



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF60.0M-10A	60.0 MHz IF SAW Filter 10.11 MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- 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)



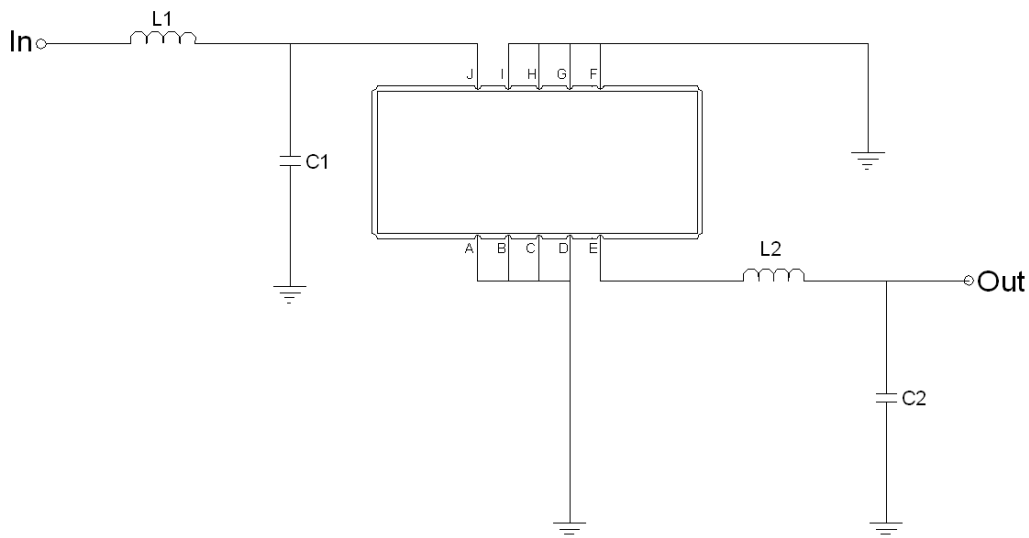


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=120 nH, C1=11 pF
Output	L2=100 nH, C2=22 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	-	60.0	-
Insertion Loss at Fo	dB	-	20.6	22.5
Group Delay Variation (Fo±4.42MHz)	ns	-	49	100
Absolute Delay	us	-	2.08	-
Passband Ripple (Fo±4.42MHz)	dB	-	0.4	1.00
Bandwidth at -1dB	MHz		10.11	-
Bandwidth at -3dB	MHz	10.3	10.44	
Bandwidth at -25dB	MHz	-	11.55	11.60
Bandwidth at -40dB	MHz		11.84	-
Ultimate Rejection	dB	50	53	-
Temperature Coefficient of Frequency	ppm/°C		-72	



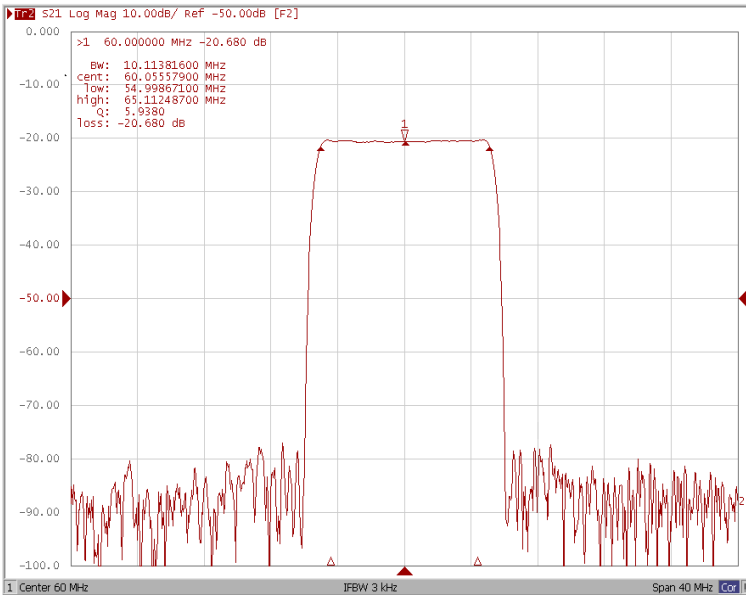
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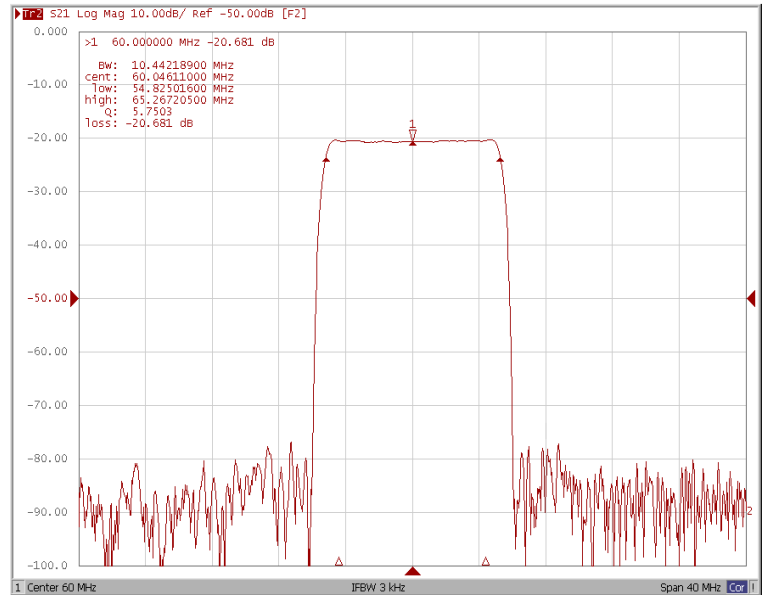
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Frequency Response

