



Total Solution Provider in Saw Device

SL15320AS1

153.6 MHz IF SAW Filter
23.5 MHz Bandwidth
Revision 0: 6. May. 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	-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	S1			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.8

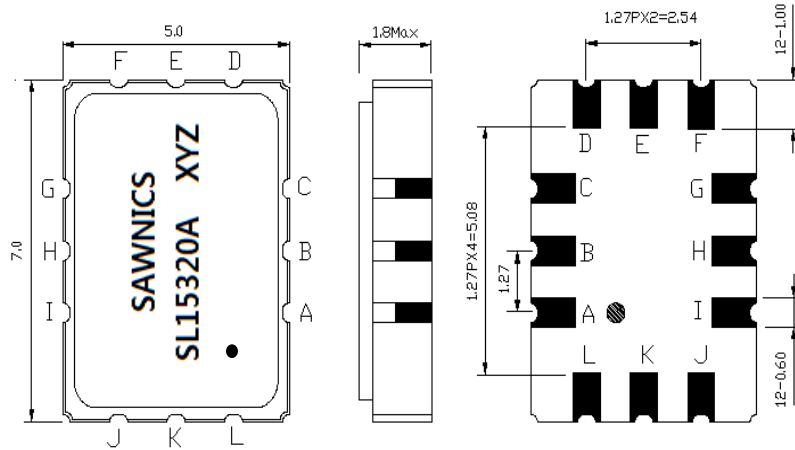
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	153.4	153.6	153.8
Insertion Loss at Fo	dB	-	9.0	11.0
Amplitude Ripple Variation at Fo ± 10.0 MHz	dB _{p-p}	-	0.65	1.0
Group Delay Variation at Fo ± 10.0 MHz	nsec	-	70	100
Phase Linearity at Fo ± 10.0 MHz	rms	-	3.0	5.0
Absolute Delay at Fo	µsec	-	0.65	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	20.0	23.5	-
Bandwidth at -3.0 dB	MHz	-	24.9	-
Bandwidth at -40.0 dB	MHz	-	31.7	33.0
VSWR	-	-	-	2.0 : 1
Relative Attenuation				
1.0MHz ~ 80.0MHz	dB	50	70	-
80.0MHz ~ 105.0MHz	dB	56	63	-
200.0MHz ~ 230.0MHz	dB	56	63	-
230.0MHz ~ 1000.0MHz	dB	40	70	-

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.

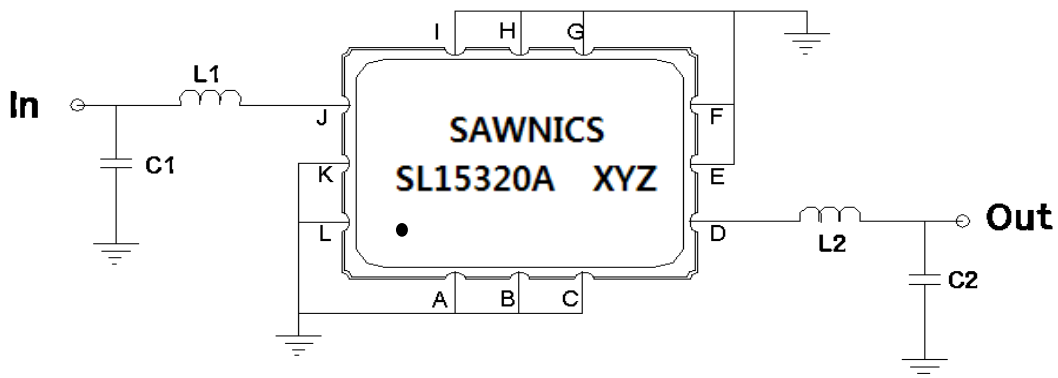
Package Dimensions



- ① SAWNICS: Brand
- ② SL15320A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

Pin Description	
A,B,C,E,F,G,H,I,K,L	Ground
J	Input
D	Output

Testing Environment

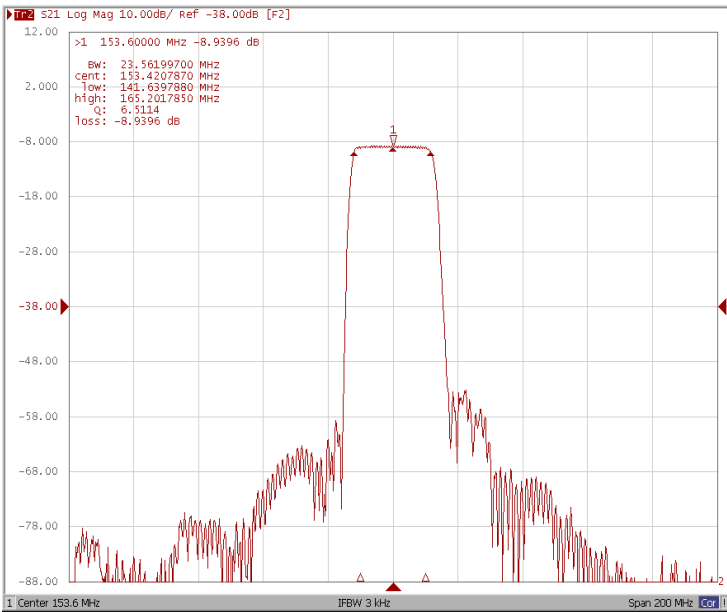


Test Fixture & Values	
Input	L1=39 nH , C1=36 pF
Output	L2=47 nH , C2=33 pF
Source/Load Impedance	50 Ω

