



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF110.0M-20B	110.0 MHz IF SAW Filter 20.27 MHz Bandwidth

Specification Contents

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- o Test Circuit
- o Maximum Ratings
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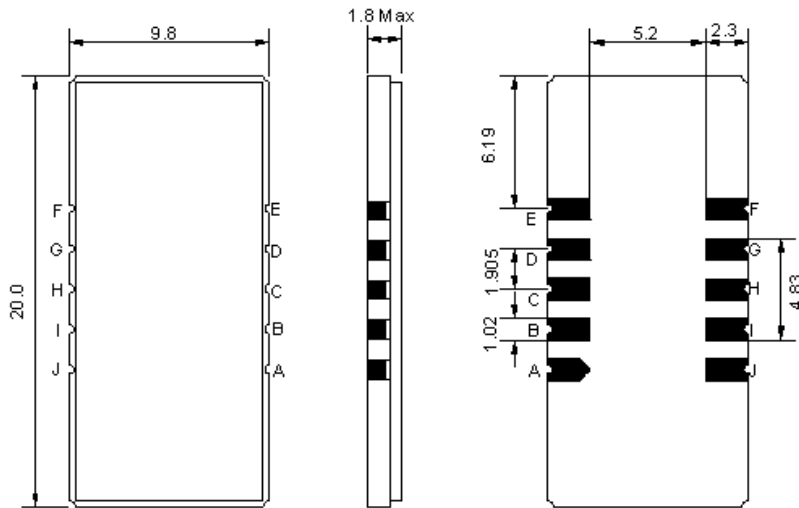
Notes

- 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)



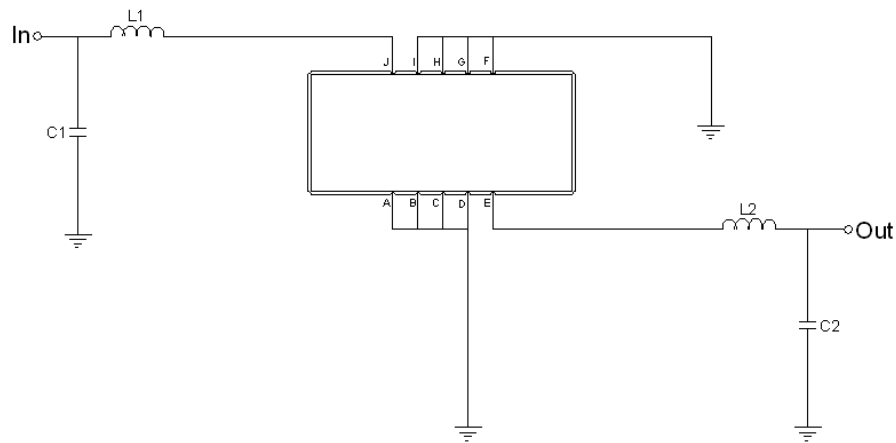


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=68nH, C1=18pF
Output	L2=68nH, C2=22pF
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	-	60
Storage Temperature Range	°C	-30	-	80
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.

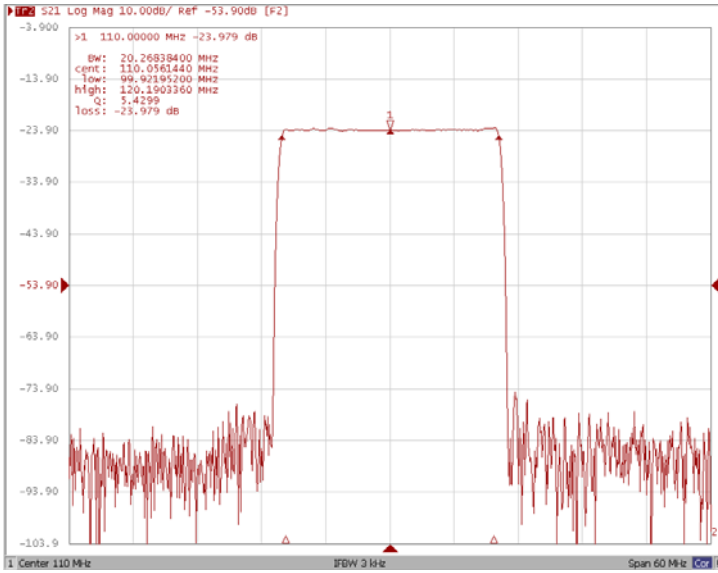
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	110.00	-
Insertion Loss at Fo	dB	-	20.0	23.0
Group Delay Variation (Fo±9.75MHz)	ns	-	40	80
Absolute Delay	us	-	2.38	-
Passband Ripple (Fo±9.75MHz)	dB	-	0.54	1.00
Bandwidth at -1dB	MHz	-	20.27	-
Bandwidth at -3dB	MHz	-	20.54	-
Bandwidth at -40dB	MHz	-	21.73	-
Ultimate Rejection	dB	-	52	-
Temperature coefficient	ppm/°C	-	-72	-

