



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF140.0M-09A	40.00MHz IF SAW Filter 9.25 MHz Bandwidth

## Specification Contents

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

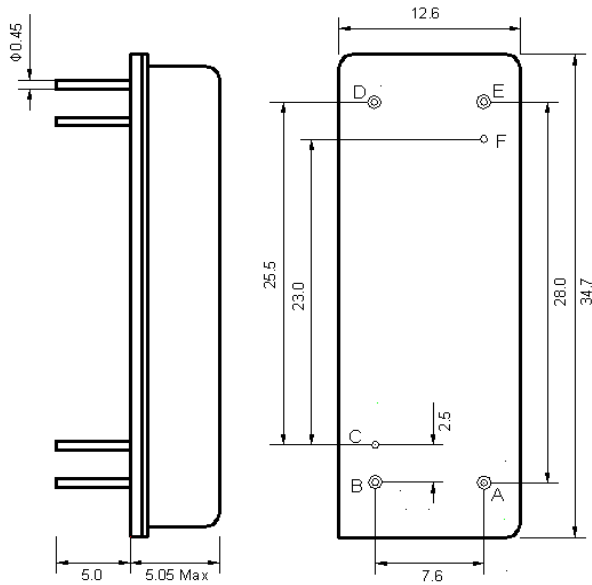
## Notes

- 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)



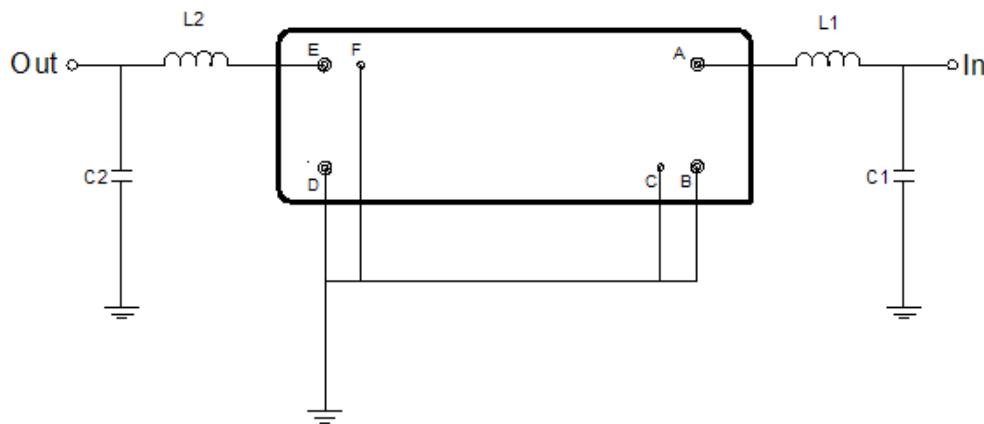


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=33 nH, C1=51 pF
Output	L2=33 nH, C2=47 pF
Source/Load Impedance	50 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	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.

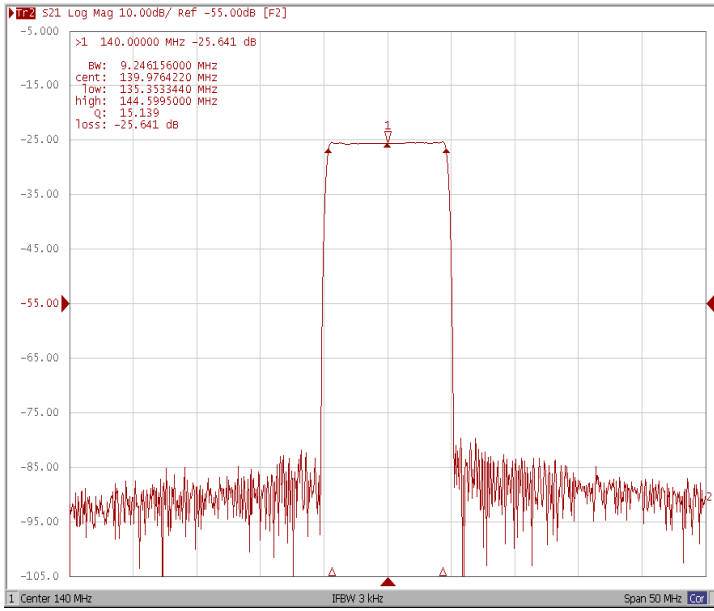
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	140.0	-
Insertion Loss at Fo	dB	-	25.6	28.0
Group Delay Variation (Fo±4.35MHz)	ns	-	49	100
Absolute Delay	us	-	4.21	-
Passband Ripple (Fo±4.35MHz)	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	9.10	9.25	-
Bandwidth at -3dB	MHz	-	9.45	9.70
Bandwidth at -15dB	MHz	-	9.95	10.10
Bandwidth at -40dB	MHz	-	10.30	10.50
Bandwidth at -50dB	MHz	-	10.40	10.70
Ultimate Rejection	dB	50	55	-
Temperature Coefficient	ppm/°C	-	-20	-

