

- 110.59 MHz IF SAW Filter / 1.41 MHz Bandwidth
- Revision 0: 04 Nov. 2008

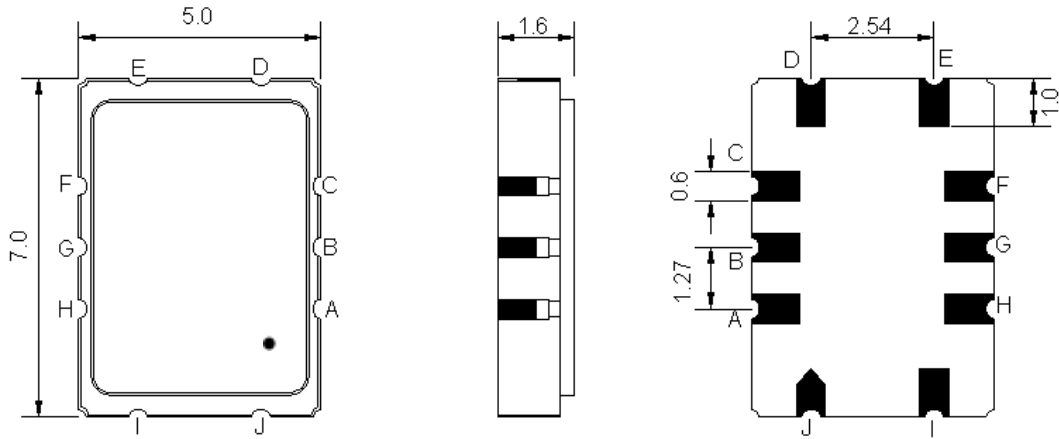
Electrical Characteristics

MAXIMUM RATING				
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	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	-	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	-
Relative Attenuation				
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.

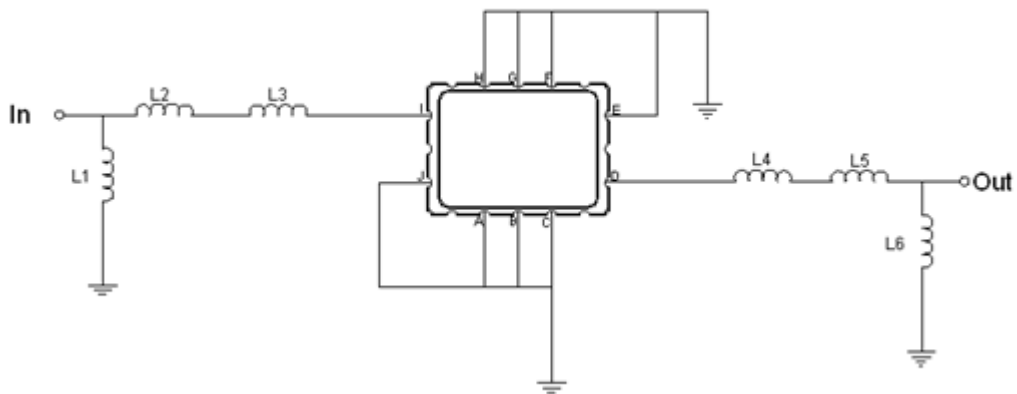
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL11001A:** 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

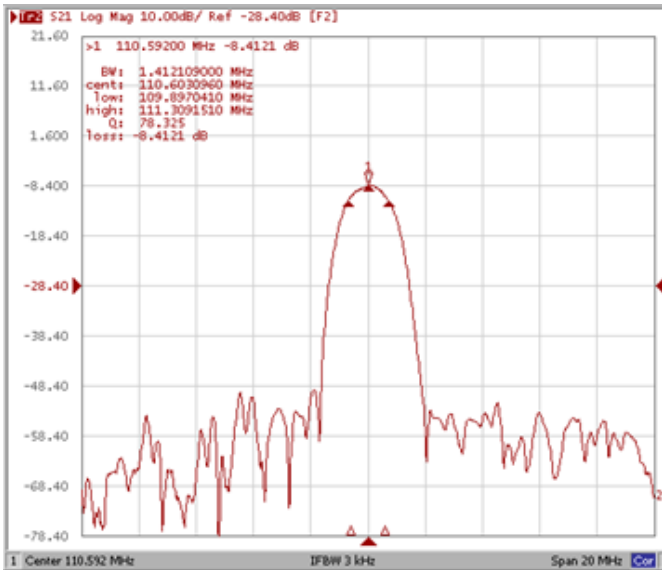


Test Fixture & Values	
Input	L1=68 nH ,L2=39 nH, L3=220 nH
Output	L4=270 nH ,L5=33 nH, L6=56 nH
Source/Load Impedance	50 Ω

