



Oscilent Corporation

# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF98.0M-20A	98.0MHz IF SAW Filter 20.55 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

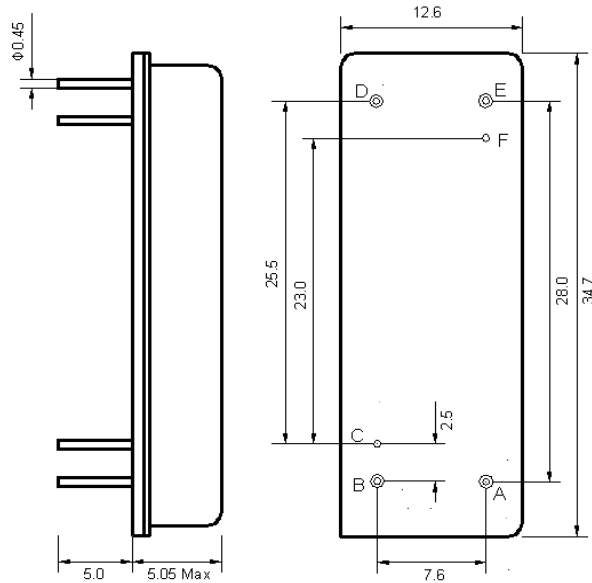
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



Oscilent Corporation  
Telephone: 1.949.252.0522  
Fax: 1.949.252.0522  
Email: sales@oscilent.com

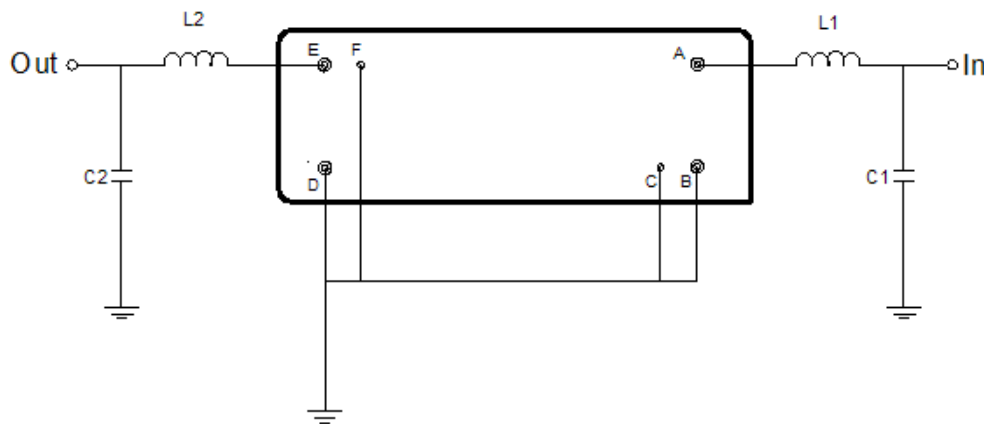


## Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	In
E	Out

## Test Circuit



Test Fixture & Values	
Input	L1=82 nH, C1=18 pF
Output	L2=82 nH, C2= 6 pF
Source/Load Impedance	50 $\Omega$



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	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.

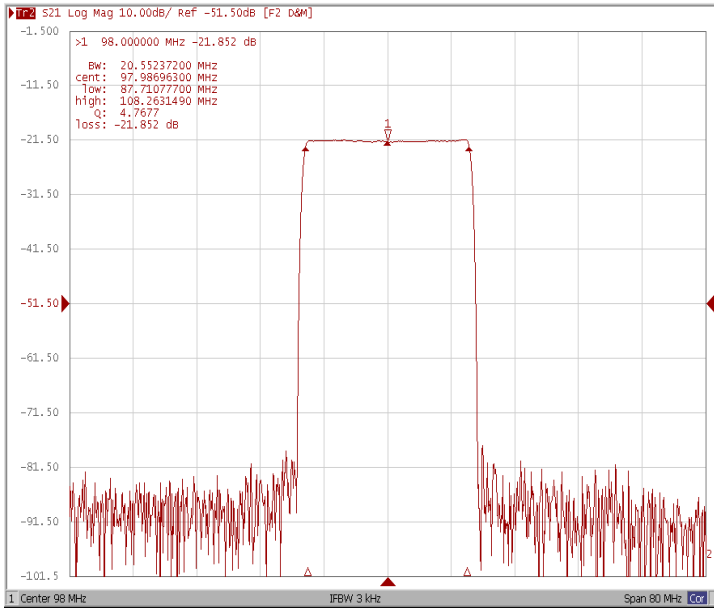
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	98.0	-
Insertion Loss at Fo	dB	-	21.8	23.5
Group Delay Variation (Fo±10.0MHz)	ns	-	39	80
Absolute Delay Time at Fo	us	-	2.30	2.50
Amplitude Ripple (Fo±10.0MHz)	dB	-	0.57	1.00
Bandwidth at -1dB	MHz	20.35	20.55	-
Bandwidth at -3dB	MHz	-	20.90	-
Bandwidth at -45dB	MHz	-	22.43	22.70
Relative Attenuation				
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-
Temperature Coefficient	ppm/°C	-	-72	-

