



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF43.75M-05A	43.75 MHz IF SAW Filter 5.33 MHz Bandwidth

## Specification Contents

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

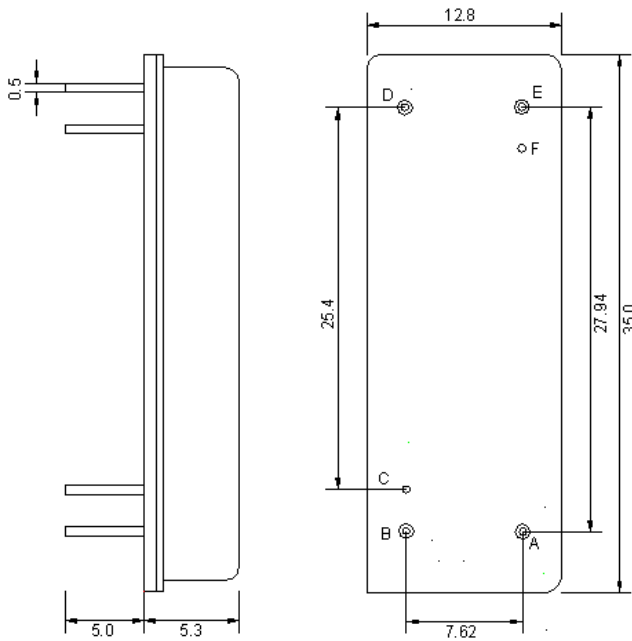
## Notes

- 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)



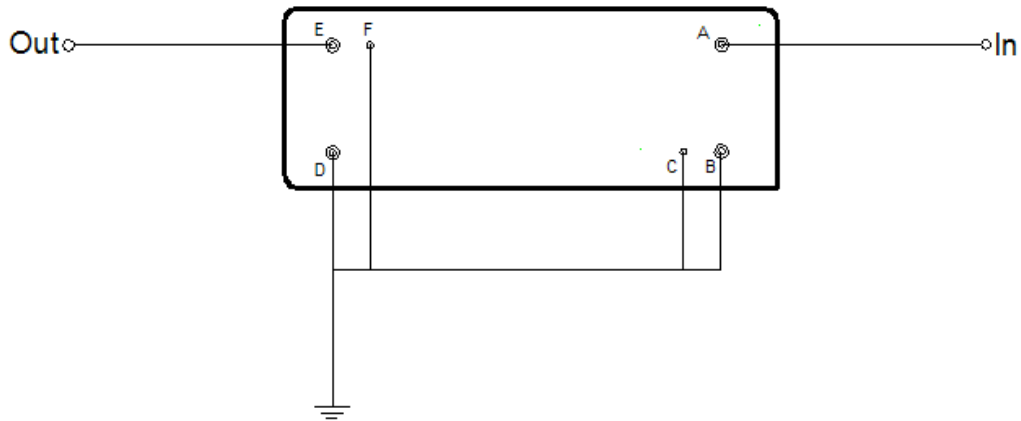


## Mechanical Dimensions (mm)



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

## Test Circuit



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.

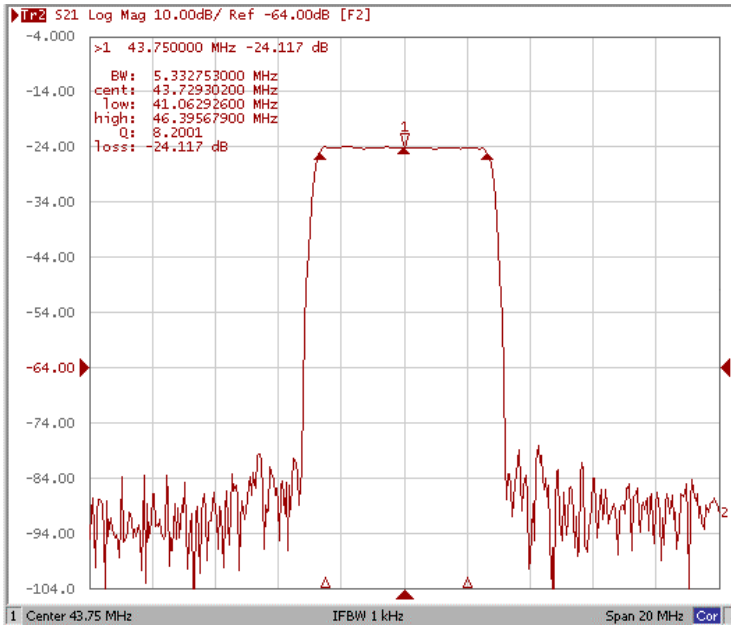
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	43.75	-
Insertion Loss at Fo	dB	-	24.0	26.0
Amplitude Ripple Variation at 41.25 ~ 45.75 MHz	dB <sub>p-p</sub>	-	0.5	0.8
Group Delay Variation at 41.25 ~ 45.75 MHz	nsec	-	80	120
Absolute Delay at Fo	μsec	-	4.15	-
Temperature Coefficient	ppm/°C	-	-94	-
Bandwidth at -1.0 dB	MHz	5.20	5.33	-
Bandwidth at -3.0 dB	MHz	-	5.54	-
Bandwidth at -40.0 dB	MHz	-	6.32	6.50
Ultimate Rejection	dB	50	55	-
Relative Attenuation				
39.75MHz	dB	50	55	-
47.25MHz	dB	50	55	-

