



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF75.0M-27A	75.0MHz IF SAW Filter 27.12MHz Bandwidth

Specification Contents

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

Notes

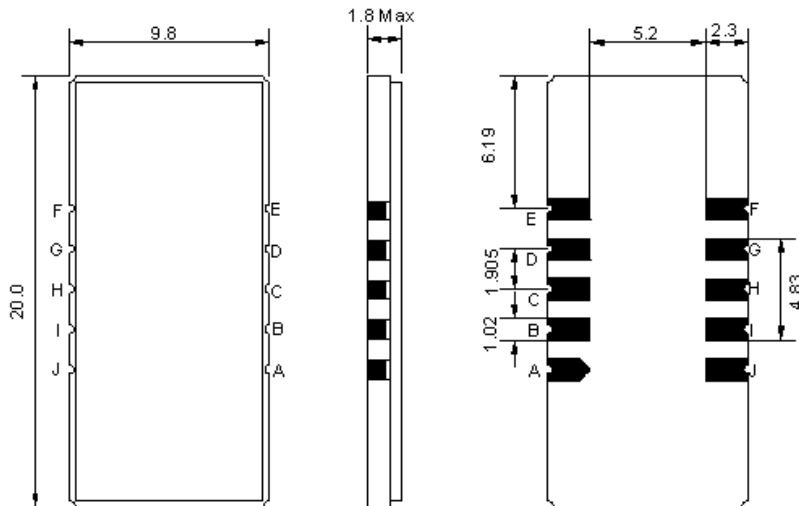
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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

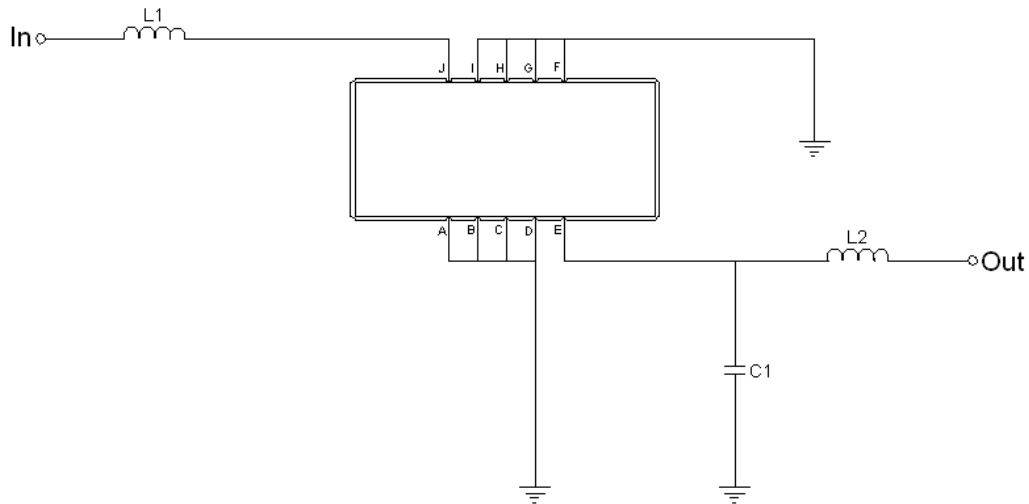


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=150 nH
Output	C1=12 pF, L2=150 nH
Source/Load Impedance	50 Ω



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) ⁽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.

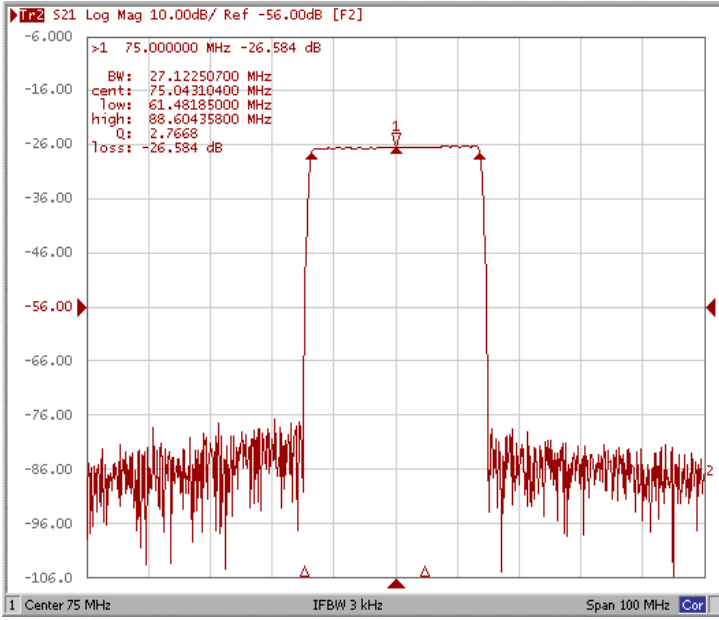
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	26.50	28.00
Group Delay Variation (Fo±12.48MHz)	ns	-	21	-
Absolute Delay	us	-	1.65	-
Temperature Coefficient	ppm/°C	-	-72	-
Passband Ripple (Fo±12.48MHz)	dB	-	0.40	0.95
Bandwidth at -1dB	MHz	-	27.12	-
Bandwidth at -3dB	MHz	27.50	27.64	-
Bandwidth at -30dB	MHz	-	29.42	29.52
Bandwidth at -50dB	MHz	-	29.85	-
Ultimate Rejection	dB	-	52	-

