



Oscilent Corporation

# PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF70.0M-14C	70.0MHz IF SAW Filter 14.27 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

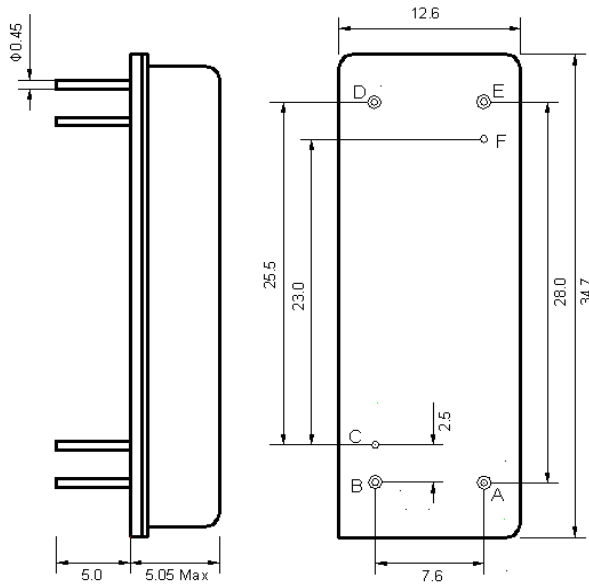
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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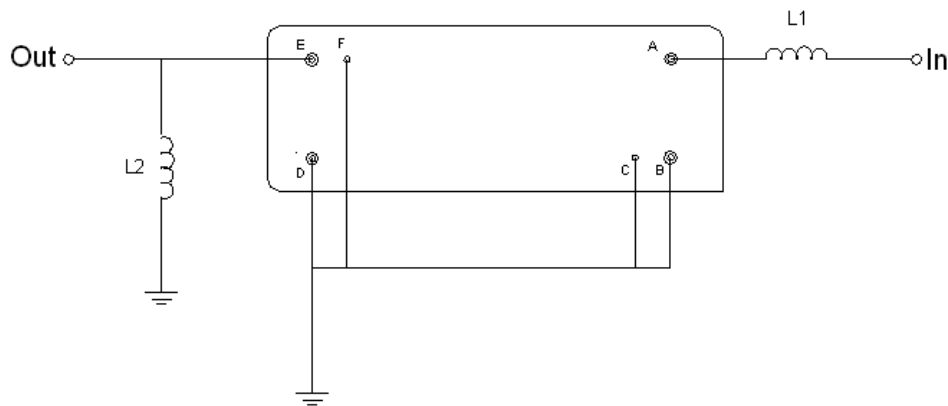


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=100 nH
Output	L2=220 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	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.

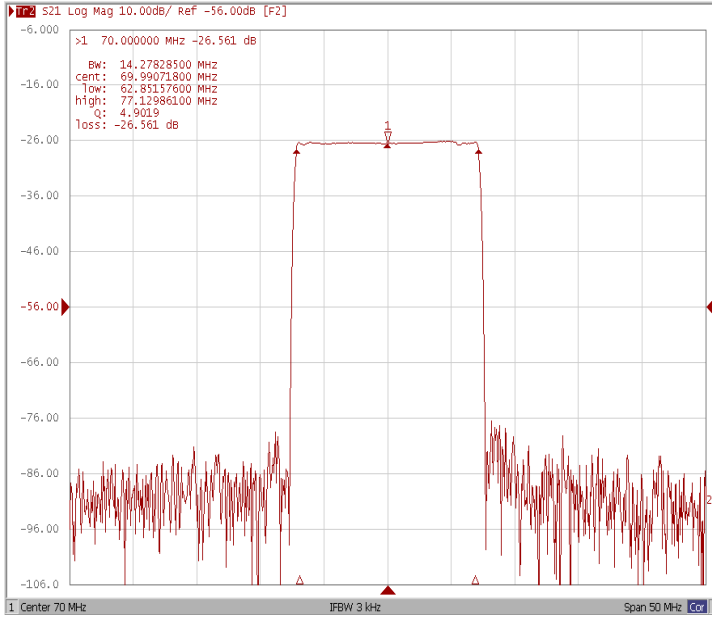
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	26.5	28.0
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple Variation	dB	-	0.65	1.00
Group Delay Variation	nsec	-	62	100
Absolute Delay	us	-	3.8	4.0
Bandwidth at -1dB	MHz	14.00	14.27	-
Bandwidth at -3dB	MHz	-	14.46	-
Bandwidth at -40dB	MHz	-	15.26	15.40
Bandwidth at -50dB	MHz	-	15.35	-
Ultimate Rejection Level	dB	45	50	-

