



Total Solution Provider in Saw Device

SL09622AS

96.0MHz IF SAW Bandpass Filter

22.0MHz Bandwidth

Revision 0: 22. July. 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	-40	-	85
Storage Temperature Range	°C	-40	-	85
Max. DC voltage between any 2 terminals	VDC	-	-	30
Maximum Input Power	dBm	-	-	10
Source Impedance (Single Ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (Single Ended) ⁽¹⁾	Ω	-	50	-
Package type & size	S			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.6

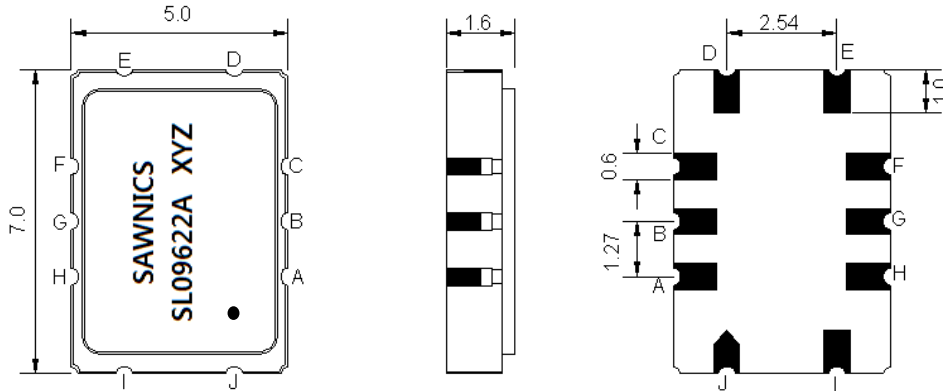
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	96.0	-
Insertion Loss at Fo (86.0~106.0MHz)	dB	-	9.5	12.0
Amplitude Ripple (86.0~106.0MHz)	dB _{p-p}	-	0.65	1.2
Group Delay Ripple (86.0~106.0MHz)	nsec	-	60	100
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	-	22.0	-
Bandwidth at -40.0 dB	MHz	-	28.3	-
Relative attenuation to I.L @out of pass band (Rejection)				
0 ~ 68.4MHz	dB	51	60	-
76.8MHz	dB	40	50	-
123.6 ~ 162.8MHz	dB	56	63	-
162.8 ~ 1000MHz	dB	35	45	-
Input IP3	dBm	35	45	-
VSWR	-	-	3	-

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

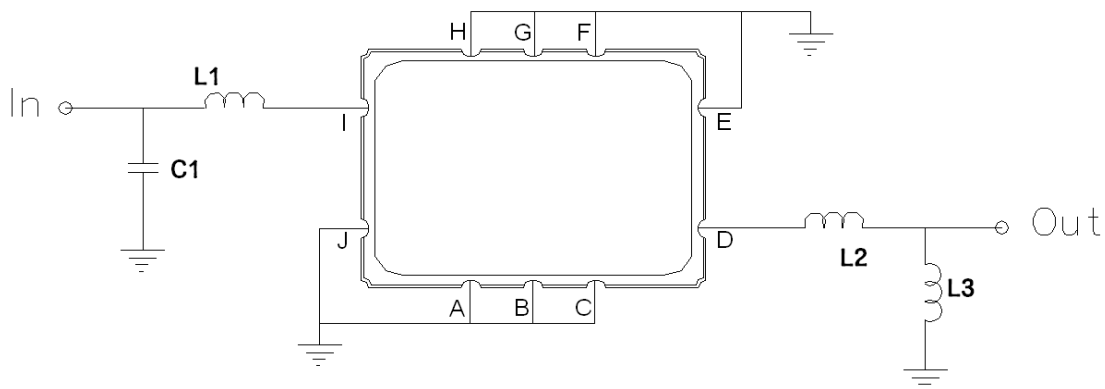


- ① SAWNICS: Brand
- ② SL09622A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

Pin Description	
A,B,C,F,G,H	Ground
I	Input or Return
J	Return or Input
D	Output or Return
E	Return or Output
Single Ended Operation	Return is ground
Differential Operation	Return is hot

