



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF260.0M-30A	60.0 MHz IF SAW Filter 30.21 MHz Bandwidth

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Smith Chart
- o VSWR

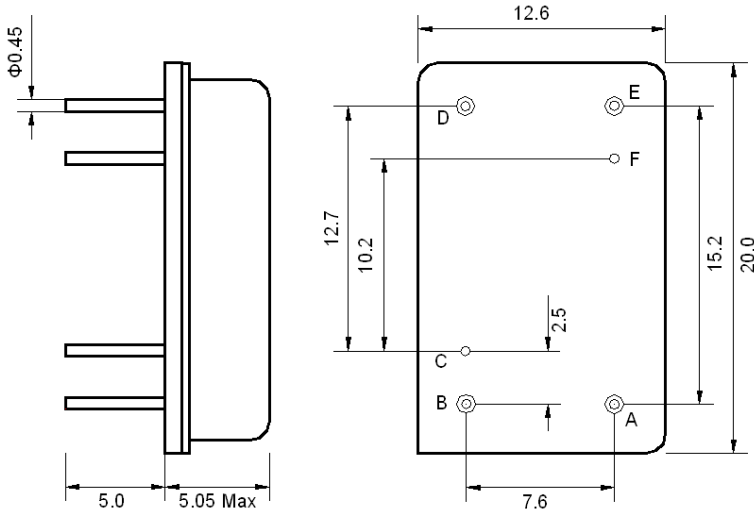
## Notes

- 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)



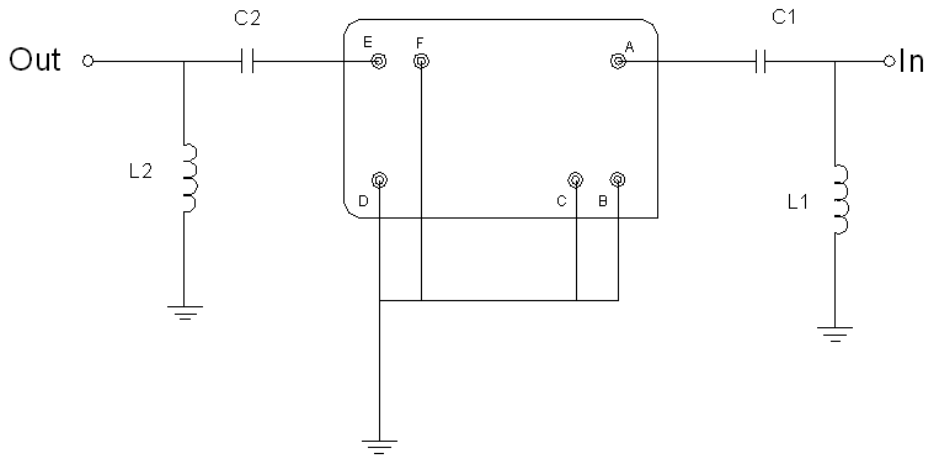


## Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

## Test Circuit



Test Fixture & Values	
Input	L1 = 6.8 nH, C1 = 200 pF
Output	L2 = 8.2 nH, C2 = 180 pF
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	80
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.

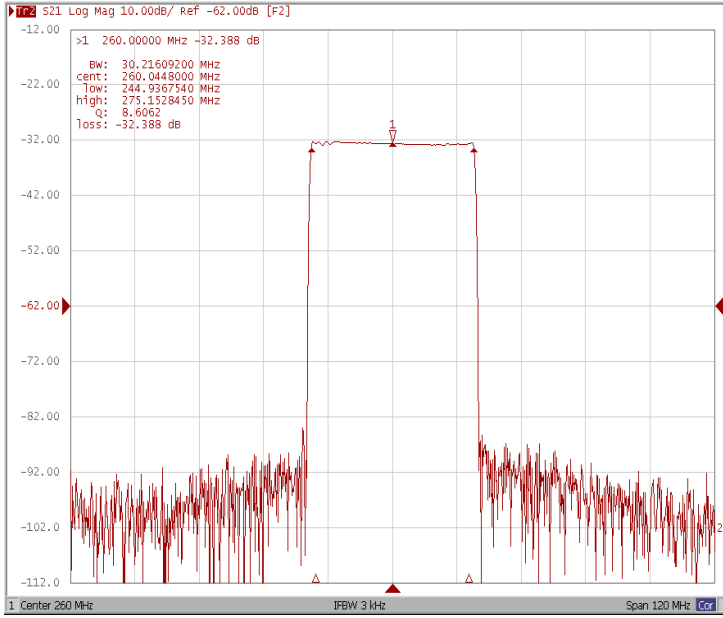
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	260.0	-
Insertion Loss at Fo	dB	-	32.5	-
Group Delay Variation at Fo ± 14.52 MHz	nsec	-	58	80
Absolute Delay at Fo	usec	-	2.83	-
Passband Ripple Variation at Fo ± 14.52 MHz	dB	-	0.79	1.0
Bandwidth at -1dB	MHz	30.00	30.21	-
Bandwidth at -3dB	MHz	-	30.51	-
Bandwidth at -20dB	MHz	-	31.33	-
Bandwidth at -40dB	MHz	-	31.72	31.90
Ultimate Rejection	dB	50	53	-
Temperature Coefficient	ppm/°C	-	-18	-