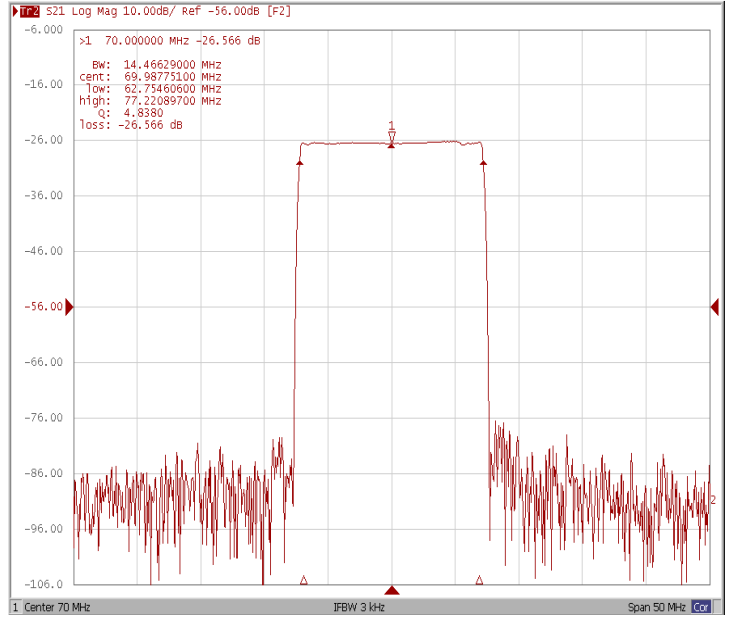


## Frequency Response

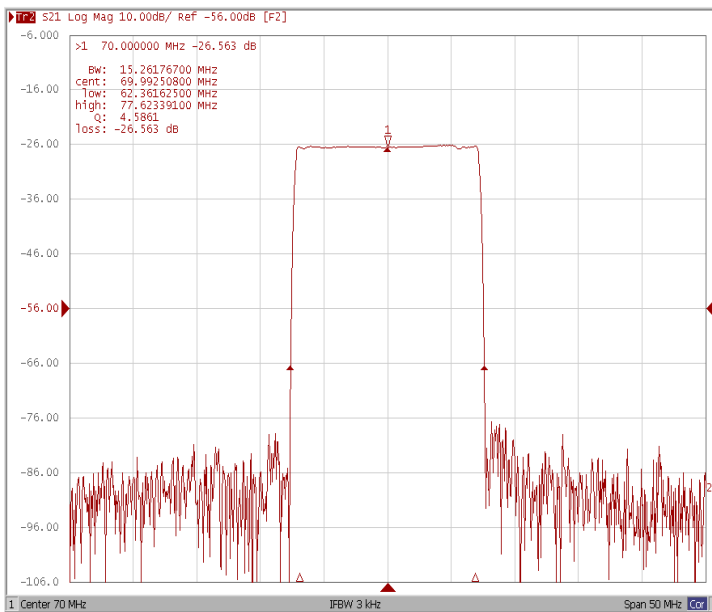
### Bandwidth at -1.0 dB



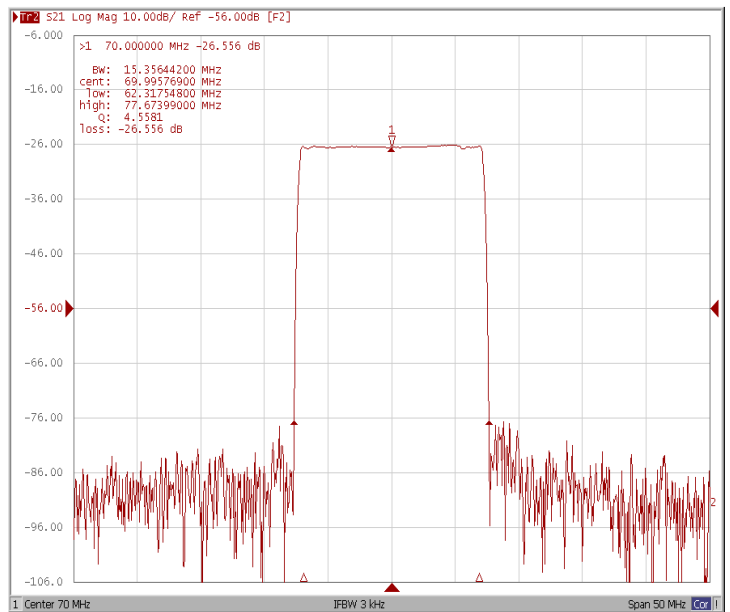
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

