



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF160.0M-20A	160.0MHz IF SAW Filter 19.3 MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
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- o Frequency Response
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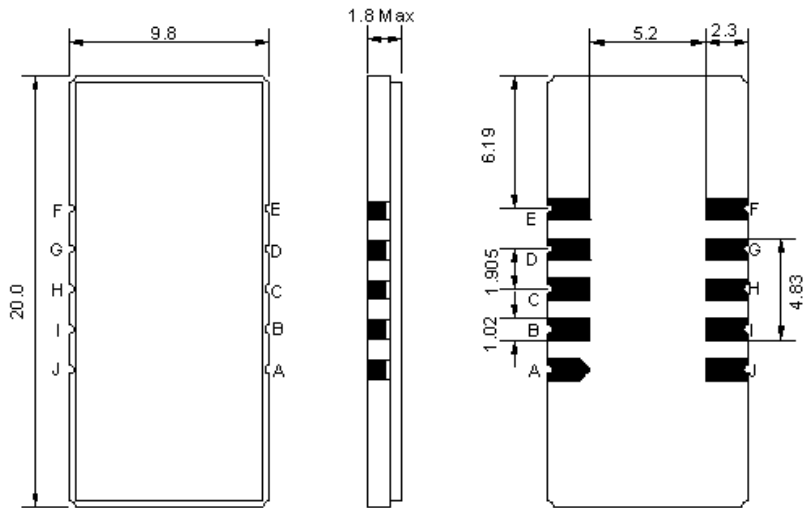
Notes

- 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)



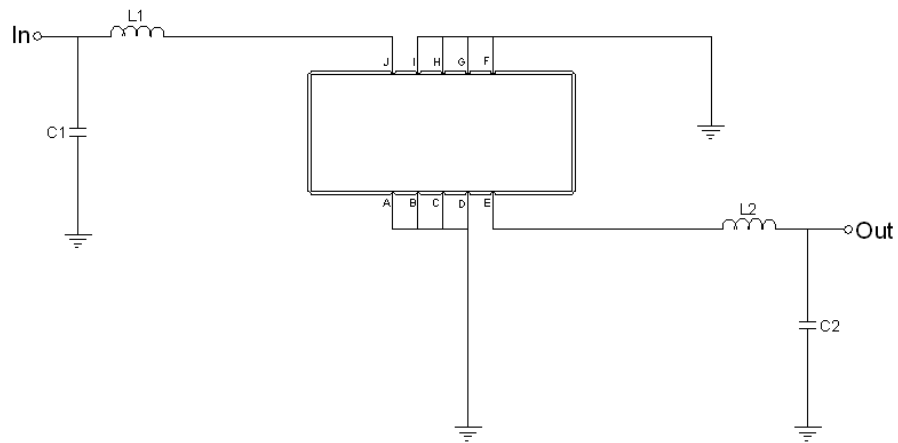


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=10 nH, C1=13 pF
Output	L2=12 nH, C2=13 pF
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).