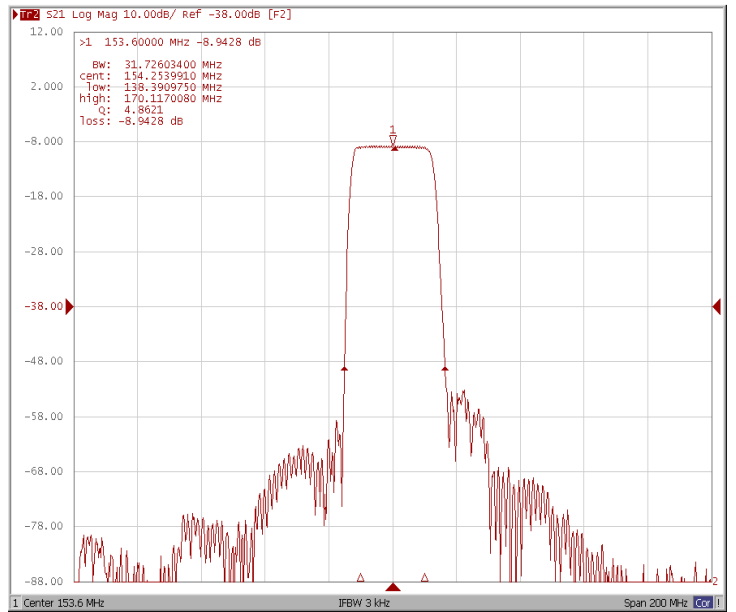
□ Frequency Characteristics

Frequency Response

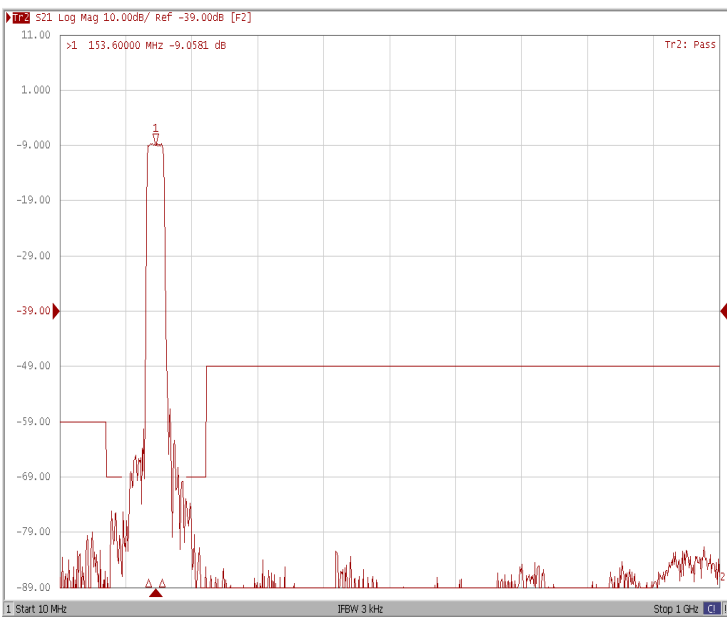
Bandwidth at -1.0 dB



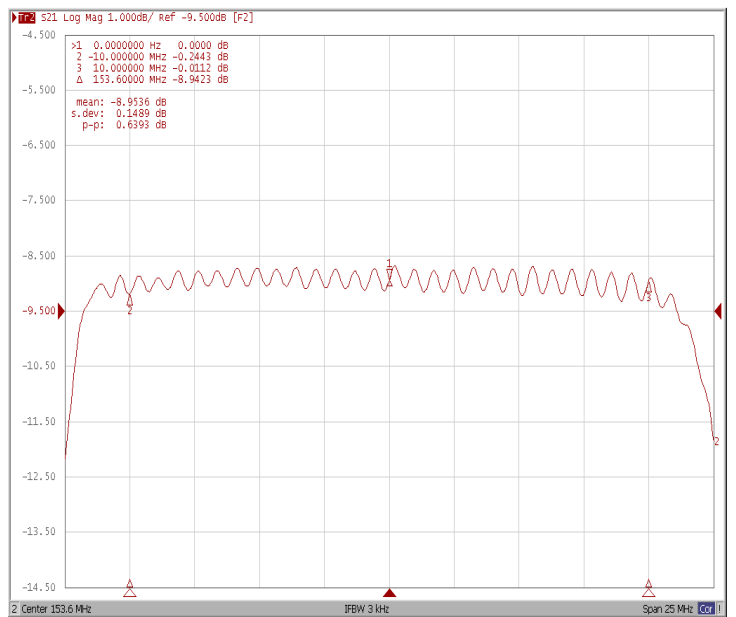
Bandwidth at -40.0 dB



Wide-Band



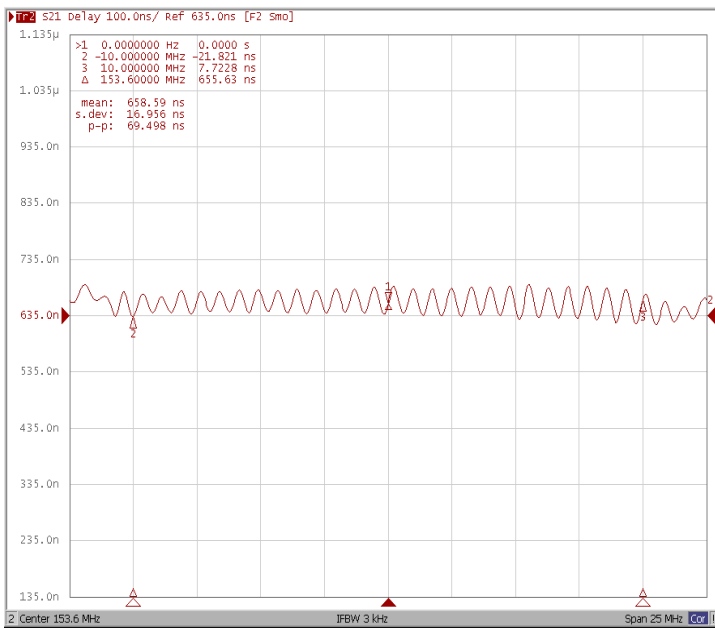
