



Total Solution Provider in Saw Device

SL10920AV

109.5 MHz IF SAW Filter
20.3 MHz Bandwidth
Revision 0: 3. APR. 2008



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

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□ Electrical Characteristics

Maximum Ratings

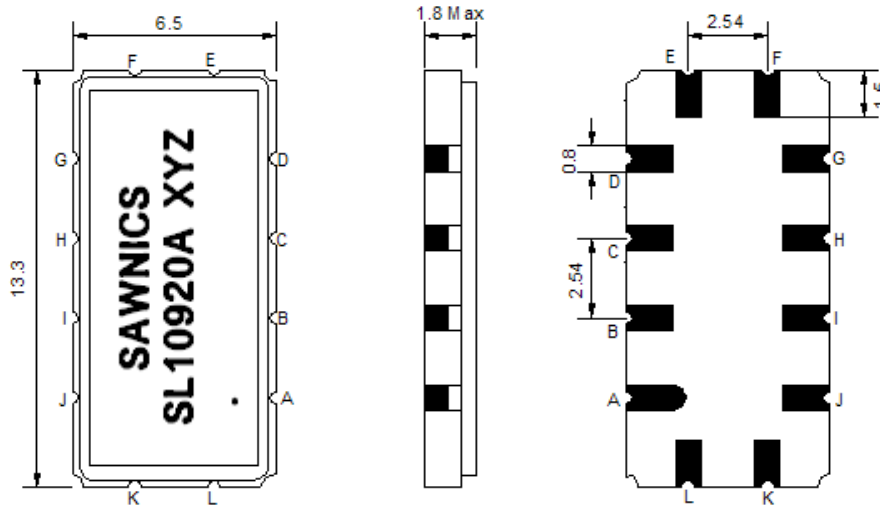
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0		70
Storage Temperature Range	°C	-30	-	80
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length 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	-	109.5	-
Insertion Loss at Fo	dB	-	13.5	15.0
Group Delay Variation (Fo±9.22MHz)	ns	-	35	80
Absolute Delay	us	-	1.16	-
Passband Ripple (Fo±9.22MHz)	dB	-	0.45	1.0
Bandwidth at -1dB	MHz	18.44	20.3	-
Bandwidth at -10dB	MHz	-	21.9	22.3
Bandwidth at -20dB	MHz	-	22.6	23.0
Bandwidth at -30dB	MHz	-	23.3	23.6
Bandwidth at -40dB	MHz	-	24.0	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency	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.

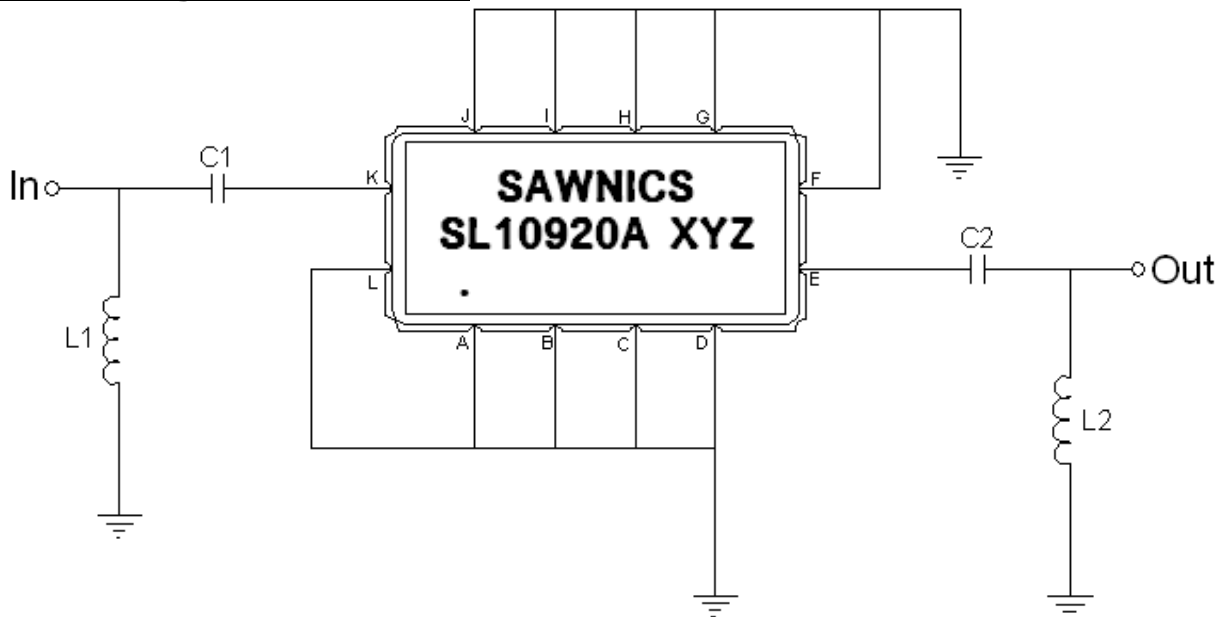
Package Dimensions



- ① SAWNICS: Brand
- ② SL10920A: 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



