



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL75.0M-21C	75.0MHz IF SAW Filter 21.60 MHz Bandwidth

## Specification Contents

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

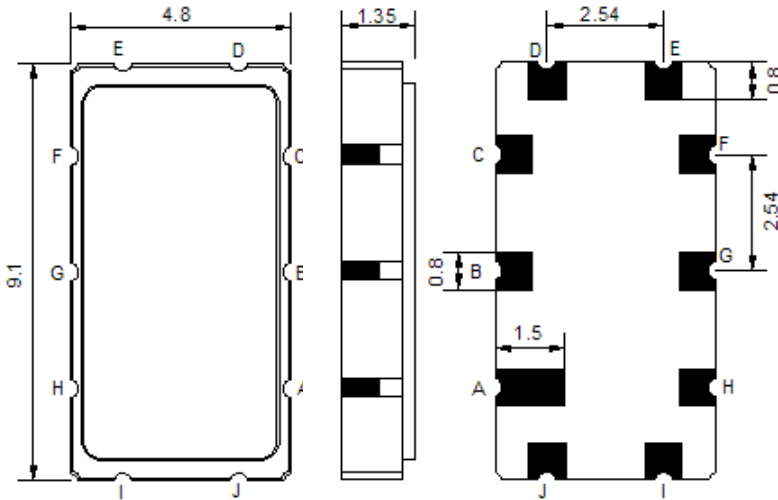
## Notes

- 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)



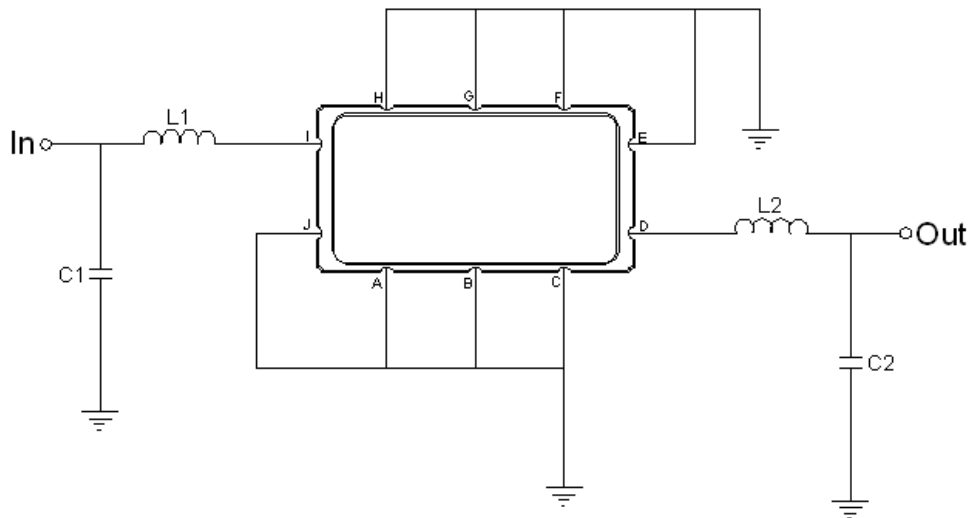


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=180 nH, C1=10 pF
Output	L2=180 nH, C2=10 pF
Source/Load Impedance	50 $\Omega$



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	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	-	75.0	-
Insertion Loss at Fo	dB	-	14.0	16.0
Amplitude Ripple Variation at Fo ± 9.75 MHz	dB <sub>p-p</sub>	-	0.3	0.8
Group Delay Variation at Fo ± 9.75 MHz	nsec	-	22	40
Absolute Delay at Fo	μsec	-	0.607	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	21.30	21.60	-
Bandwidth at -3.0 dB	MHz	-	23.00	-
Bandwidth at -20.0 dB	MHz	-	26.90	27.20
Bandwidth at -40.0 dB	MHz	-	29.35	-
Relative Attenuation				
Lower Sidelobe	dB	40	45	-
Upper Sidelobe	dB	40	45	-

