



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL108.4M-02A	108.40 MHz IF SAW Filter 3.20 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

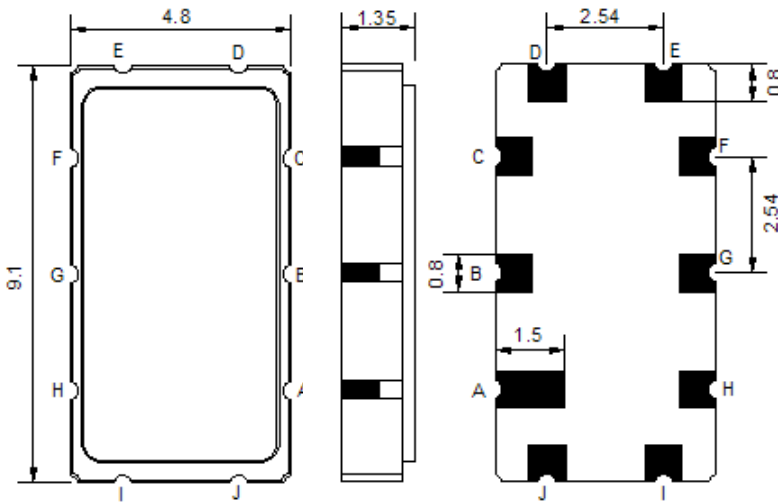
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



Oscilent Corporation  
Telephone: 1.949.252.0522  
Fax: 1.949.252.0522  
Email: sales@oscilent.com

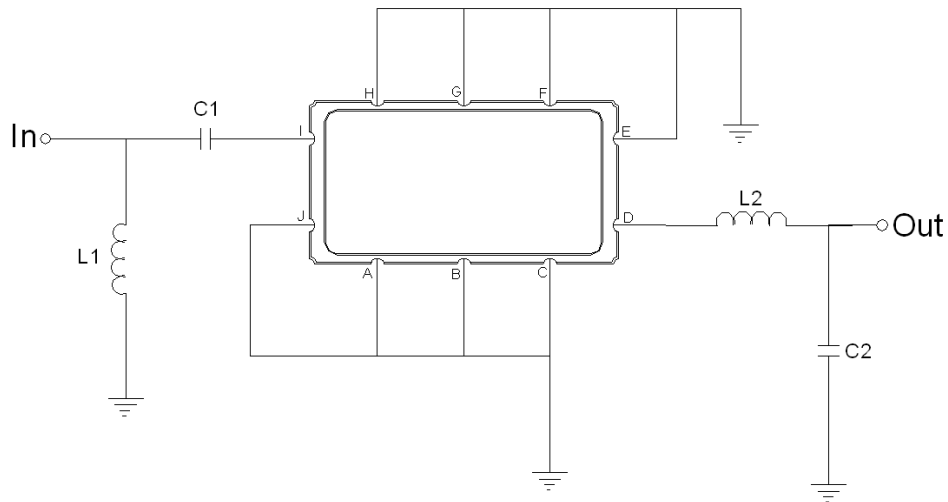


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 27 nH, C1 = 200 pF
Output	L2 = 39 nH, C2 = 68 pF
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	70
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.

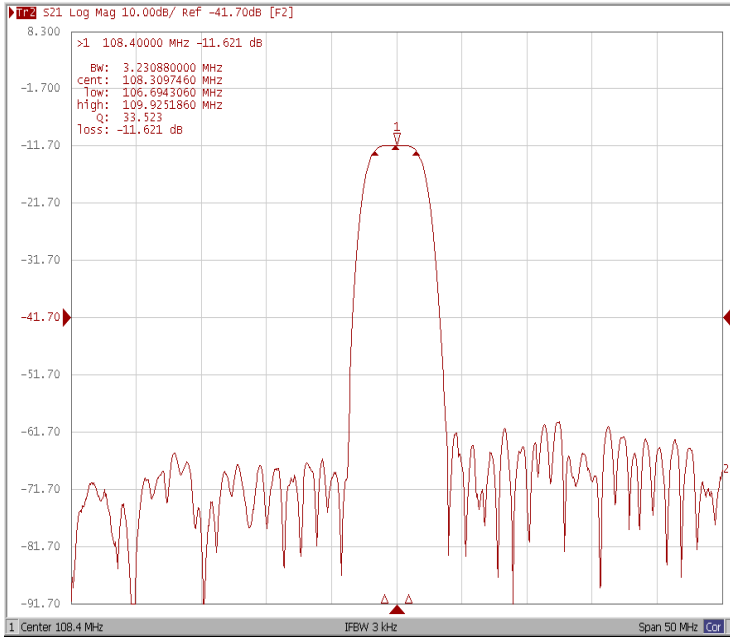
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	108.40	-
Insertion Loss at Fo	dB	-	11.60	14.00
Temperature Coefficient	ppm/°C	-	-20	-
Group Delay Variation at Fo±0.9MHz	nsec	-	10	40
Absolute Delay at Fo	usec	-	0.89	-
Passband Ripple at Fo±0.9MHz	dB	-	0.20	0.70
Bandwidth at -1dB	MHz	2.00	3.20	-
Bandwidth at -3dB	MHz	-	4.05	-
Bandwidth at -40dB	MHz	-	7.10	8.00
Ultimate Rejection	dB	45	50	-

