



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF180.0M-15A	80.0 MHz IF SAW Filter 15.45 MHz Bandwidth

### Specification Contents

- o Mechanical Dimensions
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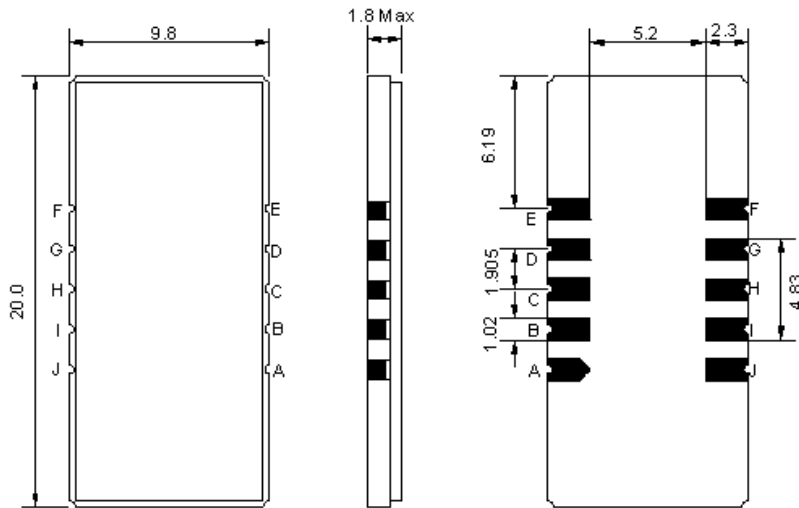
### Notes

- 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)



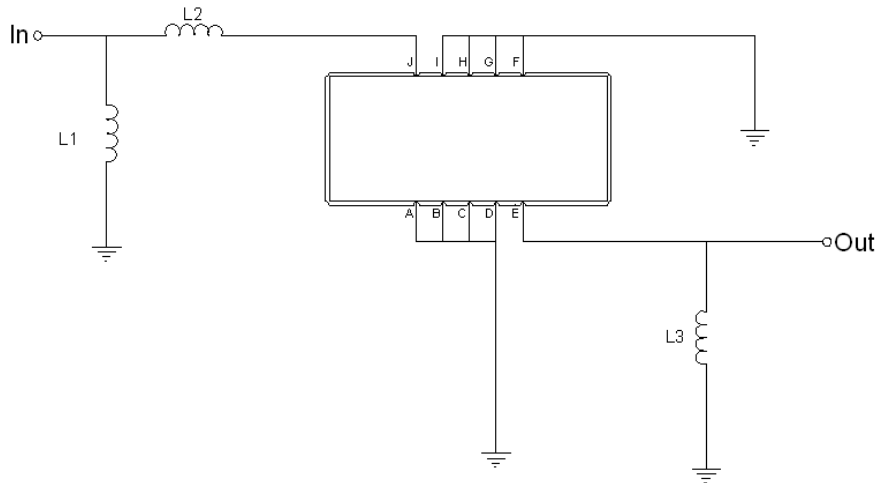


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 15 nH, L2 = 8.2 nH
Output	L3 = 18 nH
Source/Load Impedance	50 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	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.

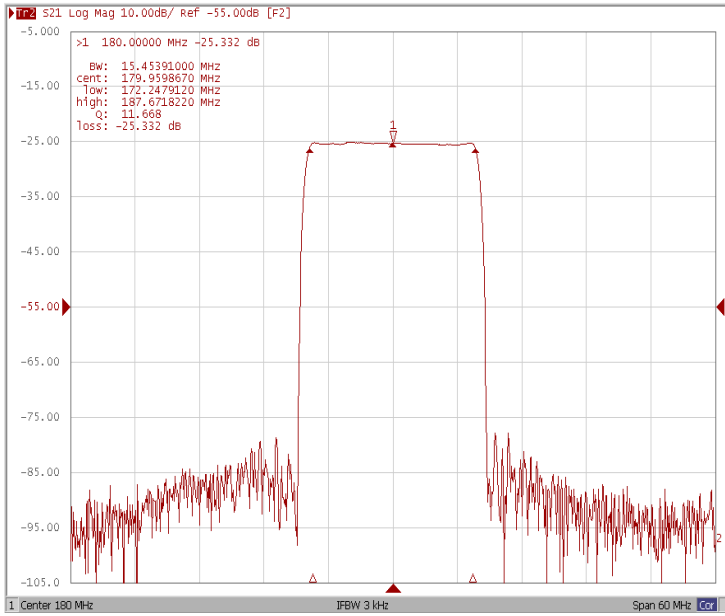
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	180.0	-
Insertion Loss at Fo	dB	-	25.3	27.0
Group Delay Variation at Fo ± 7.47 MHz	nsec	-	21	60
Absolute Delay at Fo	usec	-	2.68	-
Passband Ripple Variation at Fo ± 7.47MHz	dB	-	0.57	1.0
Bandwidth at -1dB	MHz	15.25	15.45	-
Bandwidth at -3dB	MHz	-	15.83	-
Bandwidth at -40dB	MHz	-	17.40	17.60
Ultimate Rejection	dB	50	53	-
Temperature Coefficient	ppm/°C	-	-18	-