Testing Environment

Matching Network for 50Ω/50Ω Balanced Configuration

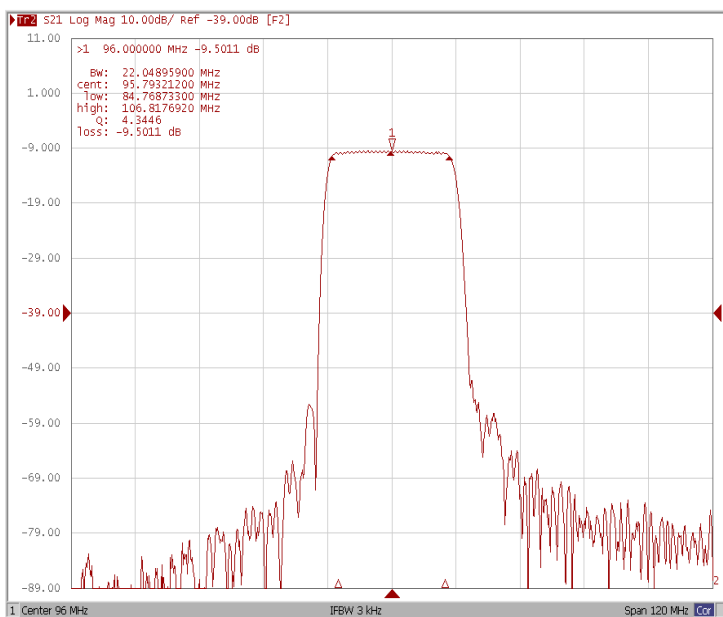


Test Fixture & Values	
Input	L1=82 nH , C1=51 pF, Q>35
Output	L2=27 nH , L3=56 nH, Q>35
Source/Load Impedance	50/50 Ω

