



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
807-SL110.59M-01A	110.59 MHz IF SAW Filter 1.41 MHz Bandwidth

### Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Smith Chart
- o VSWR

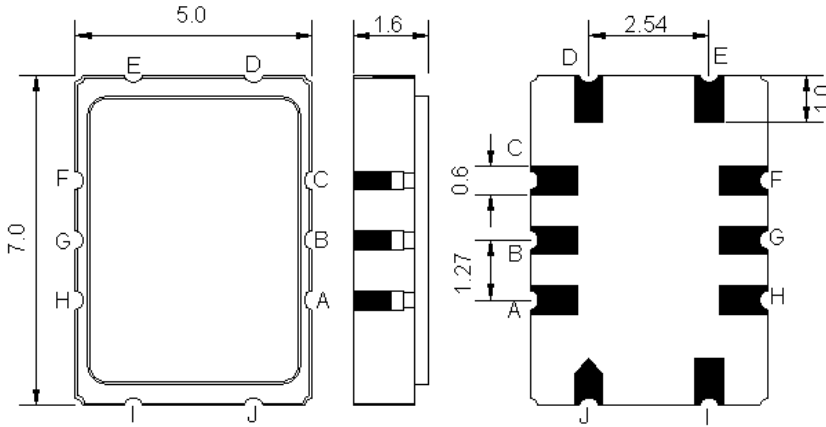
### Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



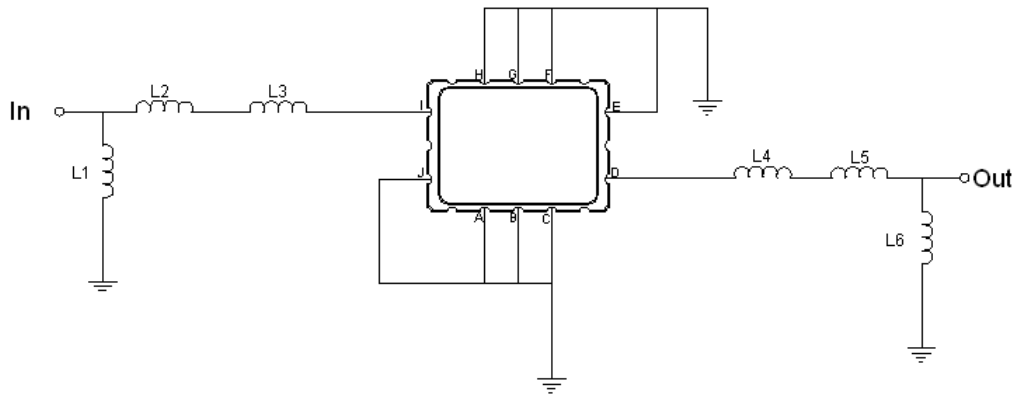


## Mechanical Dimensions (mm)



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

## Test Circuit



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

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating 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	-

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

Those impedances could be modified with different impedance values and/or structures, if necessary.