## Frequency Response

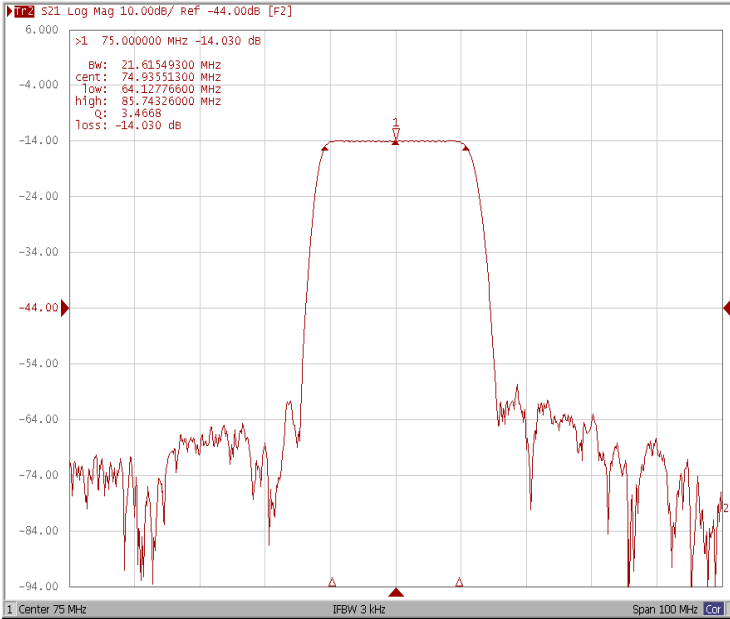


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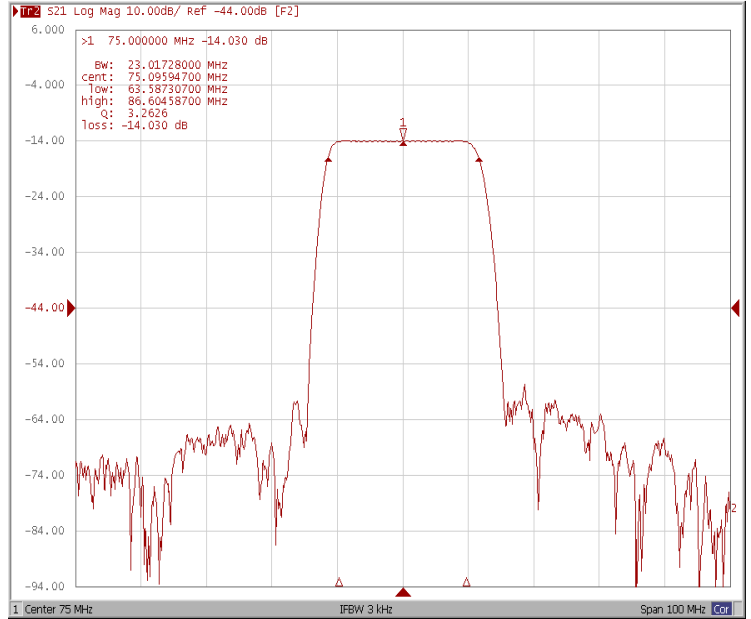
# Oscilent Part Number 809-SL75.0M-21C

