



# PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF70.0M-30B	70.0 MHz IF SAW Filter 29.10MHz Bandwidth

## Specification Contents

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

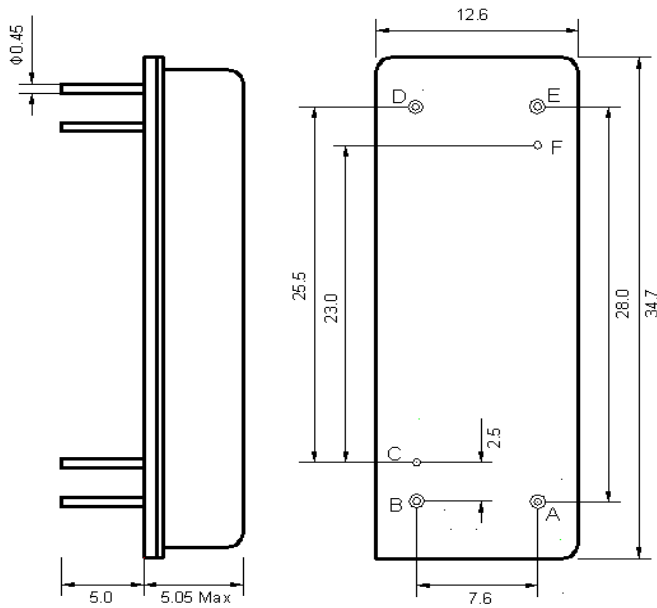
## Notes

- 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)



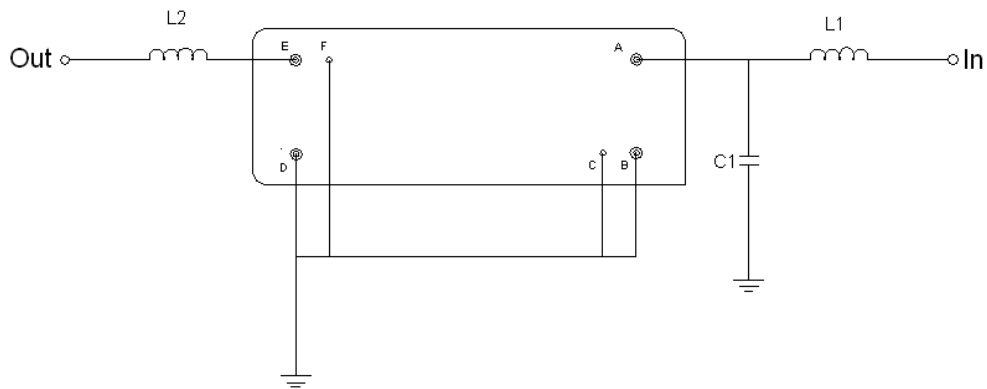


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 180nH, C1 = 5pF
Output	L2 = 150nH
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	-

**Electrical Specification**

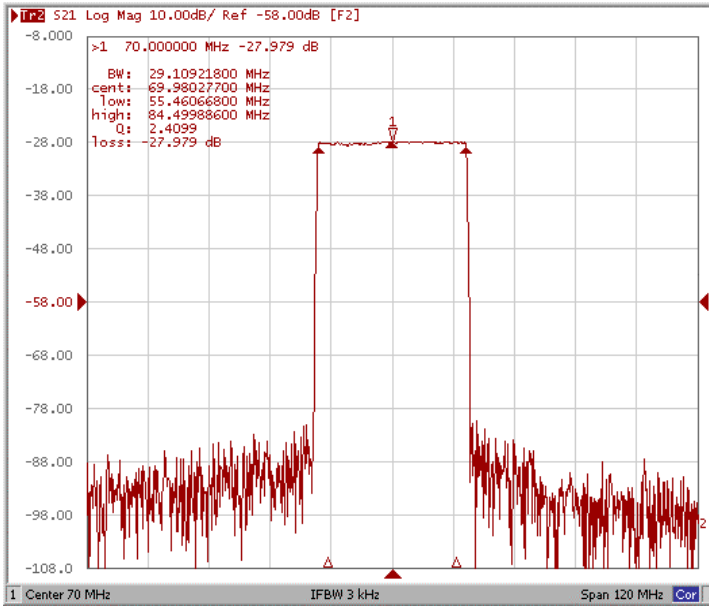
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.9	70.0	70.1
Insertion Loss at Fo	dB	-	28.0	30.0
Group Delay Variation (Fo±14.42MHz)	nsec	-	45	80
Absolute Delay at Fo	usec	-	3.10	-
Passband Ripple Variation (Fo±14.42MHz)	dB	-	0.82	1.2
Bandwidth at -1dB	MHz	29.00	29.10	-
Bandwidth at -3dB	MHz	29.15	29.30	-
Bandwidth at -40dB	MHz	-	30.37	30.45
Relative attenuation				
Lower Sidelobe	dB	54	60	
Upper Sidelobe	dB	54	60	
Temperature Coefficient	ppm/°C	-	-72	-