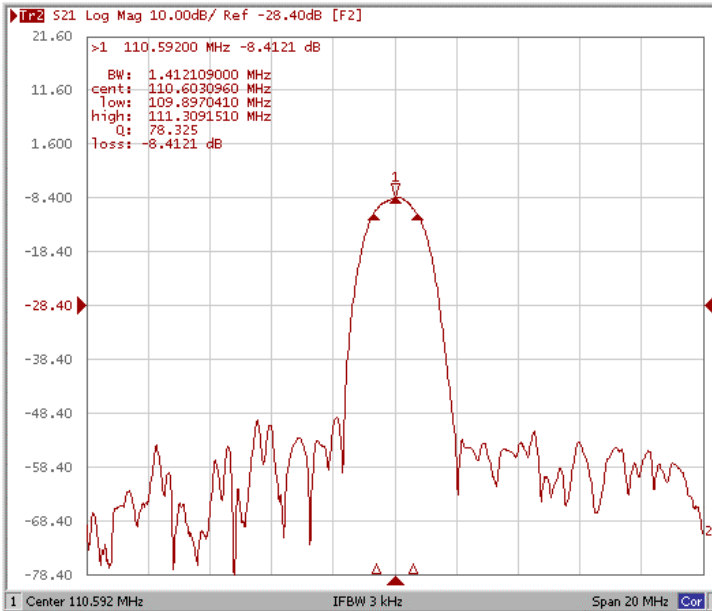
**Electrical Specification**

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	-

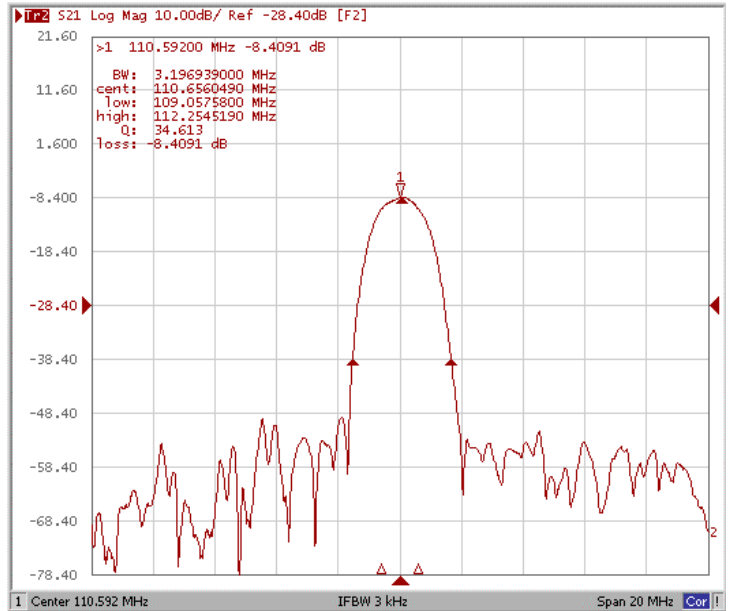


## Frequency Response

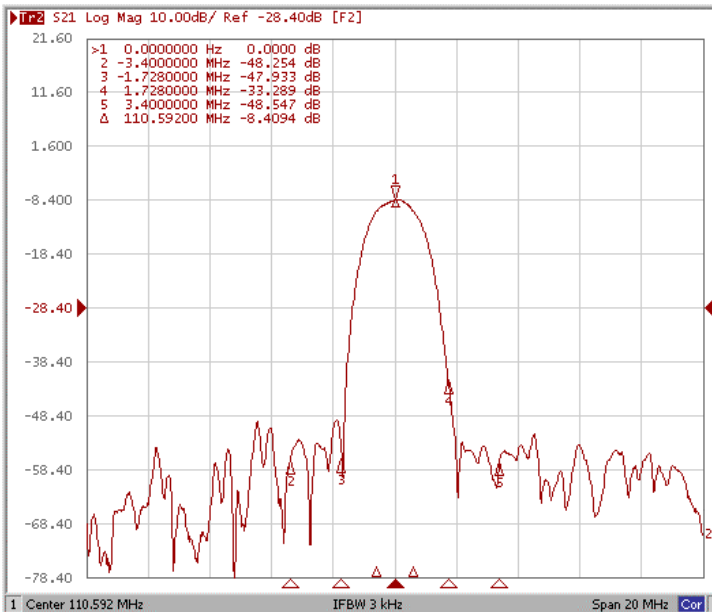
### Bandwidth at -3.0 dB



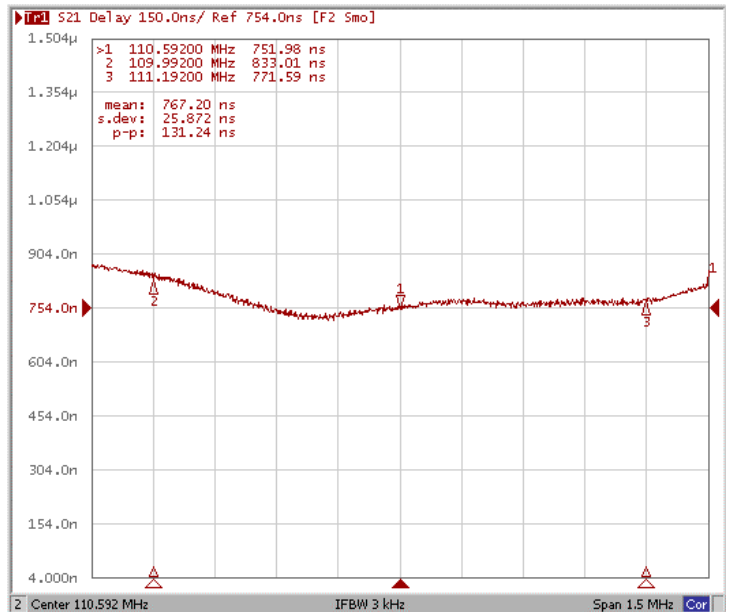
