



Oscilent Corporation

# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL75.0M-15D	75.0 MHz IF SAW Filter 14.8 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

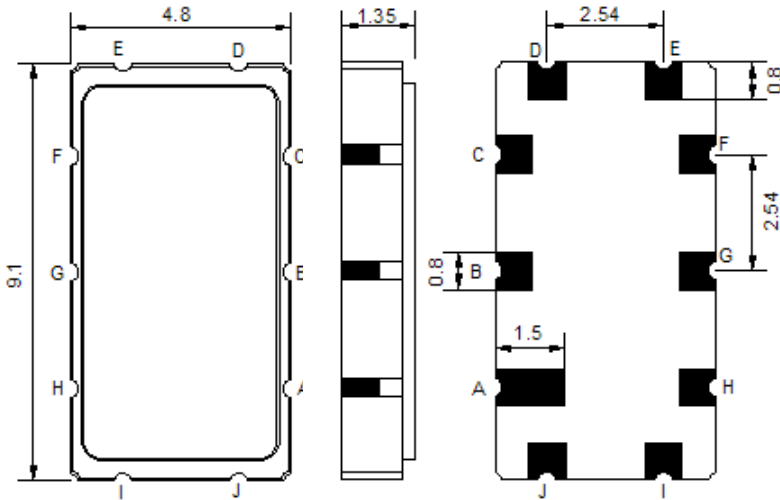
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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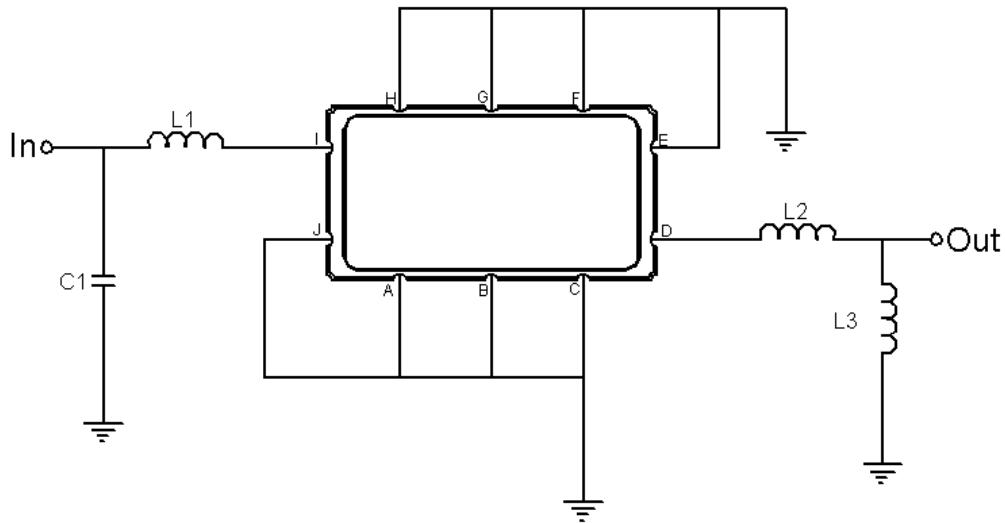


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 120 nH, C1 = 20 pF
Output	L2 = 18 nH, L3 = 100 nH
Source/Load Impedance	50 Ω



## 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	-	13.5	15.0
Group Delay Variation at Fo±6.875MHz	nsec	-	30	60
Absolute Delay Time at Fo	usec	-	0.96	-
Passband Ripple at Fo±6.875MHz	dB	-	0.46	0.8
Bandwidth at -1dB	MHz	-	14.8	-
Bandwidth at -3dB	MHz	-	15.67	-
Bandwidth at -40dB	MHz	-	19.85	20.5
Ultimate Rejection	dB	40	47	-
Temperature Coefficient	ppm/□	-	-86	-
VSWR	-	-	3	-



