



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL75.1M-27C	75.1MHz IF SAW Filter 27.5 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

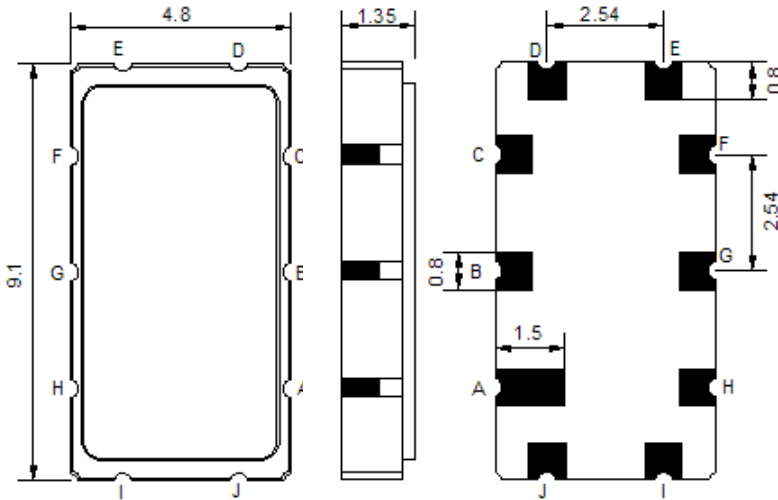
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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

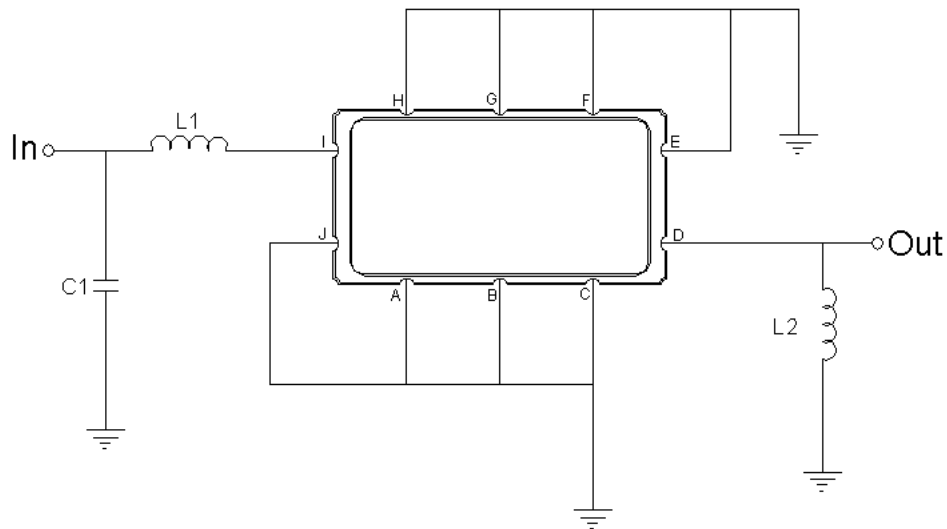


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=100 nH, C1=12 pF
Output	L2=120 nH
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) ⁽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.

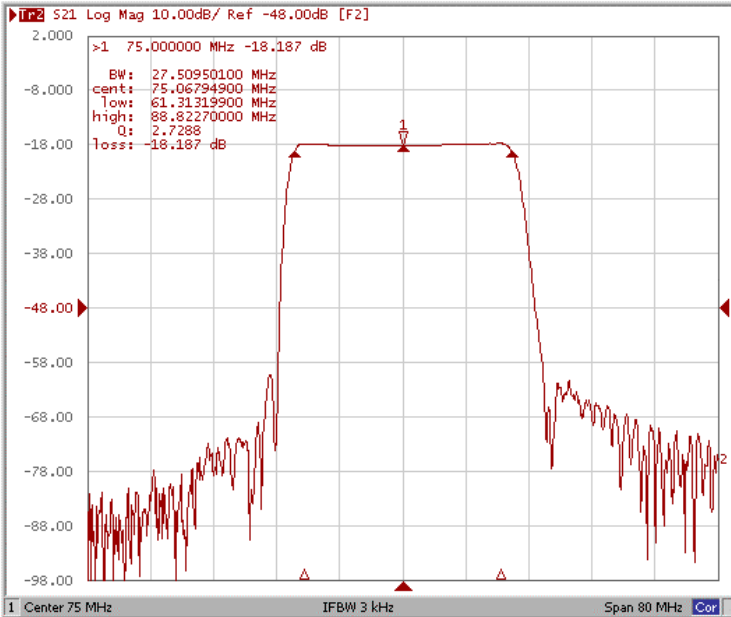
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.1	-
Insertion Loss at Fo	dB	-	18.2	19.0
Amplitude Ripple Variation at Fo ± 12.5 MHz	dB _{p-p}	-	0.3	0.6
Group Delay Variation at Fo ± 12.5 MHz	nsec	-	15	35
Absolute Delay at Fo	μsec	-	0.83	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	-	27.50	-
Bandwidth at -3.0 dB	MHz	-	28.40	-
Bandwidth at -30.0 dB	MHz	-	32.40	32.80
Relative Attenuation				
Lower Sidelobe	dB	30	40	-
Upper Sidelobe	dB	30	40	-