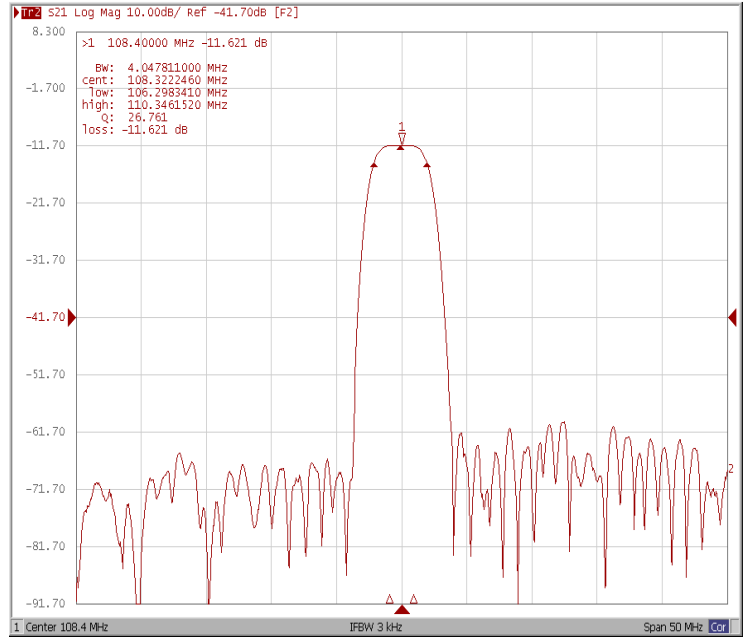


### Frequency Response

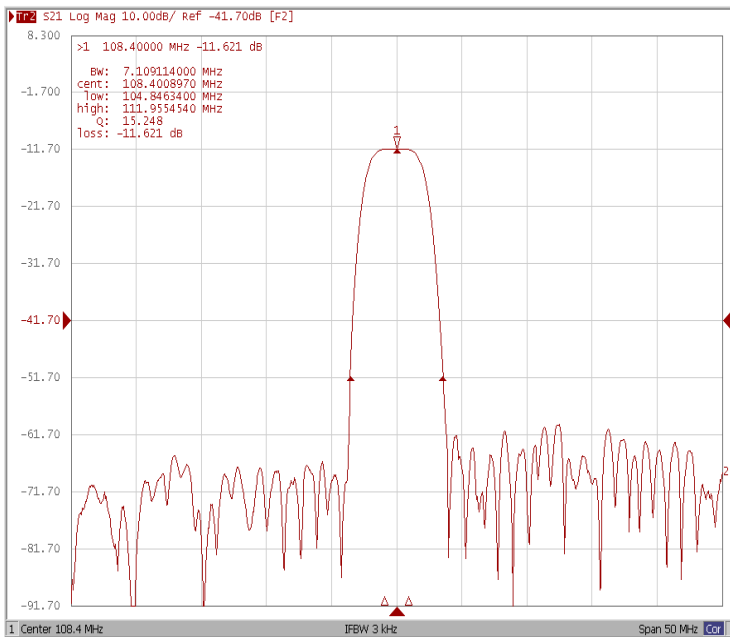
Bandwidth at -1.0 dB



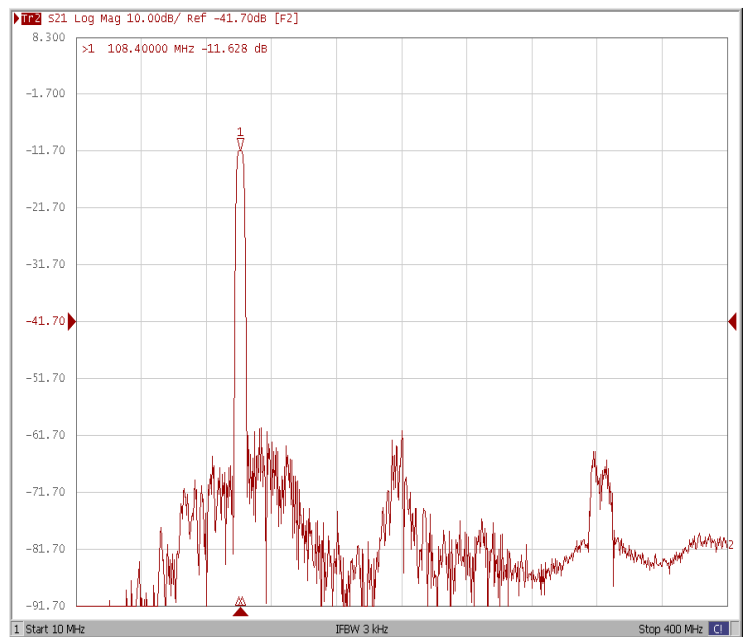
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

