



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF65.0M-30A	65.0MHz IF SAW Filter 29.99MHz Bandwidth

## Specification Contents

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

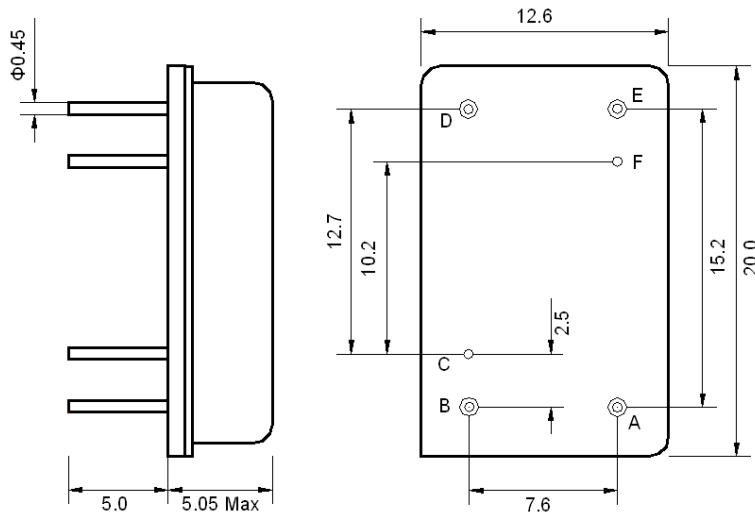
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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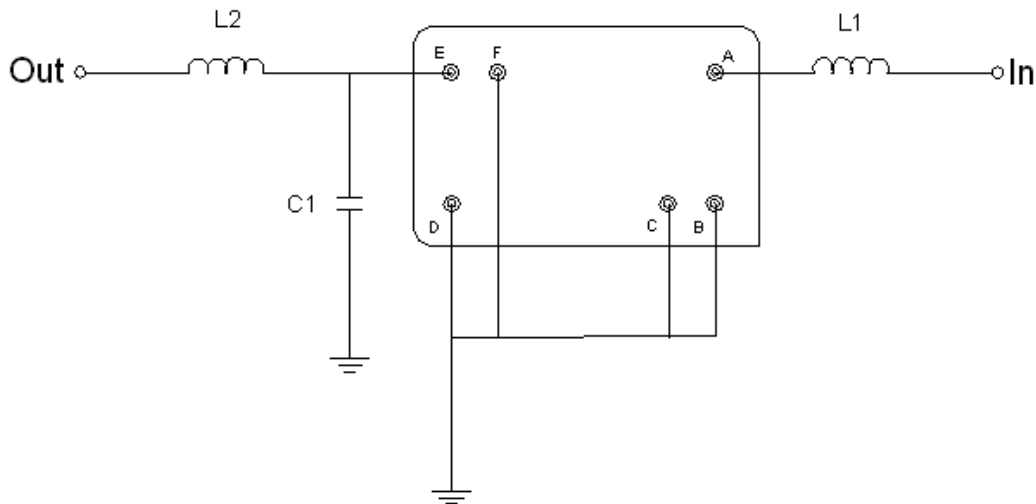


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 150 nH
Output	L2 = 180 nH, C1 = 16 pF
Source/Load Impedance	50 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
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.

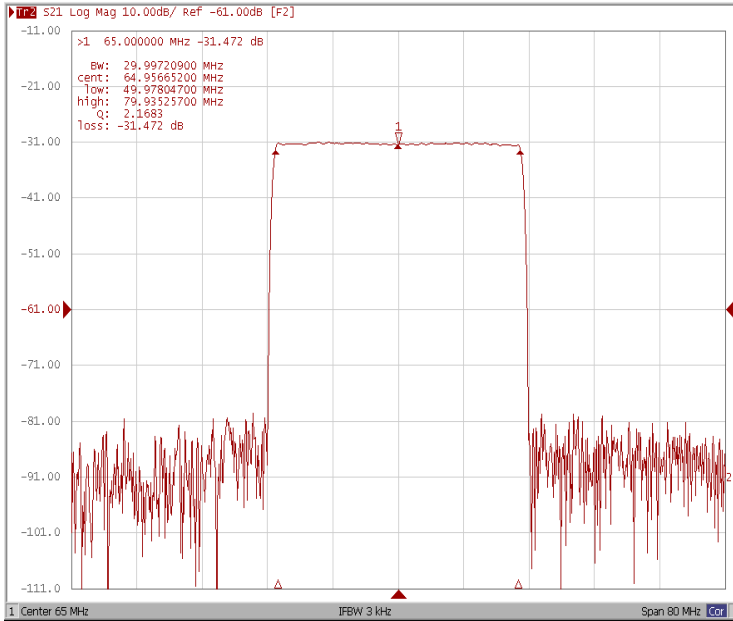
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	65.0	-
Insertion Loss at Fo	dB	-	31.5	33.0
Amplitude Ripple Variation within Fo ±14.75 MHz	dB <sub>p-p</sub>	-	0.65	1.0
Group Delay Variation within Fo ±14.75 MHz	nsec	-	30	60
Absolute Delay at Fo	μsec	-	2.14	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -1.0 dB	MHz	29.90	29.99	-
Bandwidth at -3.0 dB	MHz	-	30.30	-
Bandwidth at -40.0 dB	MHz	-	31.70	31.90
Attenuation Rejection				
Lower Sidelobe	dB	45	48	
Upper Sidelobe	dB	45	48	



