



# PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF75.0M-11A	75.0 MHz IF SAW Filter 11.65 MHz Bandwidth

## Specification Contents

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

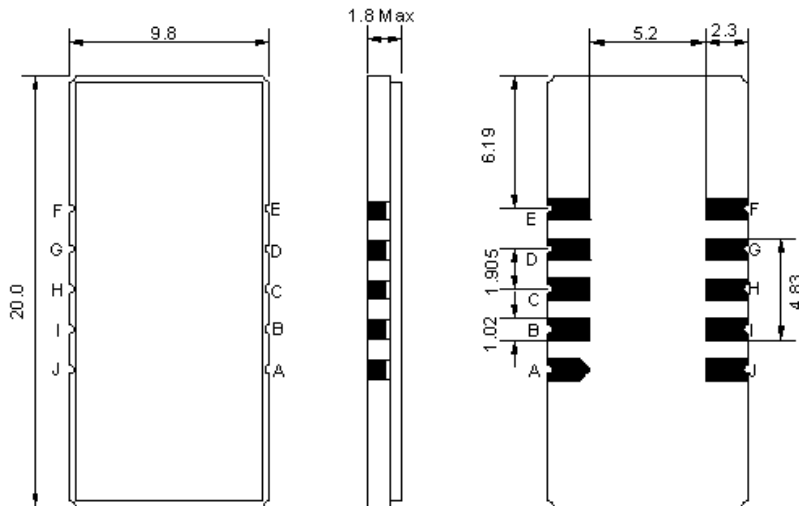
## Notes

- 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)



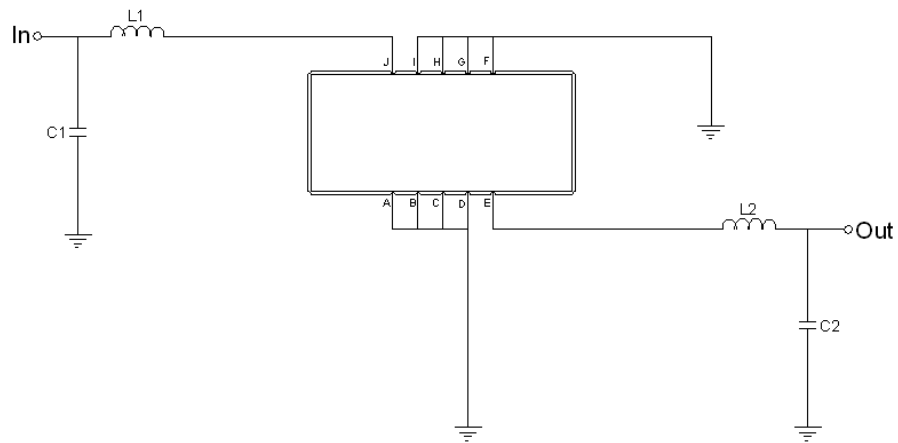


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=68nH, C1=20pF
Output	L2=68nH, C2=20pF
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	-	75.00	-
Insertion Loss at Fo	dB	-	20.5	23.5
Group Delay Variation (Fo±5.5MHz)	ns	-	42	100
Absolute Delay	us	-	2.40	-
Temperature Coefficient	ppm/°C	-	-72	-
Passband Ripple (Fo±5.5MHz)	dB	-	0.56	1.00
Bandwidth at -1dB	MHz	11.00	11.65	-
Bandwidth at -30dB	MHz	-	13.13	-
Bandwidth at -45dB	MHz	-	13.40	15.00
Ultimate Rejection	dB	-	55	-
Relative Attenuation Fo±6.5MHz /Fo±7.5MHz	dB		24 / 55	



