



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF70.0M-06A	70.0MHz IF SAW Filter 6.41 MHz Bandwidth

Specification Contents

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

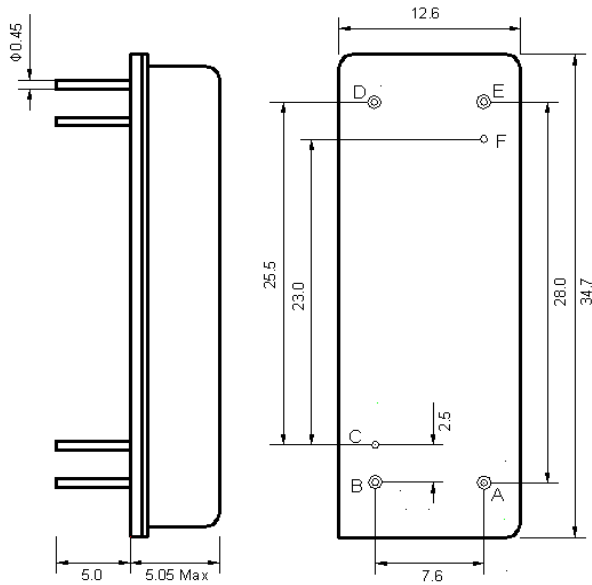
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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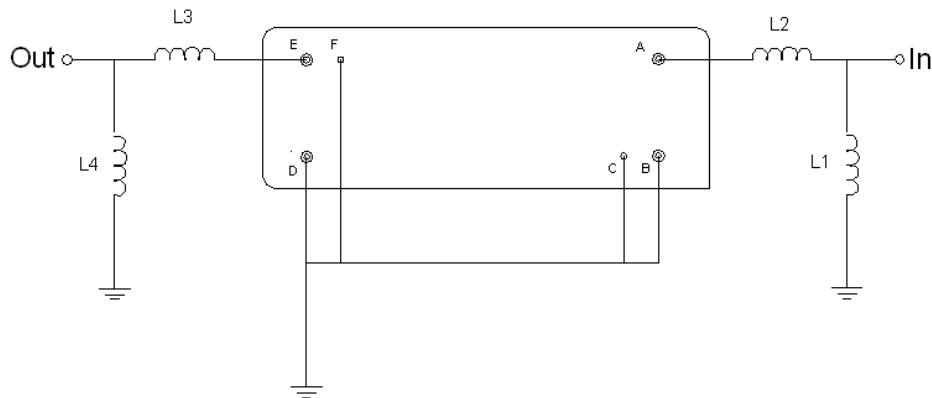


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=100 nH, L2=33 nH
Output	L3=33 nH, L4=100 nH
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.

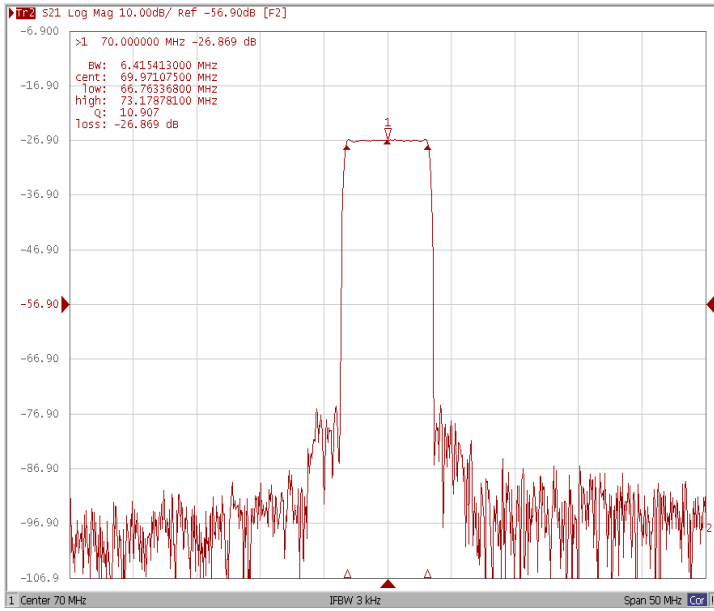
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	26.8	29.0
Absolute Delay	us	-	4.73	4.80
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple (Fo±3.125MHz)	dB	-	0.57	1.00
Group Delay Variation (Fo±3.125MHz)	nsec	-	52	100
Bandwidth at -1dB	MHz	-	6.41	-
Bandwidth at -3dB	MHz	-	6.60	-
Bandwidth at -40dB	MHz	-	7.35	7.40
Bandwidth at -50dB	MHz	-	7.41	-
Ultimate Rejection	dB	42	48	-
Relative Attenuation				
Delta 625KHz	dB	-	45	-

