



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF75.0M-40F	75.0 MHz IF SAW Filter 40.12 MHz Bandwidth

Specification Contents

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- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
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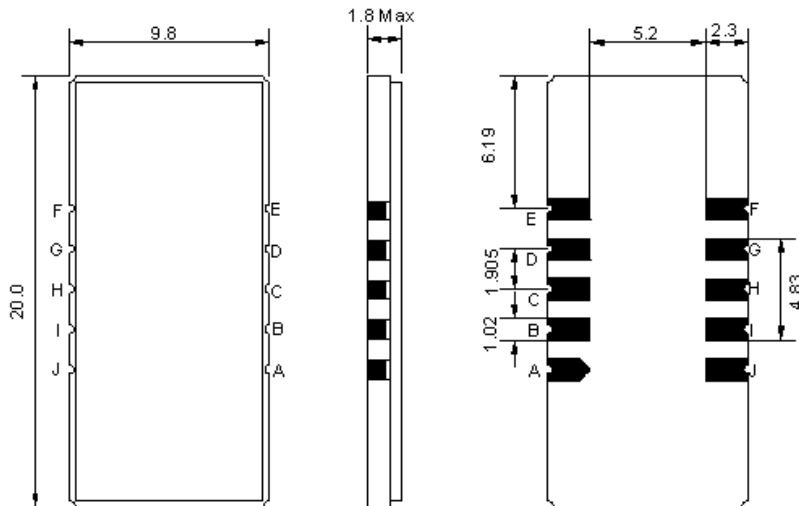
Notes

- 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)



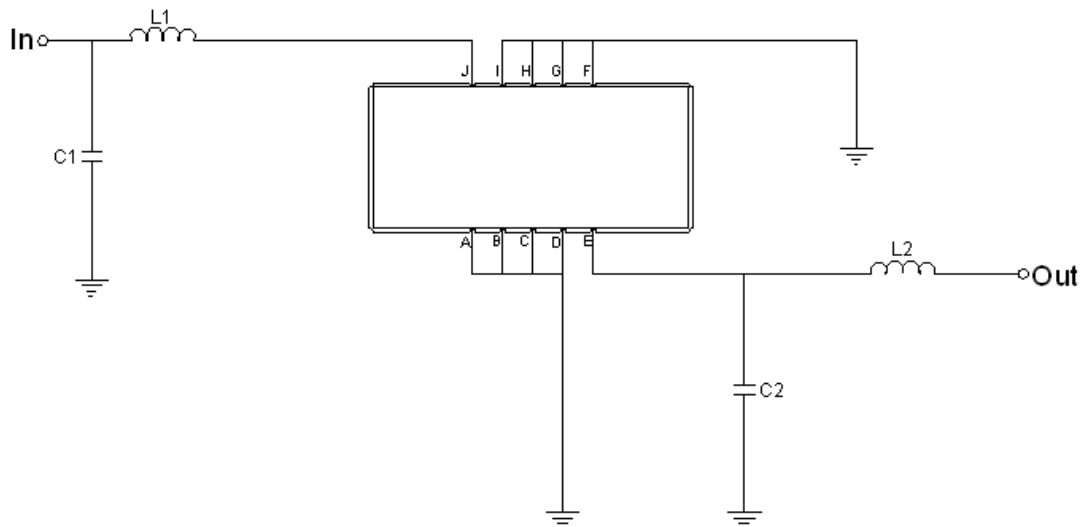


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=150 nH, C1=11 pF
Output	L2=180 nH, C2=5 pF
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	-	75.0	-
Insertion Loss at Fo	dB	-	31.7	34.0
Group Delay Variation (Fo±19.22MHz)	ns	-	33	50
Absolute Delay	us	-	1.7	-
Passband Ripple (Fo±19.22MHz)	dB	-	0.66	1.00
Bandwidth at -1dB	MHz	-	40.12	-
Bandwidth at -3dB	MHz	40.35	40.58	-
Bandwidth at -25dB	MHz	-	42.08	-
Bandwidth at -40dB	MHz	-	42.52	-
Ultimate Rejection	dB	45	47	-
Temperature Coefficient of Frequency	ppm/°C	-	-72	-