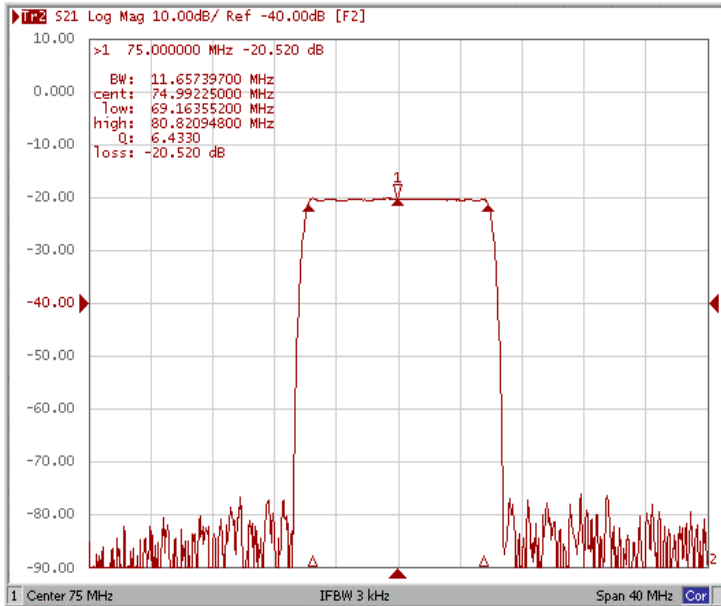
January 2011 Rev A

# Oscilent Part Number 821-IF75.0M-11A

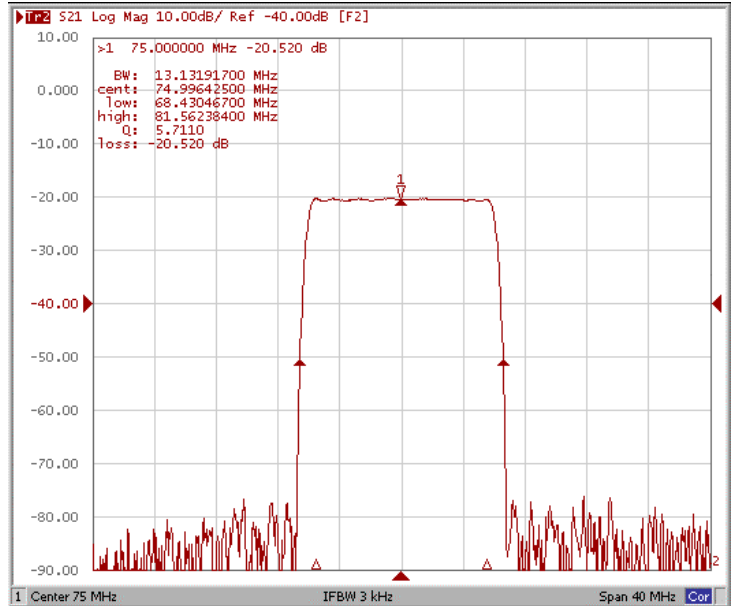
75.0 MHz IF SAW Filter 11.65 MHz Bandwidth

