



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF70.0M-30A	70.0 MHz IF SAW Filter 29.08 MHz Bandwidth

Specification Contents

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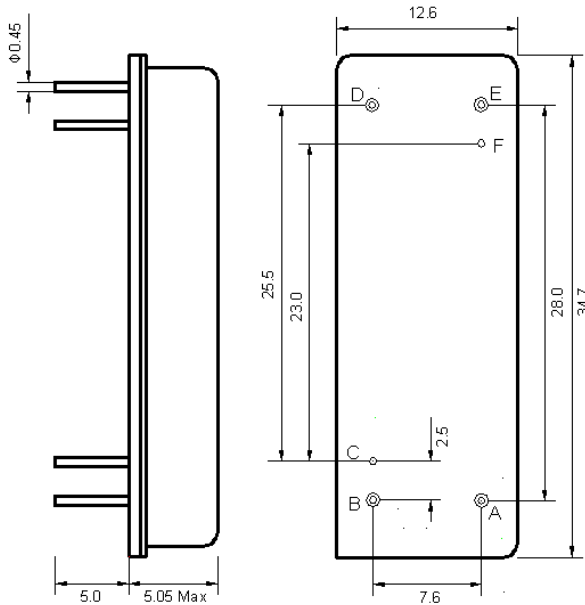
Notes

- 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)



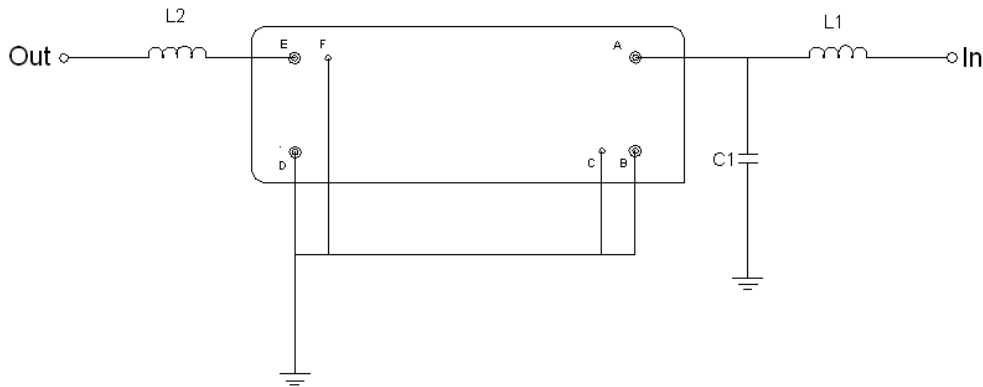


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 180nH, C1 = 2pF
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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	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.

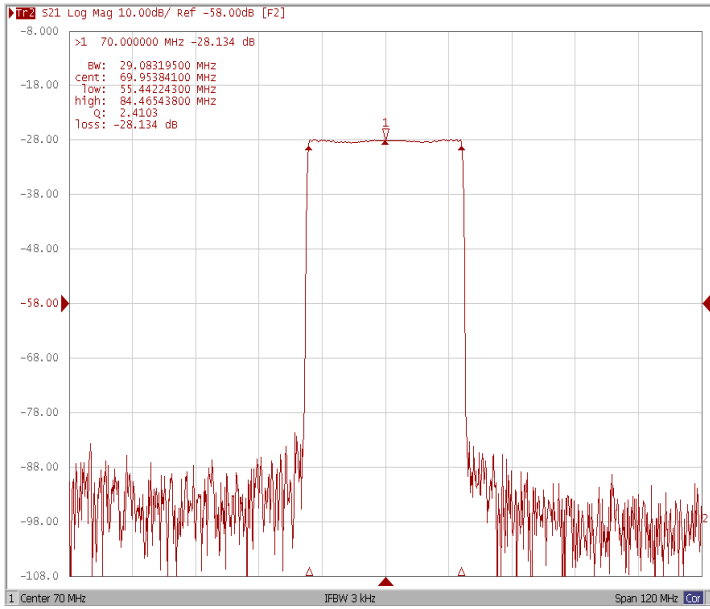
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	28.1	30.0
Group Delay Variation (Fo±14.42MHz)	nsec	-	37	70
Absolute Delay at Fo	usec	-	3.10	-
Passband Ripple Variation (Fo±14.42MHz)	dB	-	0.65	-
Bandwidth at -1dB	MHz	-	29.08	-
Bandwidth at -3dB	MHz	-	29.27	-
Bandwidth at -40dB	MHz	-	30.32	-
Relative attenuation				
@Fo±15.1MHz	dBc	-	27	-
Relative Attenuation				
Lower Sidelobe	dB	50	52	-
Upper Sidelobe	dB	50	52	-
52.0MHz~54.5MHz	dB	-	47	-
Temperature Coefficient	ppm/°C	-	-72	-