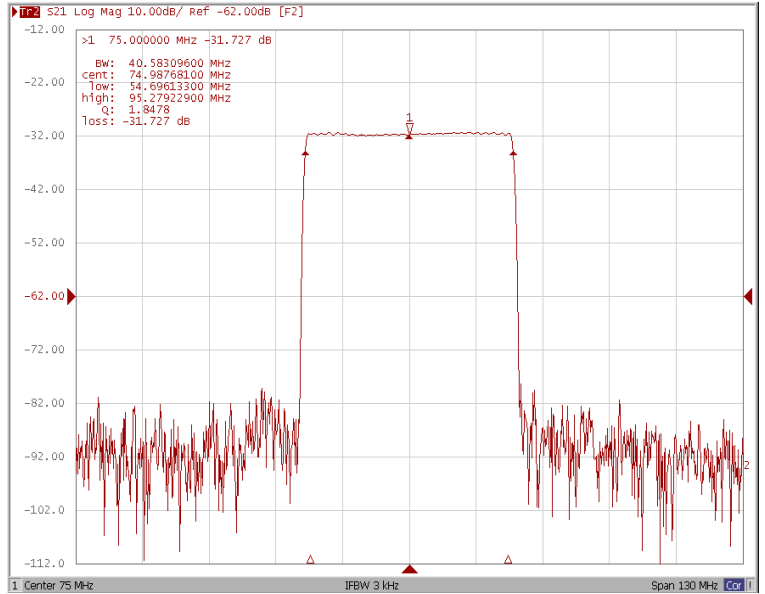


Frequency Response

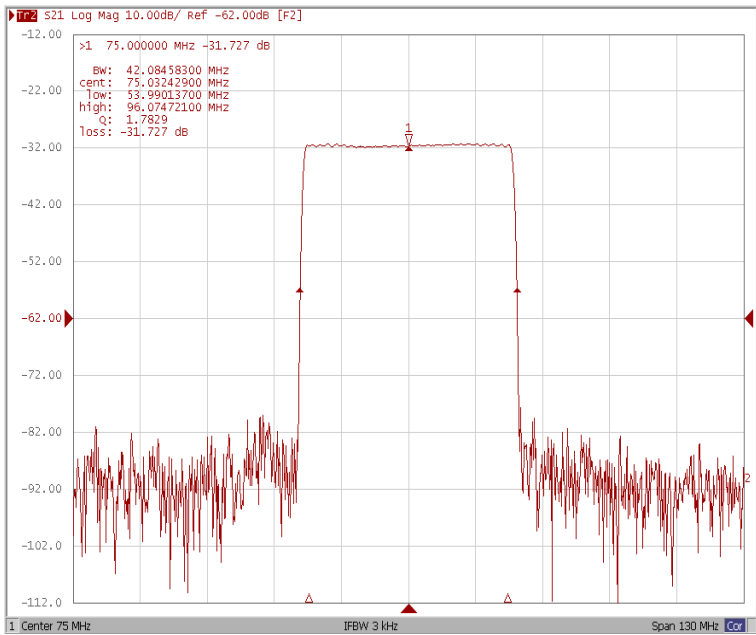
Bandwidth at -1.0 dB



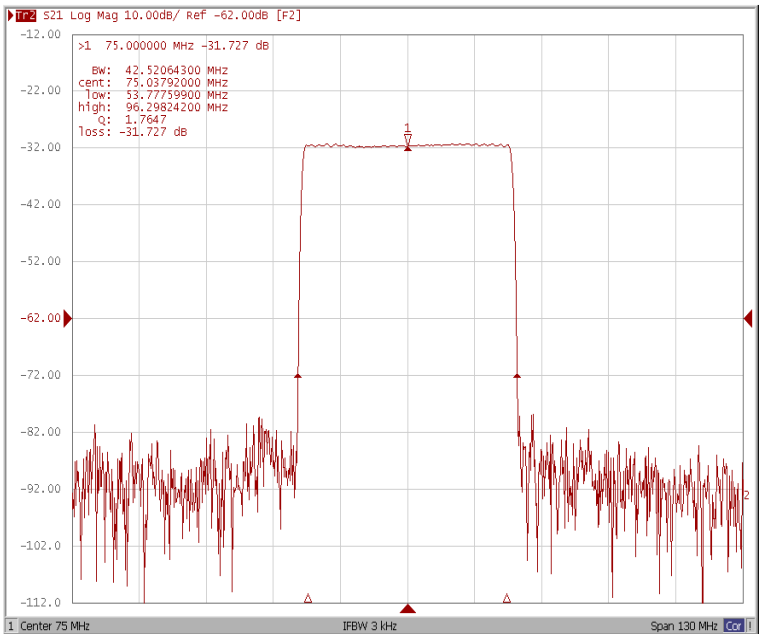
Bandwidth at -3.0 dB



Bandwidth at -25.0 dB

