



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF237.5M-05A	237.5 MHz IF SAW Filter 5.15MHz 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

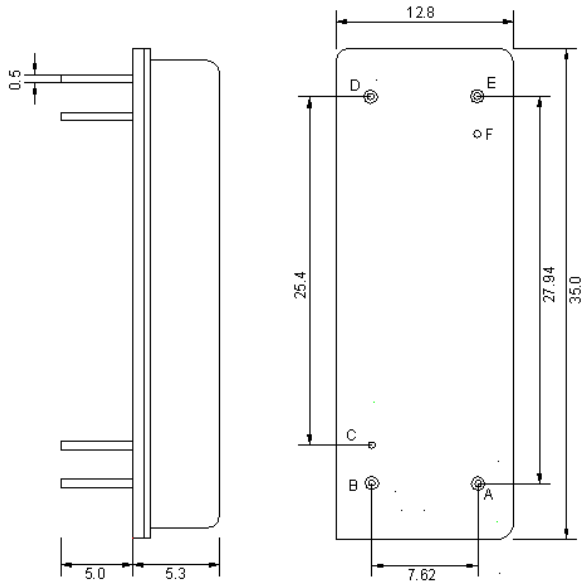
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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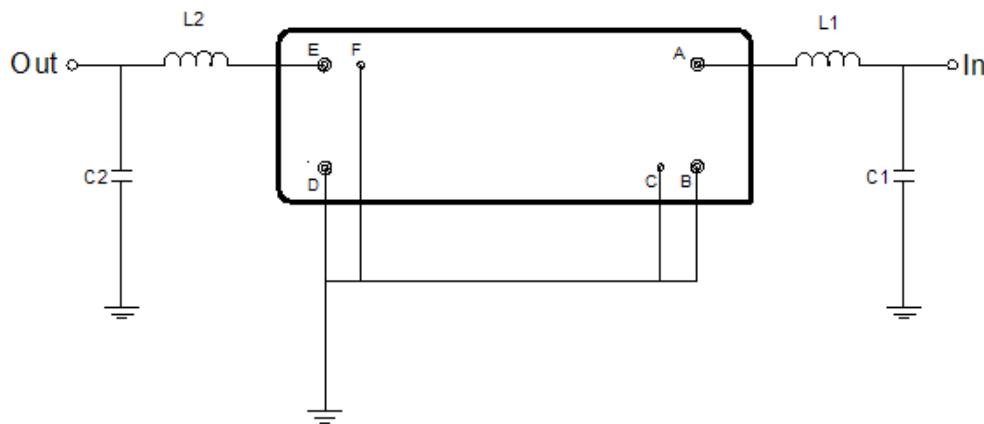


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=12nH, C1=33pF
Output	L2=12nH, C2=36pF
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-25	-	70
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).