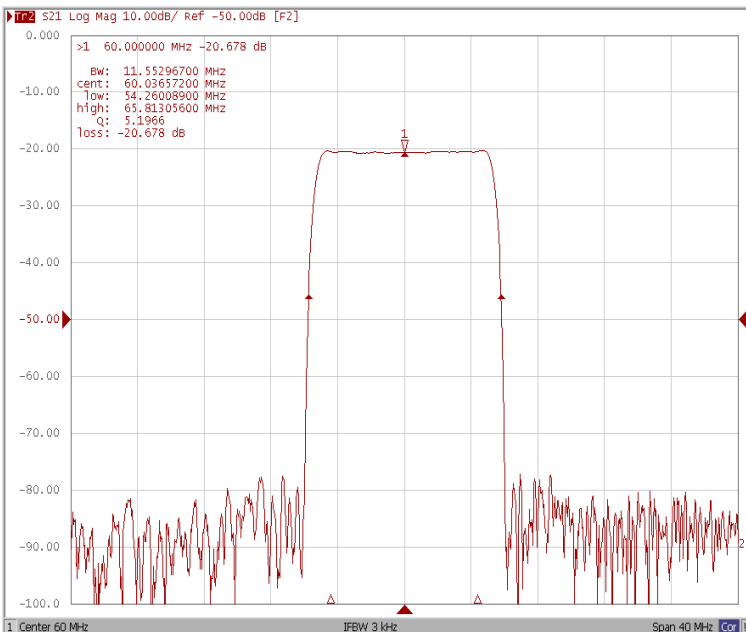
Bandwidth at -1.0 dB



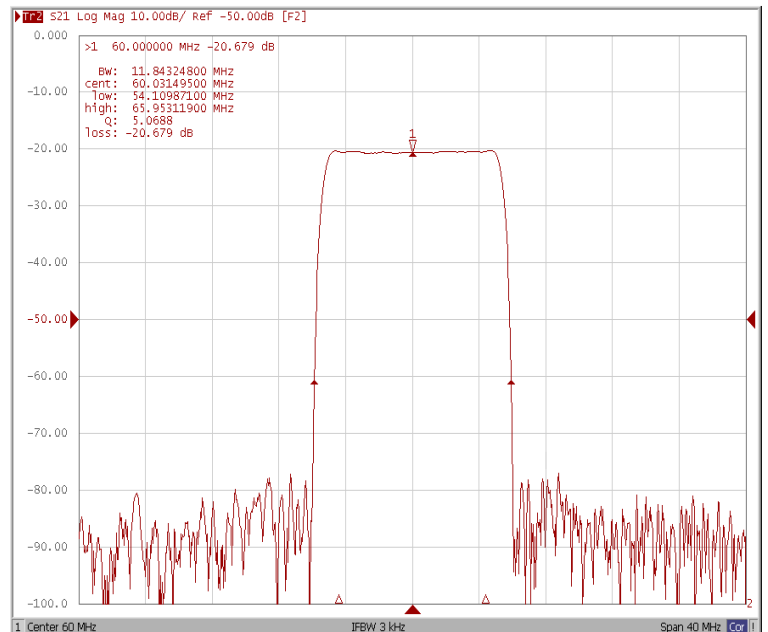
Bandwidth at -3.0 dB



Bandwidth at -25.0 dB

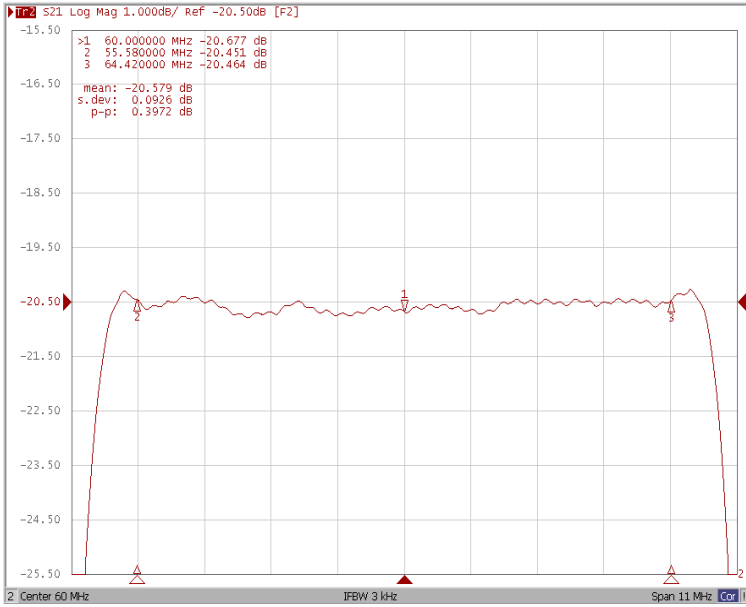