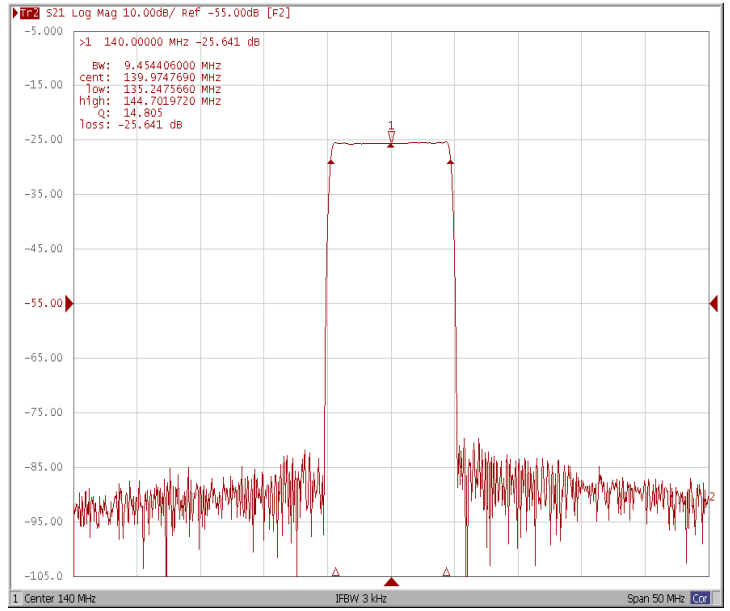


## Frequency Response

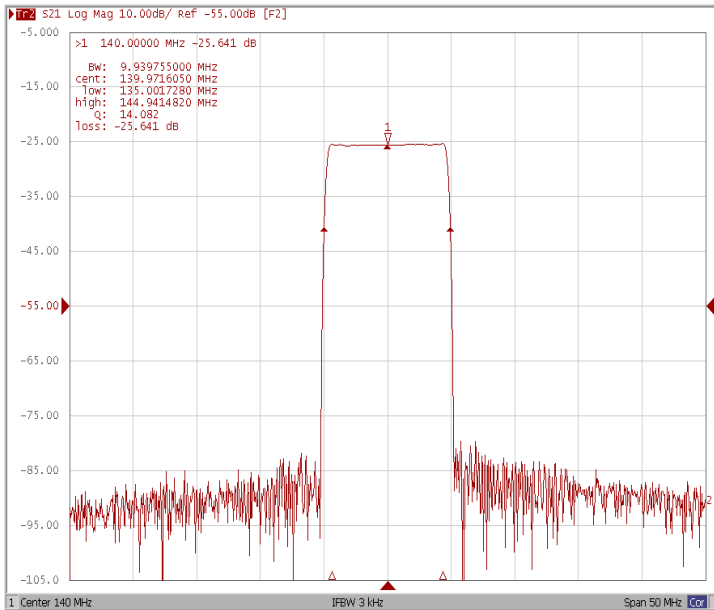
### Bandwidth at -1.0 dB



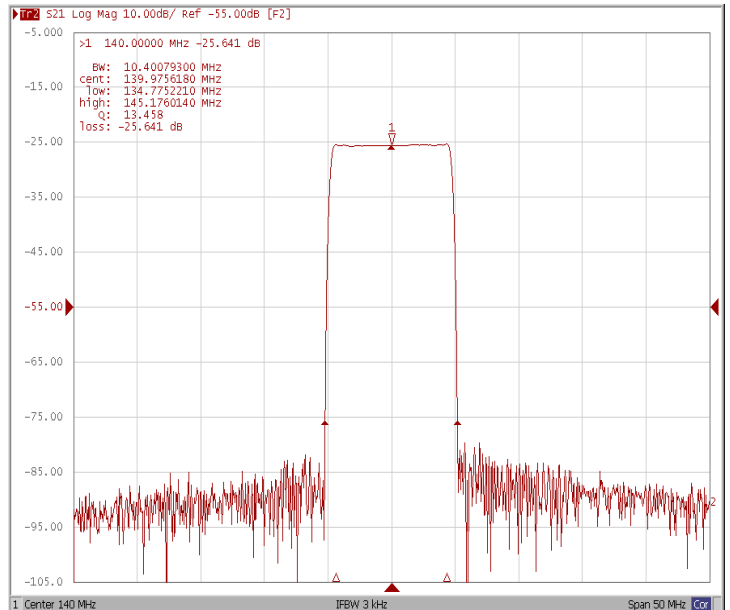
### Bandwidth at -3.0 dB



### Bandwidth at -15.0 dB

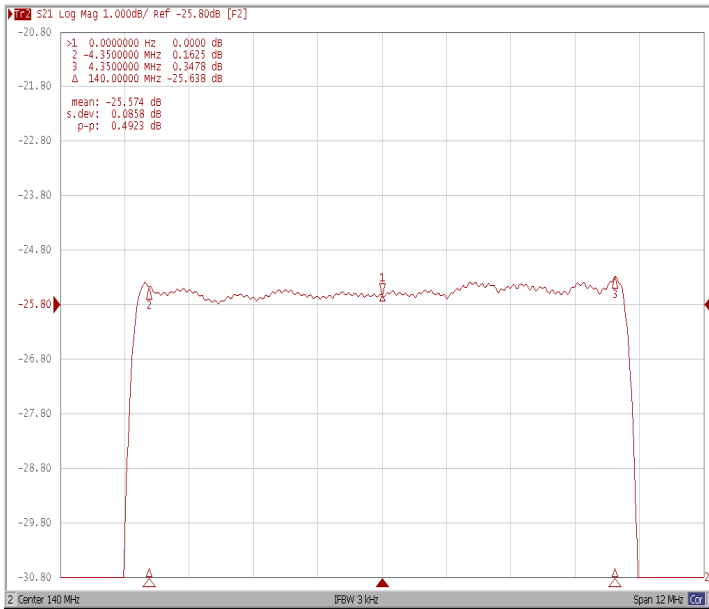


