



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF119.6875M-09A	119.6875 MHz IF SAW Filter 9.8 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)



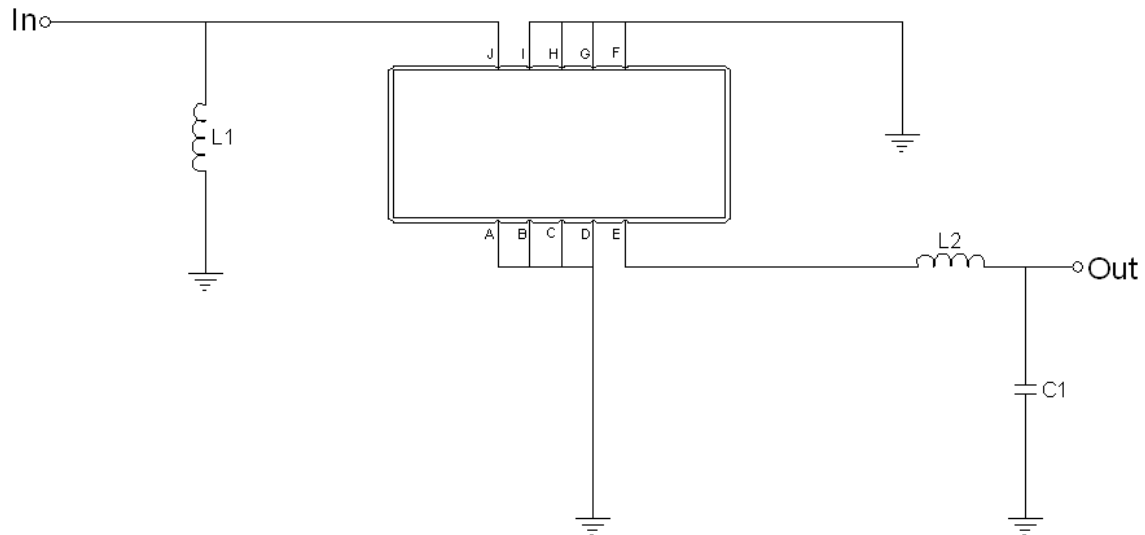


## Mechanical Dimensions (mm)



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

## Test Circuit



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

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	-	60
Storage Temperature Range	°C	-20	-	70
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.

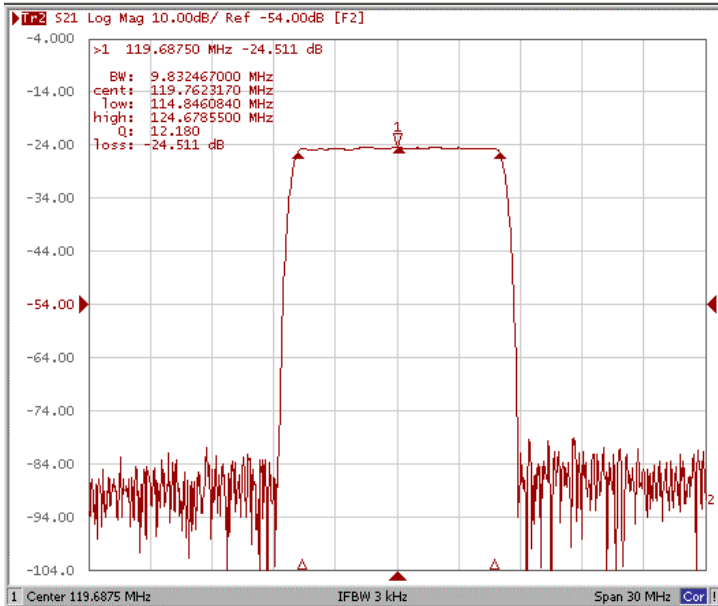
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	119.5675	119.6875	119.8075
Insertion Loss at Fo	dB	-	24.5	27.0
Group Delay Variation (Fo±4.6875MHz)	ns	-	35	100
Absolute Delay	us	-	3.24	-
Temperature Coefficient	ppm/°C	-	-20	-
Passband Ripple (Fo±4.6875MHz)	dB	-	0.50	1.00
Bandwidth at -1dB	MHz	9.375	9.83	-
Bandwidth at -30dB	MHz	-	11.25	-
Bandwidth at -40dB	MHz	-	11.40	12.10
Ultimate Rejection	dB	-	50	-
Relative Attenuation Fo±5.9125MHz	dB	30	60	-

