



# PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF75.0M-09A	75.0 MHz IF SAW Filter 9.82 MHz Bandwidth

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
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- o VSWR

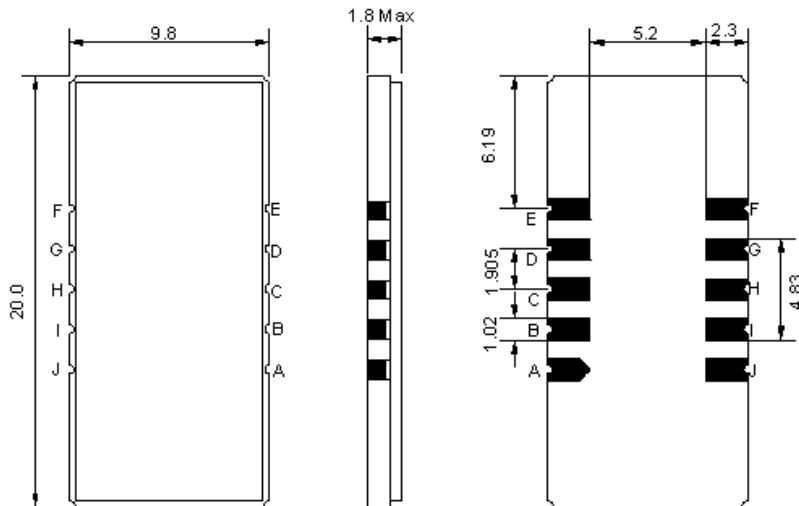
## Notes

- 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)



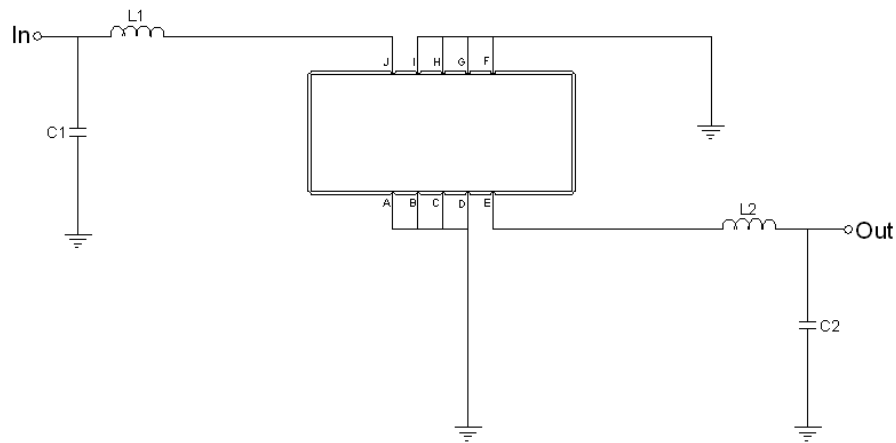


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=33nH, C1=10pF
Output	L2=33nH, C2=10pF
Source/Load Impedance	50 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
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.

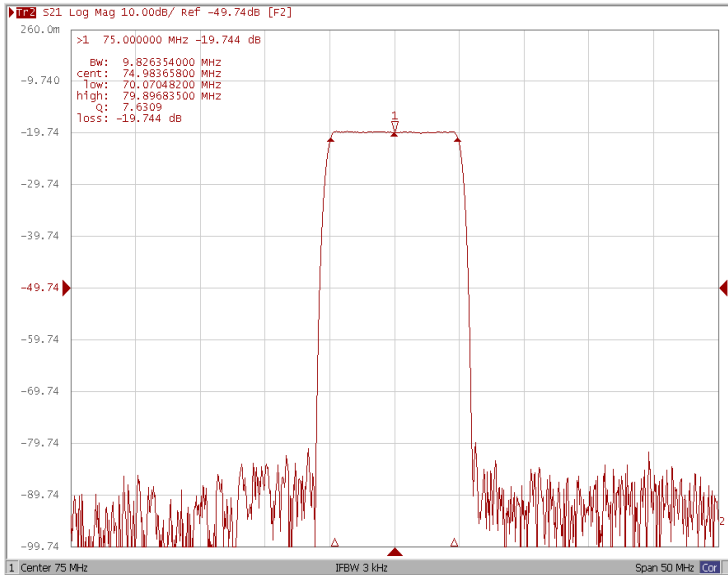
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.00	-
Insertion Loss at Fo	dB	-	19.7	22.0
Group Delay Variation (Fo±4.6MHz)	ns	-	60	120
Absolute Delay	us	-	2.4	-
Passband Ripple (Fo±4.6MHz)	dB	-	0.42	0.9
Bandwidth at -1dB	MHz	-	9.82	-
Bandwidth at -55dB	MHz	-	11.90	-
Ultimate Attenuation (65.1MHz~69MHz)	-	50	55	-
Ultimate Attenuation (81MHz~84.9MHz)	-	50	60	-
Temperature coefficient	ppm/°C	-	-72	-

