



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF115.0M-07A	115.0 MHz IF SAW Filter 7.28 MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- 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)



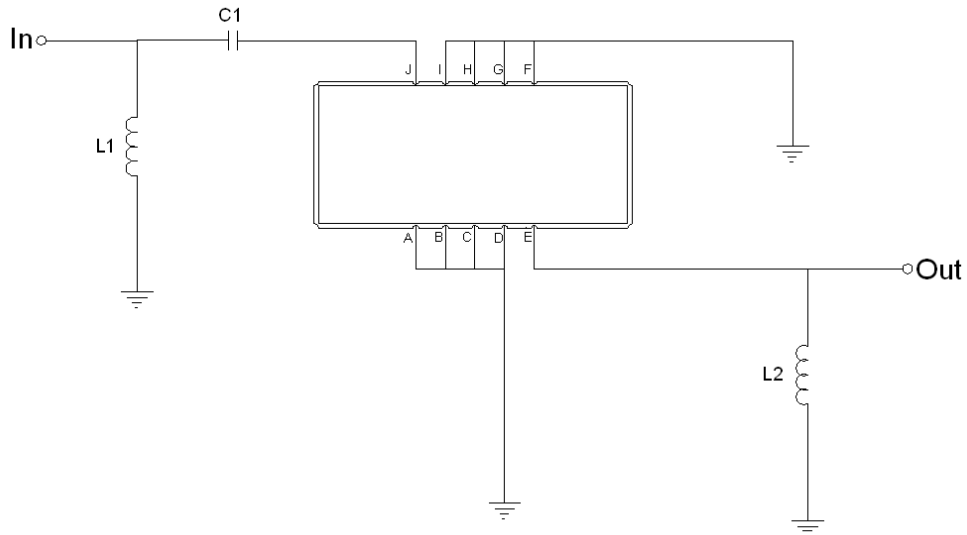


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 33 nH, C1 = 220 pF
Output	L2 = 47 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.

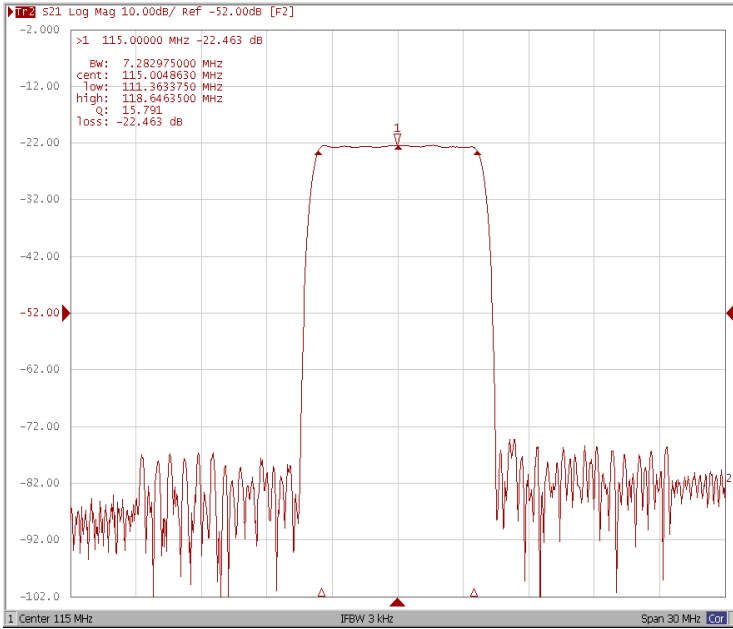
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	115.0	-
Insertion Loss at Fo	dB	-	24.5	27.0
Group Delay Variation at Fo ±3.5 MHz	nsec	-	80	150
Absolute Delay at Fo	usec	-	3.20	-
Passband Ripple Variation at Fo ±3.5 MHz	dB	-	0.50	1.0
Bandwidth at -1dB	MHz	-	7.28	-
Bandwidth at -10dB	MHz	-	8.08	-
Bandwidth at -20dB	MHz	-	8.44	-
Bandwidth at -25dB	MHz	-	8.56	-
Bandwidth at -35dB	MHz	-	8.75	-
Ultimate Rejection	dB	48	52	-
Temperature Coefficient	ppm/°C	-	-20	-