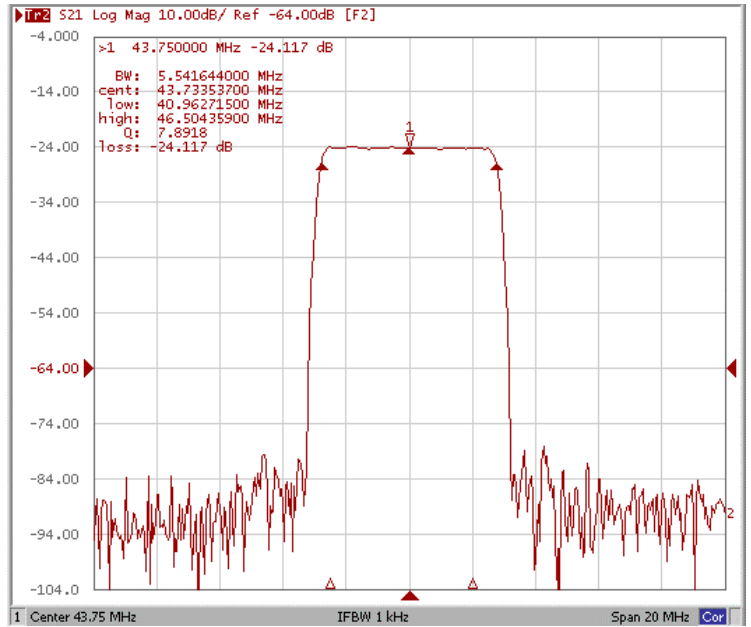


### Frequency Response

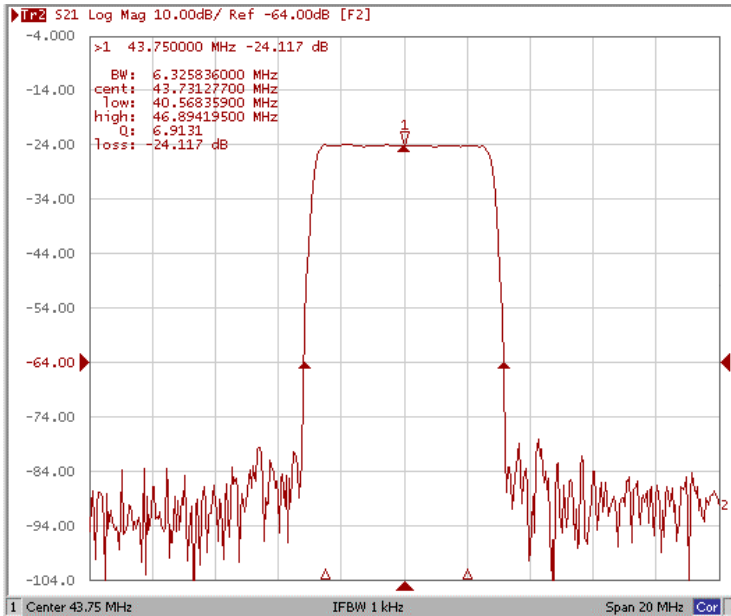
#### Bandwidth at -1.0 dB



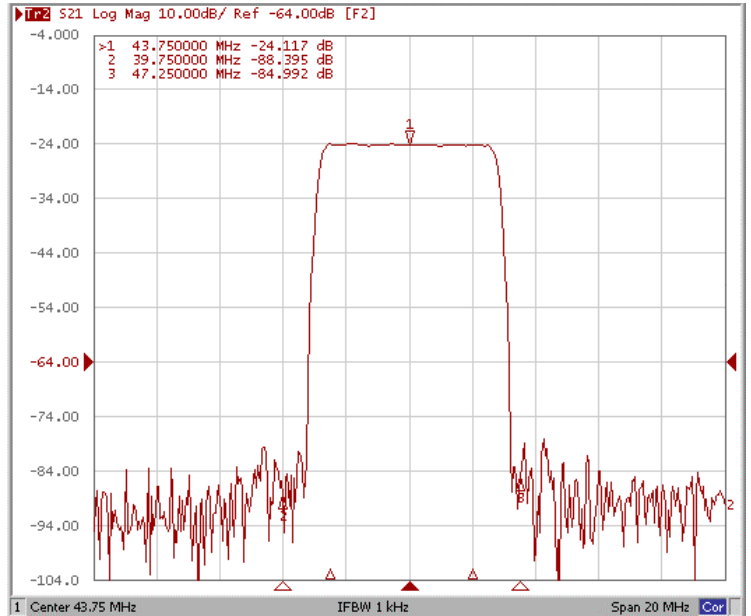
#### Bandwidth at -3.0 dB



#### Bandwidth at -40.0 dB

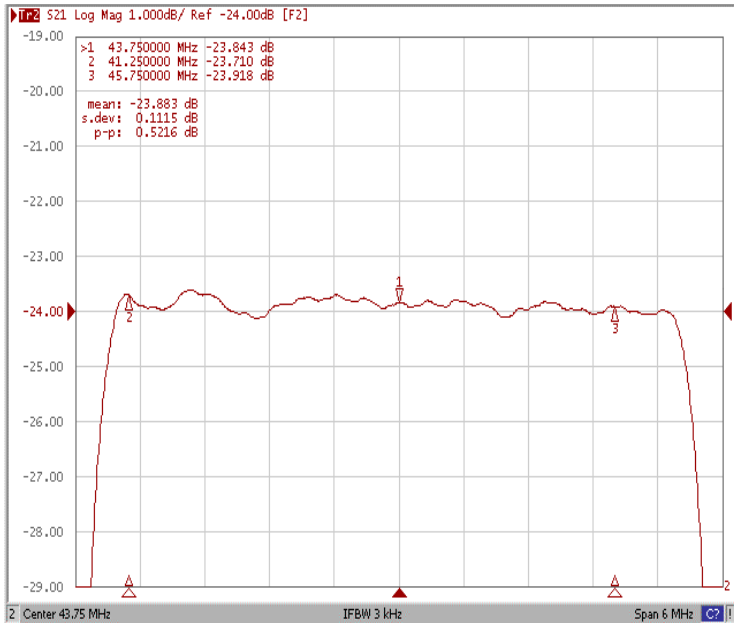