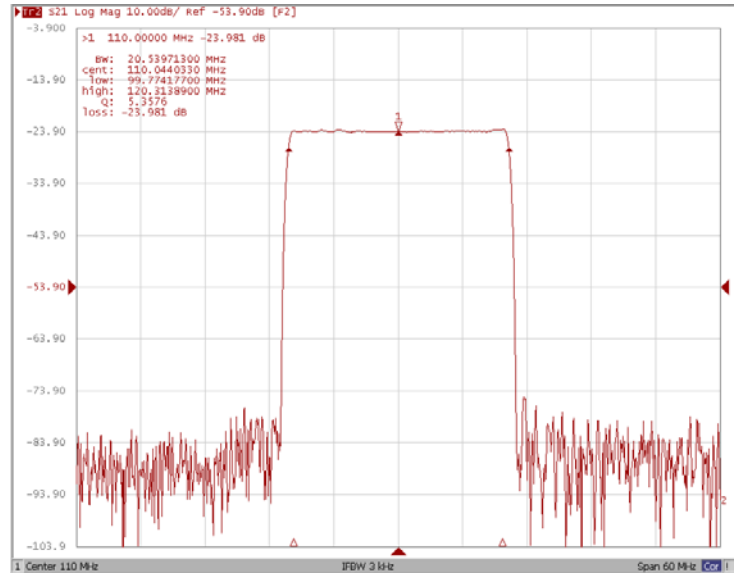


Frequency Response

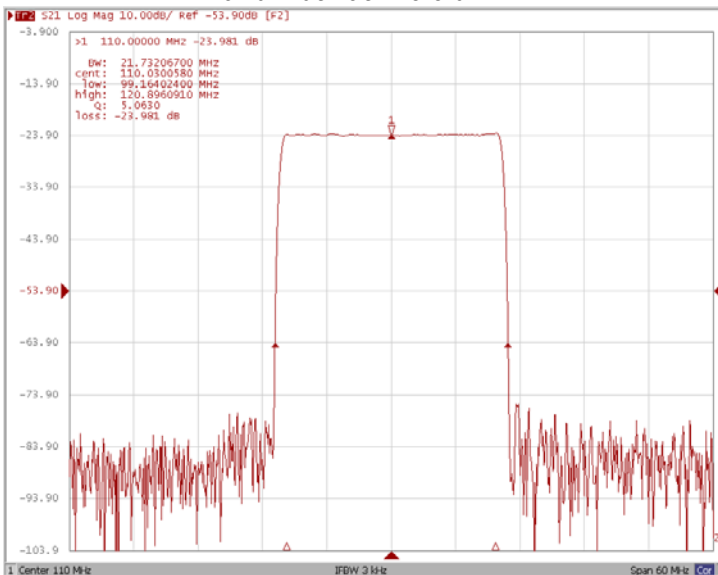
Bandwidth at -1.0 dB



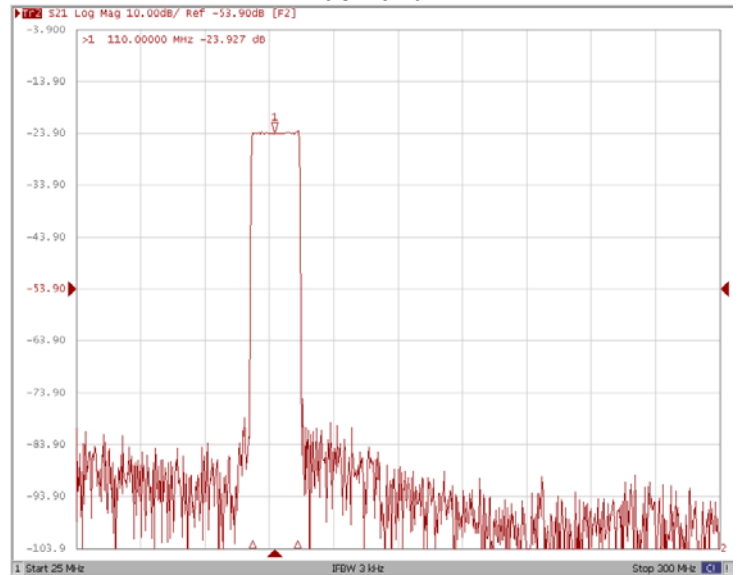
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