## Frequency Response

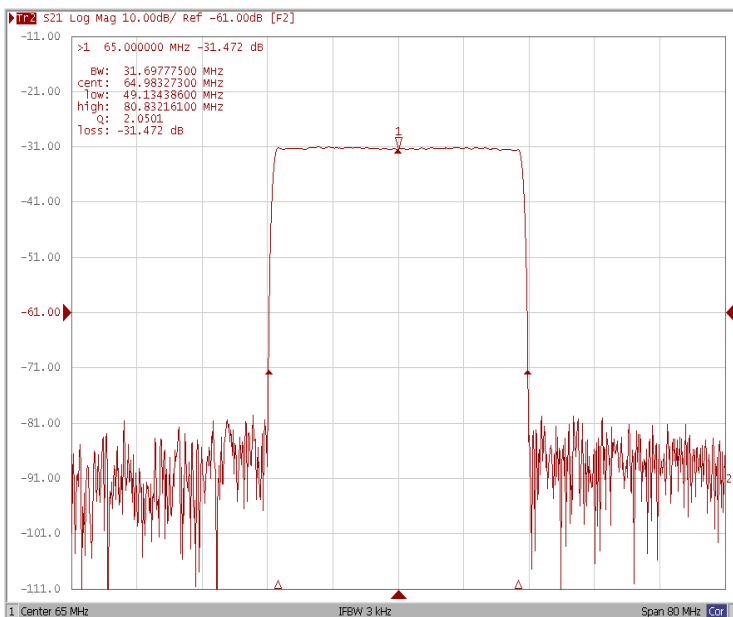
### Bandwidth at -1.0 dB



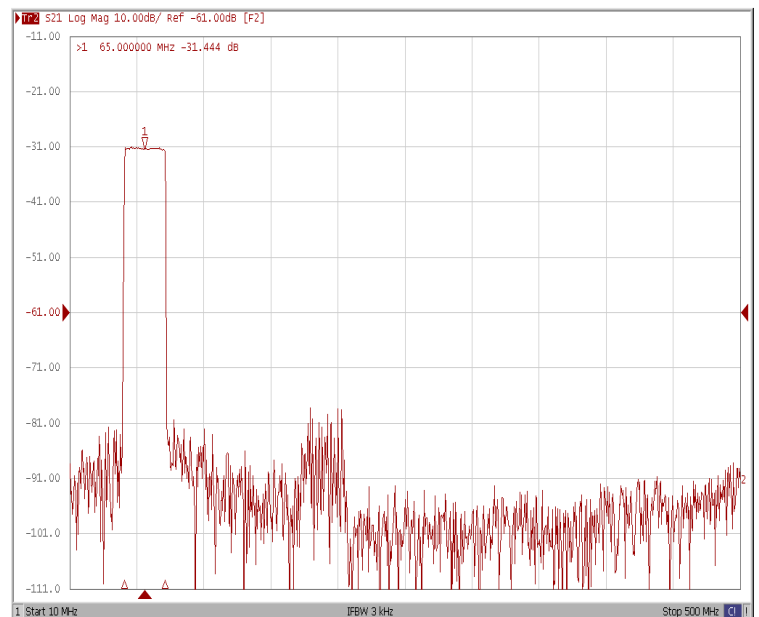
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