## 75.0MHz IF SAW Filter 21.60 MHz Bandwidth

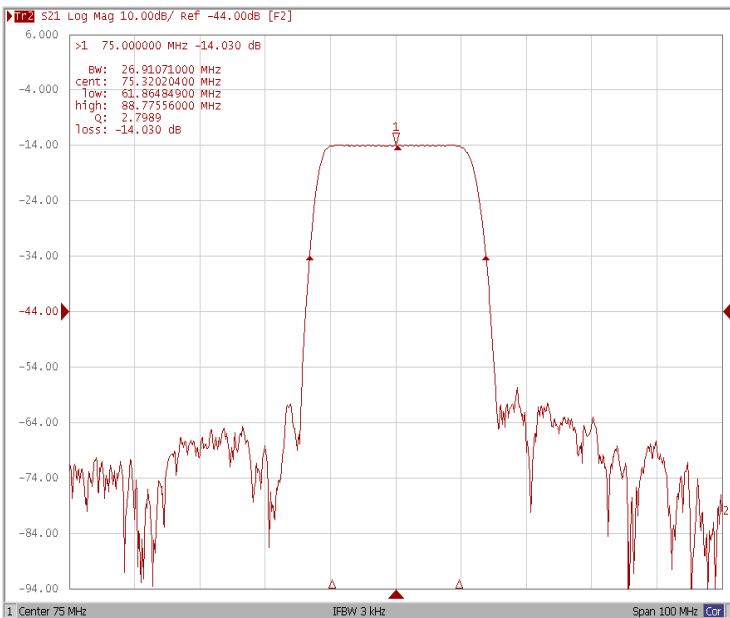
### Bandwidth at -1.0 dB



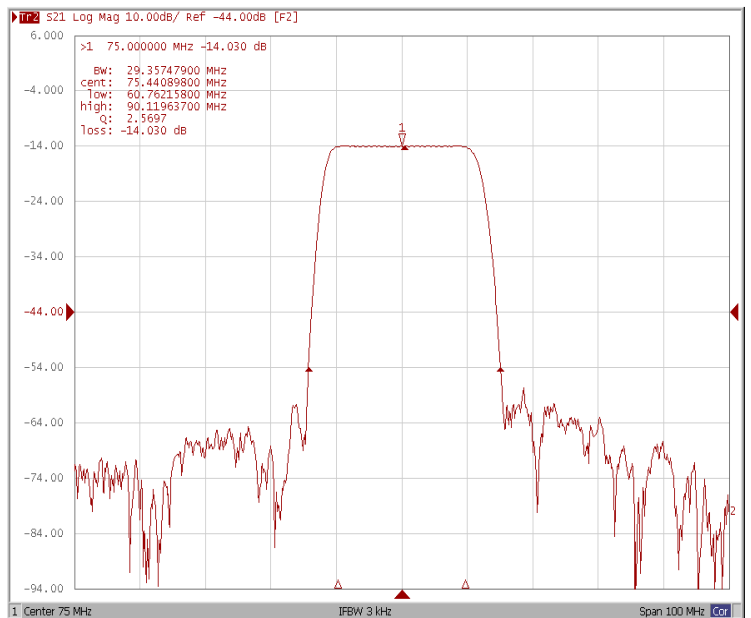
### Bandwidth at -3.0 dB



### Bandwidth at -20.0 dB

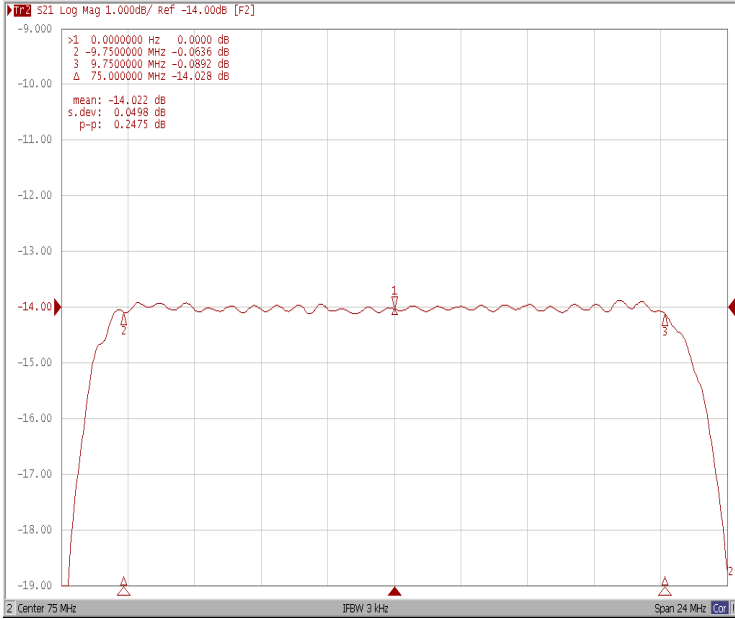