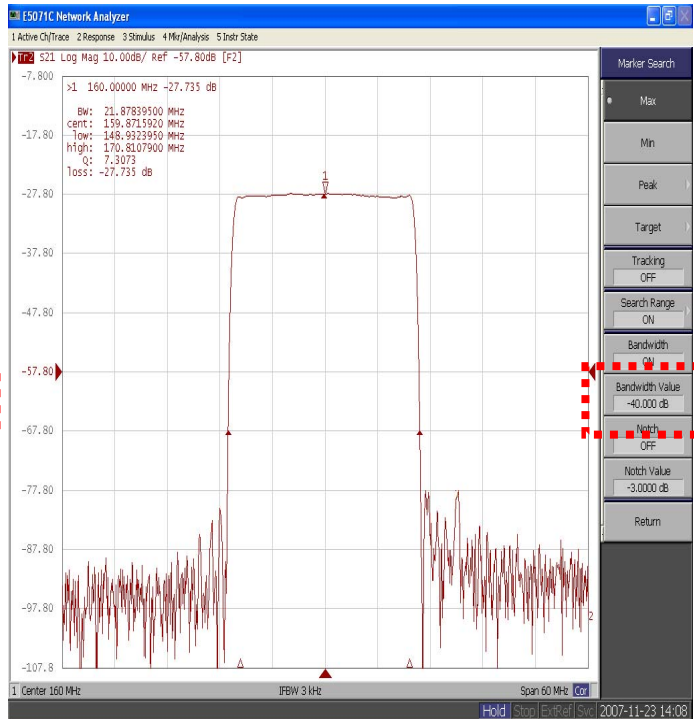
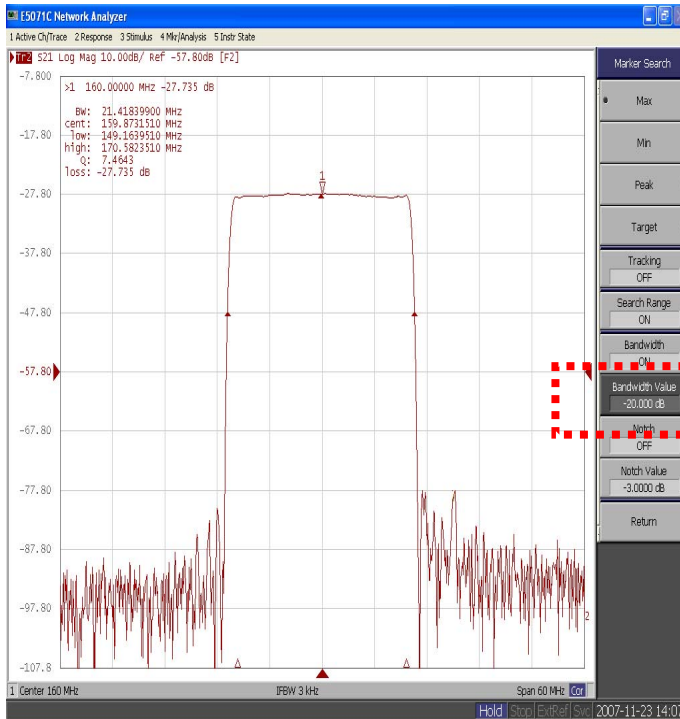
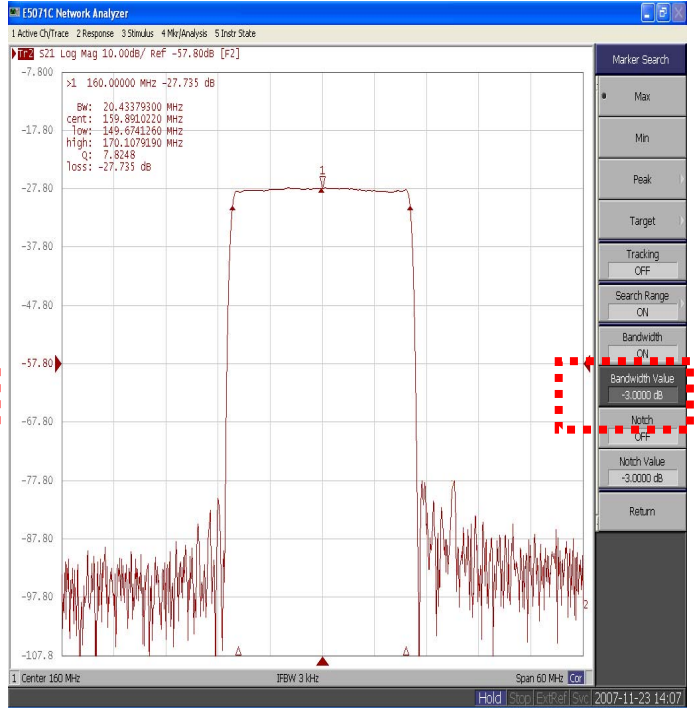
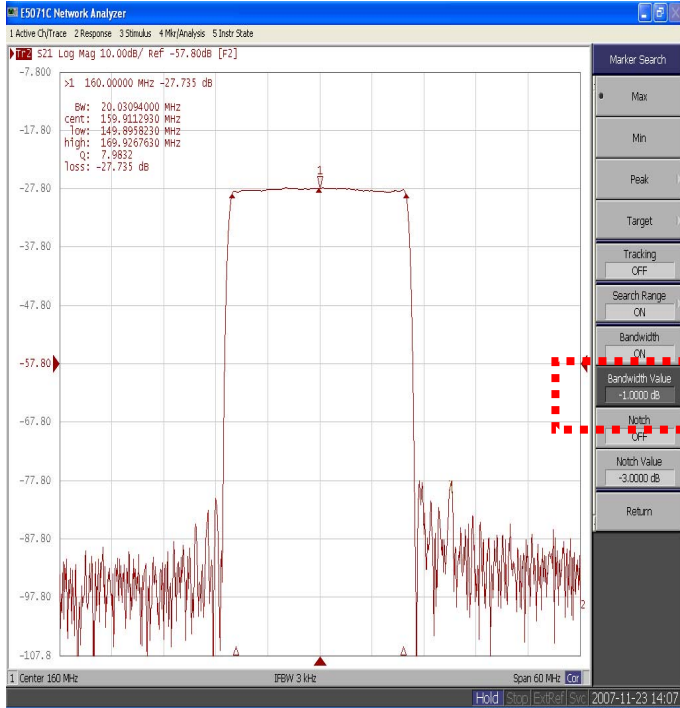
Those impedances could be modified with different impedance values and/or structures, if necessary.

