PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL75.0M-07A	75.0MHz IF SAW Filter 7.67MHz Bandwidth

Specification Contents

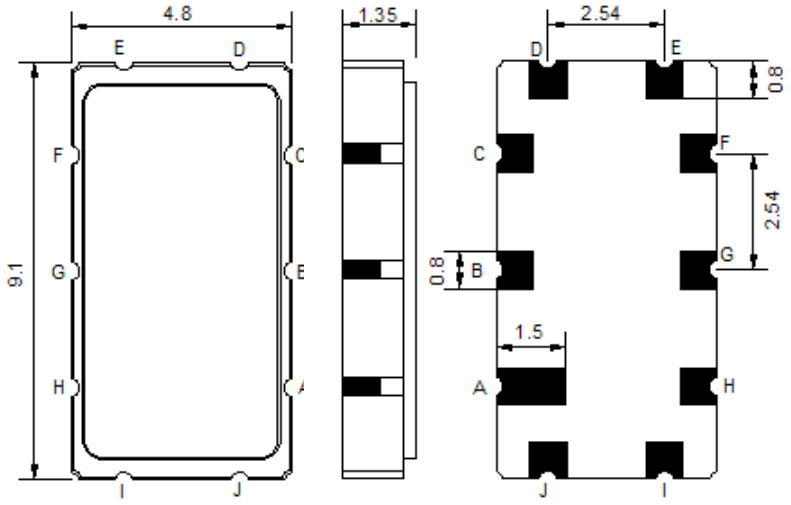
- Mechanical Dimensions
- Test Circuit
- Maximum Ratings
- Electrical Specification
- Frequency Response
- Smith Chart
- VSWR

Notes

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

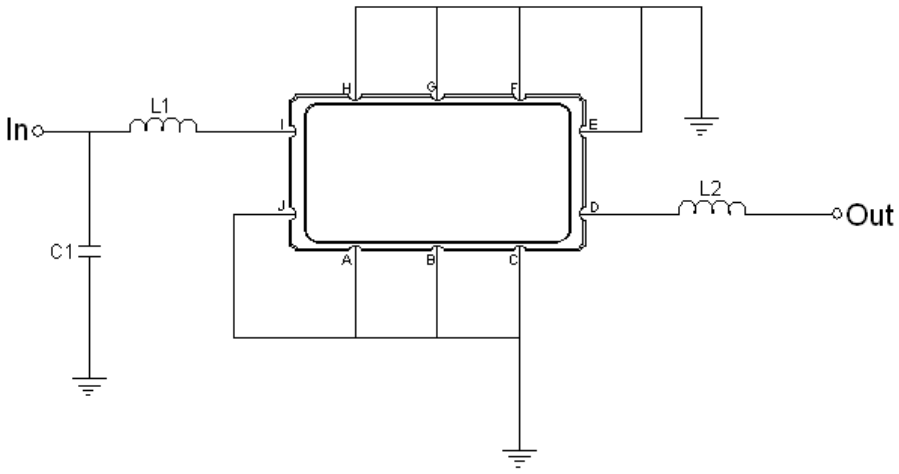
Oscilent Corporation
Telephone: 1.949.252.0522
Fax: 1.949.252.0522
Email: sales@oscilent.com

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 = 68 nH, C1 = 27 pF
Output	L2 = 68 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)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-

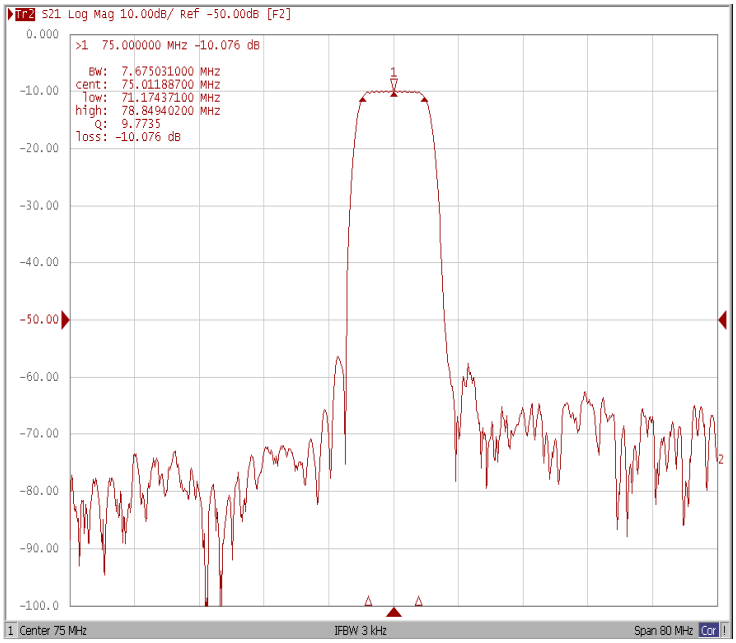
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

