

## 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	S			
Length x Width	mm <sup>2</sup>	-	7.0 x 5.0	-
Height	mm	-	-	1.6

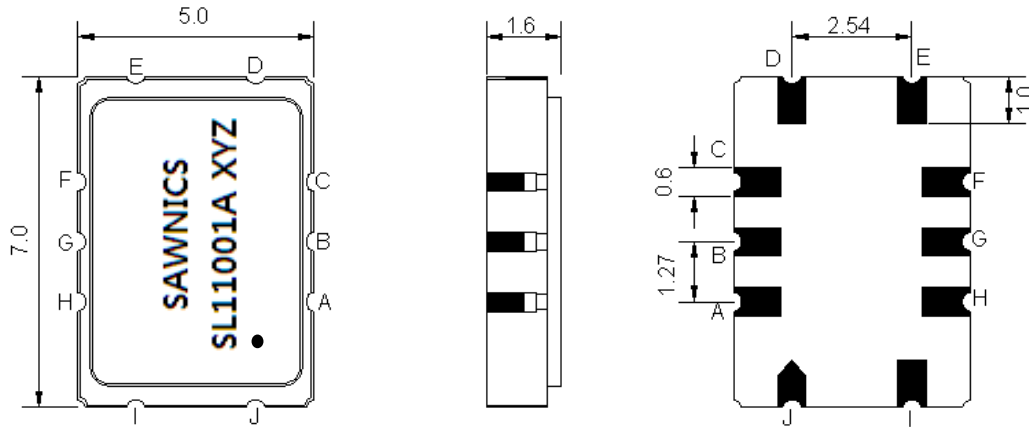
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	110.59	-
Insertion Loss at Fo	dB	-	8.41	10.00
Group Delay Variation (Fo ± 0.6 MHz)	nsec	-	131	200
Absolute Delay at Fo	µsec	-	0.78	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at -3.0 dB	MHz	1.152	1.41	-
Bandwidth at -30.0 dB	MHz	-	3.19	-
<b>Relative Attenuation</b>				
DC~Fo-3.4MHz	dB	38	48	-
Fo-3.4MHz~ Fo-1.728MHz	dB	28	47	-
Fo-1.728MHz~ Fo-3.4MHz	dB	28	33	-
Fo-3.4MHz~200MHz	dB	38	48	-

**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.

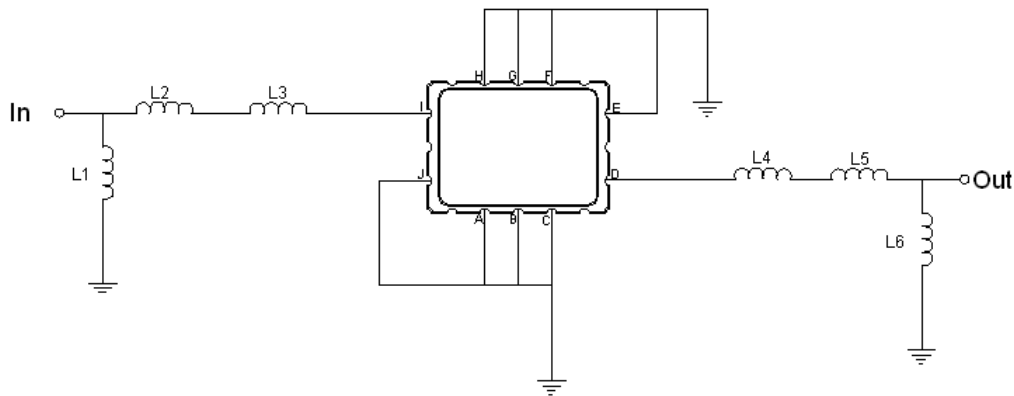
# Package Dimensions



- ① SAWNICS: Brand
- ② SL11001A: 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, J	Ground
I	Input
D	Output