### Bandwidth at -50.0 dB

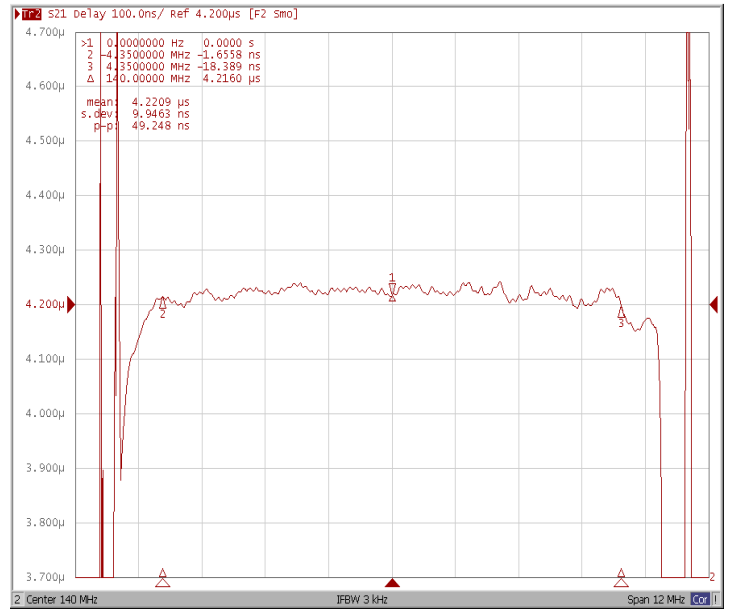




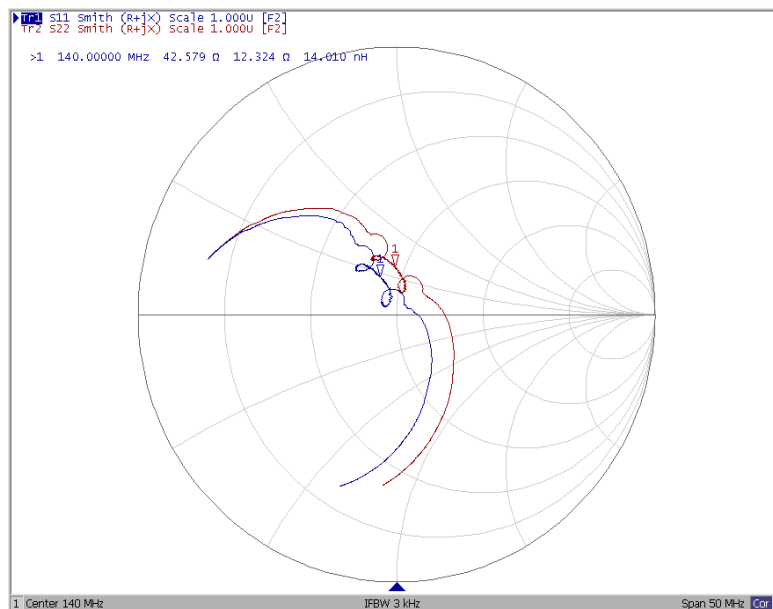
### Ripple Variation $F_0 \pm 4.35\text{MHz}$



### Group Delay Variation $F_0 \pm 4.35\text{MHz}$



### Smith Chart





### VSWR