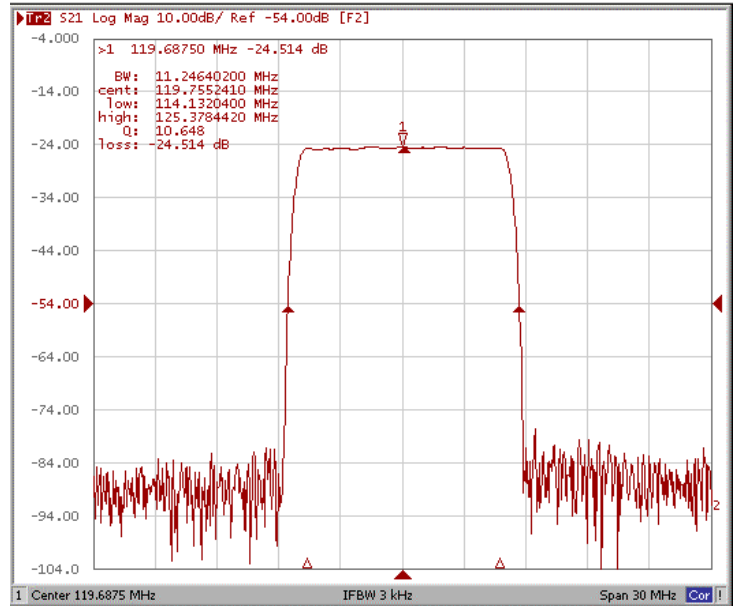


### Frequency Response

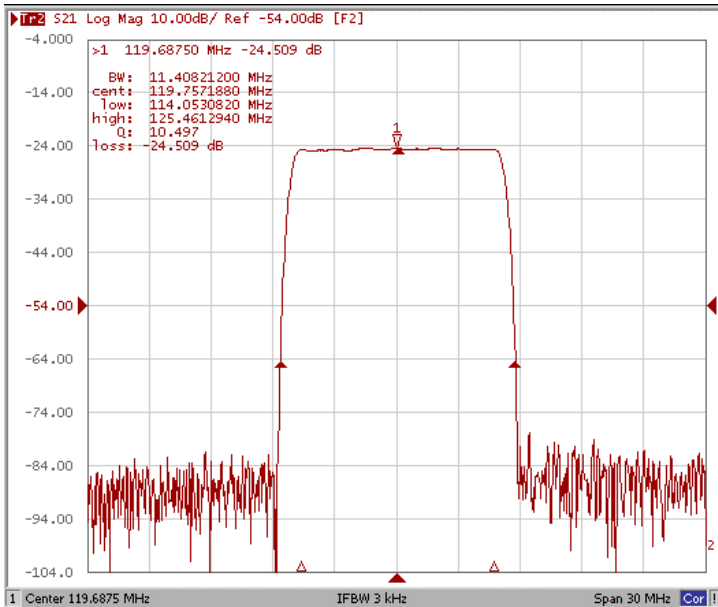
#### Bandwidth at -1.0 dB



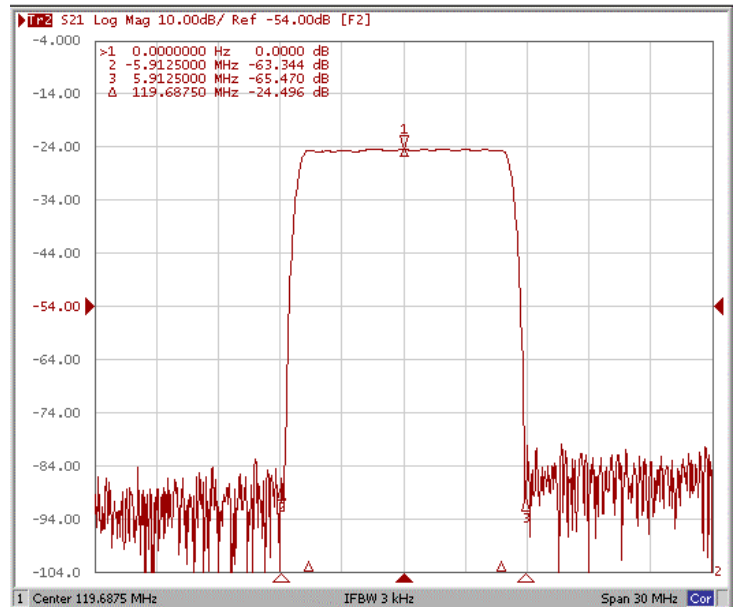
#### Bandwidth at -30.0 dB



#### Bandwidth at -40.0 dB

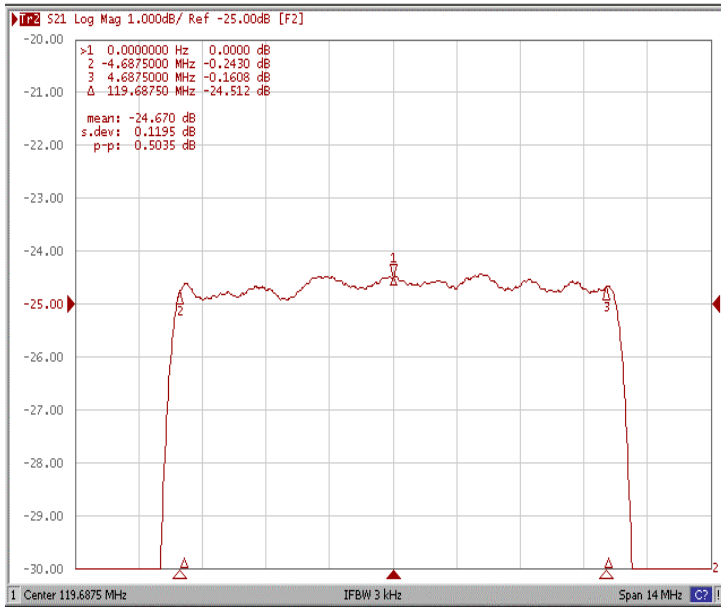