### Bandwidth at -30 dB



### Relative Attenuation



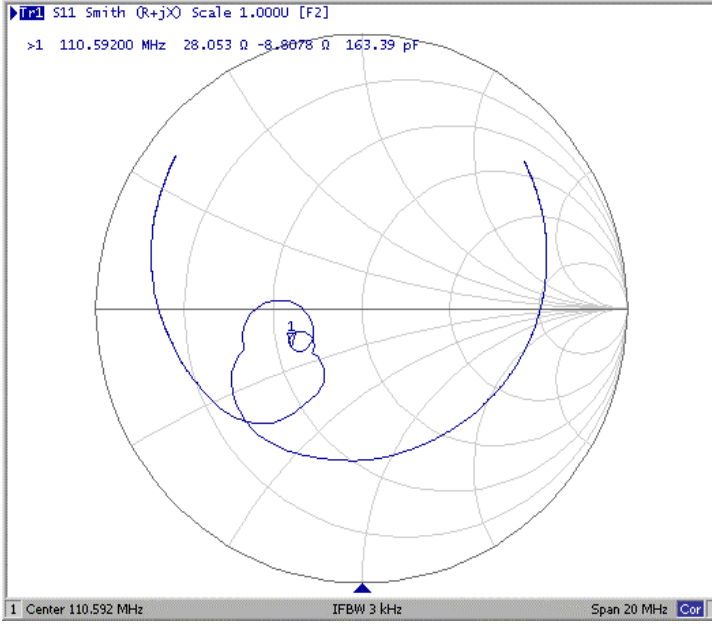
### Group Delay Variation Fo±0.6MHz



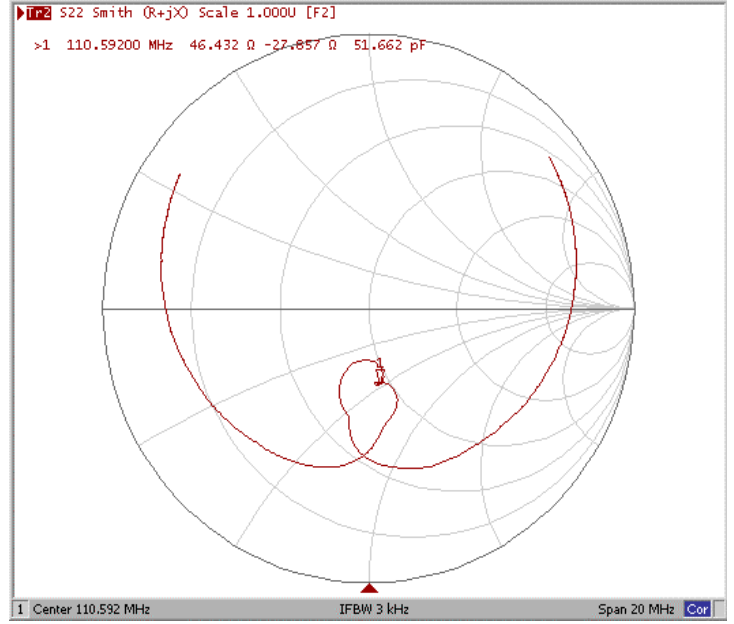


### Smith Chart

**S11**

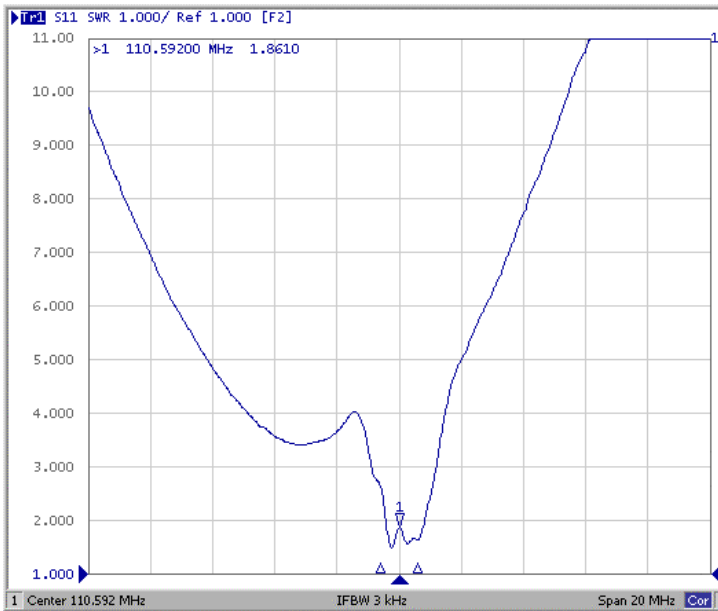


**S22**



### VSWR

**S11**



**S22**