Bandwidth at -40.0 dB

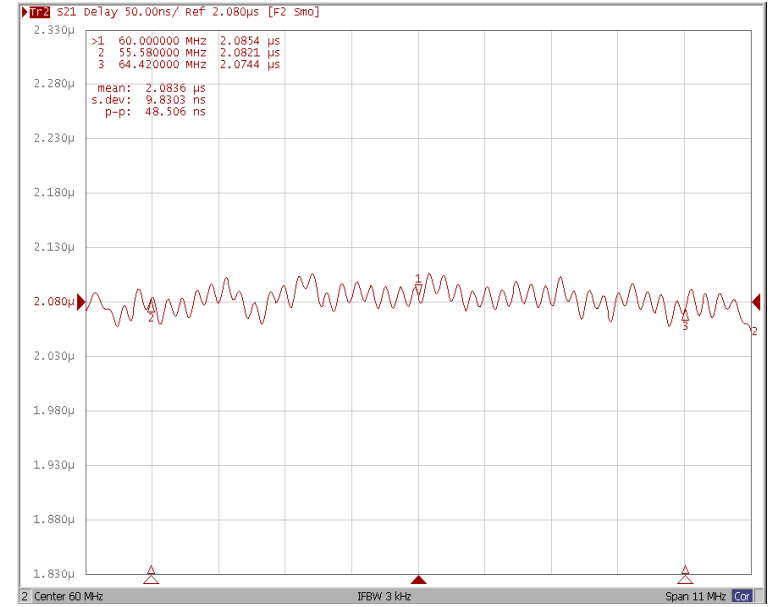




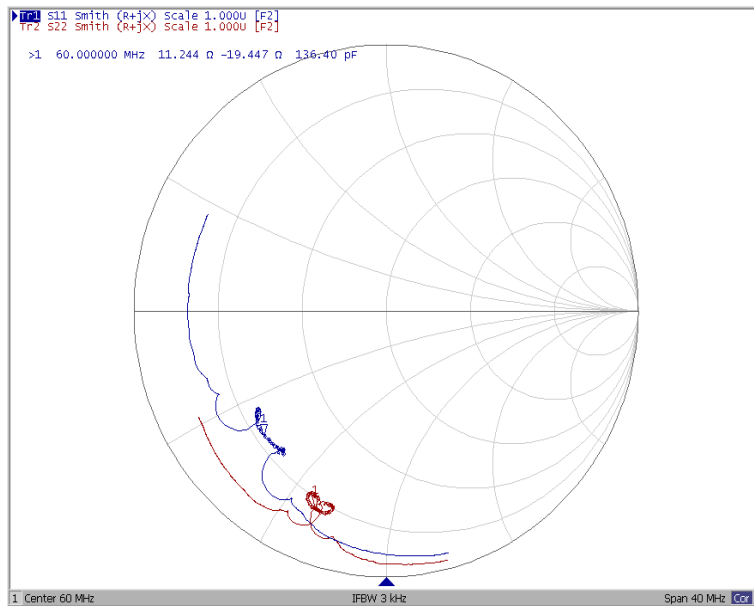
Ripple Variation Fo±4.42MHz



Group Delay Variation Fo±4.42MHz



Smith Chart





VSWR