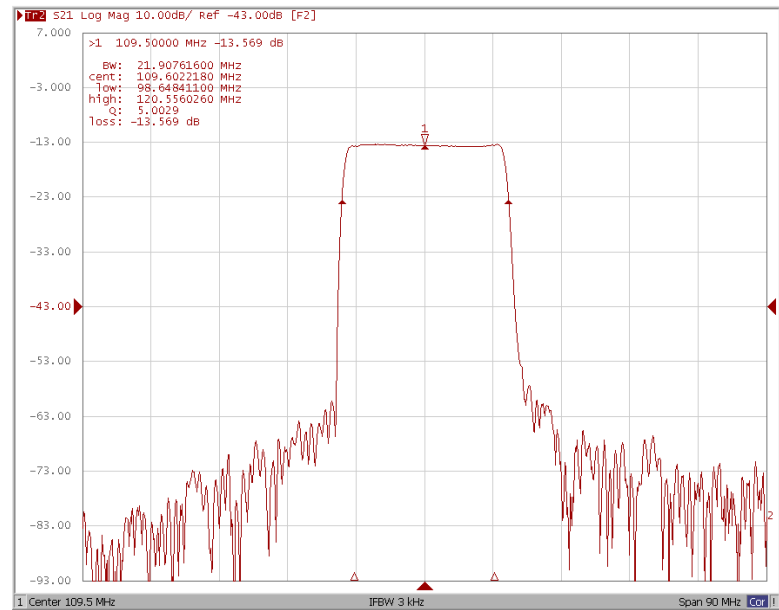
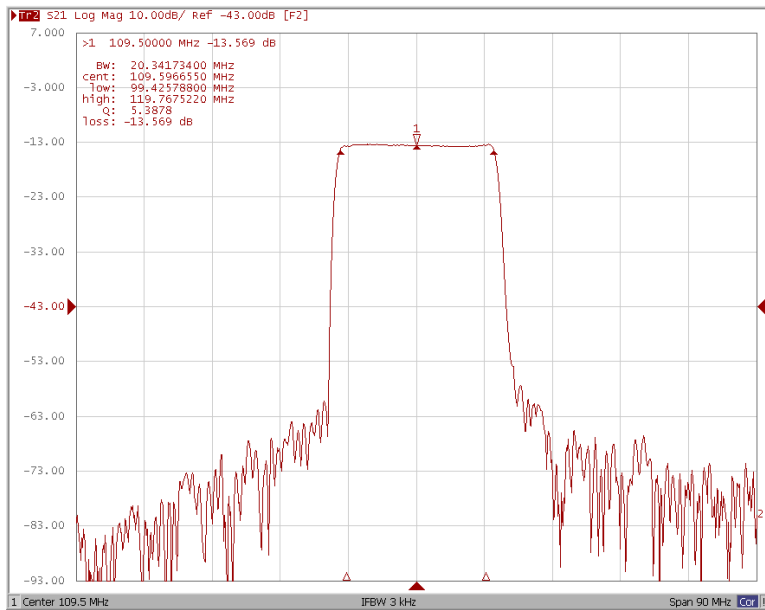
Test Fixture & Values	
Input	L1=33 nH, C1=120 pF
Output	L2=33 nH, C1=110 pF
Source/Load Impedance	50 Ω

□ Frequency Characteristics

Frequency Response

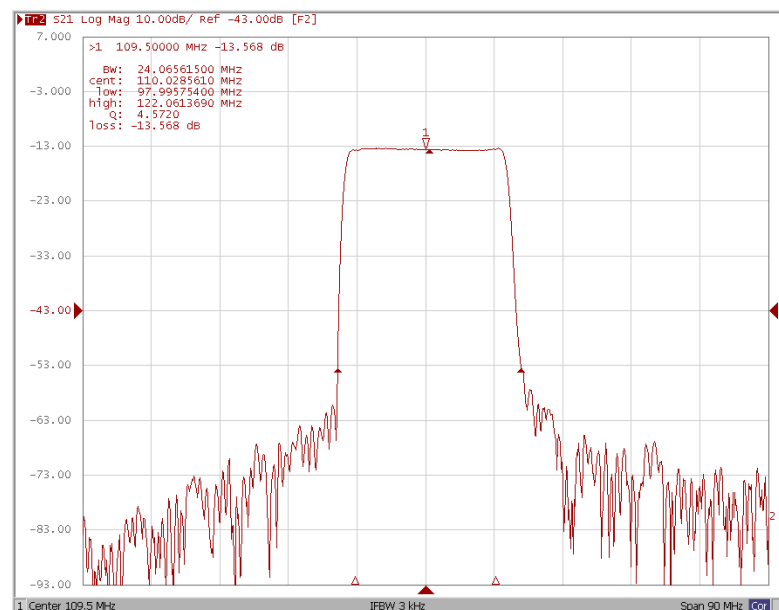
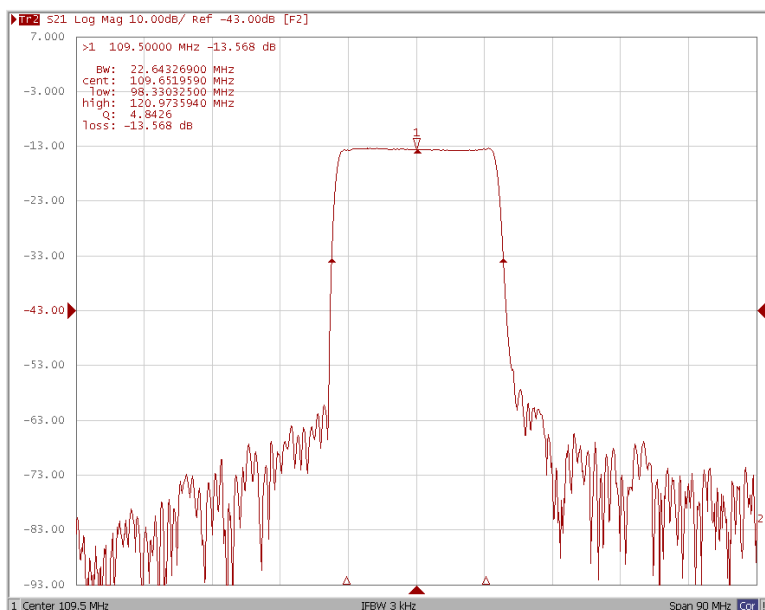
Bandwidth at -1.0 dB