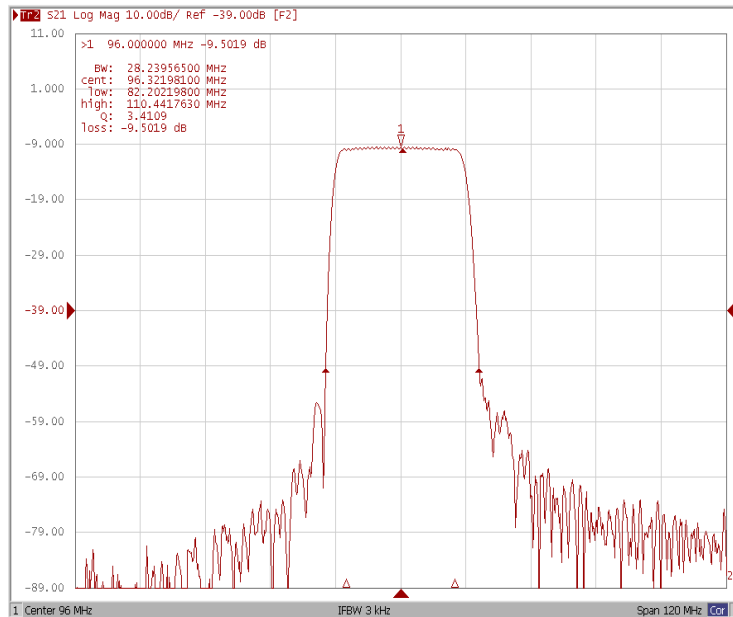
Frequency Characteristics

Frequency Response

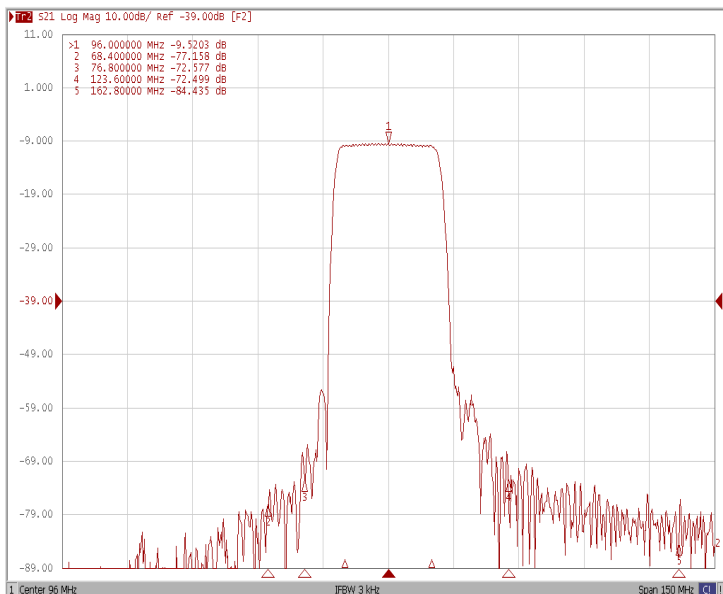
Bandwidth at -1.0 dB



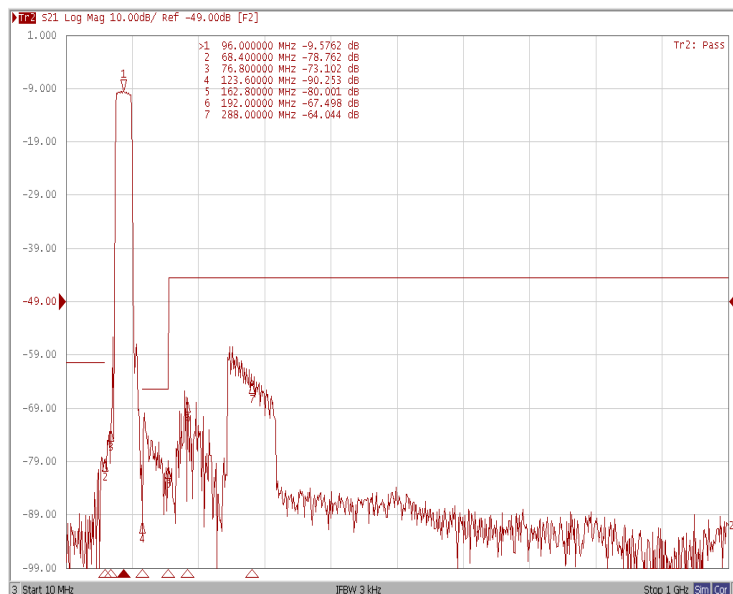
Bandwidth at -40.0 dB



Relative Attenuation



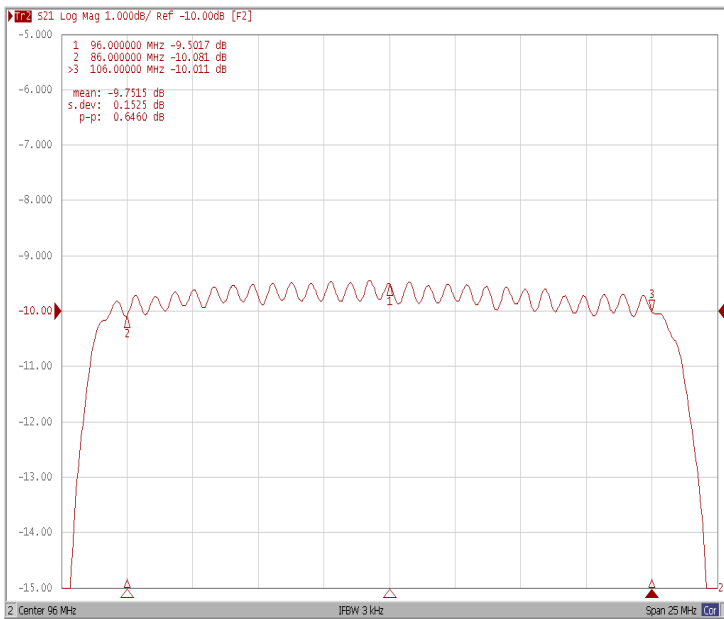
Wide-Band



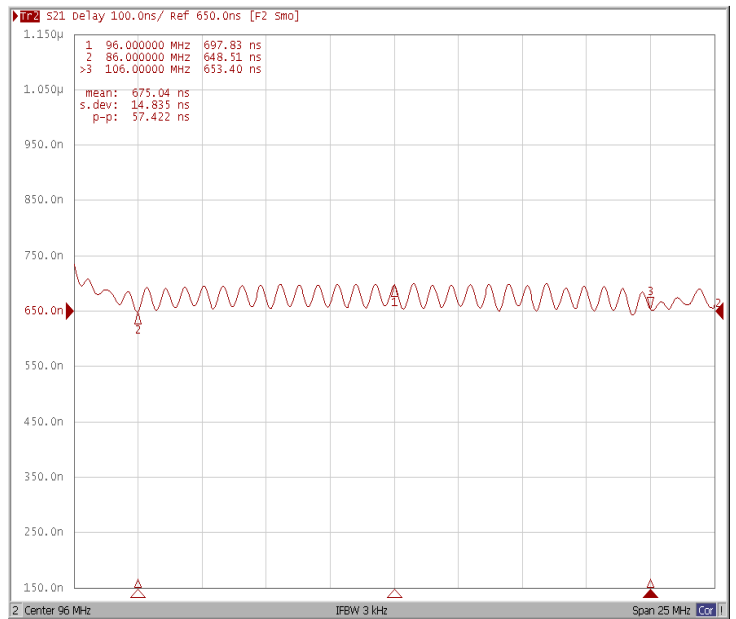
Frequency Characteristics

Frequency Response

Ripple Variation (86.0~106MHz)



Group Delay Variation (86.0~106MHz)



Smith Chart S11



Smith Chart S22