Note: Relative Attenuation Smoothing "ON"

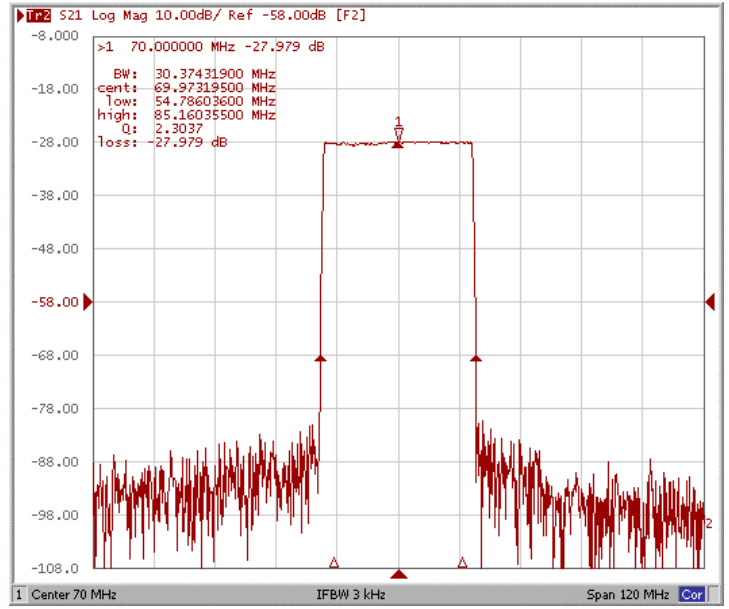


## Frequency Response

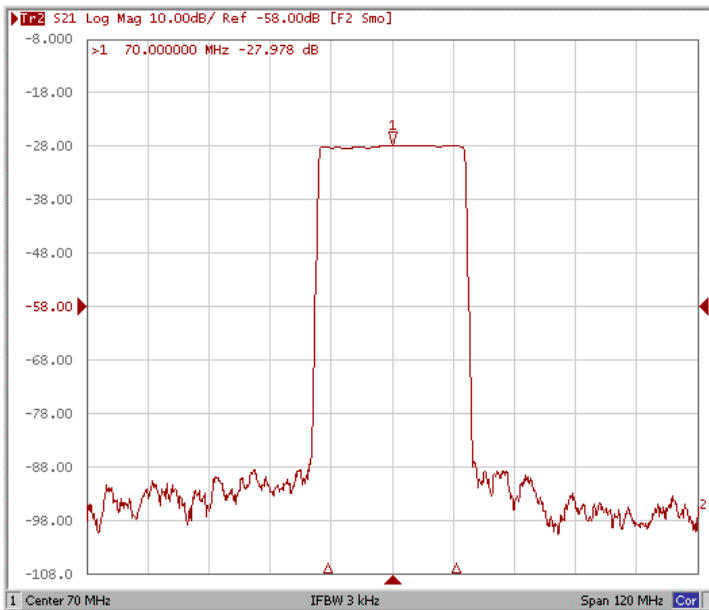
### Bandwidth at -1.0 dB



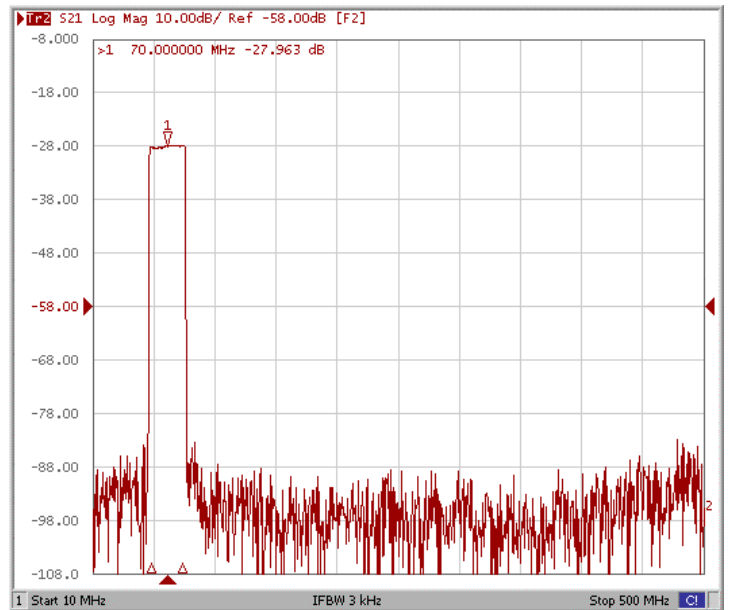
### Bandwidth at -40.0 dB



### Attenuation