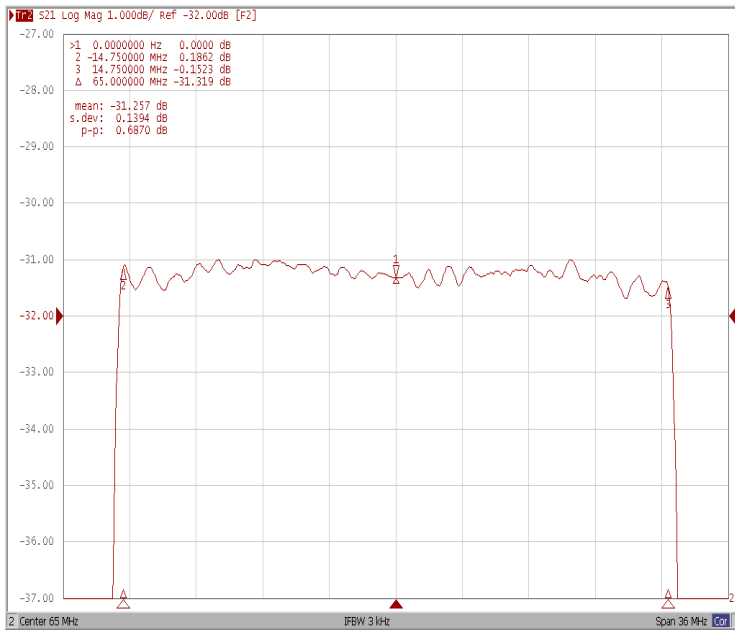


### Wide-Band

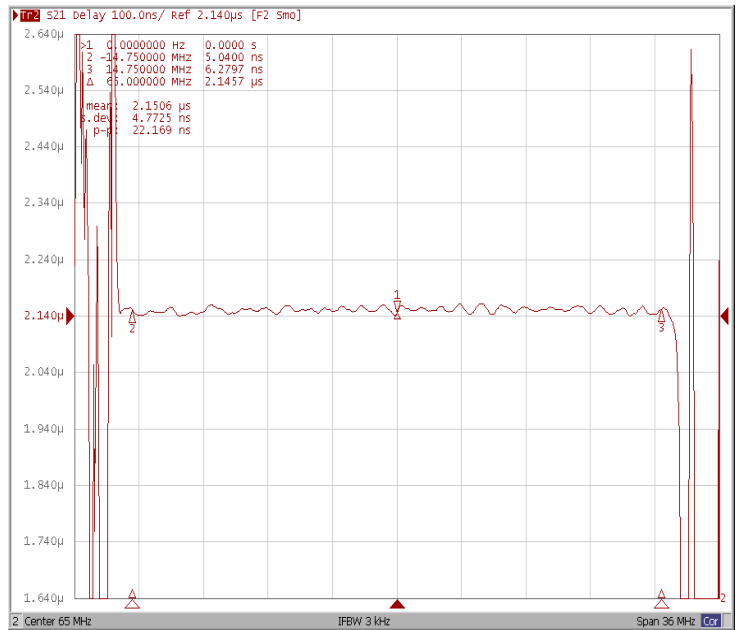




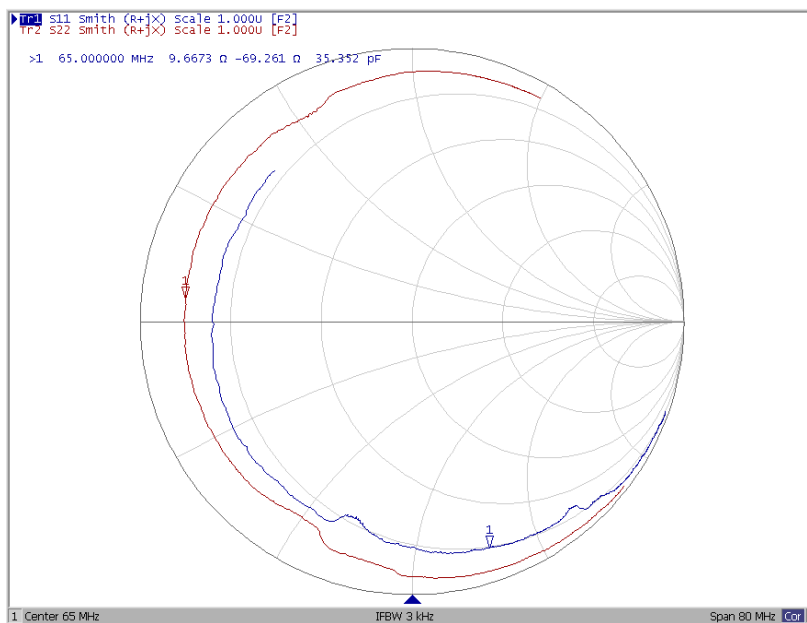
### Ripple Variation Fo±14.75MHz



### Group Delay Variation Fo±14.75MHz



### Smith Chart





### VSWR