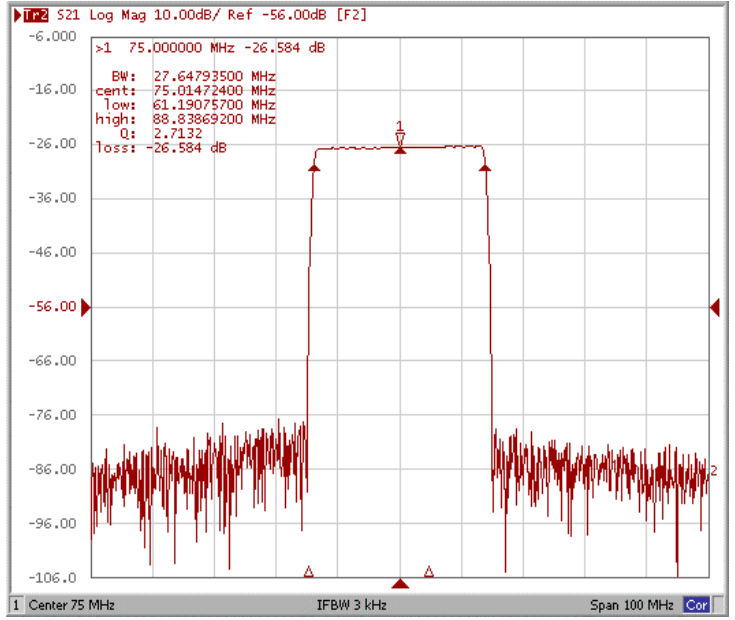


Frequency Response

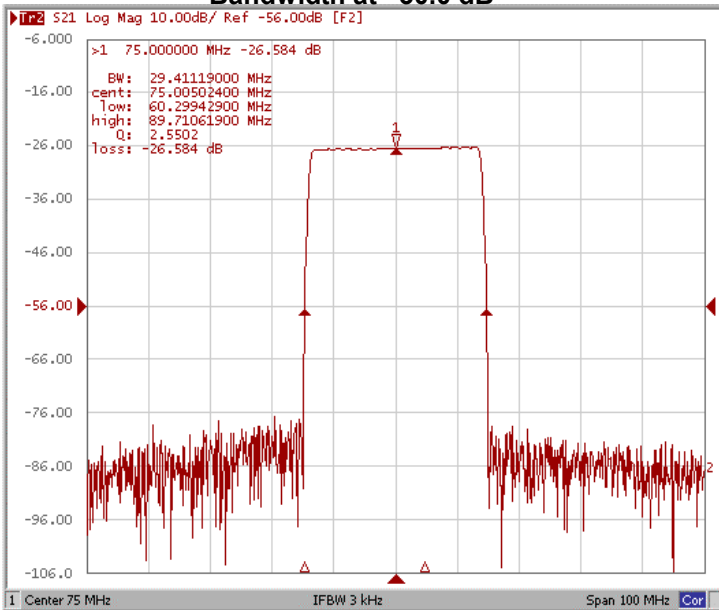
Bandwidth at -1.0 dB



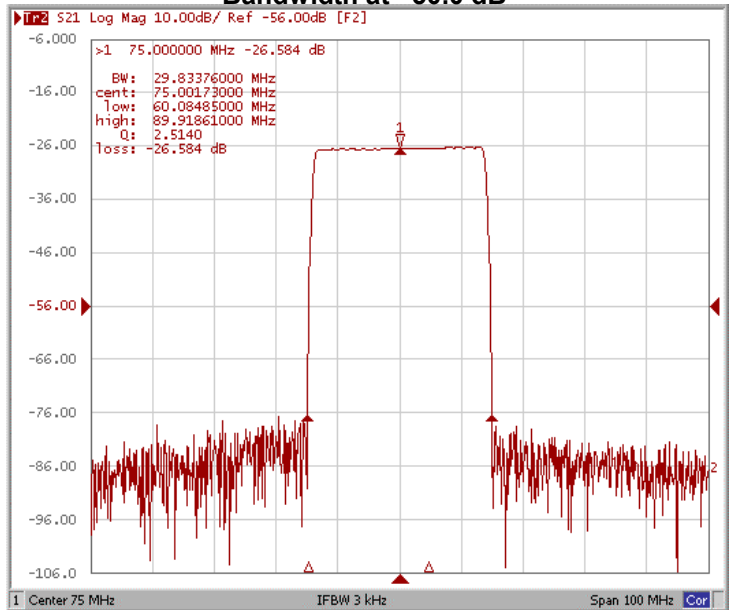
Bandwidth at -3.0 dB



Bandwidth at -30.0 dB