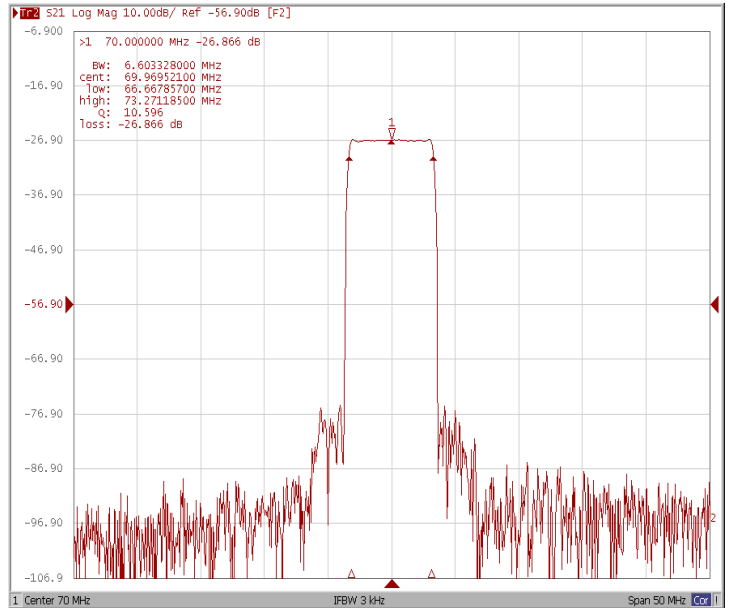


Frequency Response

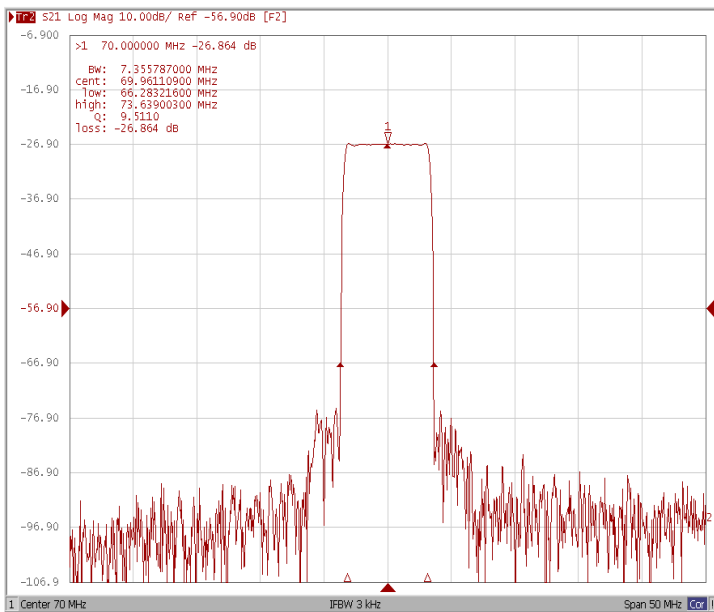
Bandwidth at -1.0 dB



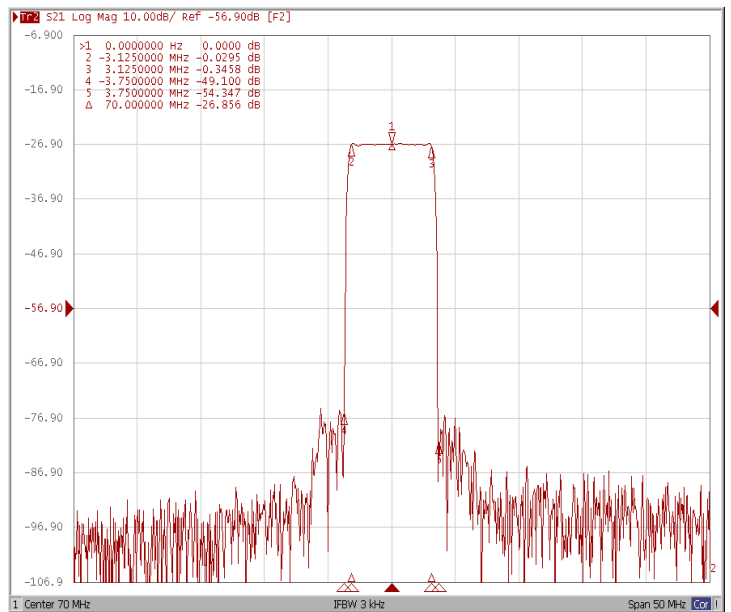
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