Bandwidth at -10.0 dB



Bandwidth at -20.0 dB

Bandwidth at -40.0 dB

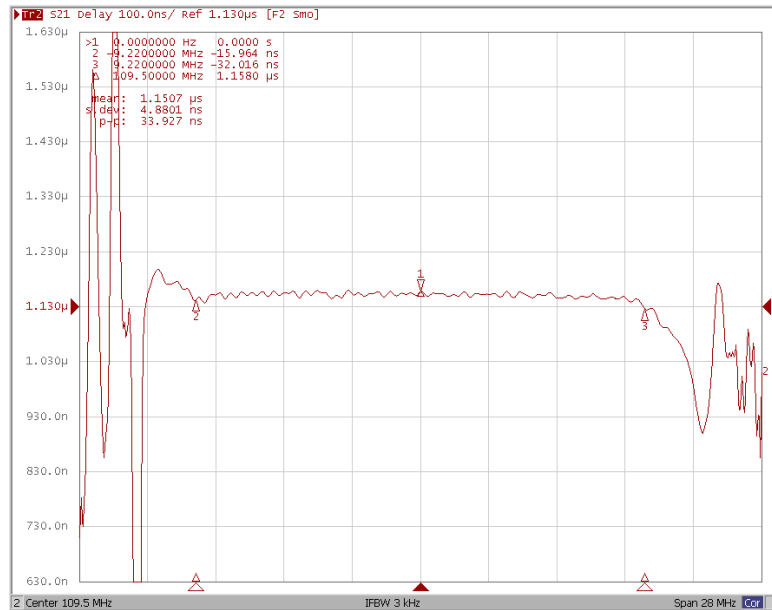
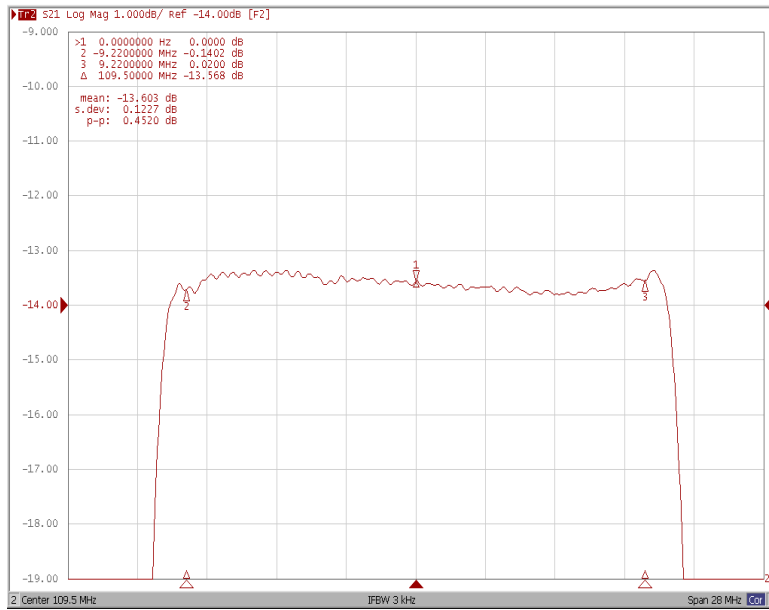


□ Frequency Characteristics

Frequency Response

Ripple Variation $Fo \pm 9.22\text{MHz}$

Group Delay Variation $Fo \pm 9.22\text{MHz}$



Smith Chart

VSWR