Ripple Variation Fo±10.0MHz



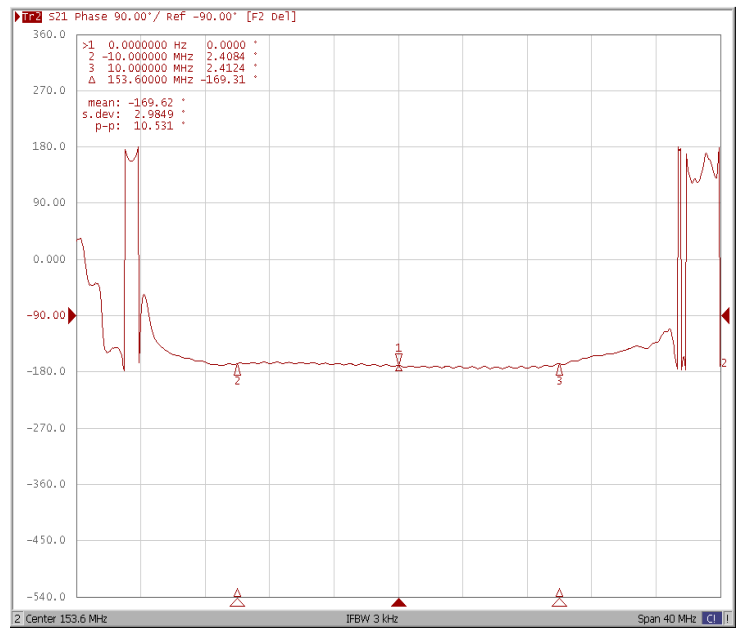
□ Frequency Characteristics

Frequency Response

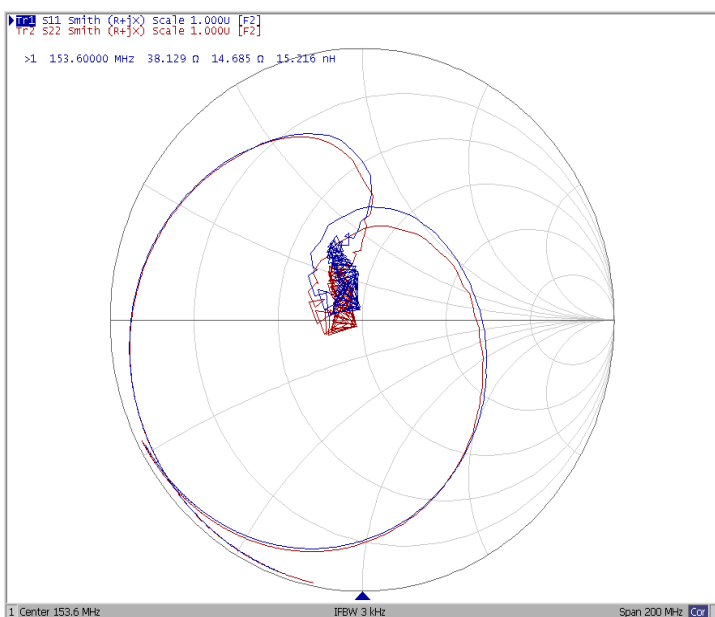
Group Delay Variation Fo±10.0MHz



Phase Linearity Fo±10.0MHz



Smith Chart



SWR