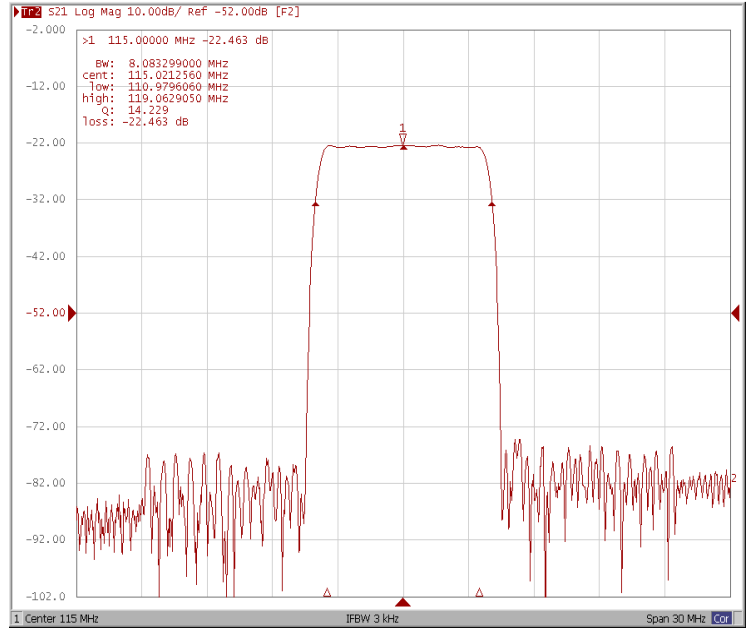


Frequency Response

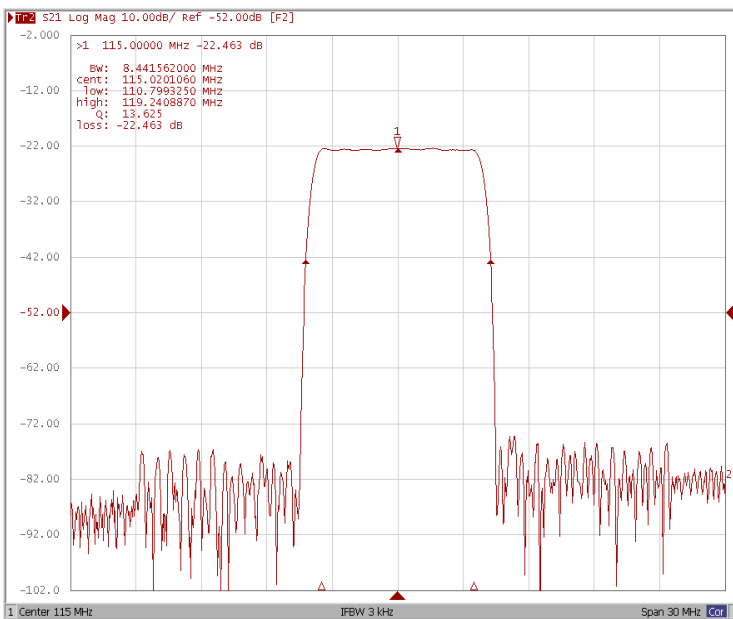
Bandwidth at -1.0 dB



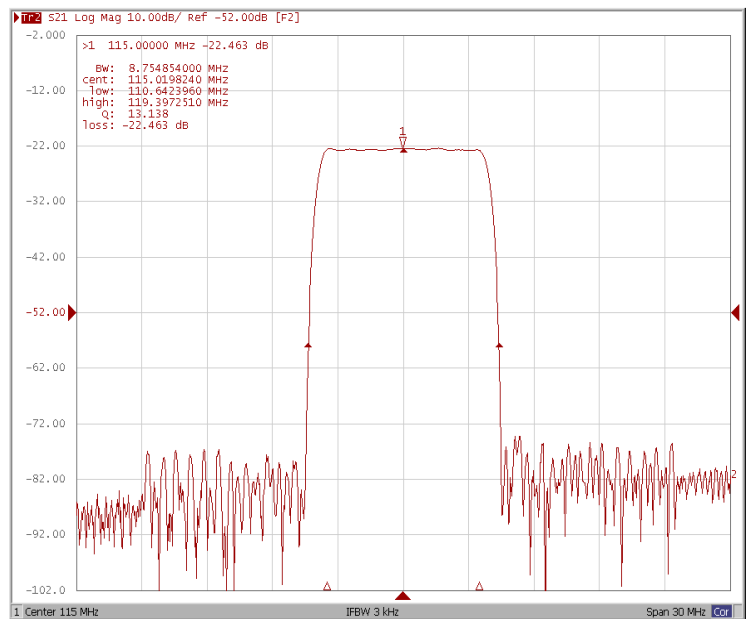
Bandwidth at -10.0 dB



Bandwidth at -20.0 dB