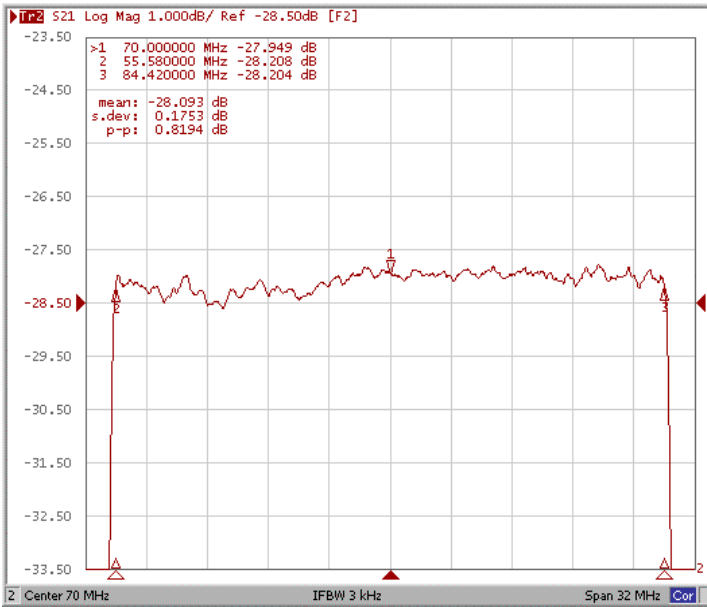


### Wide Band

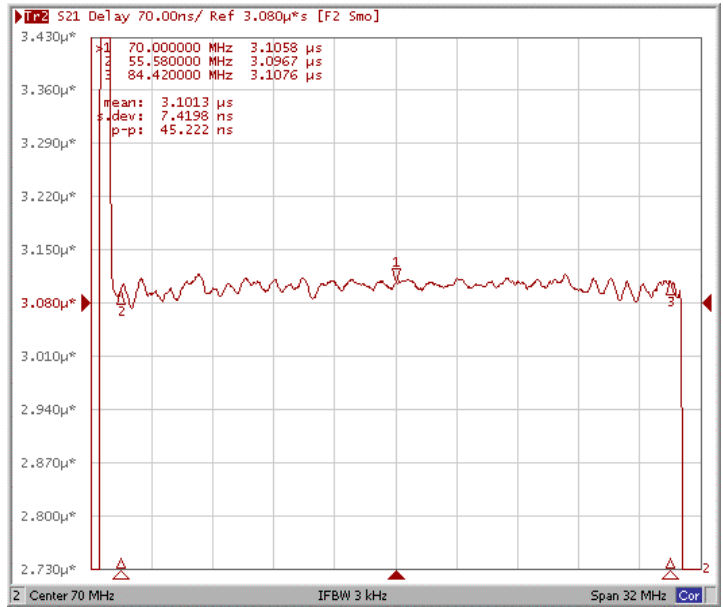




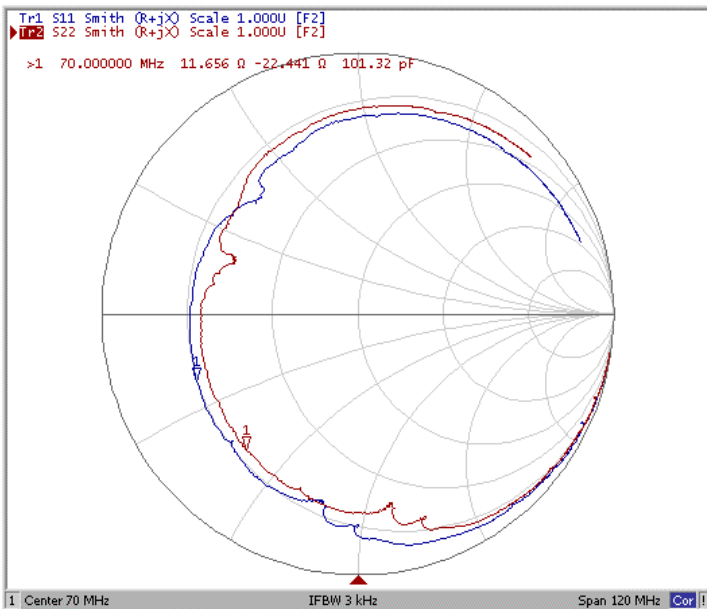
**Ripple Variation (Fo±14.42MHz)**



**Group Delay Variation (Fo±14.42MHz)**



**Smith Chart**



**SWR**