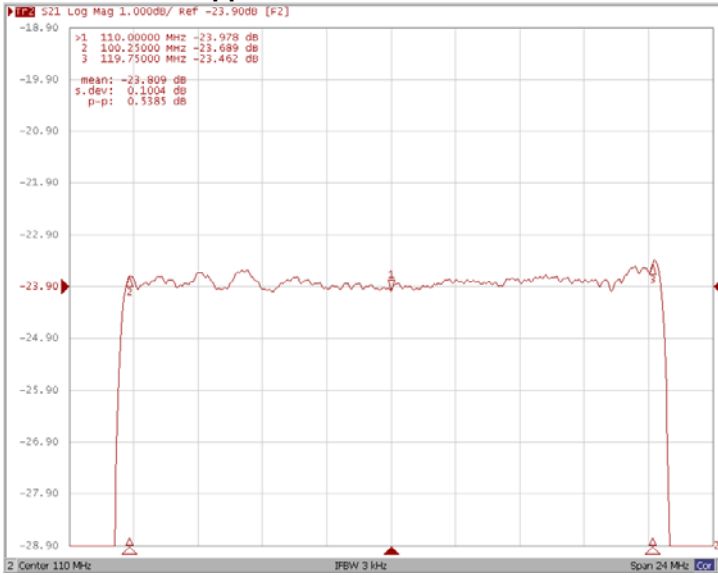


Wide Band

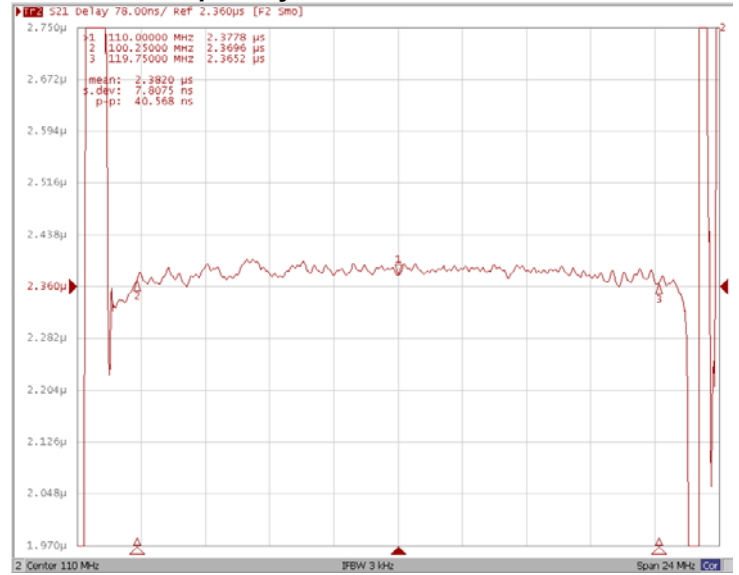




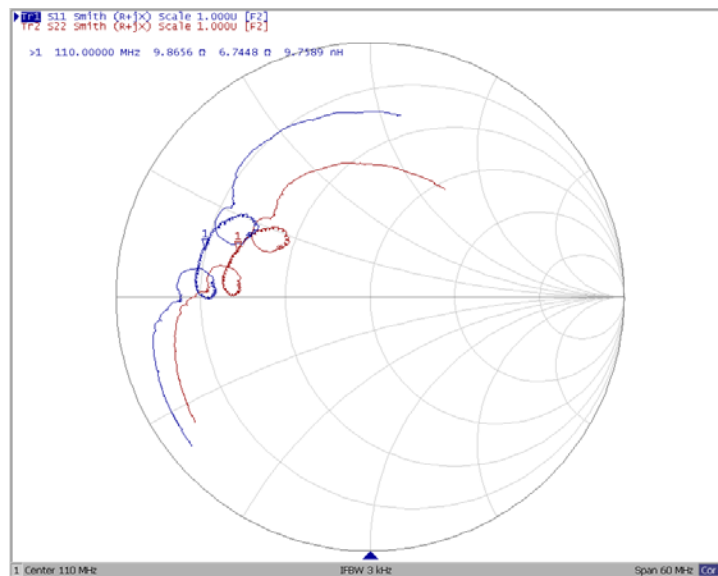
Ripple Variation $F_o \pm 9.75\text{MHz}$



Group Delay Variation $F_o \pm 9.75\text{MHz}$



Smith Chart





VSWR