### Bandwidth at -40.0 dB

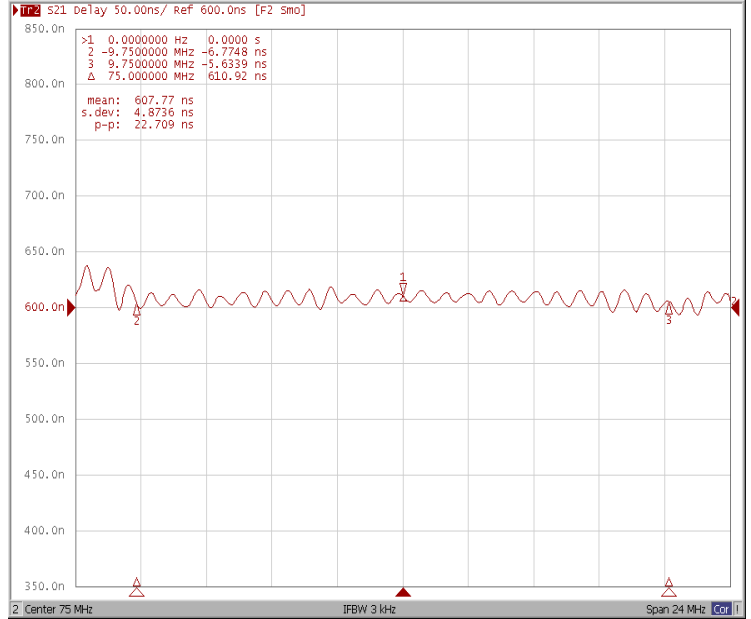




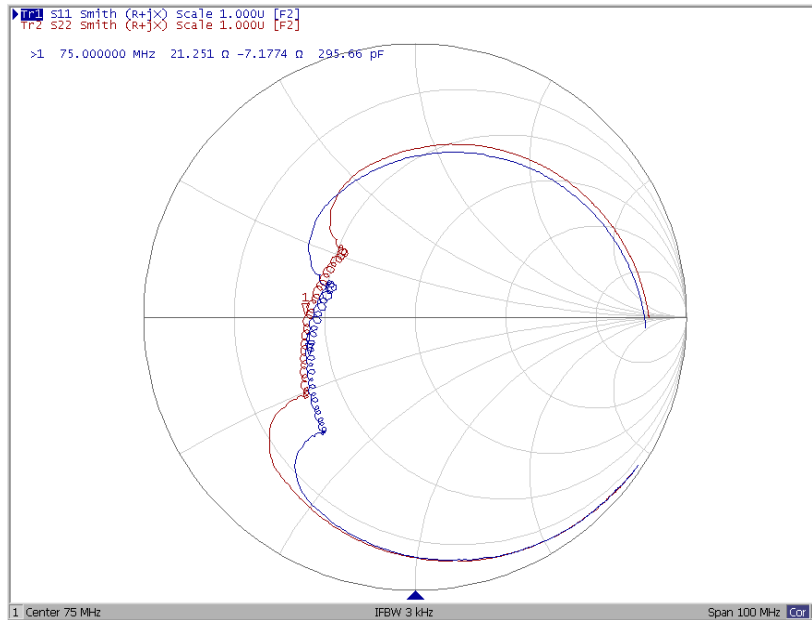
### Ripple Variation Fo±9.75MHz



### Group Delay Variation Fo±9.75MHz



### Smith Chart





### VSWR