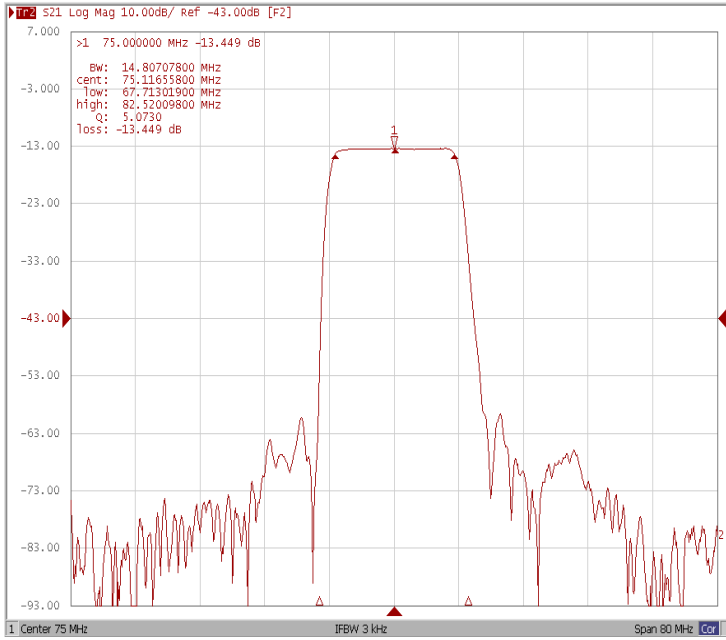
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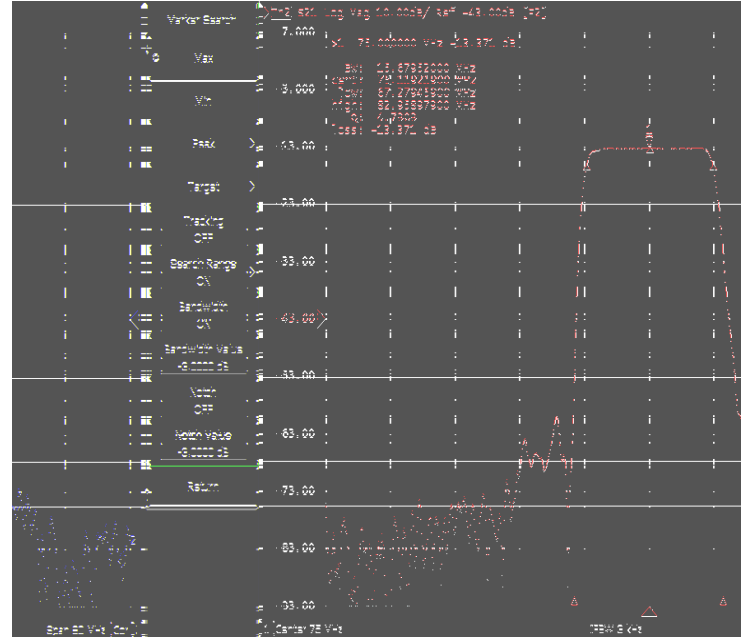
75.0 MHz IF SAW Filter 14.8 MHz Bandwidth