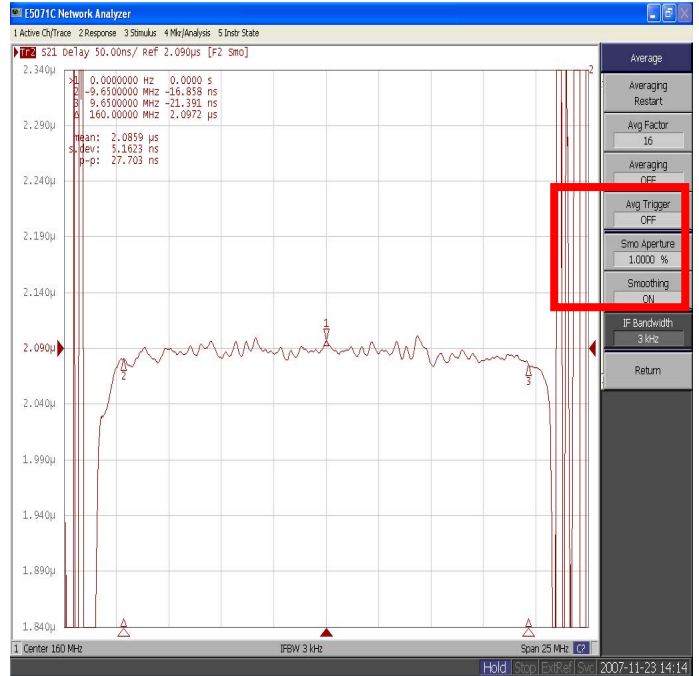
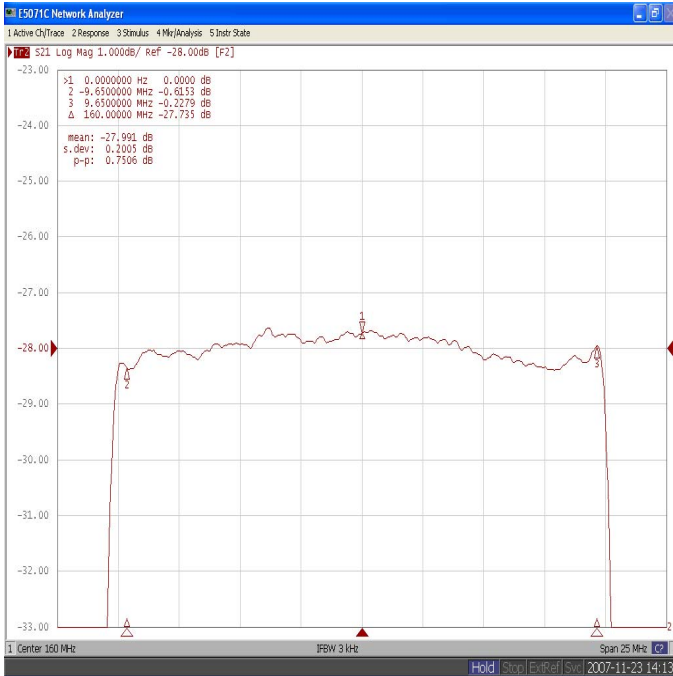
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	160.0	-
Insertion Loss at Fo	dB	-	27.7	29.5
Amplitude Ripple Variation at Fo ± 9.65 MHz	dB _{p-p}	-	0.75	-
Group Delay Variation at Fo ± 9.65 MHz	nsec	-	30	80
Absolute Delay at Fo	μsec	-	2.09	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -1.0 dB	MHz	-	20.03	-
Bandwidth at -3.0 dB	MHz	-	20.43	-
Bandwidth at -20.0 dB	MHz	-	21.42	-
Bandwidth at -40.0 dB	MHz	-	21.87	-
Relative Attenuation				
Lower Sidelobe	dB	-	50	-
Upper Sidelobe	dB	-	50	-