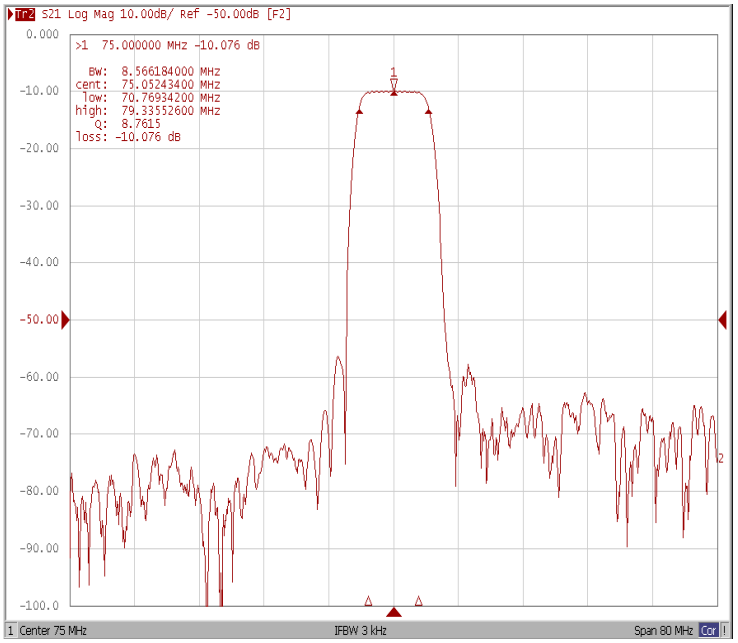
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	10.00	13.00
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple Variation (Fo+/-3.15MHz)	dB_{p-p}	-	0.4	0.9
Group Delay Variation (Fo+/-3.15MHz)	nsec	-	55	100
Absolute Delay at Fo	μsec	-	0.85	-
Bandwidth at –1.0 dB	MHz	-	7.67	-
Bandwidth at –3.0 dB	MHz	-	8.56	-
Bandwidth at –30.0 dB	MHz	-	11.60	-
VSWR	-	-	4.0	-