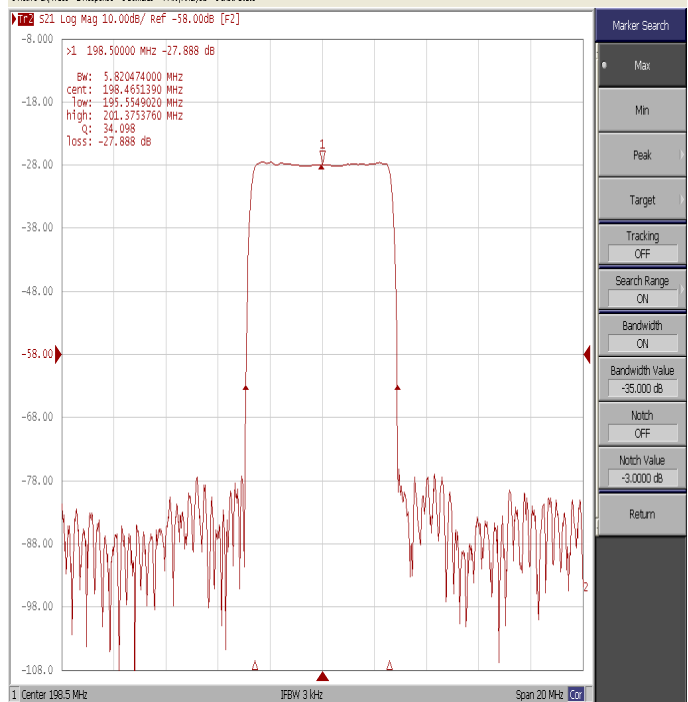
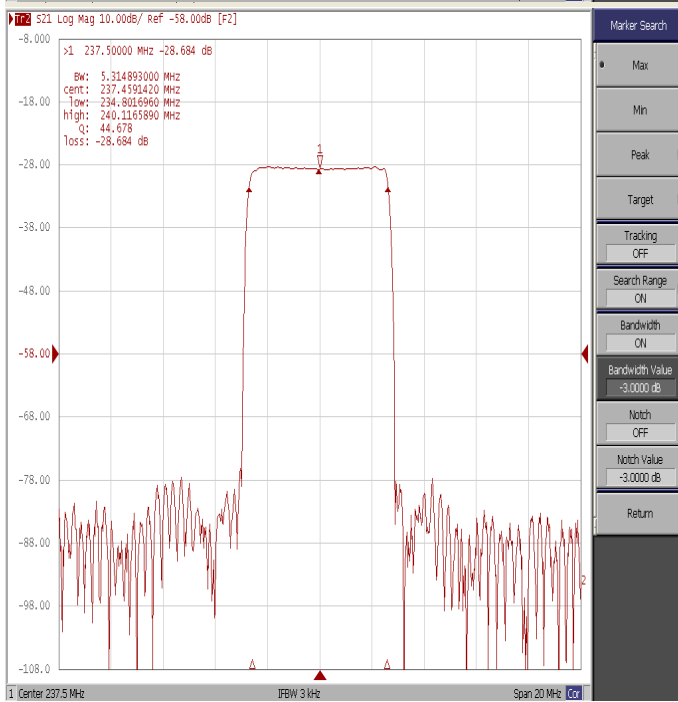
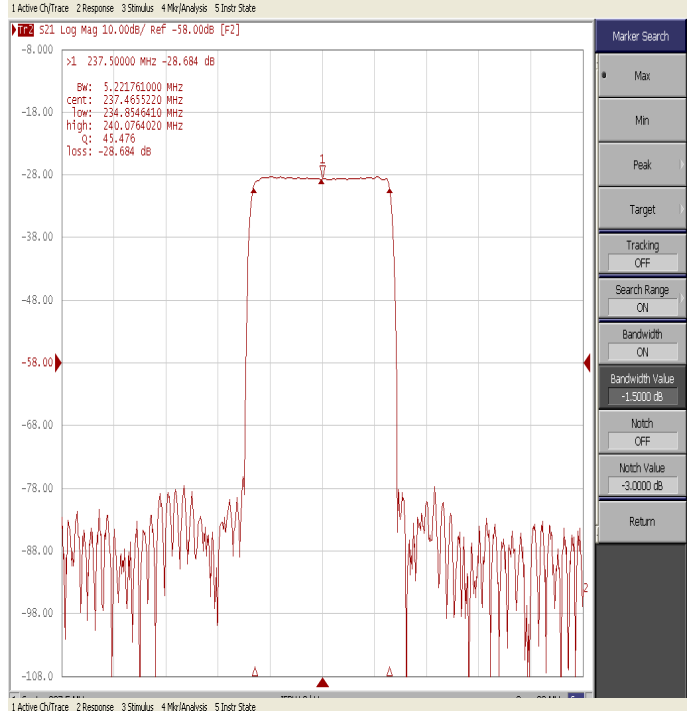
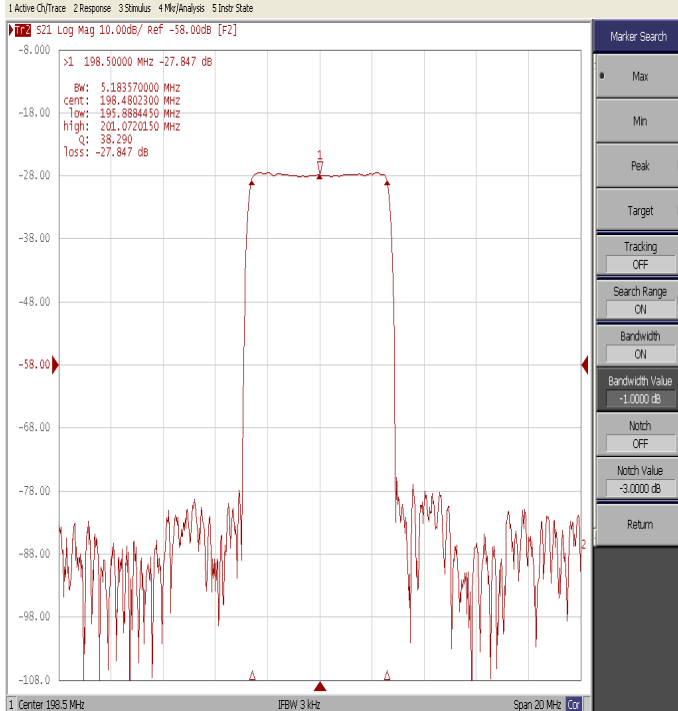
Those impedances could be modified with different impedance values and/or structures, if necessary.

