



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF85.0M-29A	85.0MHz IF SAW Filter 29.12 MHz Bandwidth

Specification Contents

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

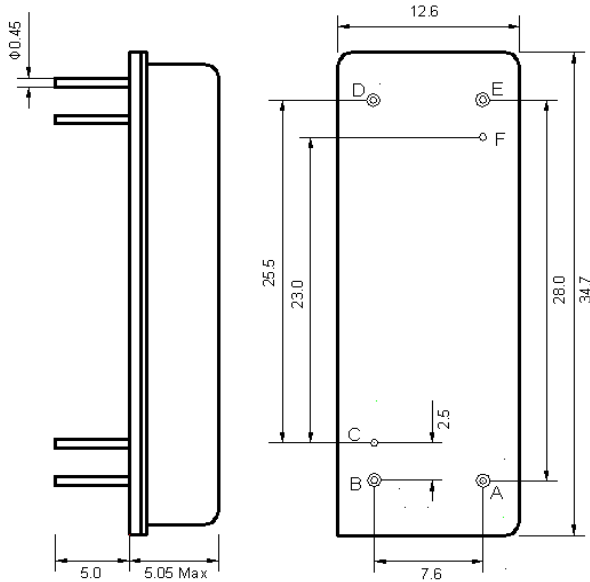
Notes

- 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)



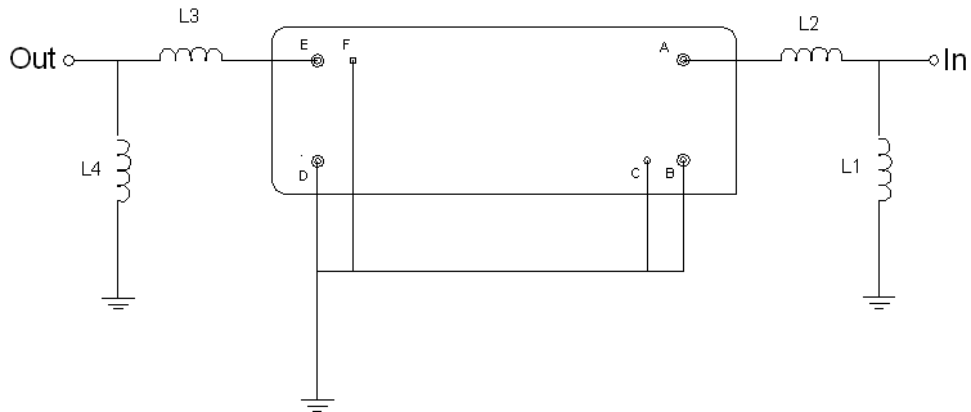


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=100 nH, L2=33 nH
Output	L3=39 nH, L4=150 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.

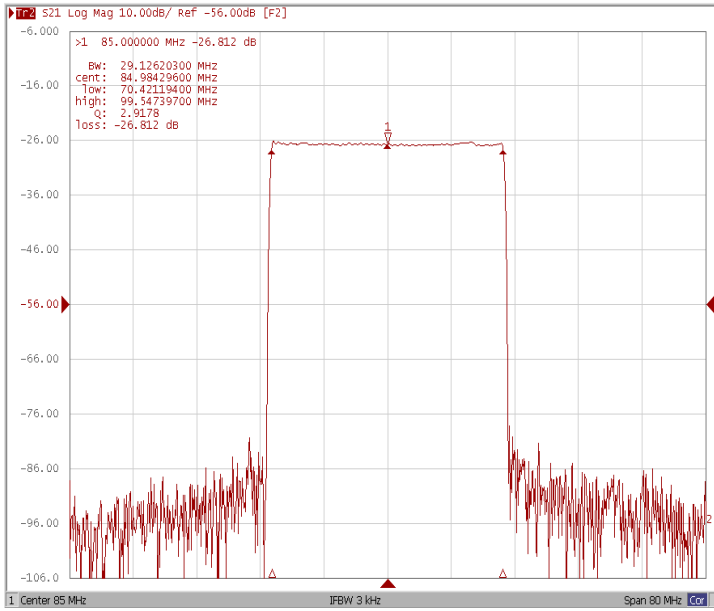
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	85.0	-
Insertion Loss at Fo	dB	-	26.8	30.0
Group Delay Variation (Fo±14.52MHz)	ns	-	38.5	80
Absolute Delay Time at Fo	us	-	3.3	-
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple (Fo±14.52MHz)	dB	-	0.93	-
Bandwidth at -1dB	MHz	29.00	29.12	-
Bandwidth at -3dB	MHz	-	29.31	-
Bandwidth at -40dB	MHz	-	30.2	30.5
Relative Attenuation				
Fo ±15.1MHz~ Fo ± 15.9MHz	dBc	24	45	-
Fo ± 15.9MHz~ Fo ± 19.9MHz	dBc	39	50	-
Fo ± 19.9MHz~ Fo ± 24.9MHz	dBc	39	50	-
Fo ± 24.9MHz~ Fo ± 30.0MHz	dBc	49	55	-
Ultimate Rejection	dB	-	50	-