#### Attenuation 39.75 / 47.25MHz

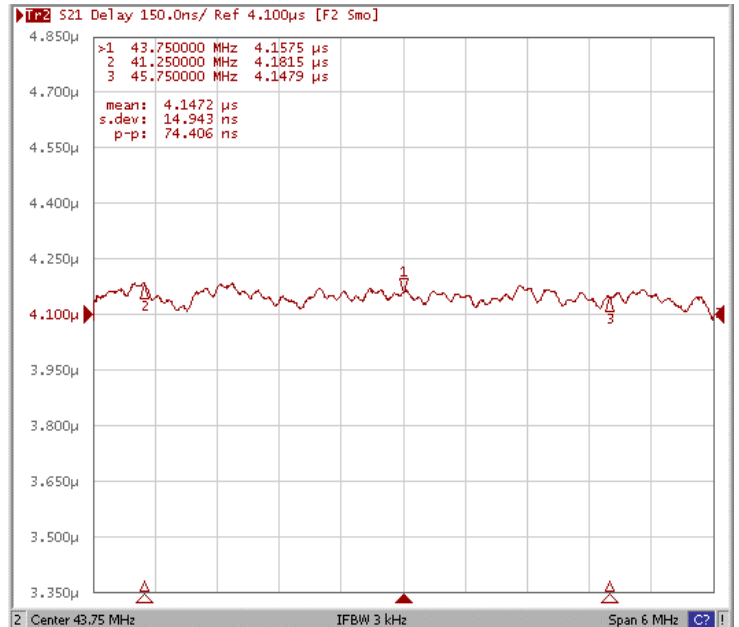




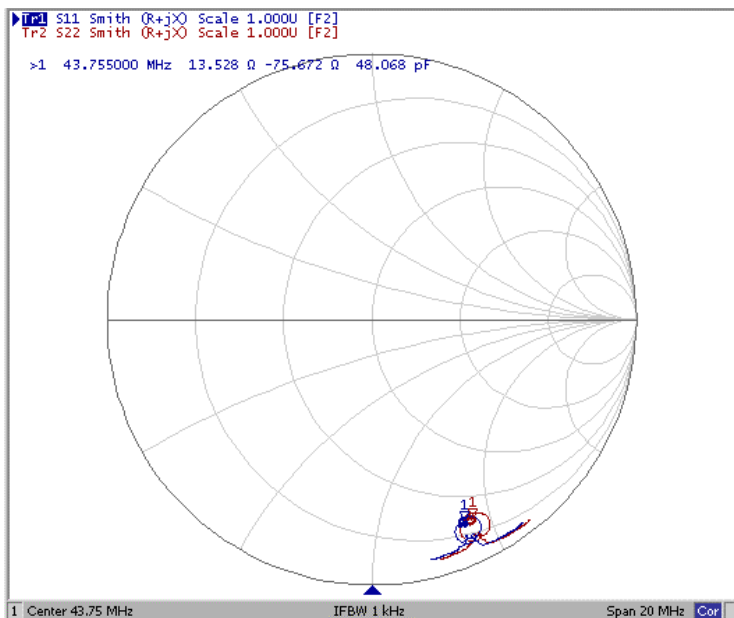
### Ripple Variation at 41.25 ~ 45.75 MHz



### Group Delay Variation at 41.25 ~ 45.75 MHz



### Smith Chart



### SWR