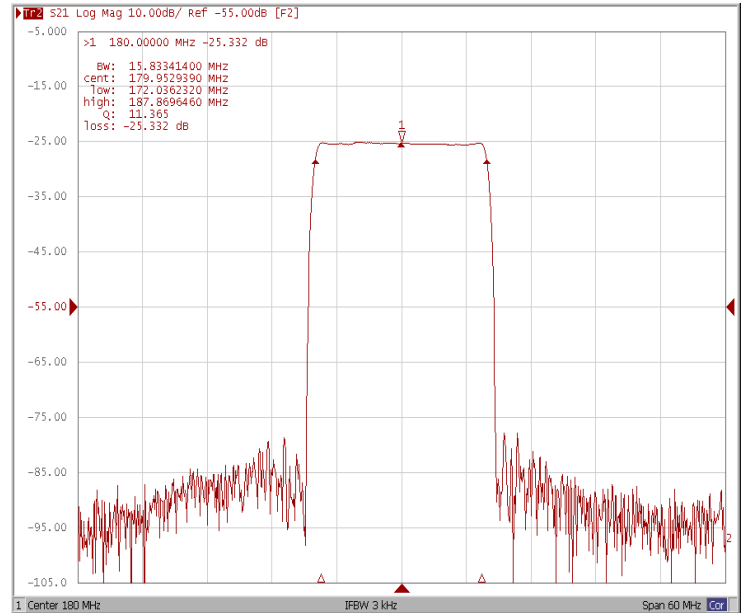


### Frequency Response

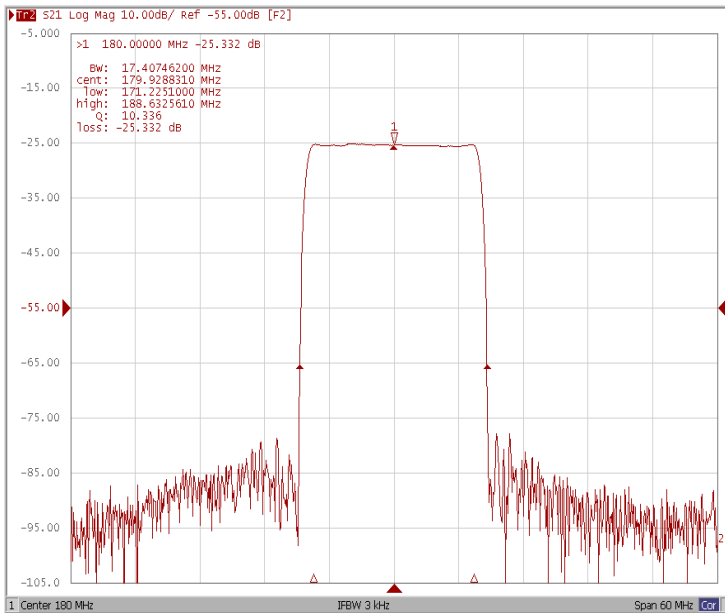
#### Bandwidth at -1.0 dB



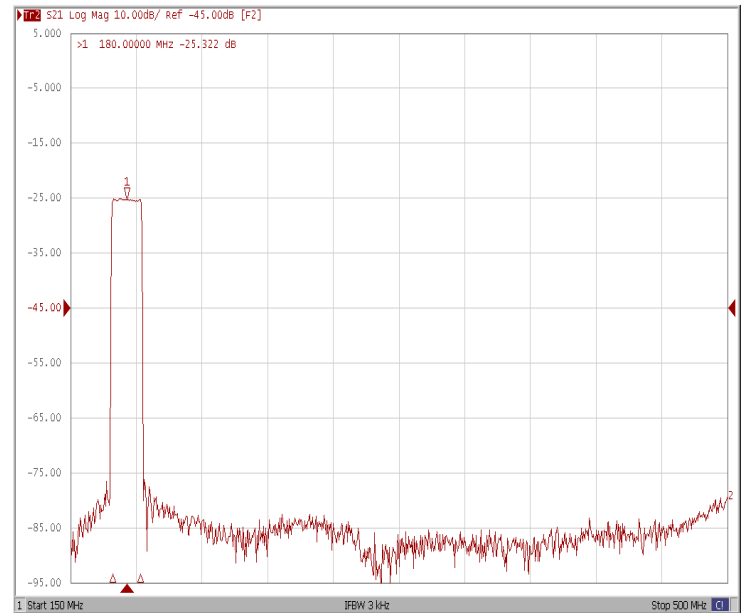
#### Bandwidth at -3.0 dB



#### Bandwidth at -40.0 dB

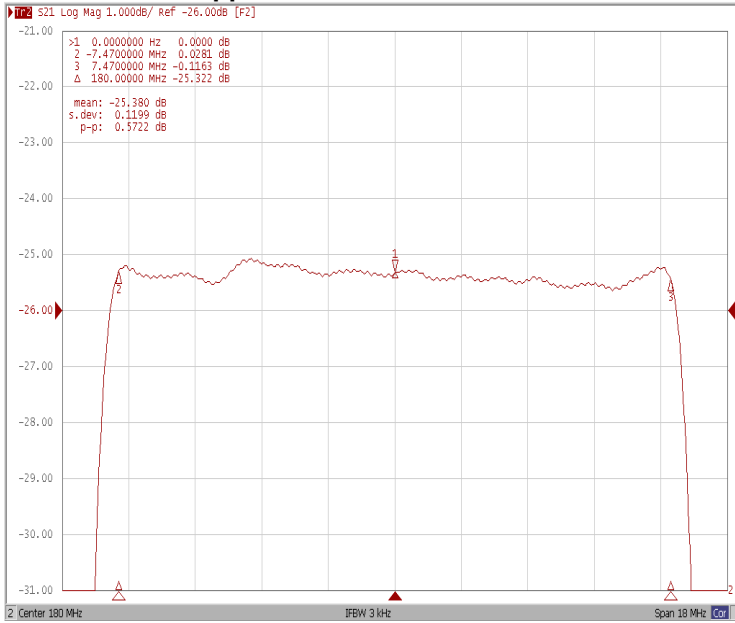