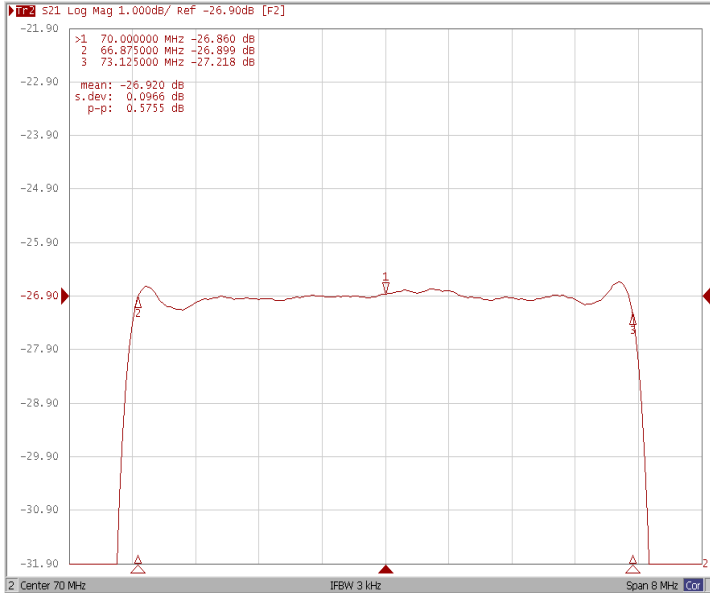


Relative Attenuation

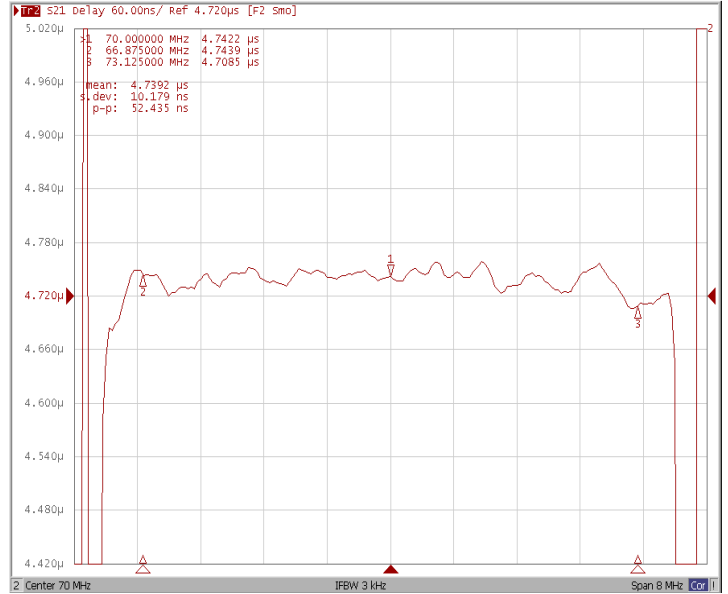




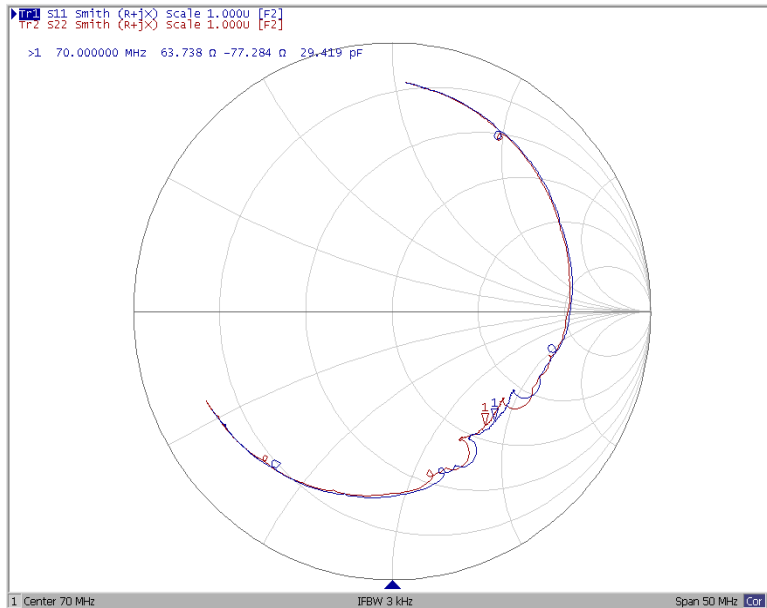
Ripple Variation (Fo±3.125MHz)



Group Delay Variation (Fo±3.125MHz)



Smith Chart





VSWR