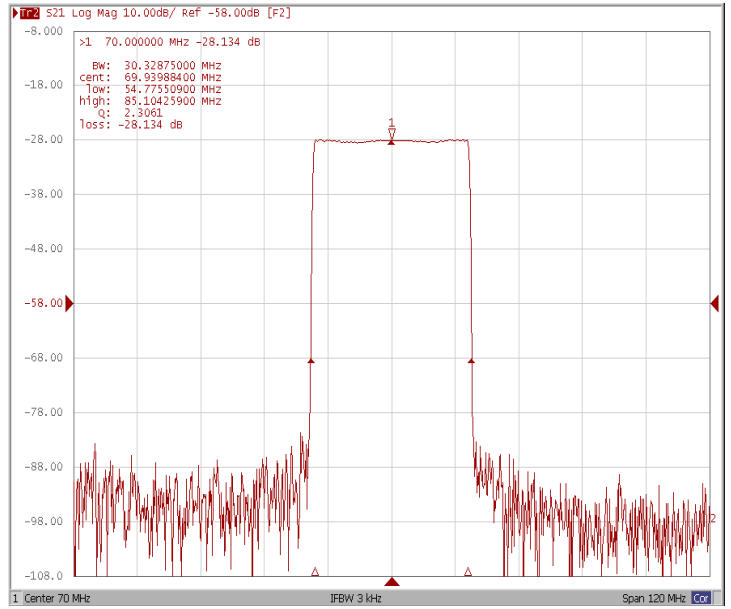


Frequency Response

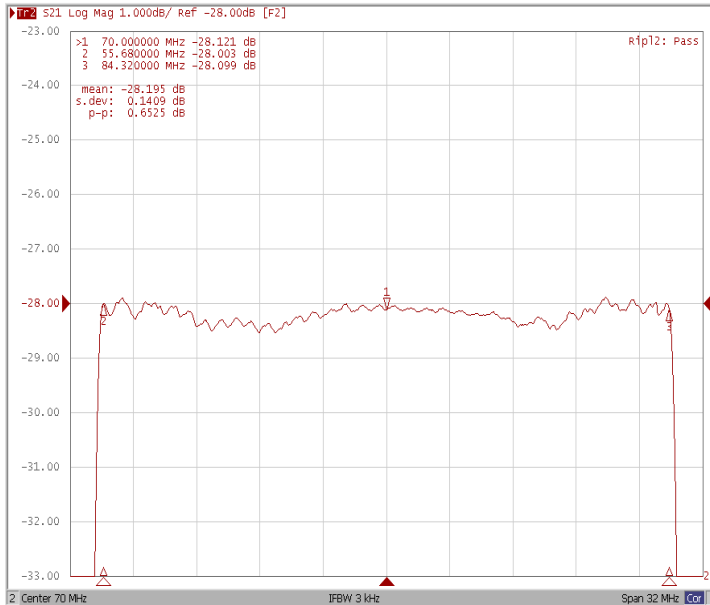
Bandwidth at -1.0 dB



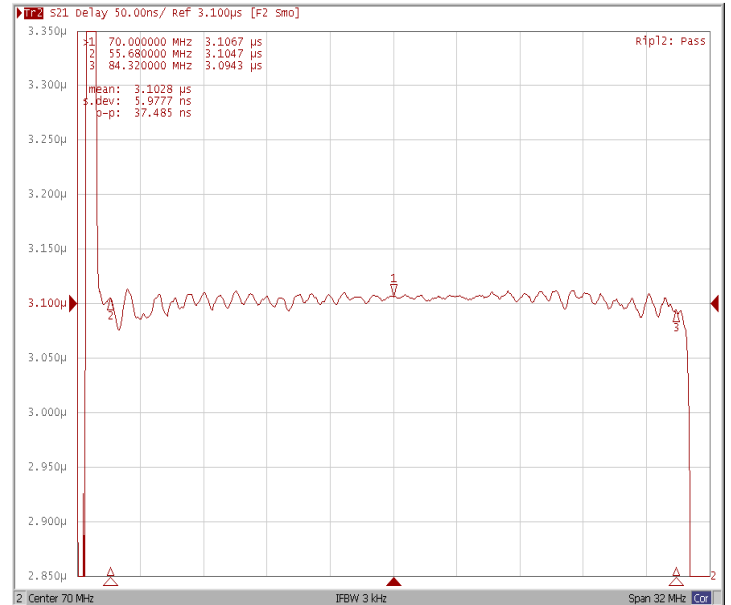
Bandwidth at -40.0 dB



Ripple Variation (Fo±14.32MHz)