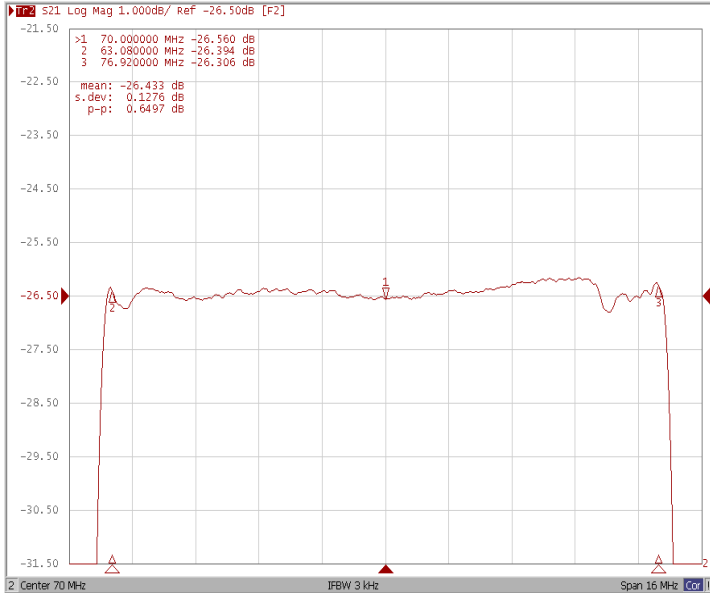


### Bandwidth at -50.0 dB

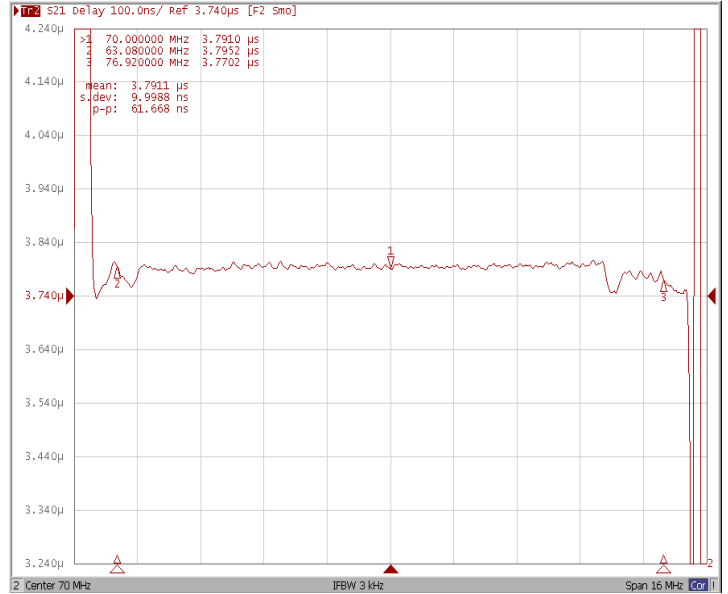




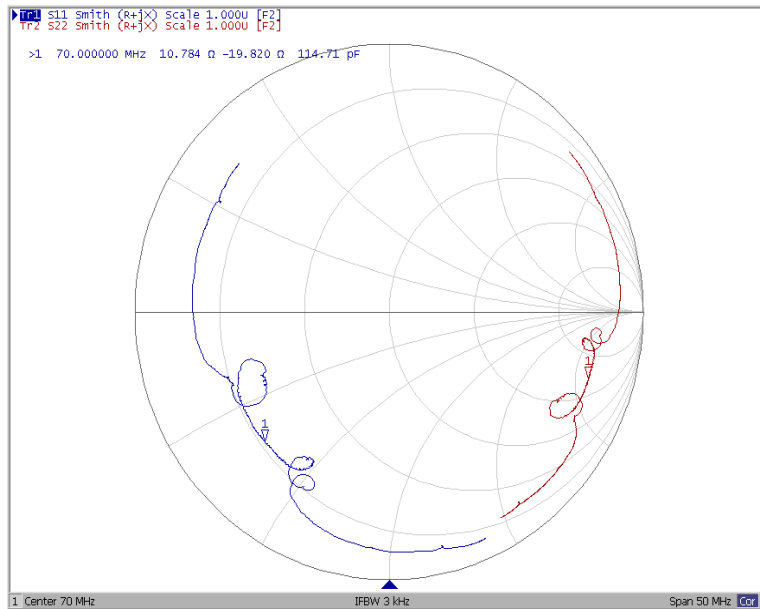
### Ripple Variation



### Group Delay Variation



### Smith Chart





## VSWR

