



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL75.0M-05C	75.0MHz IF SAW Filter 5.42MHz Bandwidth

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
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- o Frequency Response
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- o VSWR

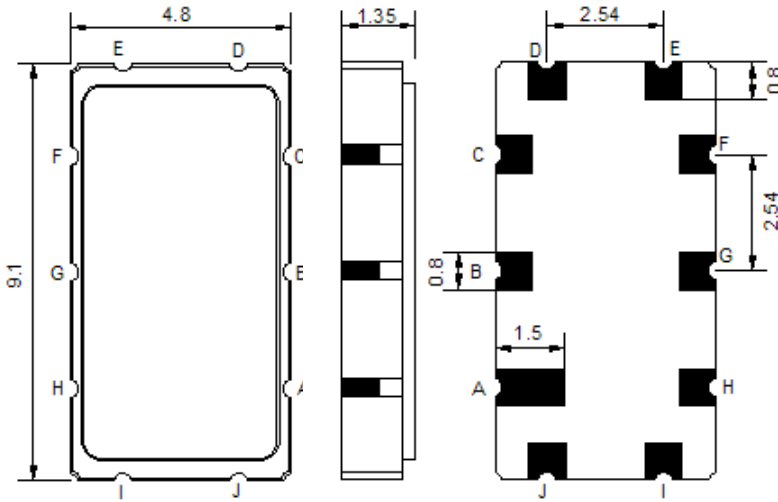
## Notes

- 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)



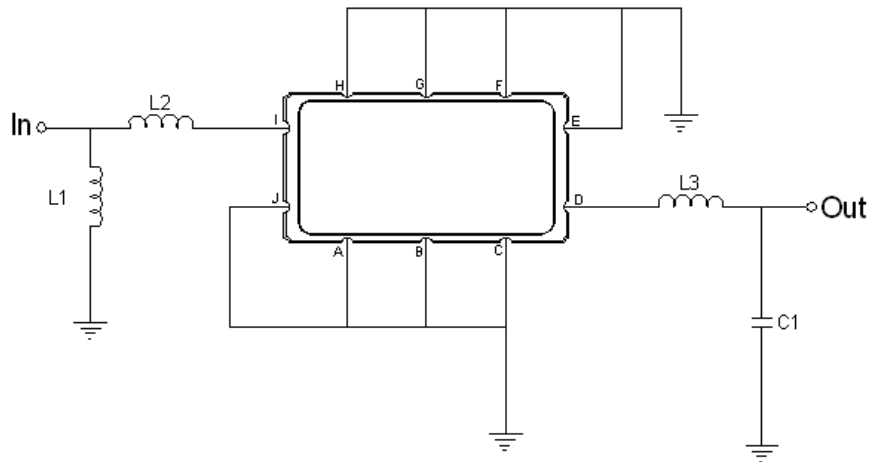


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 47 nH, L2 = 18 pF
Output	L3 = 100 nH, C1 = 110 pF
Source/Load Impedance	50 $\Omega$



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
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.

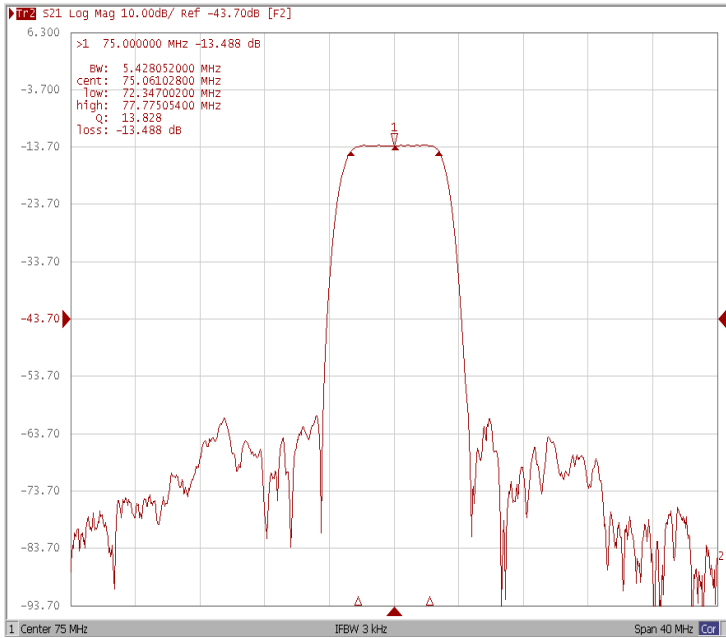
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	13.50	16.00
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple Variation (Fo+/-2.2MHz)	dB <sub>p-p</sub>	-	0.30	0.70
Group Delay Variation (Fo+/-2.2MHz)	nsec	-	35	80
Absolute Delay at Fo	µsec	-	1.07	-
Bandwidth at -1.0 dB	MHz	-	5.42	-
Bandwidth at -3.0 dB	MHz	-	6.09	-
Bandwidth at -40.0 dB	MHz	-	8.70	-
Input VSWR at Fo	dB	-	2.1	-
Output VSWR at Fo	dB	-	1.2	-
Relative Attenuation				
Lower Sidelobe	dB	40	45	
Upper Sidelobe	dB	40	45	