## Frequency Response

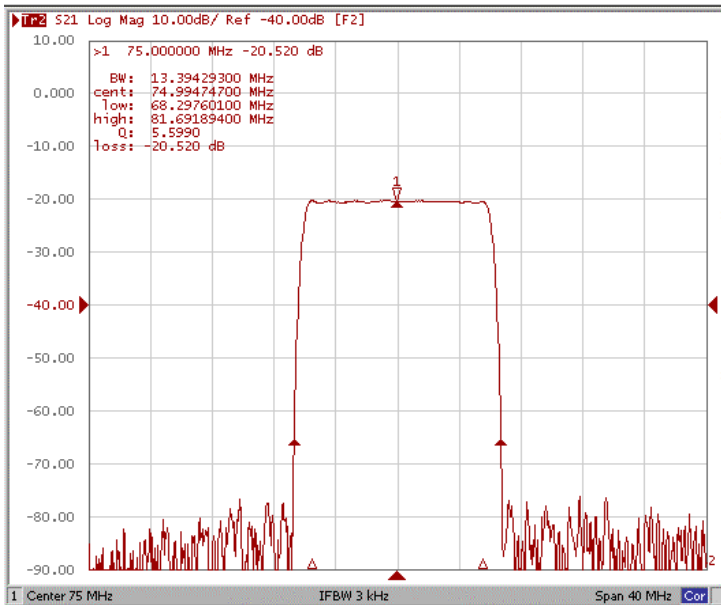
### Bandwidth at -1.0 dB



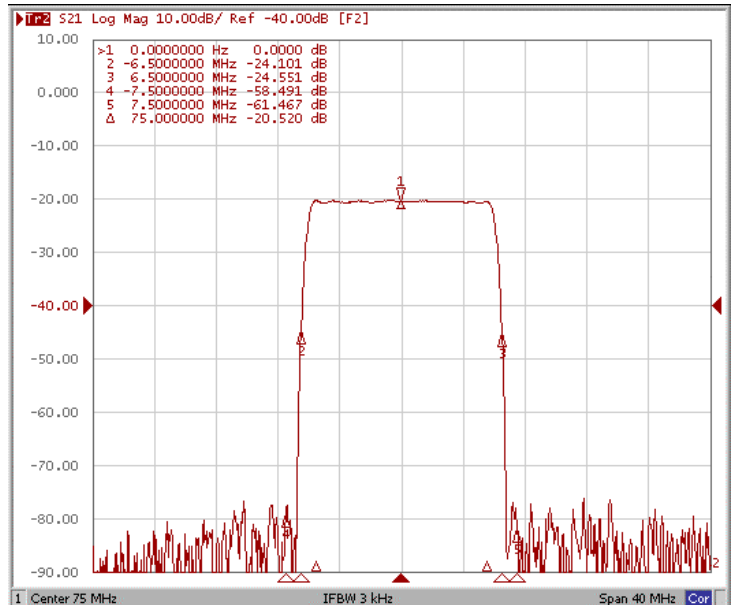
### Bandwidth at -30.0 dB



### Bandwidth at -45.0 dB

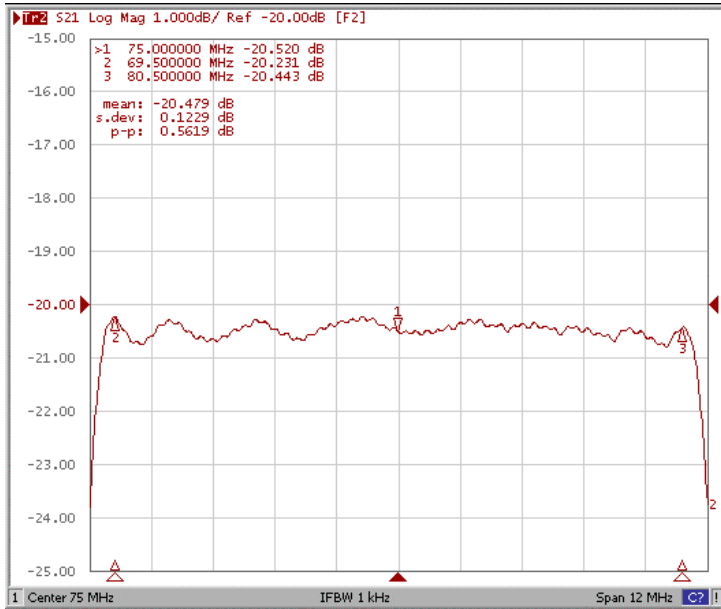


### Relative Attenuation Fo±6.5MHz /Fo±7.5MHz

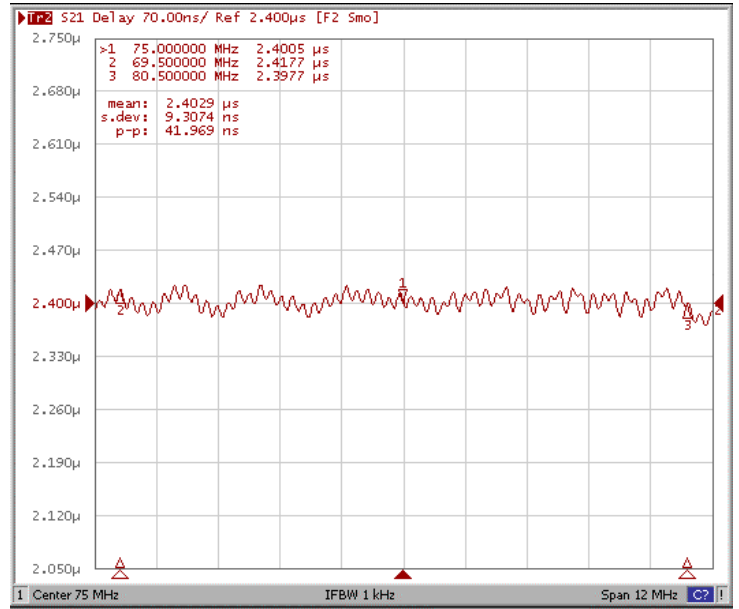




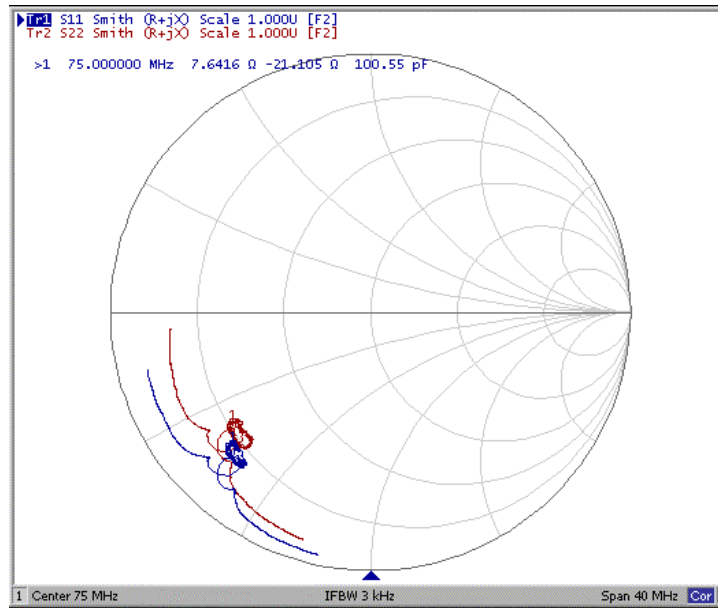
### Ripple Variation Fo±5.5MHz



### Group Delay Variation Fo±5.5MHz



### Smith Chart





### VSWR