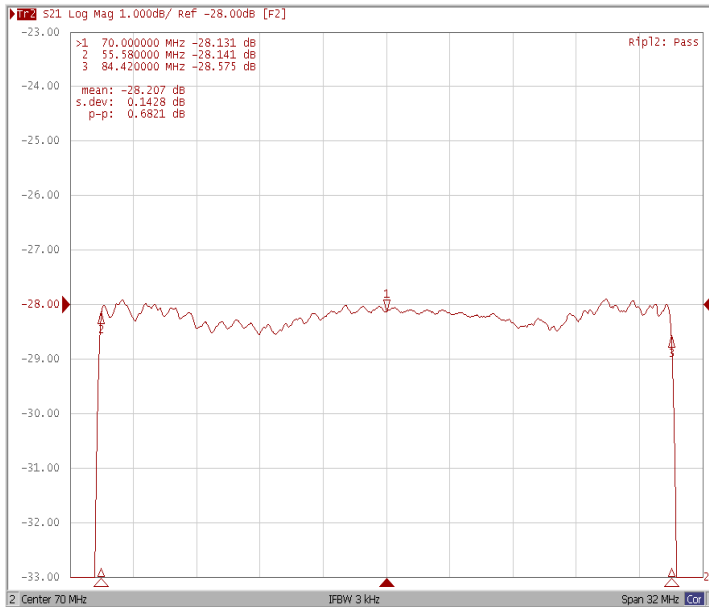


Group Delay Variation (Fo±14.32MHz)

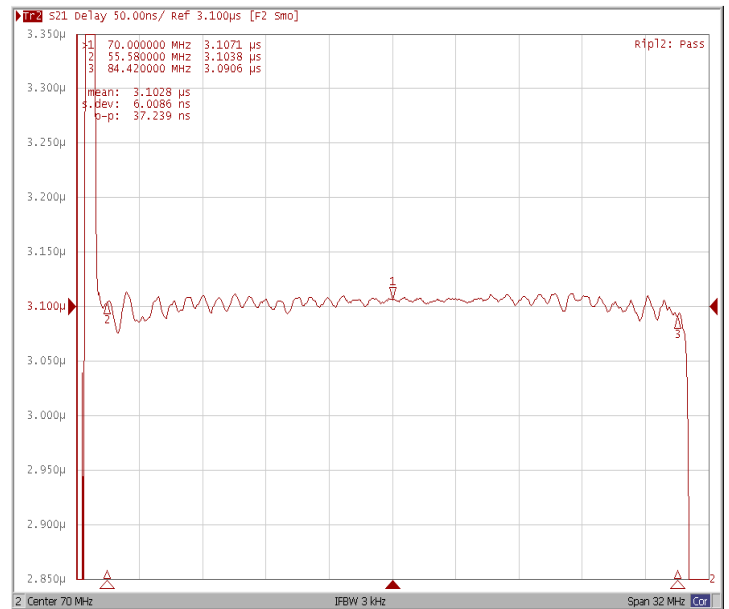




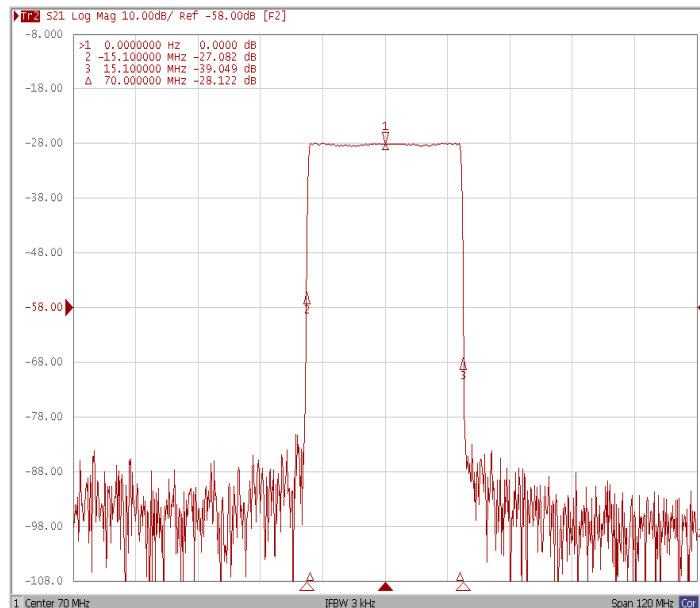
Ripple Variation (Fo±14.42MHz)



Group Delay Variation (Fo±14.42MHz)



Relative Attenuation





Smith Chart