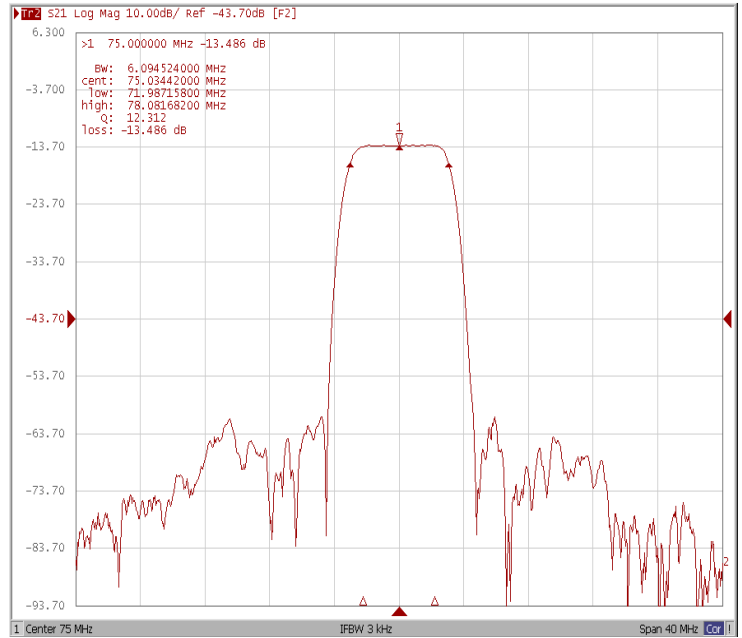


### Frequency Response

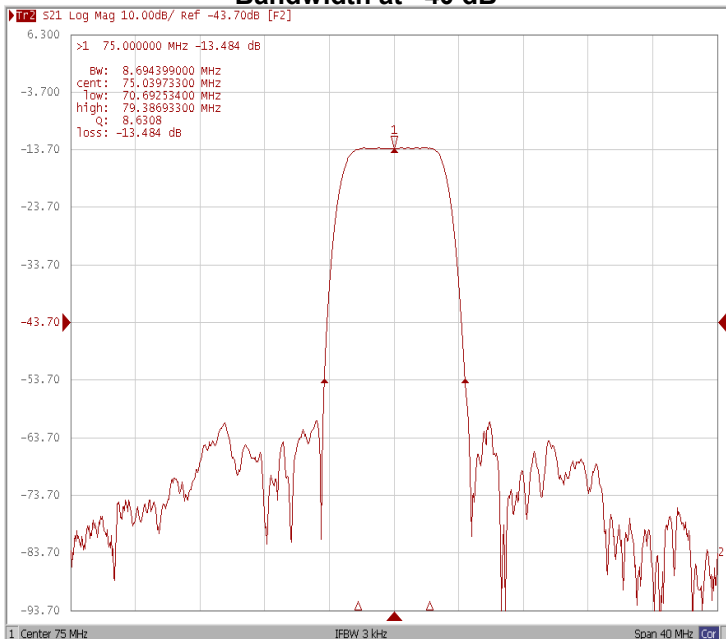
Bandwidth at -1.0 dB



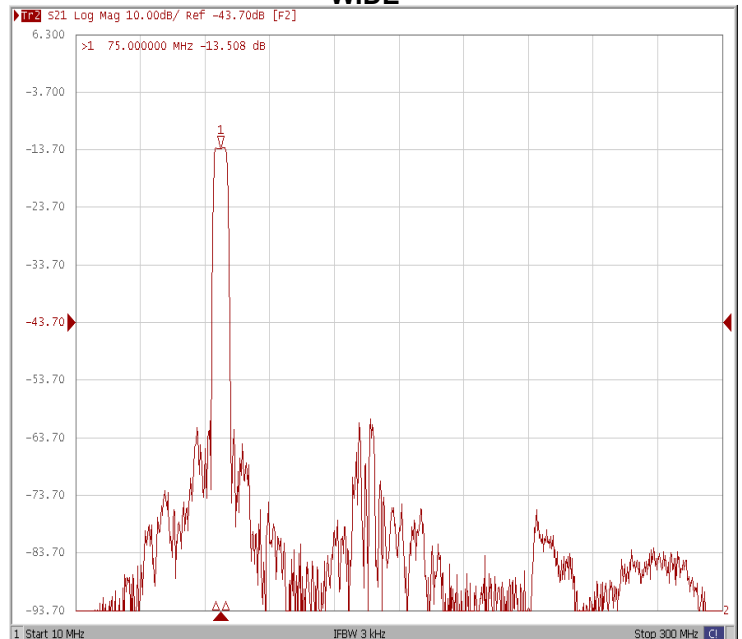
Bandwidth at -3.0 dB



Bandwidth at -40 dB