#### Wide-Band

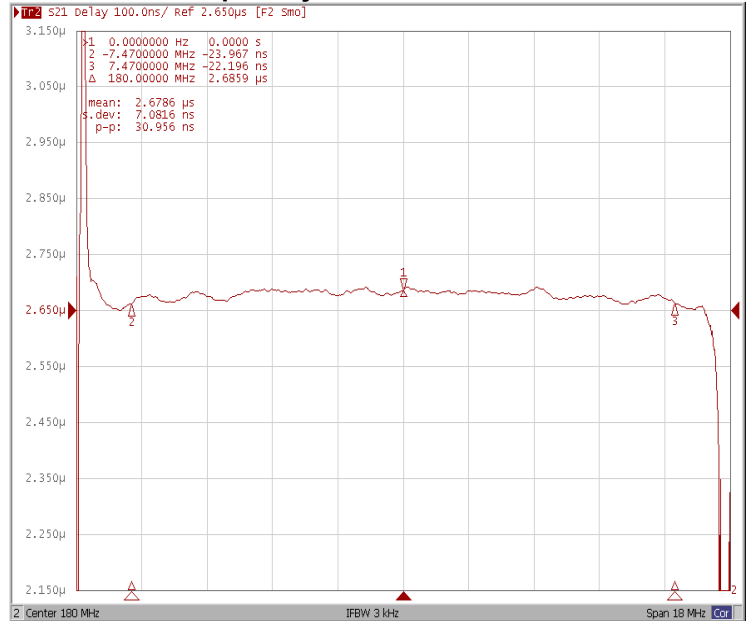




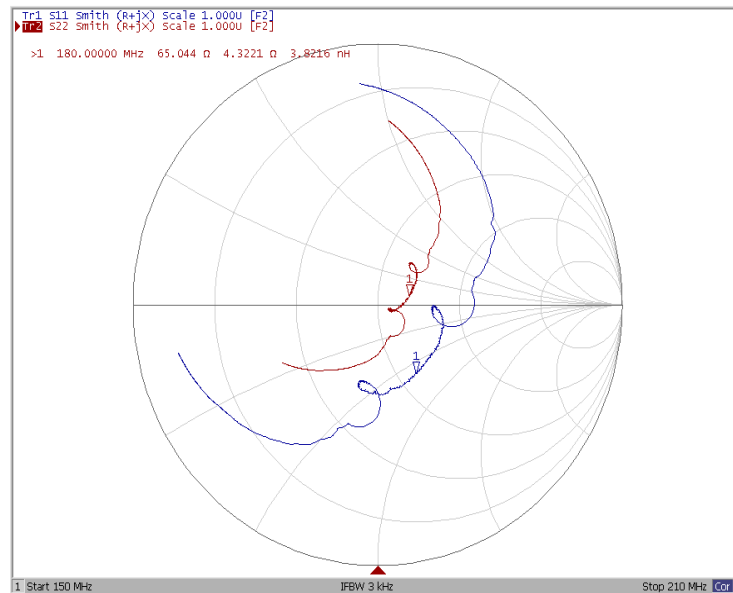
### Ripple Variation Fo±7.47 MHz



### Group Delay Variation Fo±7.47MHz



### Smith Chart





### VSWR