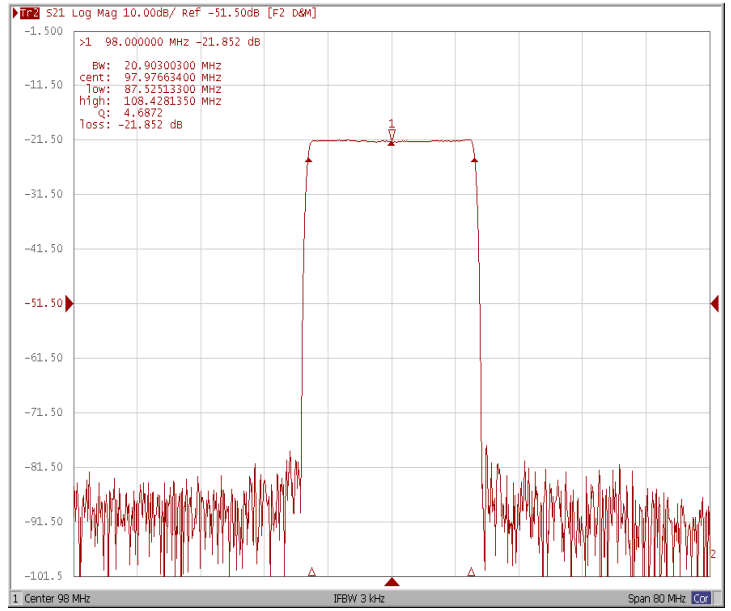


## Frequency Response

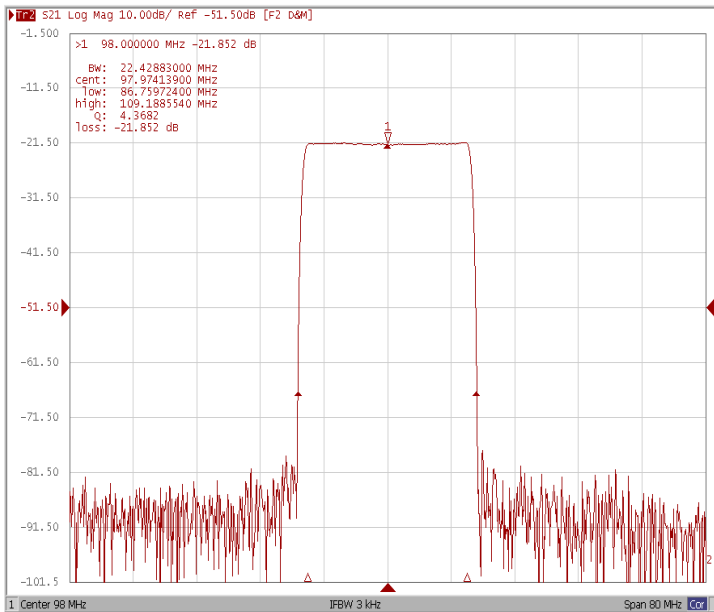
### Bandwidth at -1.0 dB



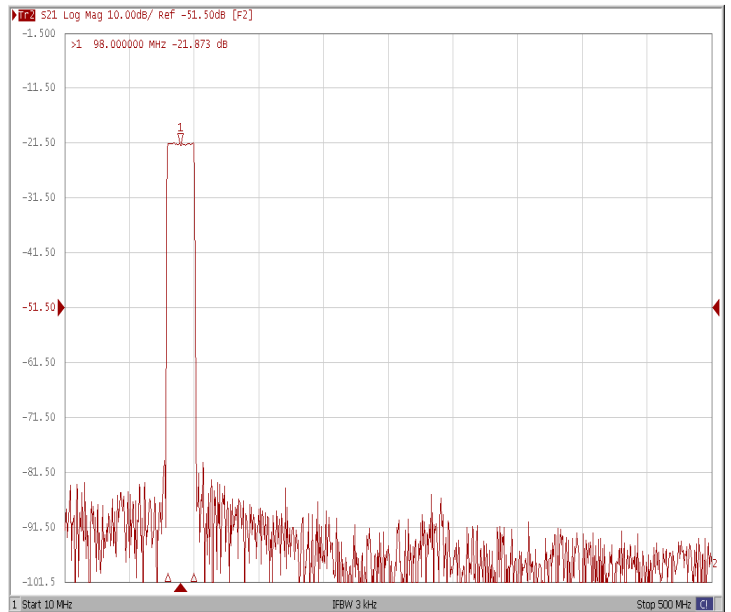
### Bandwidth at -3.0 dB



### Bandwidth at -45.0 dB

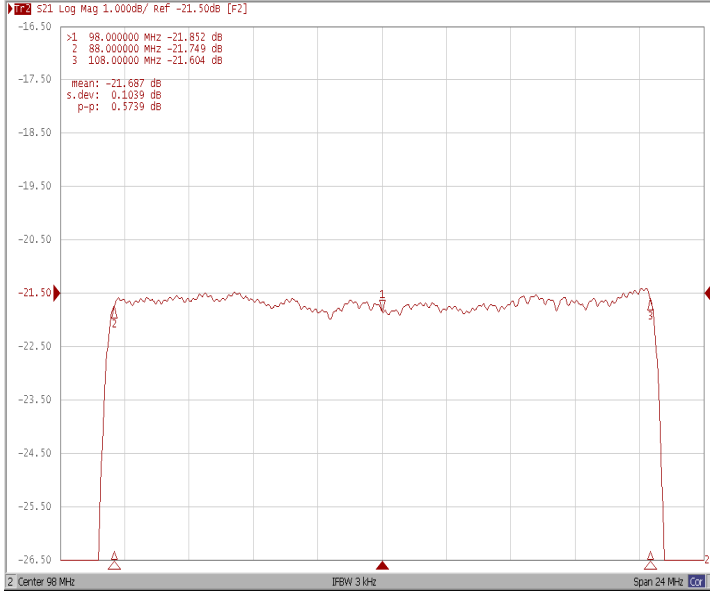