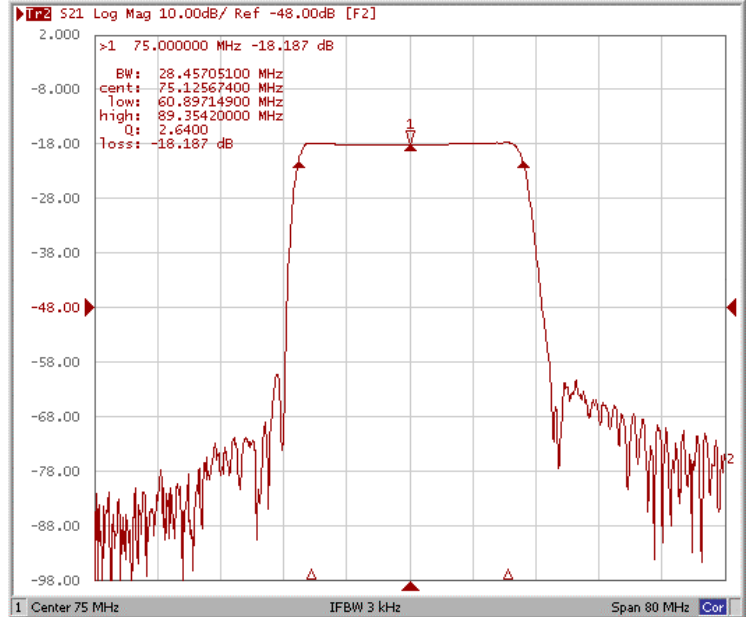


Frequency Response

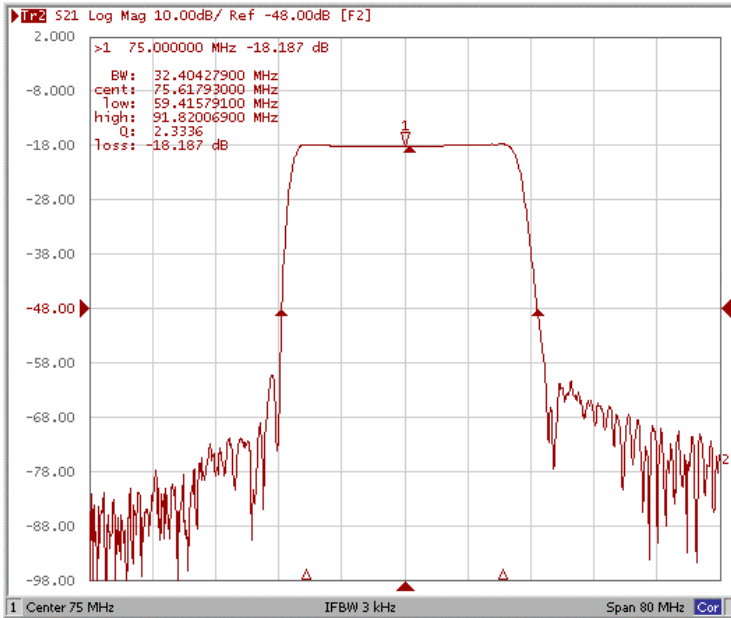
Bandwidth at -1.0 dB



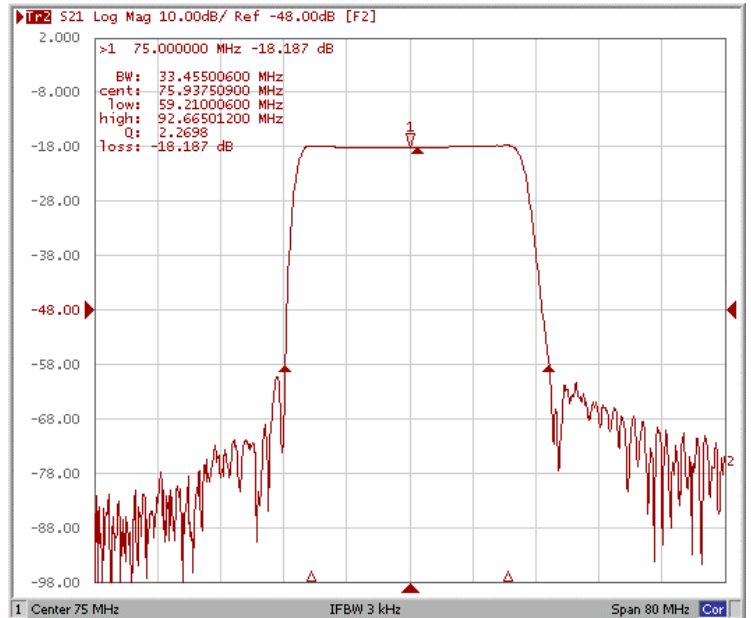
Bandwidth at -3.0 dB



Bandwidth at -30.0 dB