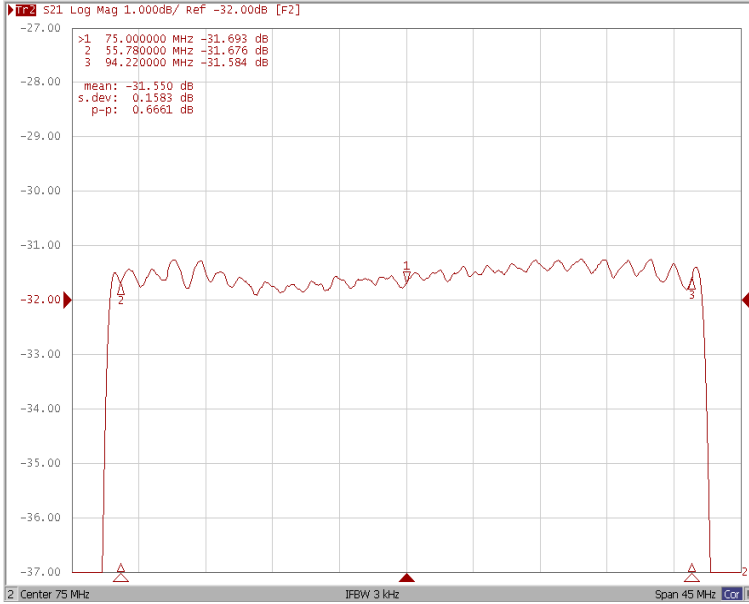


Bandwidth at -40.0 dB

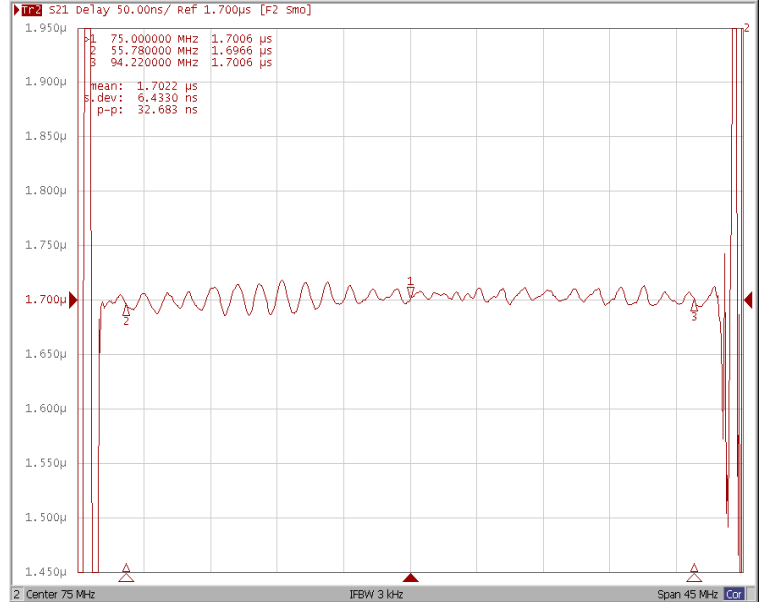




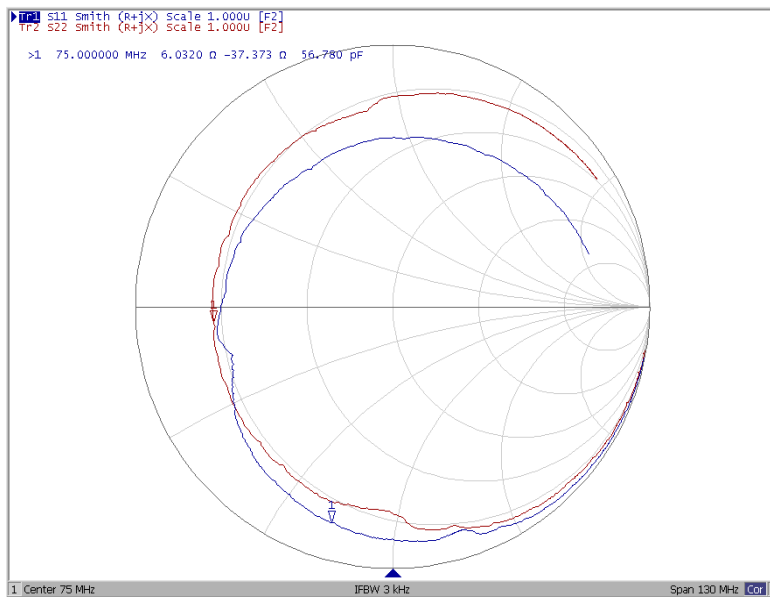
Ripple Variation Fo±19.22MHz



Group Delay Variation Fo±19.22MHz



Smith Chart





VSWR