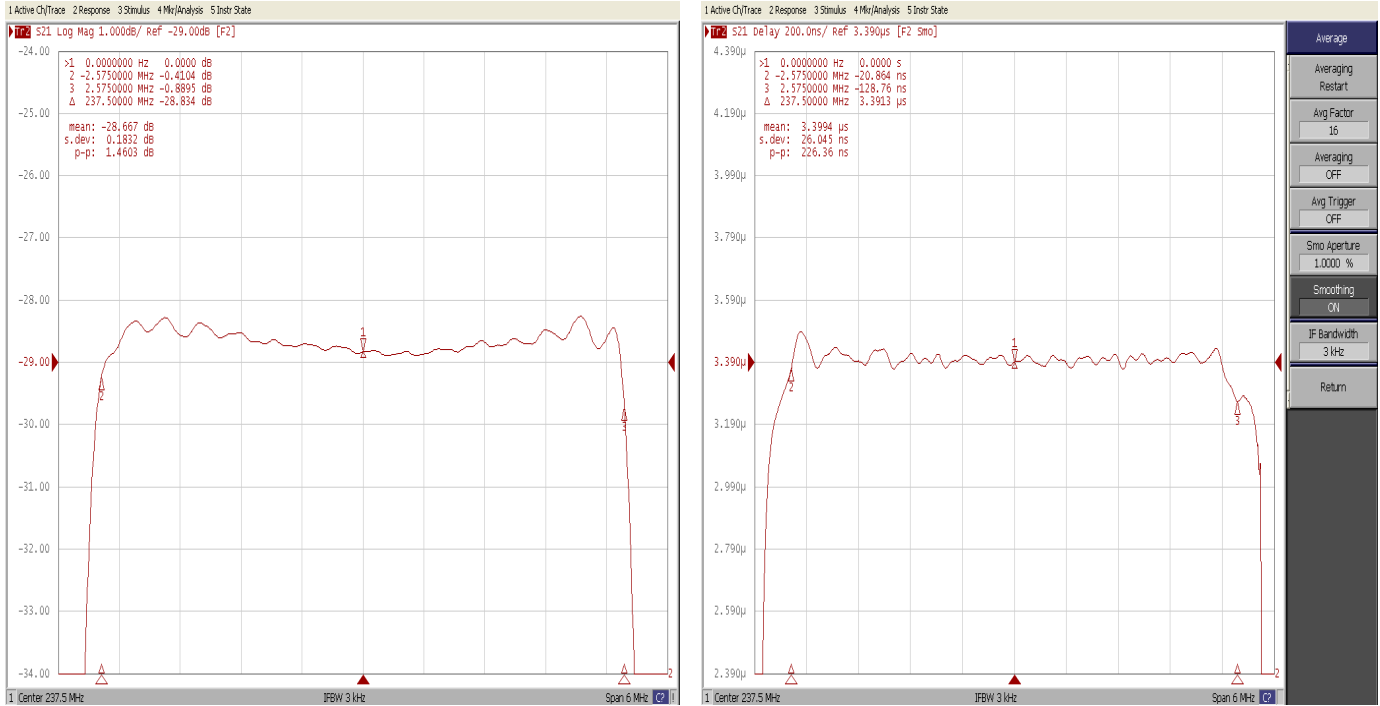
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	237.42	237.50	237.58
Insertion Loss at Fo	dB	-	29.0	30.5
Amplitude Ripple Variation ($\Delta F_o \pm 2.575\text{MHz}$)	dB _{p-p}	-	1.5	-
Group Delay Variation ($\Delta F_o \pm 2.575\text{MHz}$)	nsec	-	220	300
Absolute Delay at Fo	μsec	-	3.40	-
Temperature Coefficient	ppm/°C	-	-0.03	-
Bandwidth at -1.0 dB	MHz	5.10	5.17	-
Bandwidth at -1.5 dB	MHz	-	5.22	-
Bandwidth at -3.0 dB	MHz	-	5.31	-
Bandwidth at -35.0 dB	MHz	-	5.81	5.90
Bandwidth at -40.0 dB	MHz	-	5.84	-
Ultimate Rejection	dB	45	48	-

