristics

Frequency Response

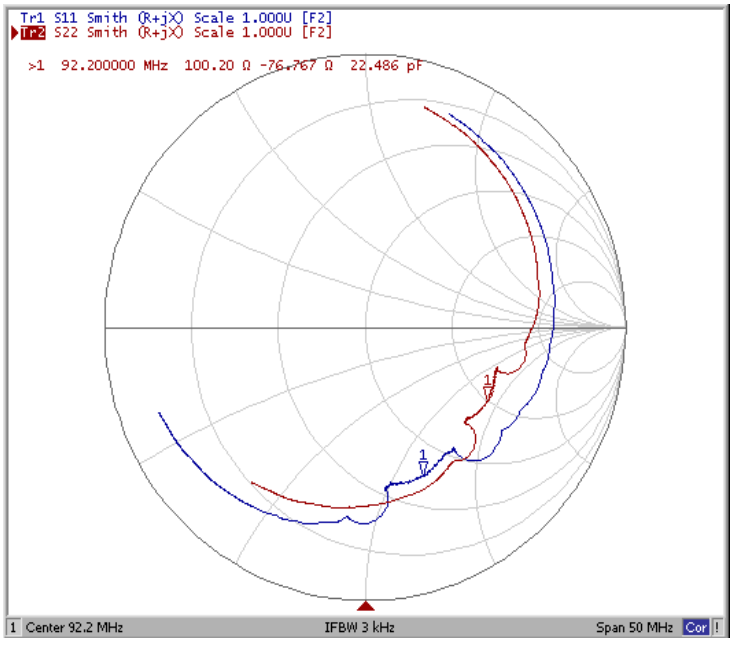
Ripple Variation Fo±3.925MHz



Group Delay Variation Fo±3.925MHz



Smith Chart



VSWR