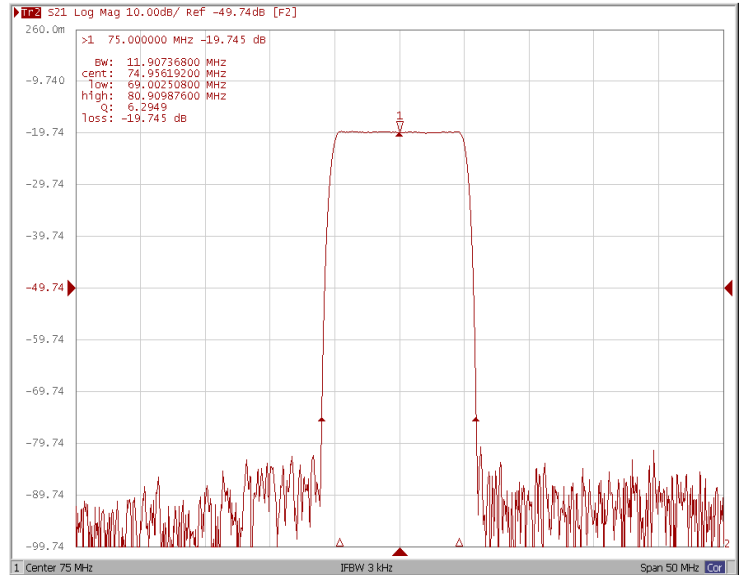


## Frequency Response

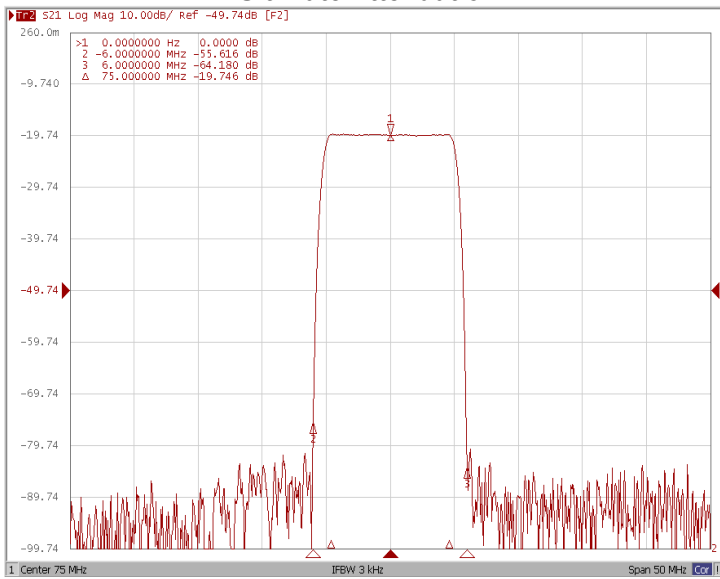
### Bandwidth at -1.0 dB



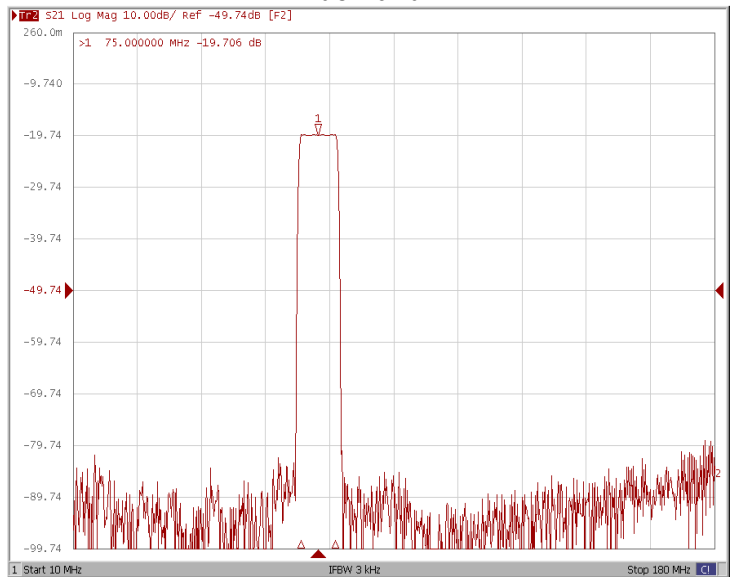
### Bandwidth at -55.0 dB



### Ultimate Attenuation

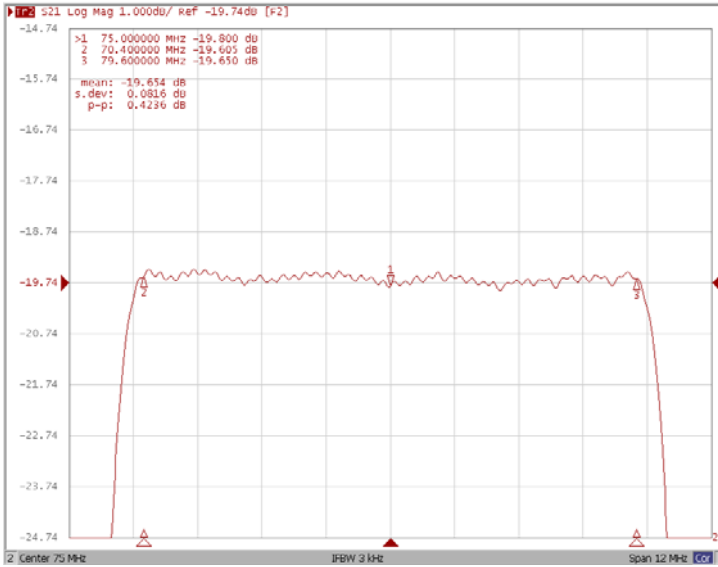