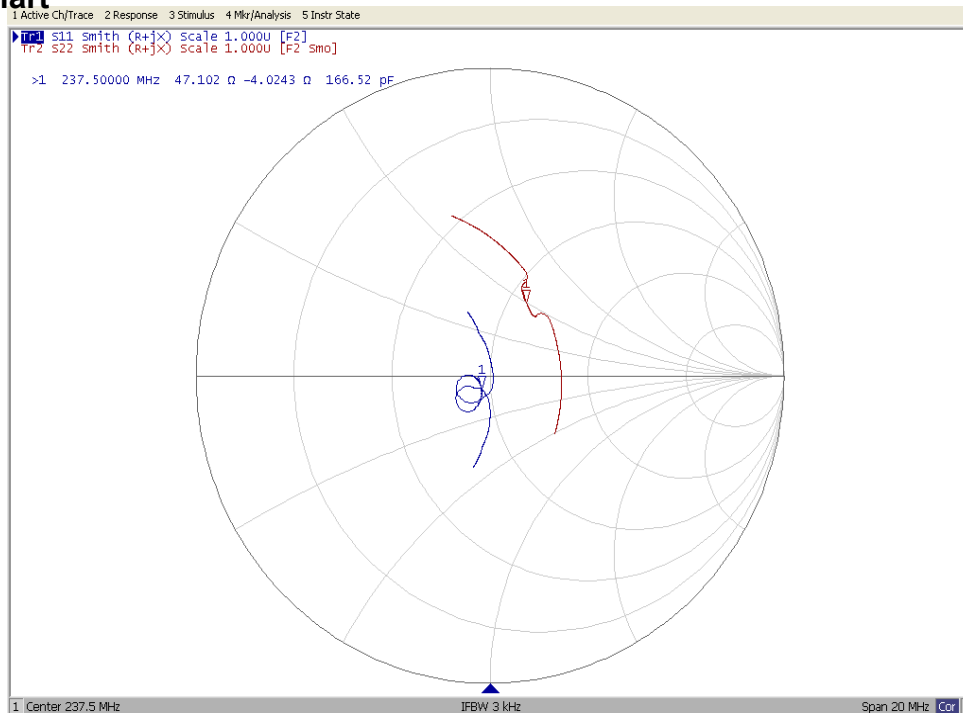


Frequency Response





Smith Chart





VSWR