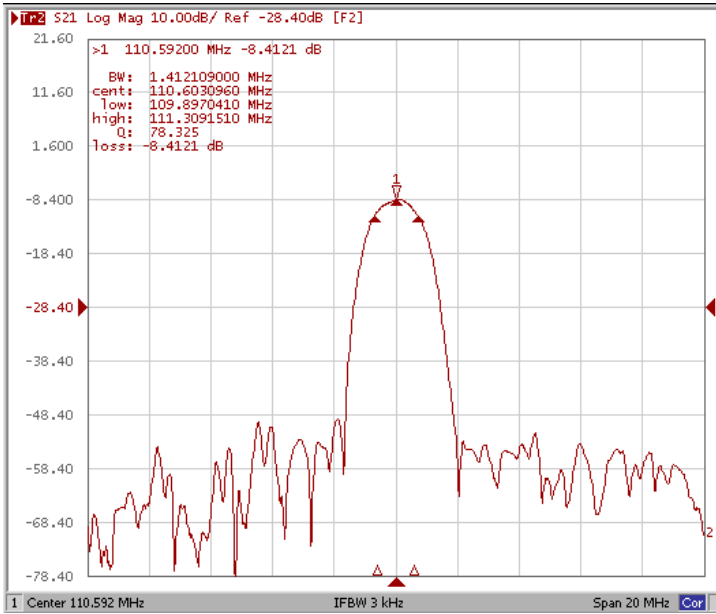
# Testing Environment



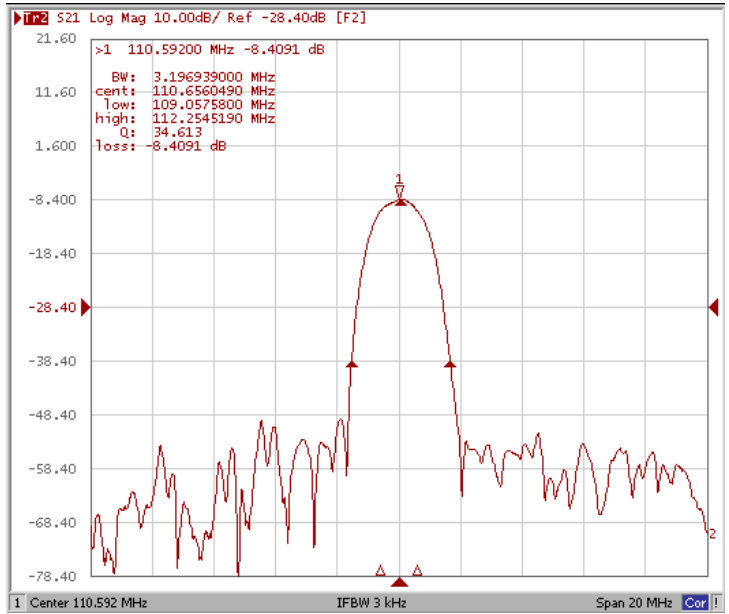
Test Fixture & Values	
Input	L1=68 nH ,L2=39 nH, L3=220nH
Output	L4=270 nH ,L5=33 nH, L6=56 nH
Source/Load Impedance	50 Ω