### Wide Span

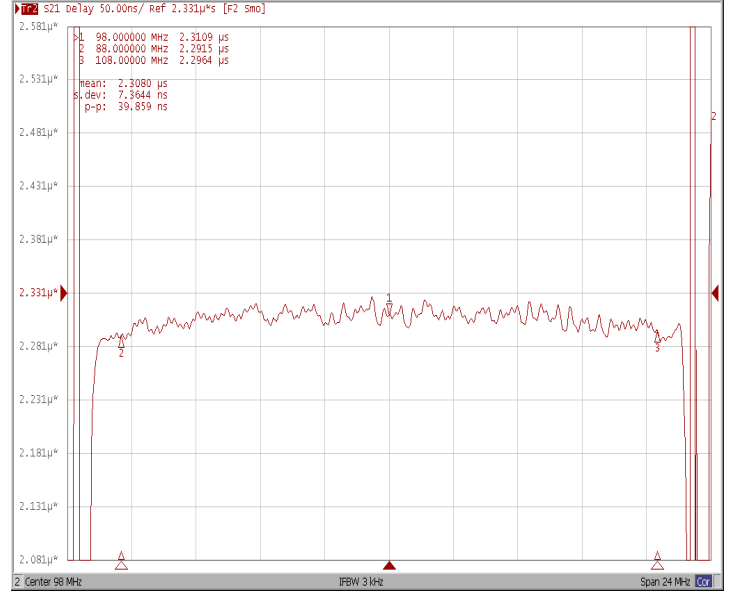




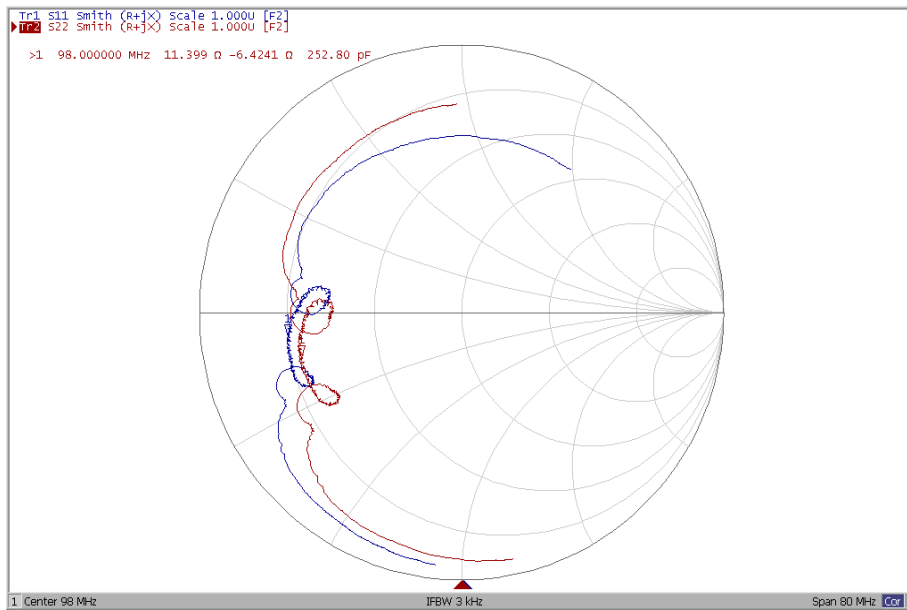
### Ripple Variation $F_o \pm 10.0\text{MHz}$



### Group Delay Variation $F_o \pm 10.0\text{MHz}$



### Smith Chart





## VSWR