## Frequency Response

### Bandwidth at -1.0 dB



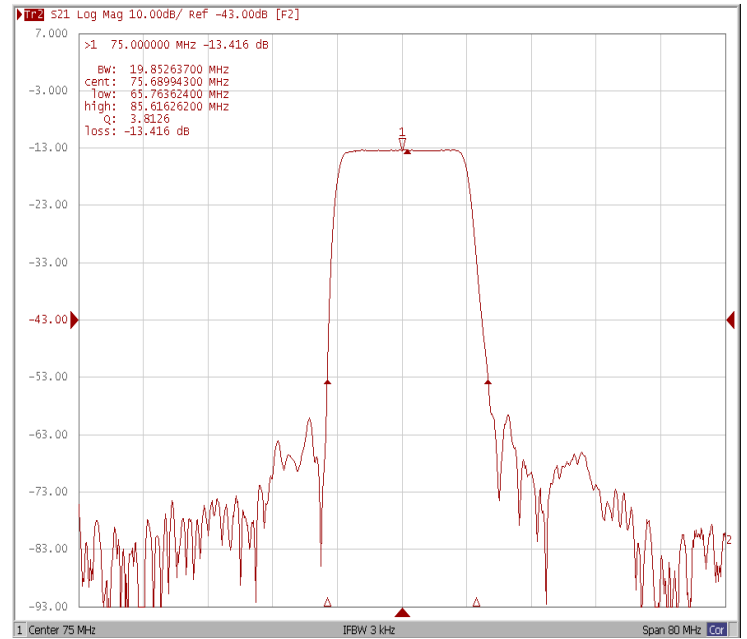
### Bandwidth at -3.0 dB



### Bandwidth at -30.0 dB

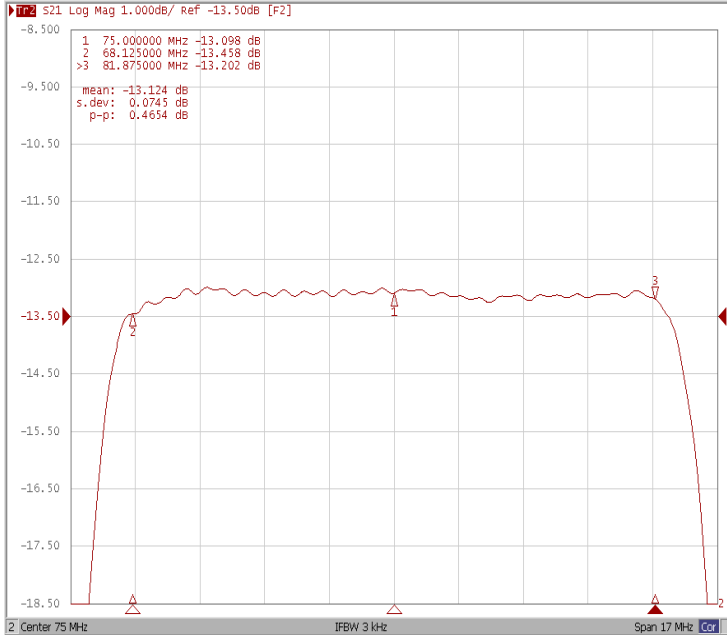


### Bandwidth at -40.0 dB

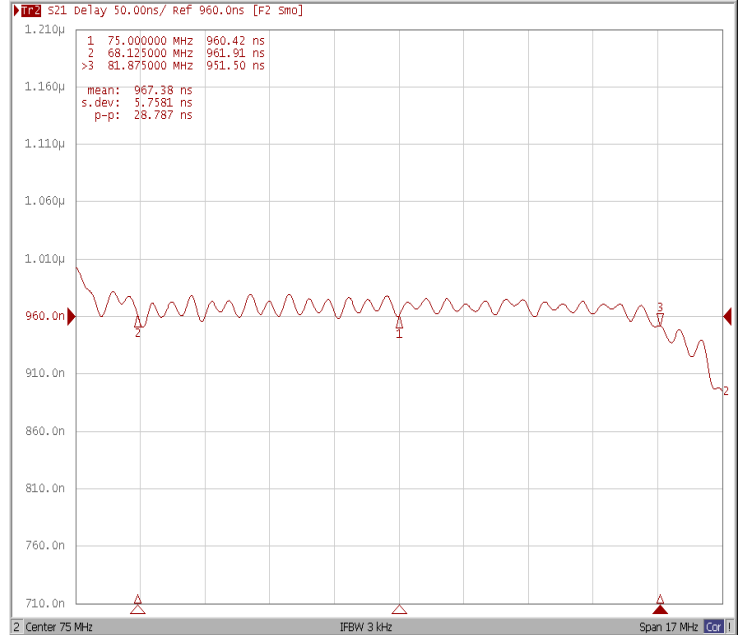




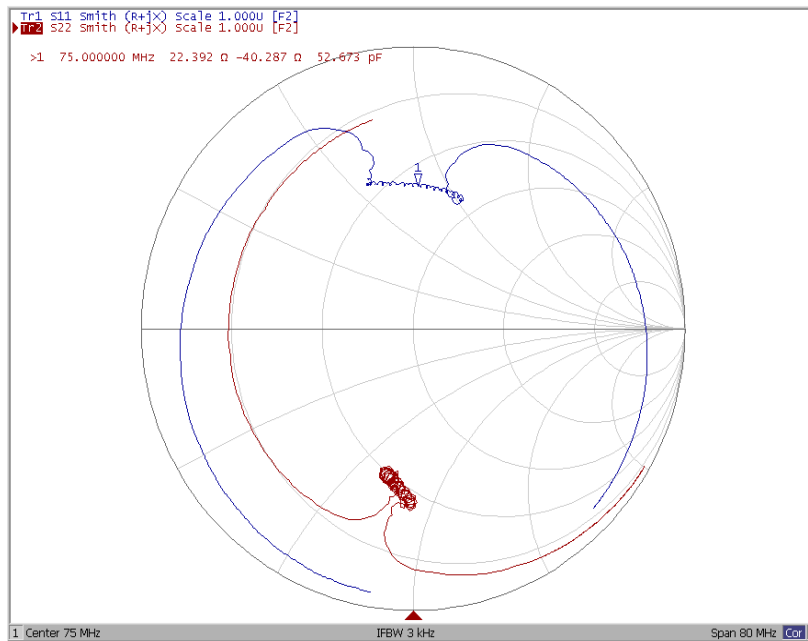
**Ripple Variation Fo±6.875MHz**



**Group Delay Variation Fo±6.875MHz**



**Smith Chart**





### VSWR