### Wide Band

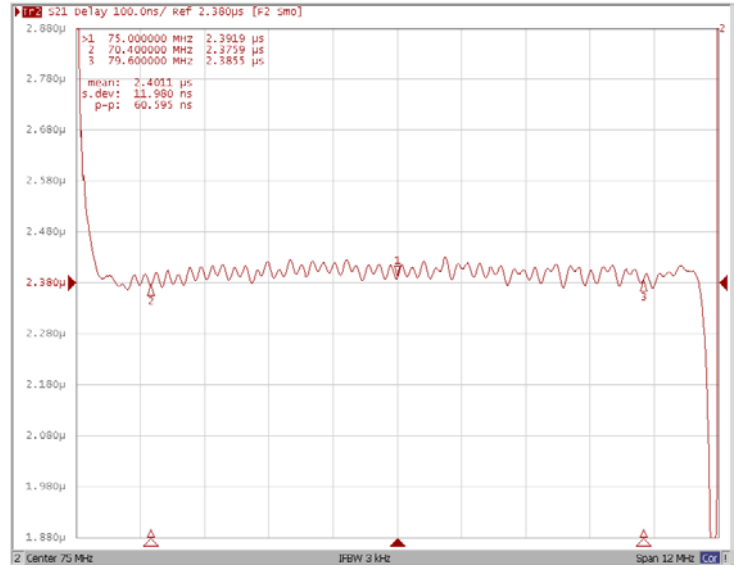




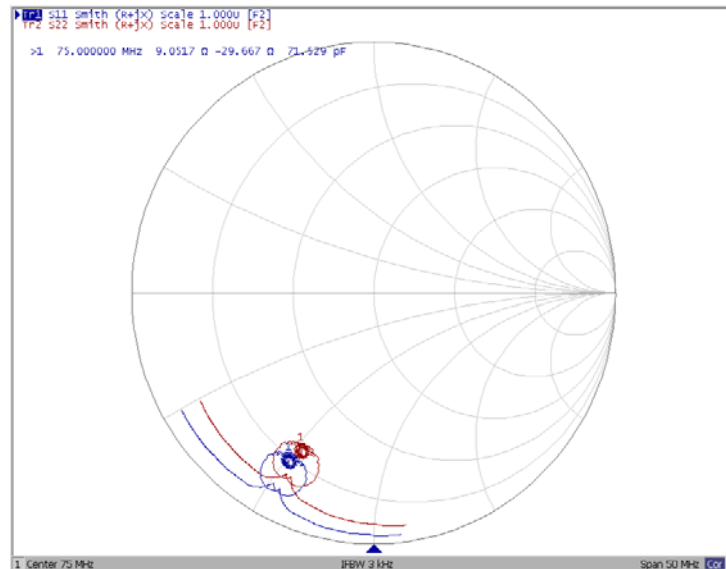
### Ripple Variation Fo±4.6MHz



### Group Delay Variation Fo±4.6MHz



### Smith Chart





## VSWR