#### Relative Attenuation Fo±5.9125MHz

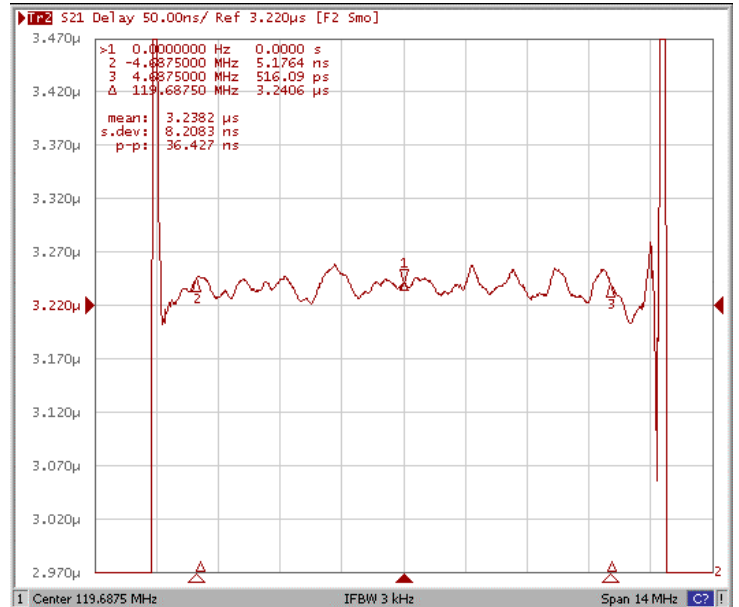




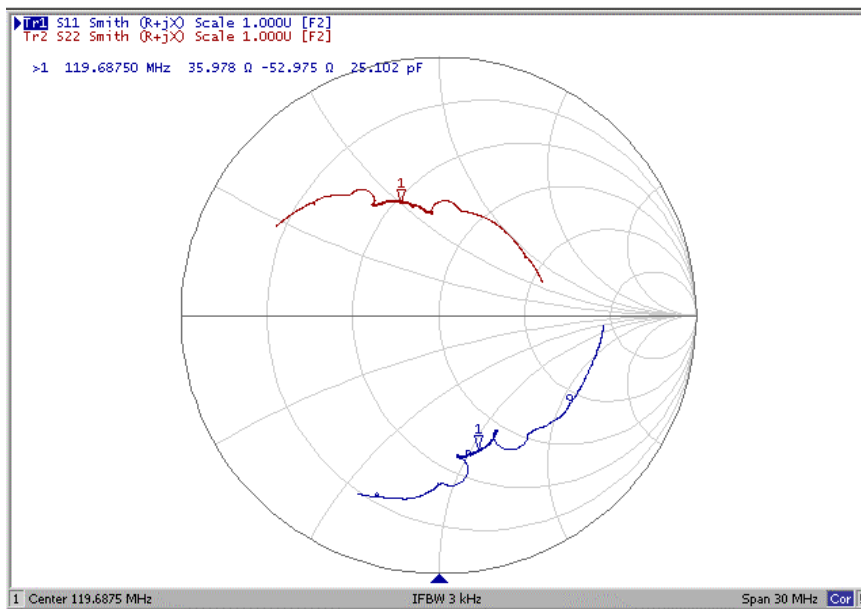
### Ripple Variation Fo±4.6875MHz



### Group Delay Variation Fo±4.6875MHz



### Smith Chart





## VSWR