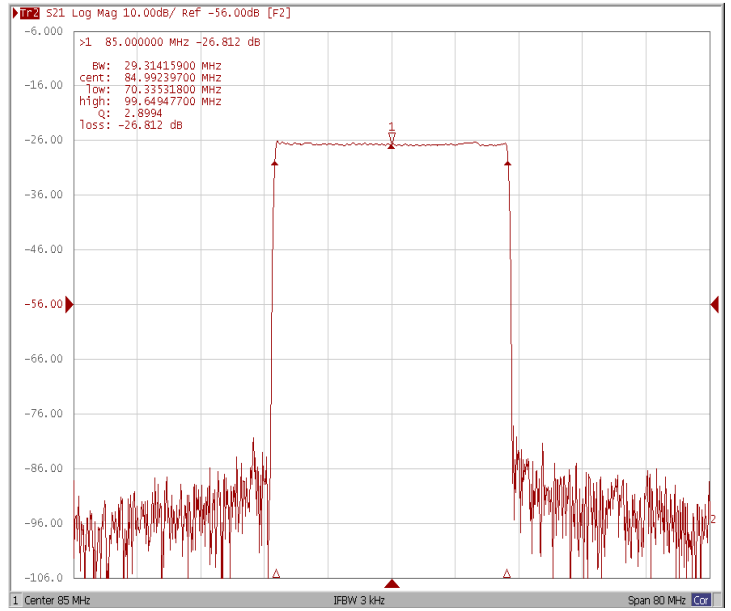


Frequency Response

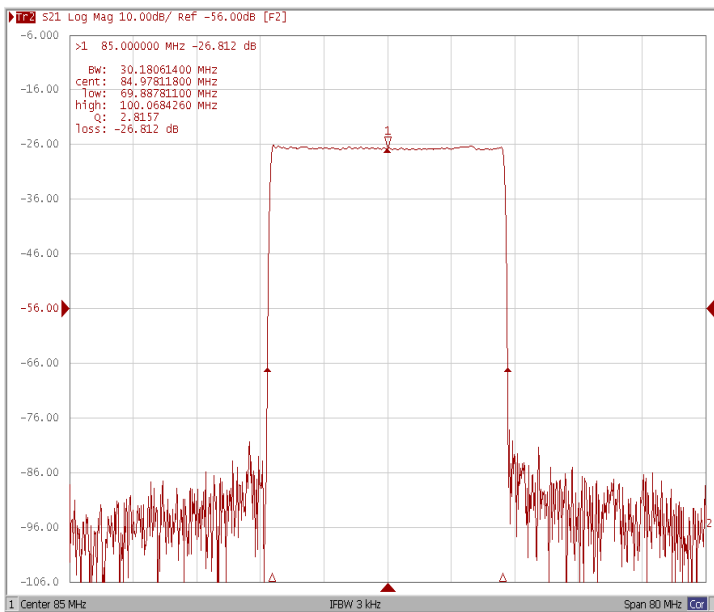
Bandwidth at -1.0 dB



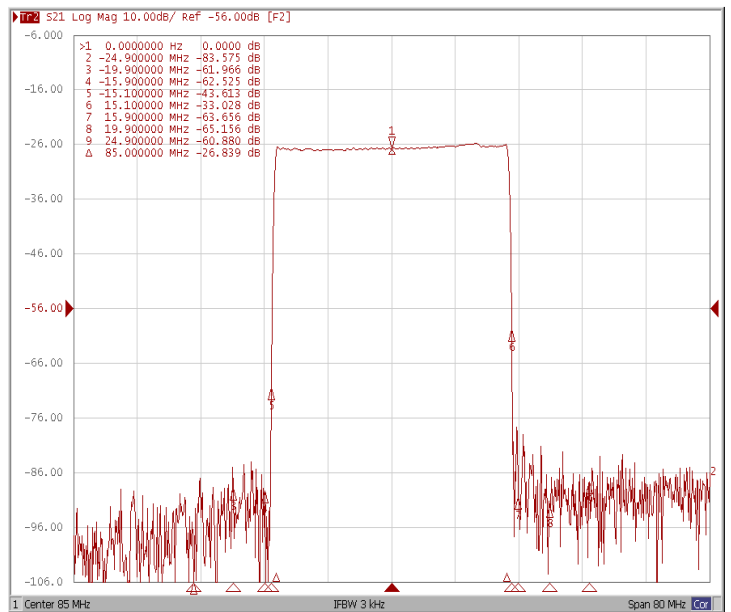
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