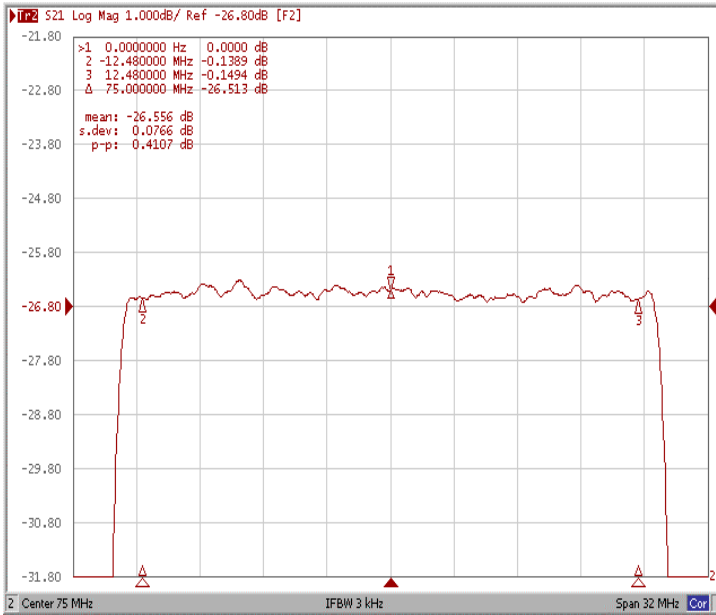


Bandwidth at -50.0 dB

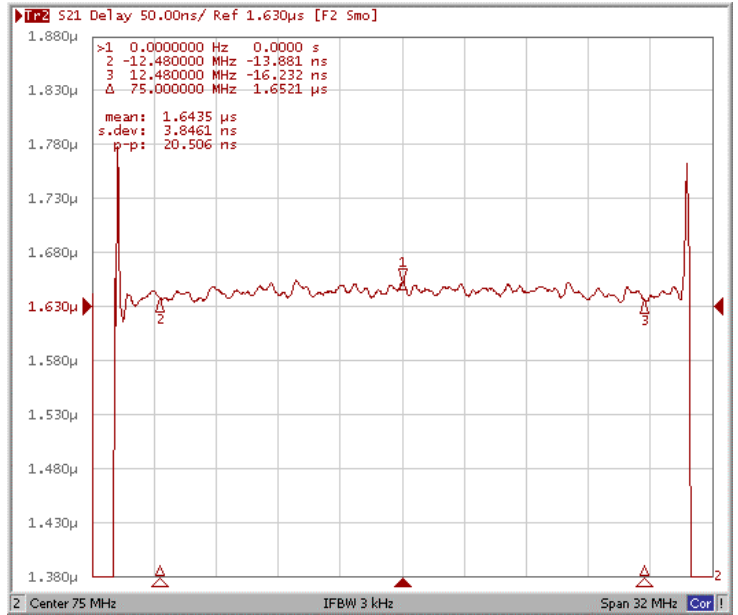




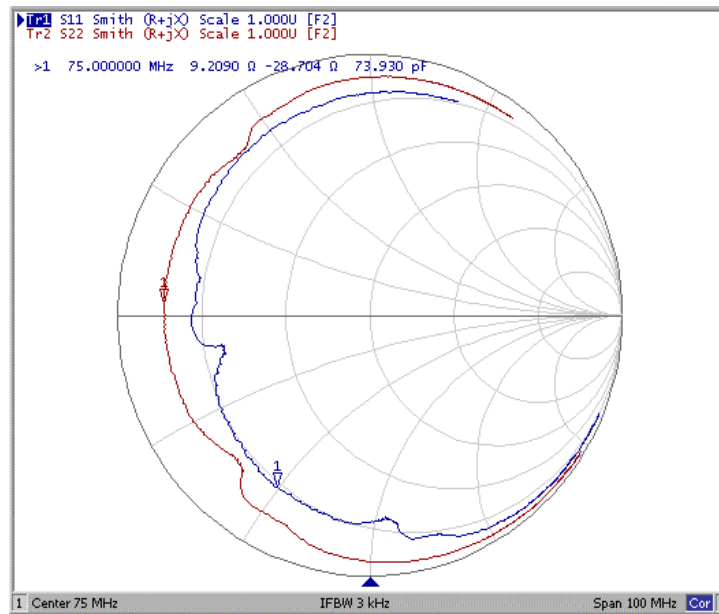
Ripple Variation Fo±12.48MHz



Group Delay Variation Fo±12.48MHz



Smith Chart





VSWR