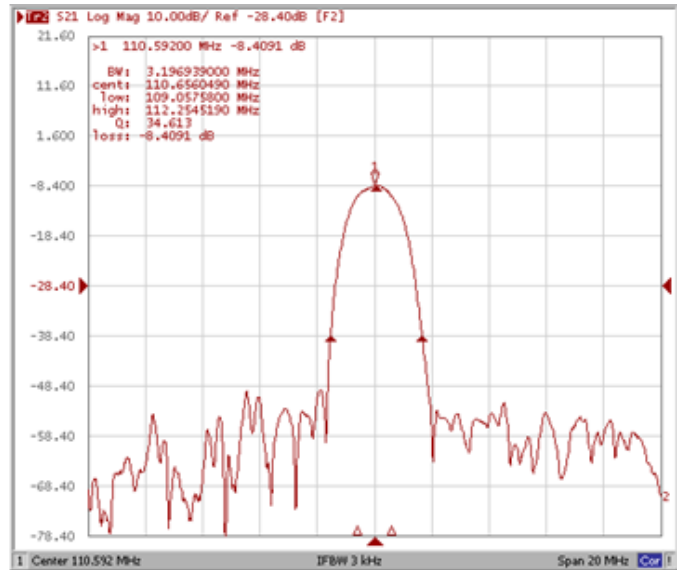
Frequency Characteristics

Frequency Response

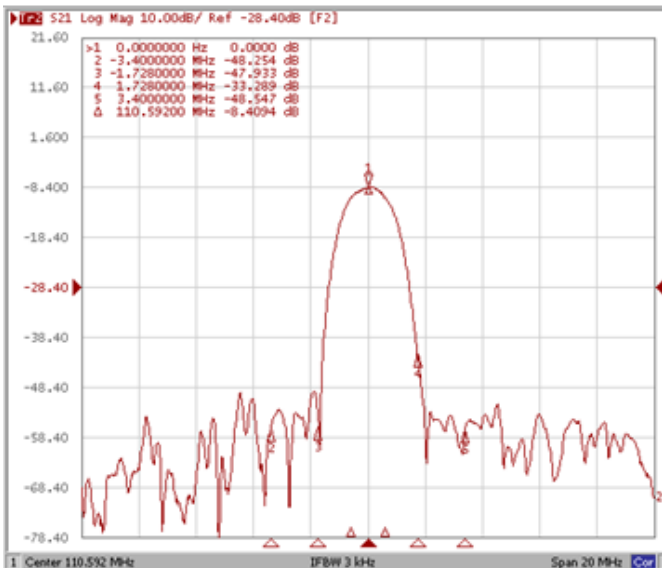
Bandwidth at -3.0 dB



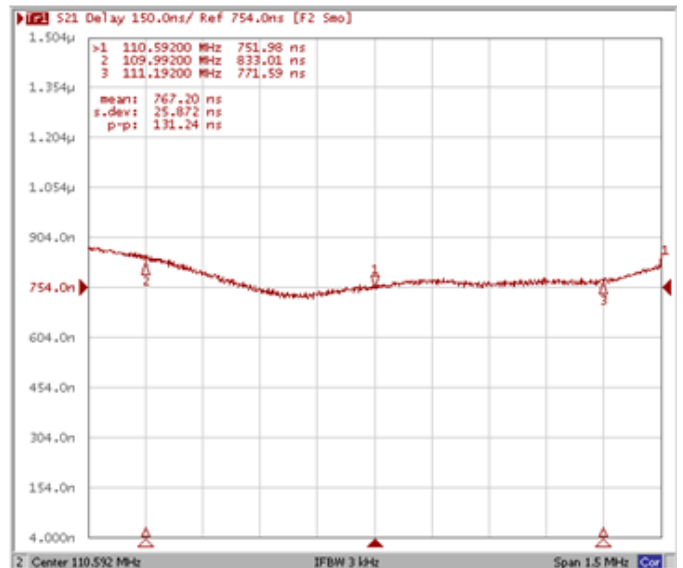
Bandwidth at -30.0 dB



Relative Attenuation

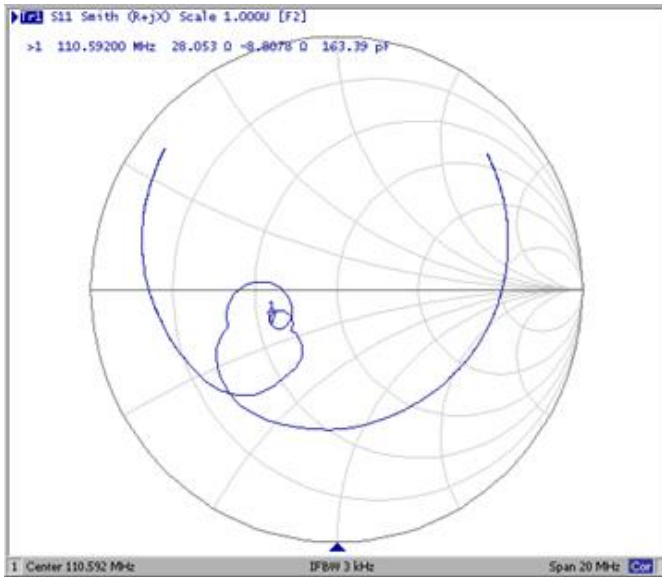


Group Delay Variation Fo±0.6MHz

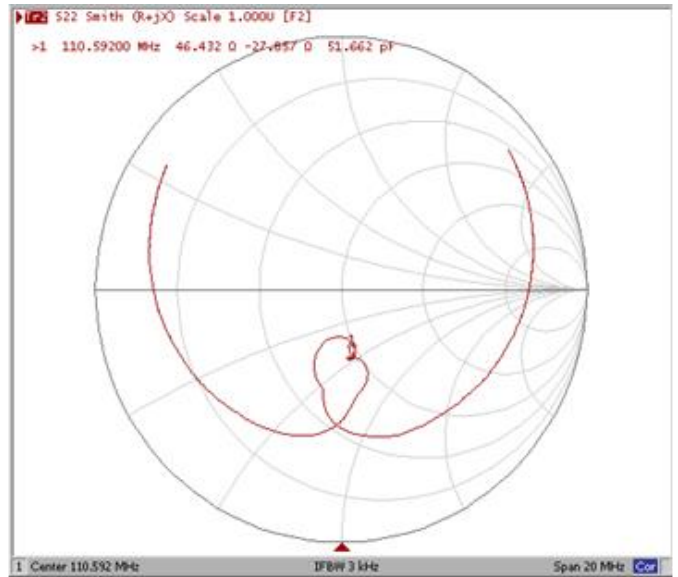


Frequency Response

Smith Chart S11



Smith Chart S22



SWR S11



SWR S22