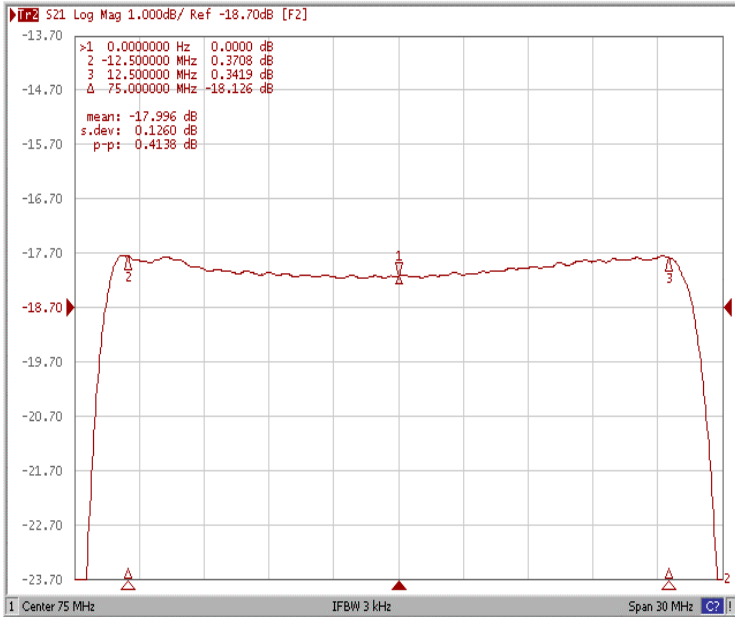


Bandwidth at -40.0 dB

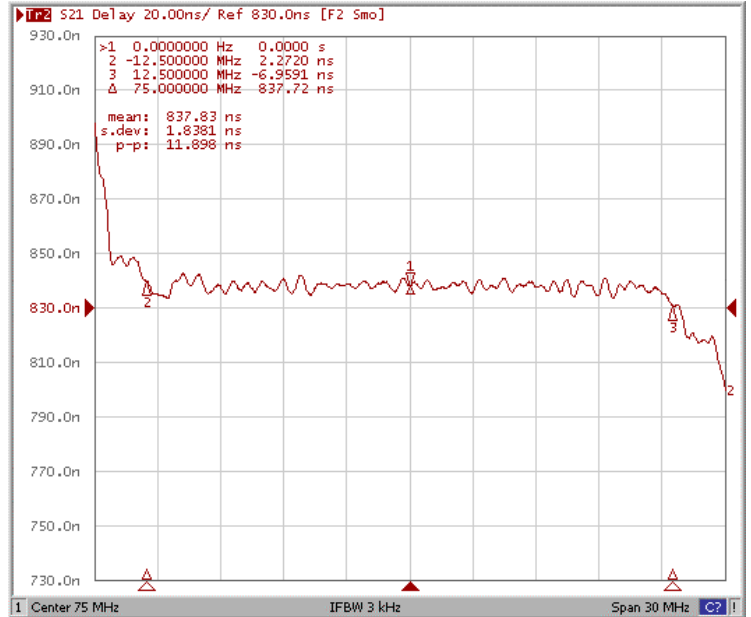




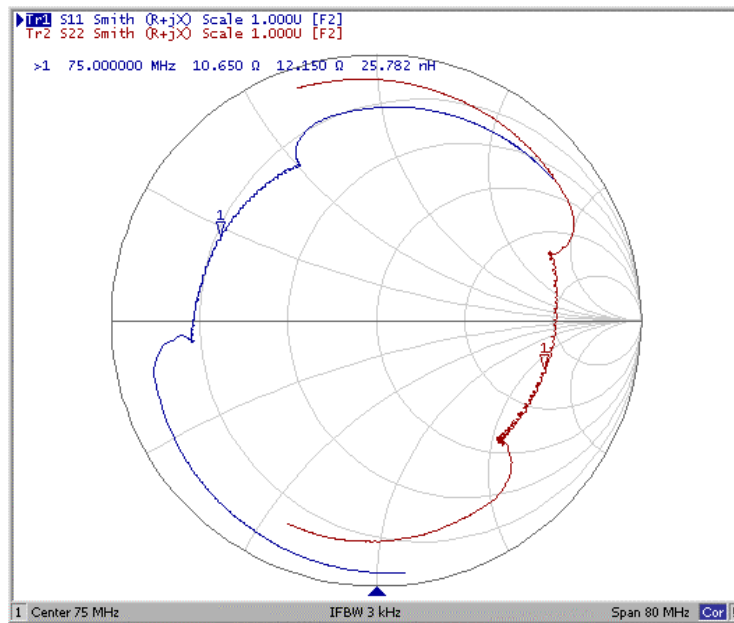
Ripple Variation Fo±12.5MHz



Group Delay Variation Fo±12.5MHz



Smith Chart





VSWR