## Frequency Response

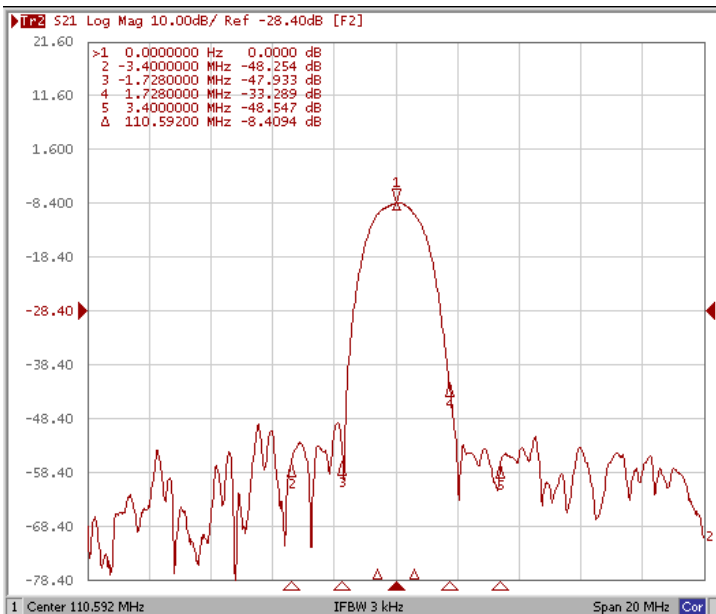
Bandwidth at -3.0 dB



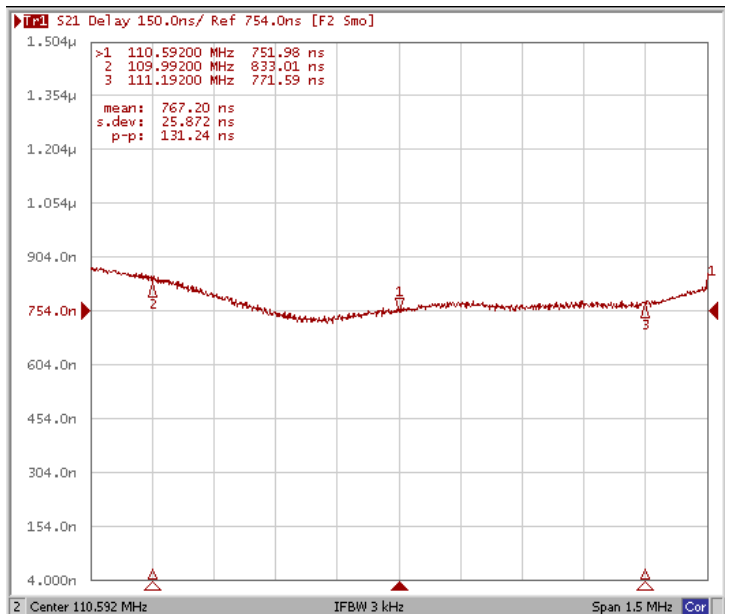
Bandwidth at -30 dB



Relative Attenuation

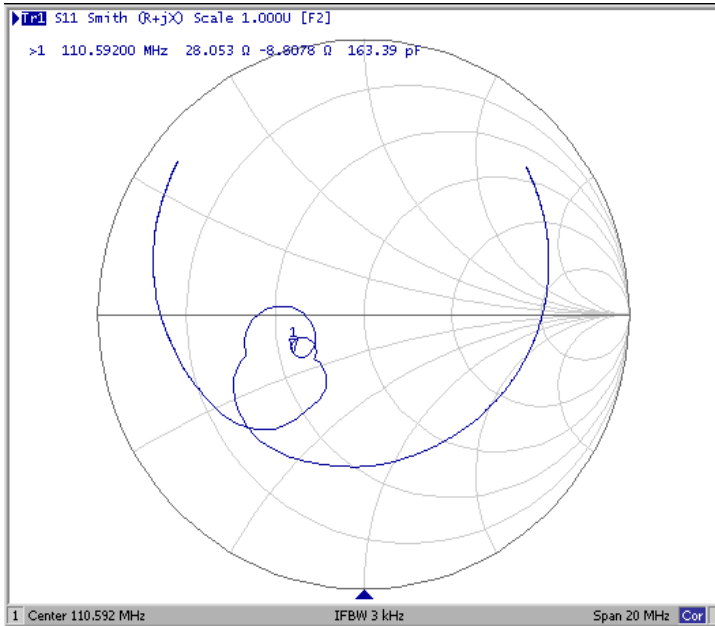


Group Delay Variation Fo±0.6MHz

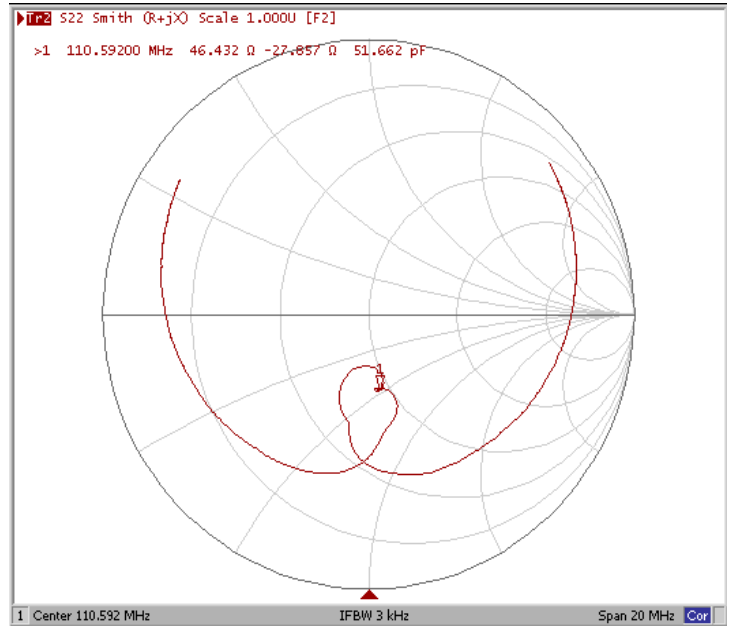


## Frequency Response

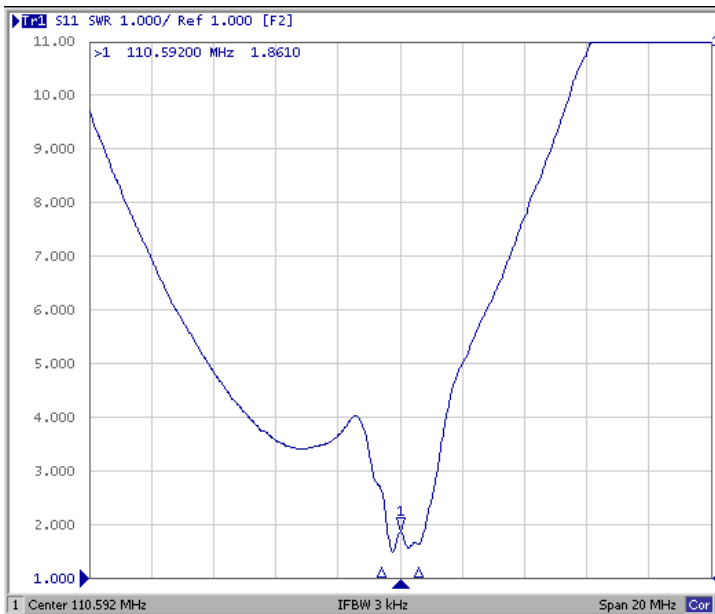
### Smith Chart S11



### Smith Chart S22



### SWR S11



### SWR S22