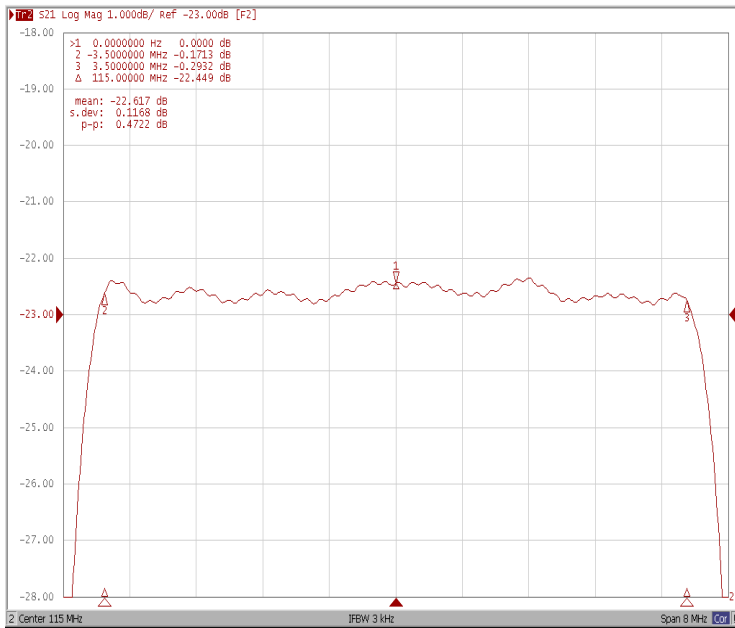


Bandwidth at -35.0 dB

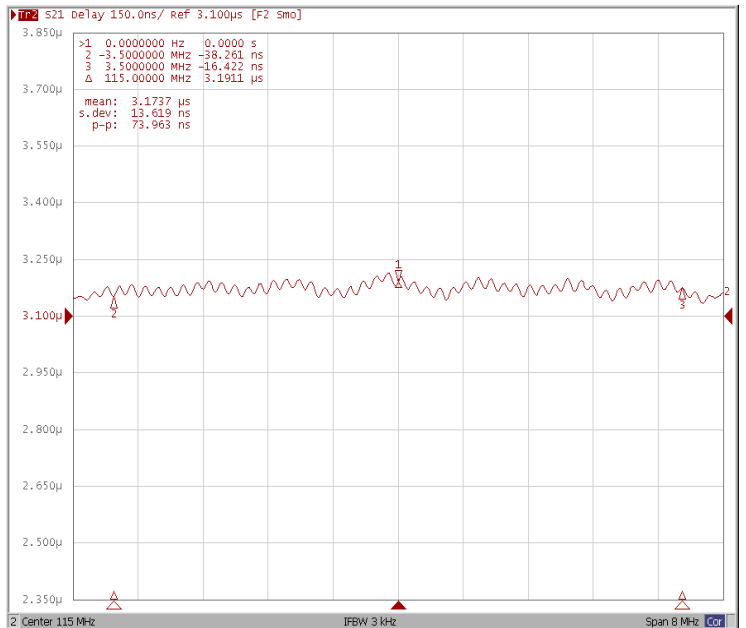




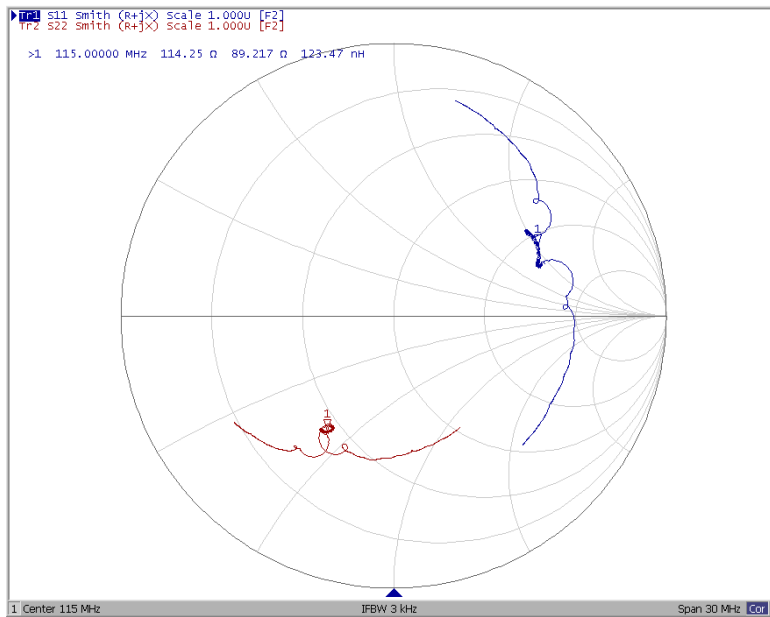
Ripple Variation Fo±3.5MHz



Group Delay Variation Fo±3.5MHz



Smith Chart





VSWR