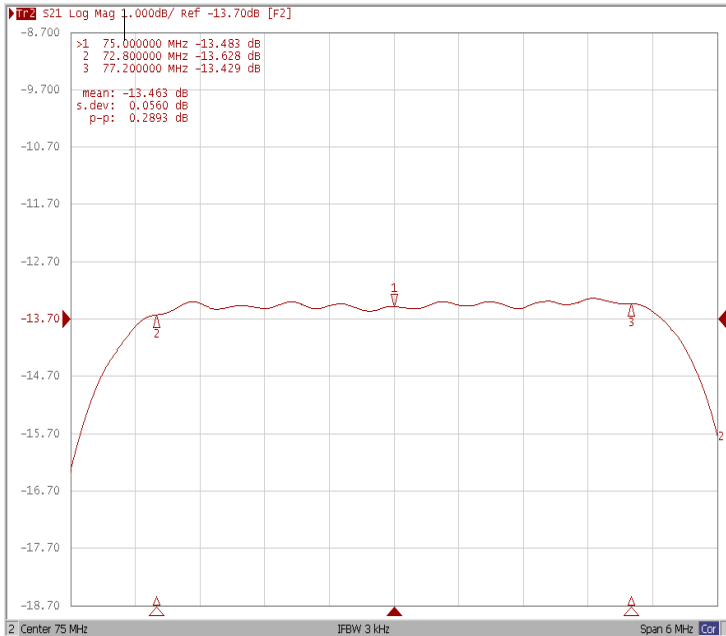


WIDE

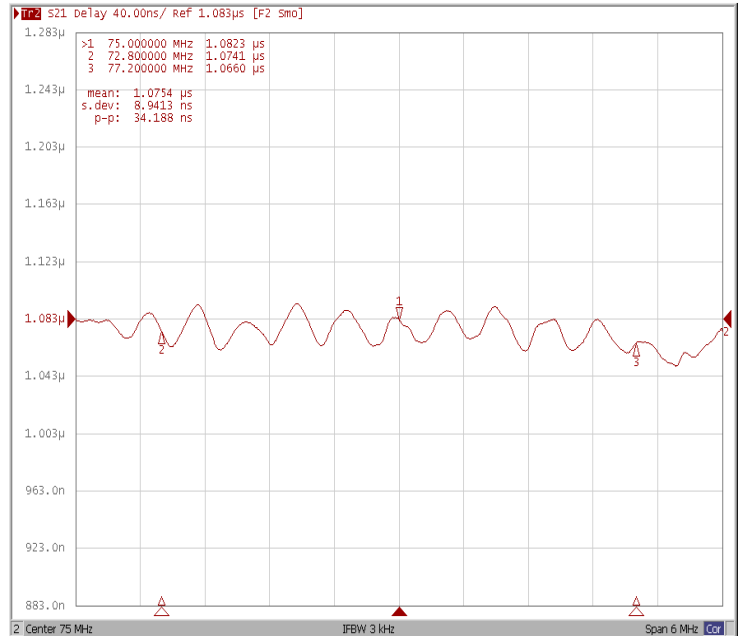




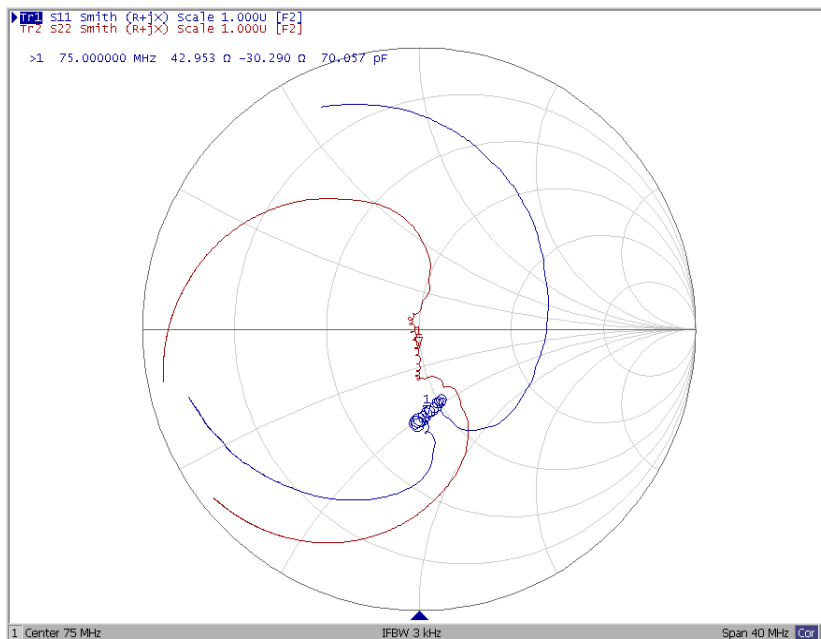
### Ripple Variation (Fo±2.2MHz)



### Group Delay Variation (Fo±2.2MHz)



### Smith Chart





### VSWR