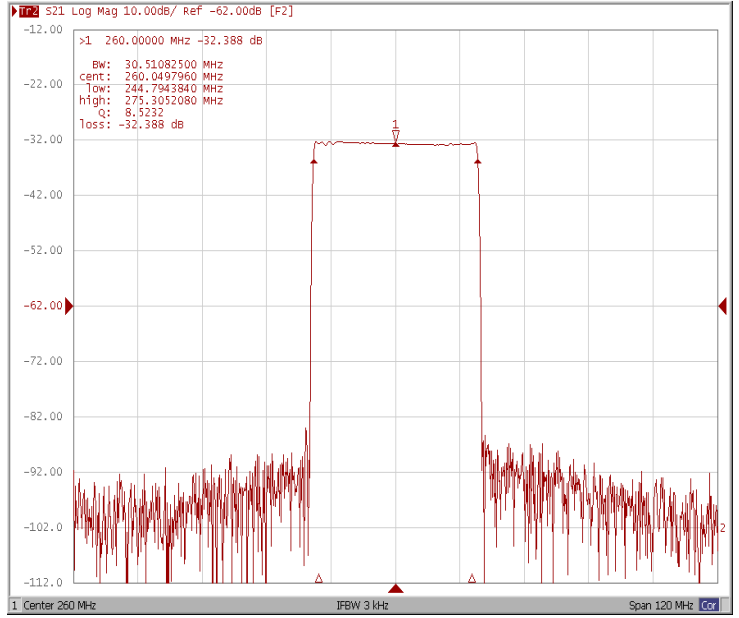


## Frequency Response

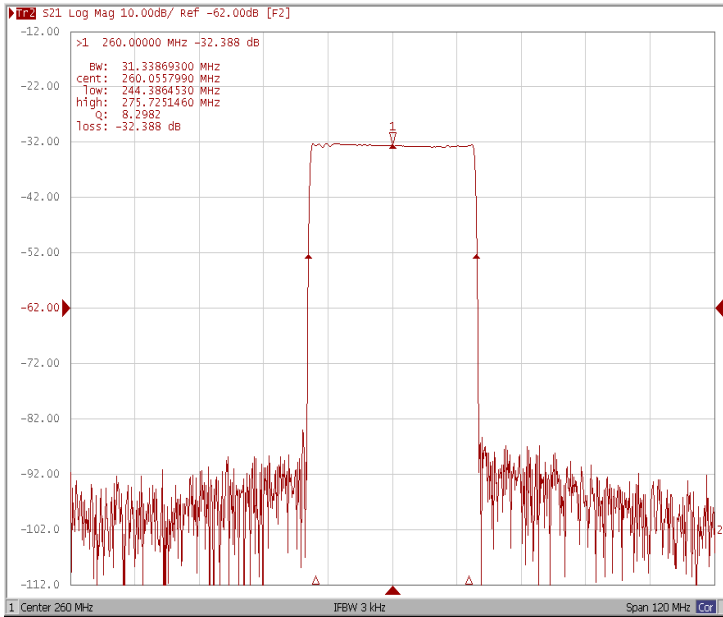
### Bandwidth at -1.0 dB



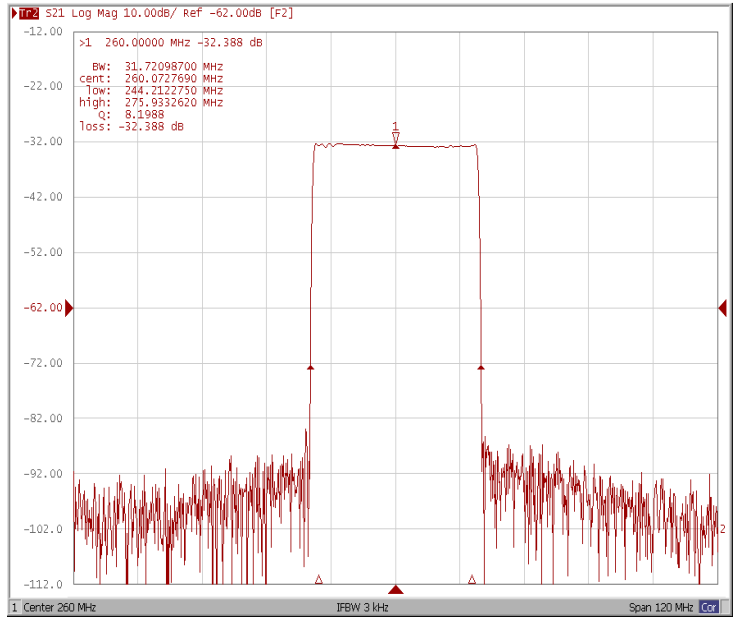
### Bandwidth at -3.0 dB



### Bandwidth at -20.0 dB

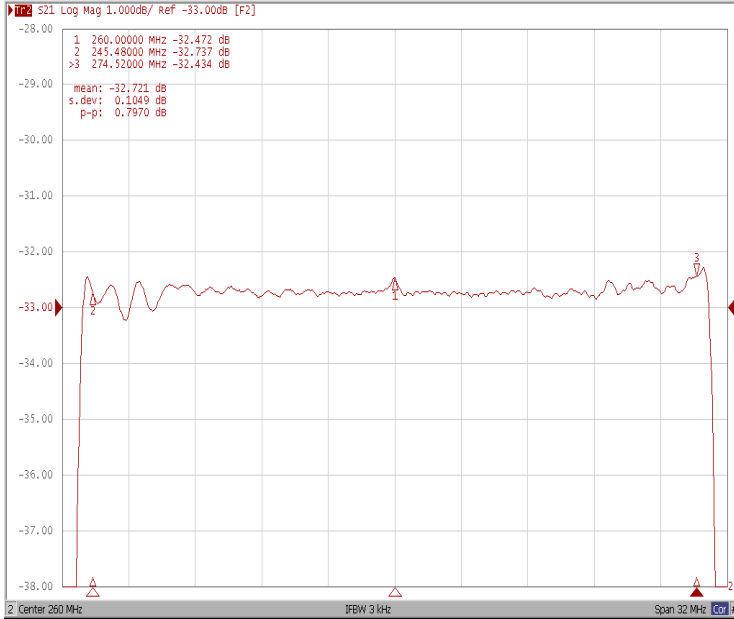