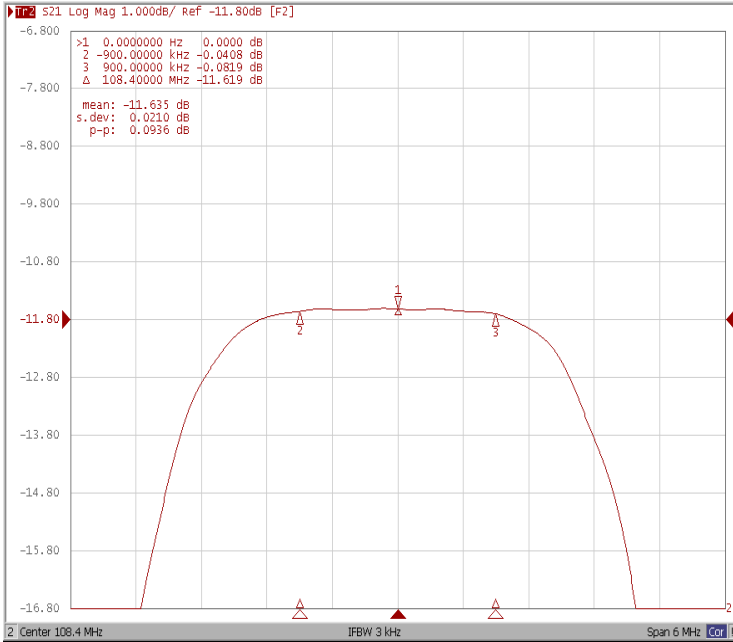


WIDE

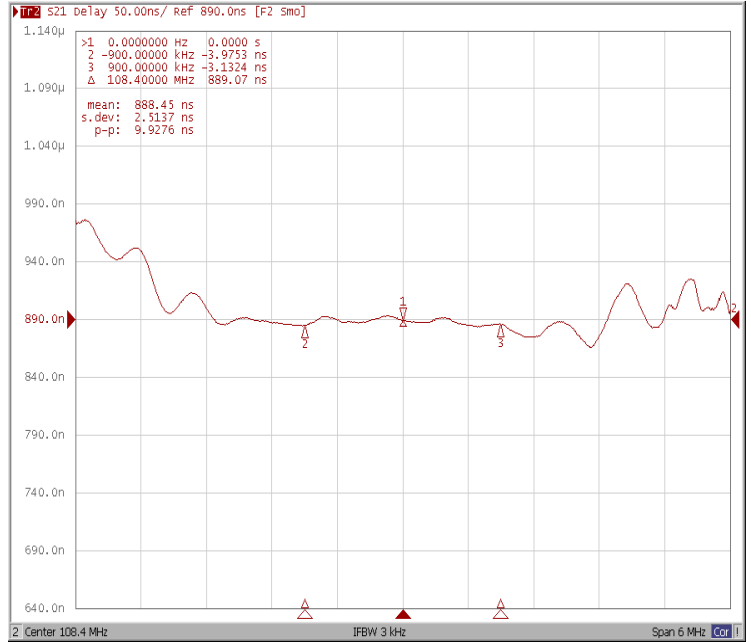




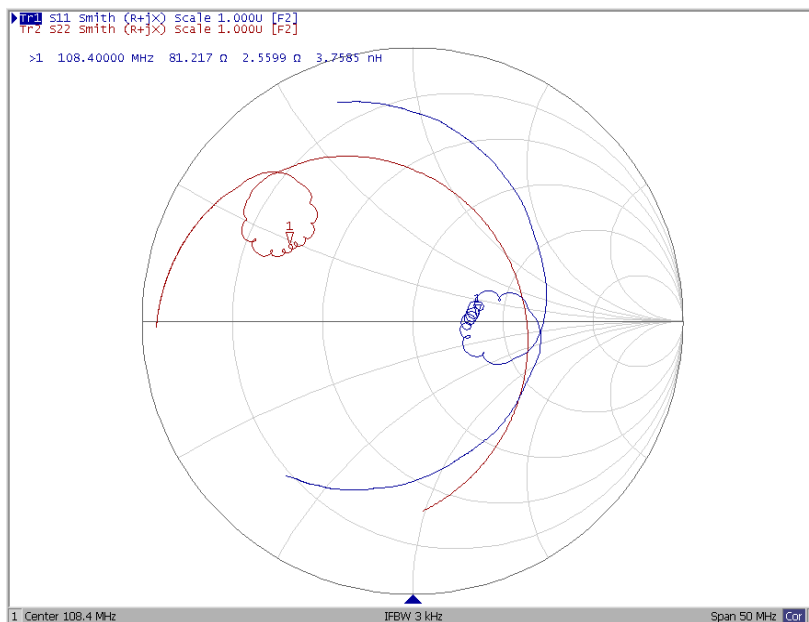
### Ripple Variation Fo±0.9MHz



### Group Delay Variation Fo±0.9MHz



### Smith Chart





### VSWR