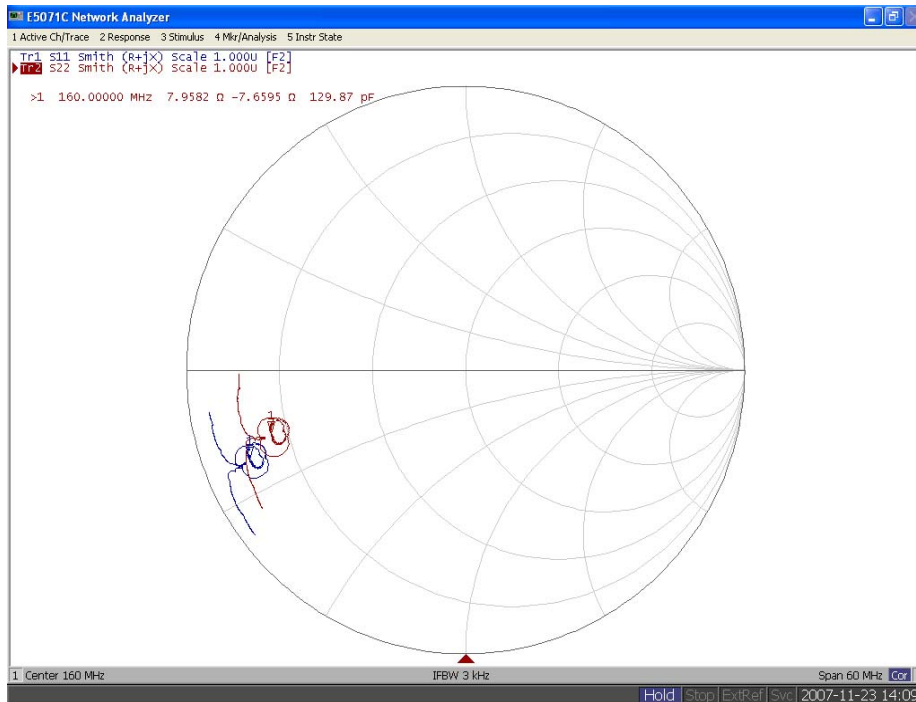


Frequency Response





Smith Chart





VSWR