Frequency Response

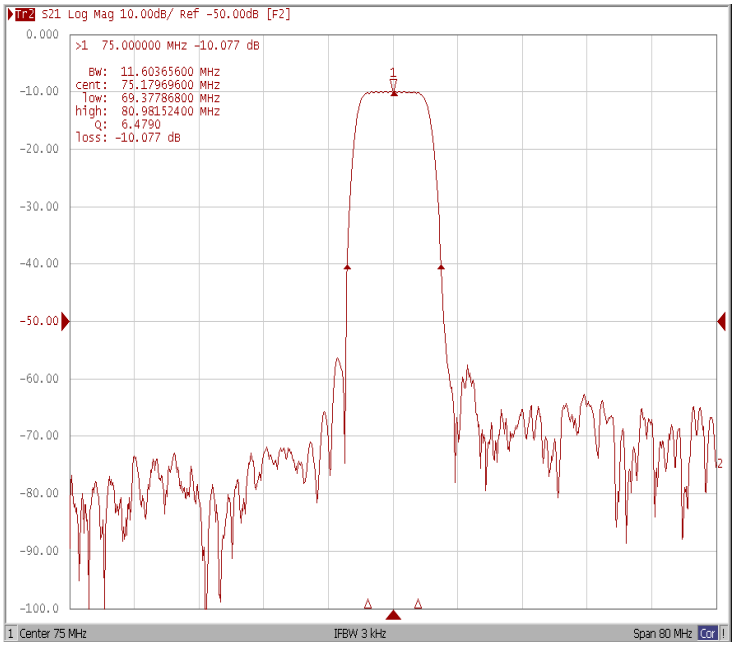
Bandwidth at –1.0 dB



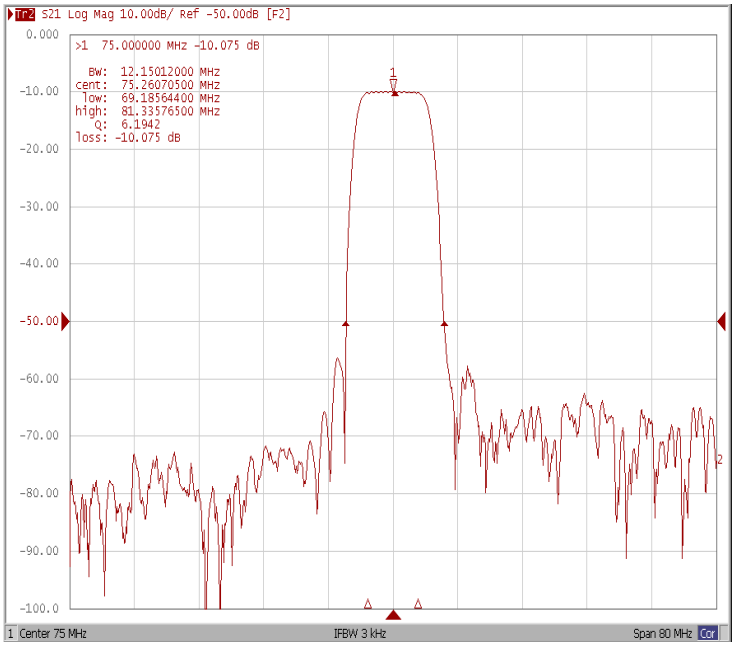
Bandwidth at –3.0 dB



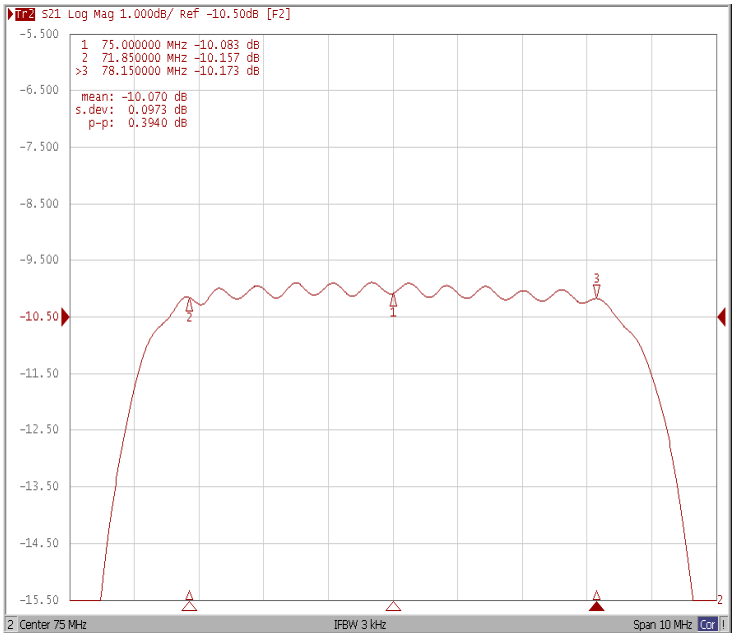
Bandwidth at –30 dB



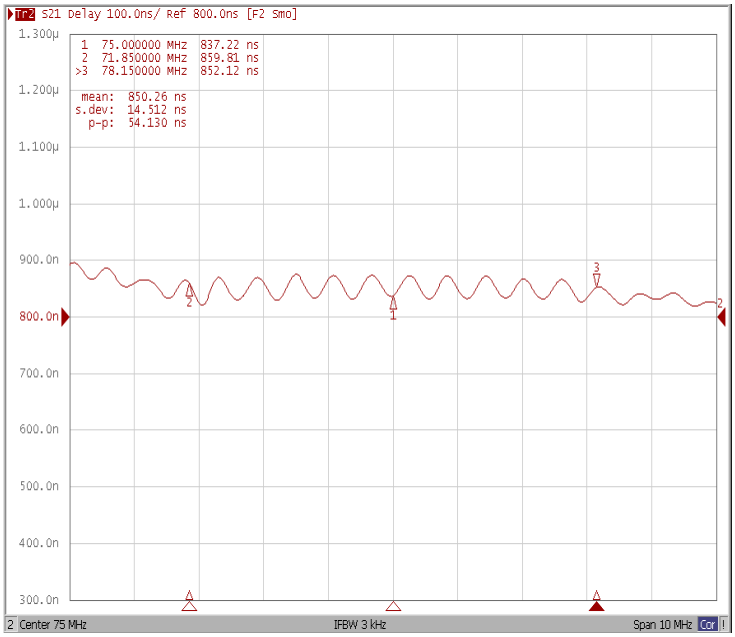
Bandwidth at –40 dB



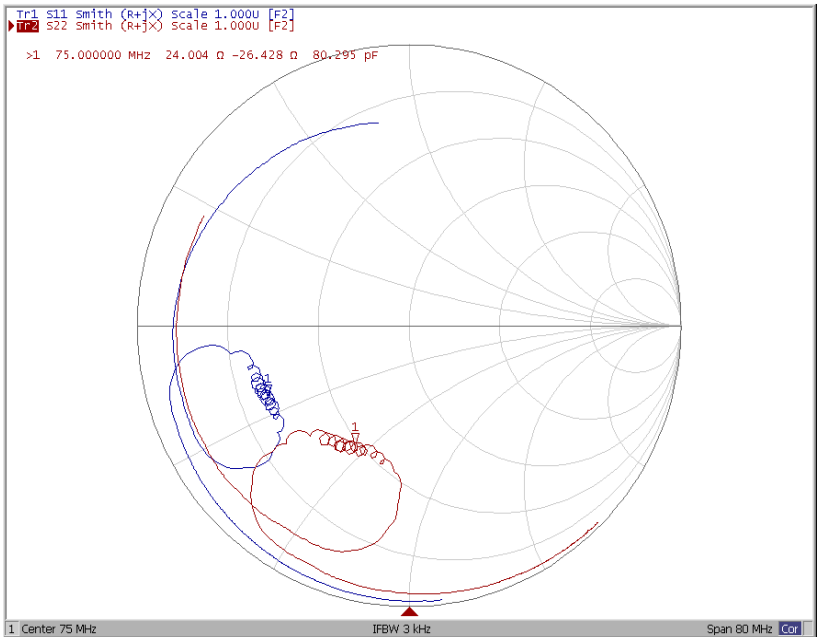