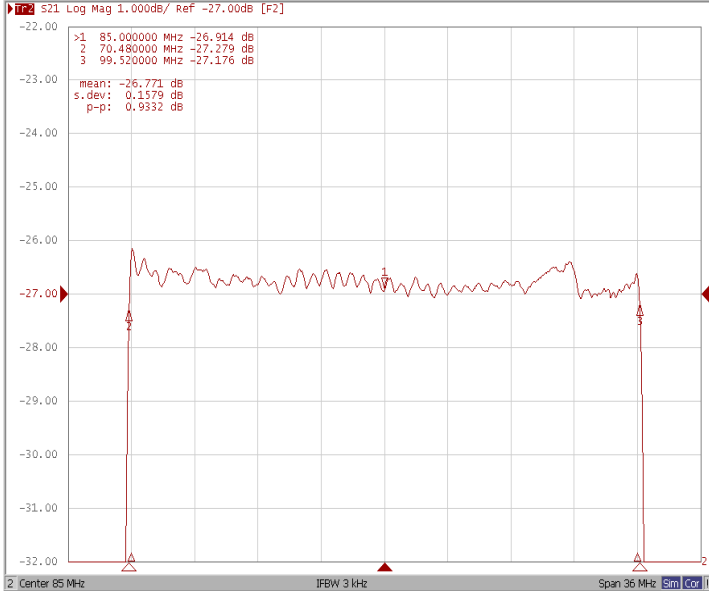


Relative Attenuation

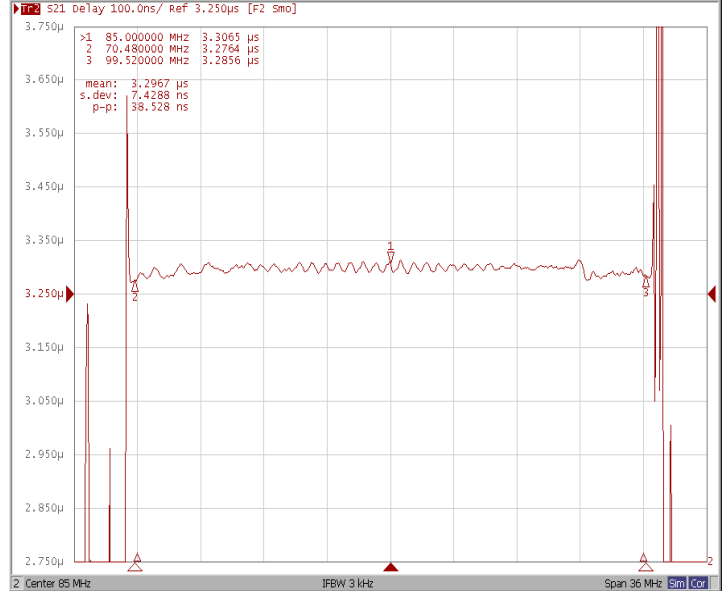




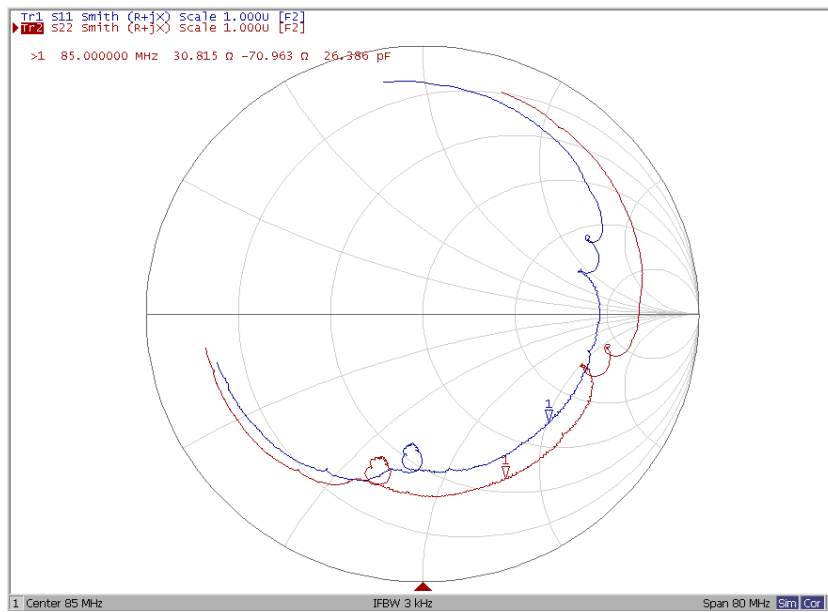
Ripple Variation Fo±14.52MHz



Group Delay Variation Fo±14.52MHz



Smith Chart





VSWR