### Bandwidth at -40.0 dB

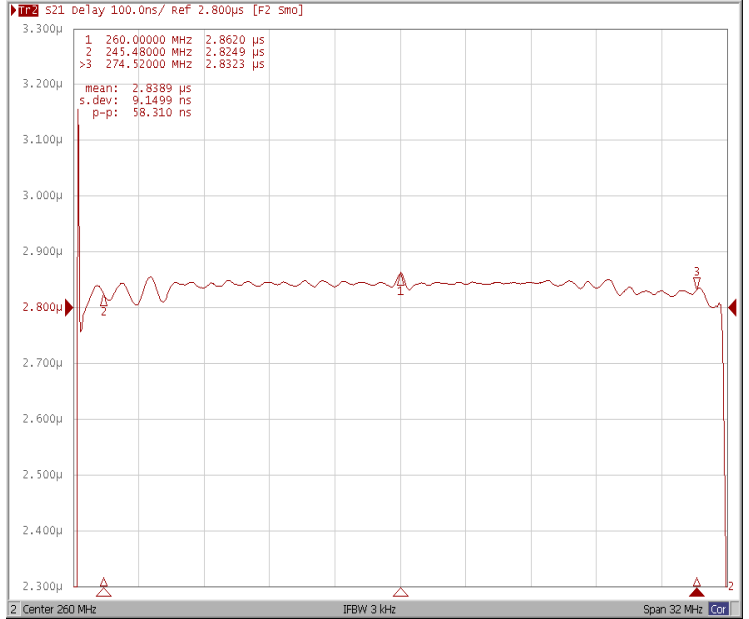




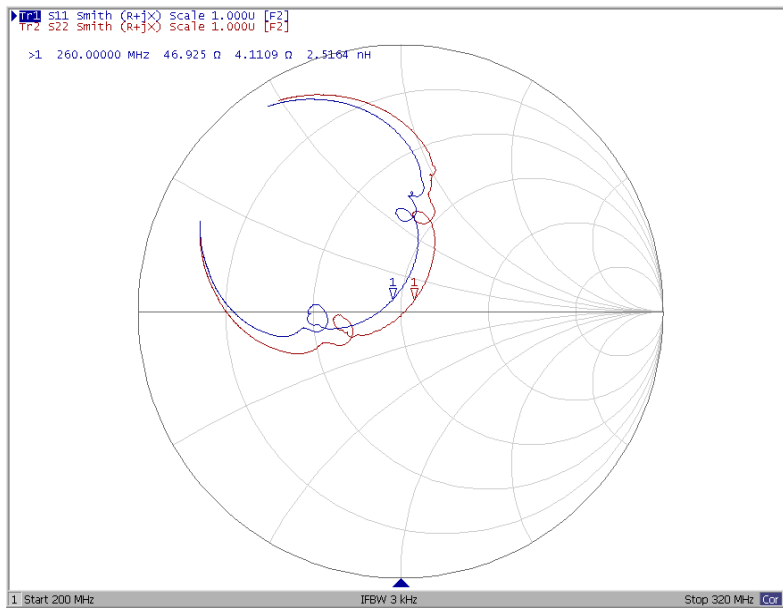
### Ripple Variation Fo±14.52MHz



### Group Delay Variation Fo±14.52MHz



### Smith Chart





### VSWR