Ripple Variation (Fo±3.15MHz)



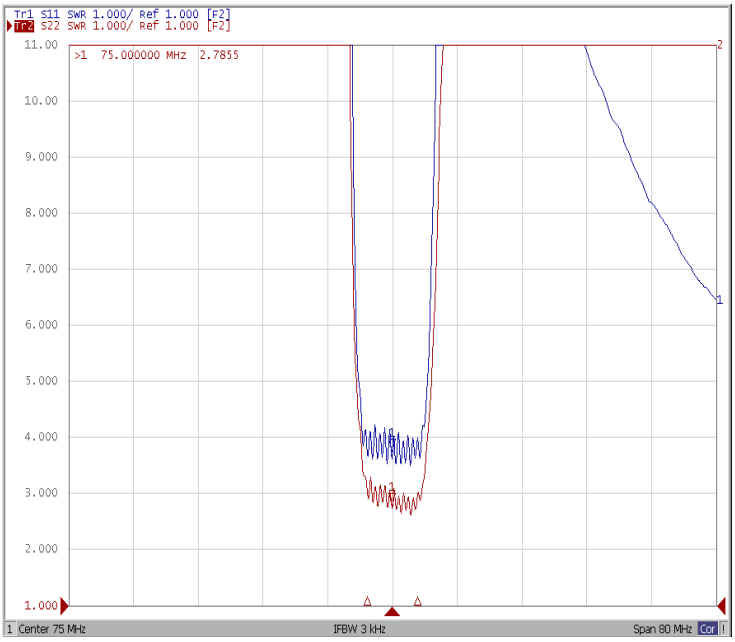
Group Delay Variation(Fo±3.15MHz)



Smith Chart



VSWR


Tr1 S11 SWR 1.000/ Ref 1.000 [F2]
Tr2 S22 SWR 1.000/ Ref 1.000 [F2]
>1 75.000000 MHz 2.7855
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Center 75 MHz
IFBW 3 kHz
Span 80 MHz