

# Oscilent Corporation PRODUCT SPECIFICATION

**REV A January 2011** 

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
835-IF44.0M-05A	44.0 MHz IF SAW Filter 5.40 MHz Bandwidth

#### **Specification Contents**

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

#### **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)

A EEE

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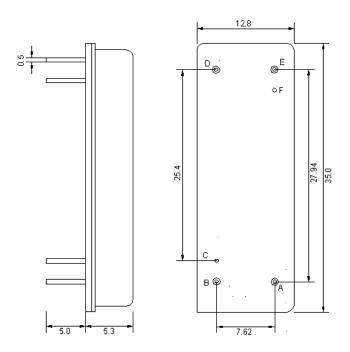
Product Specification www.oscilent.com

## 835-IF44.0M-05A

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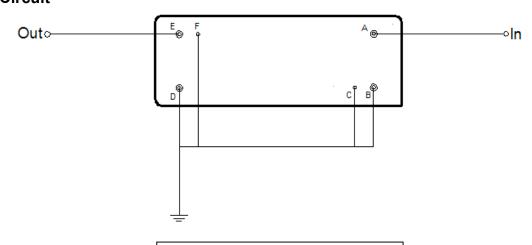
#### 44.0 MHz IF SAW Filter 5.40 MHz Bandwidth

#### **Mechanical Dimensions** (mm)



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

#### **Test Circuit**



Source & Load Impedance: 50  $\Omega$ 

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### **Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
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).

#### **Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	43.95	44.0	44.05
Insertion Loss at Fo	dB	-	25.0	26.5
Amplitude Ripple Variation at Fo ± 2.7 MHz	dB <sub>p-p</sub>	-	0.5	0.8
Group Delay Variation at Fo ± 2.7 MHz	nsec	-	60	100
Absolute Delay at Fo	µsec	-	4.1	-
Temperature Coefficient	ppm/°C	-	-94	-
Bandwidth at –1.0 dB	MHz	5.5	5.70	-
Bandwidth at –3.0 dB	MHz	5.8	5.88	-
Bandwidth at –40.0 dB	MHz	-	6.65	6.8
Ultimate Rejection	dB	45	50	-

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

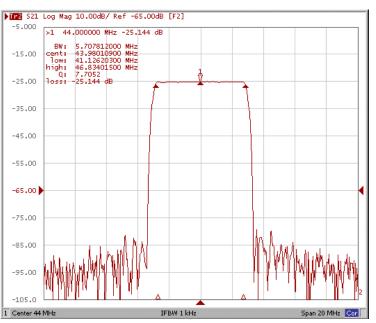
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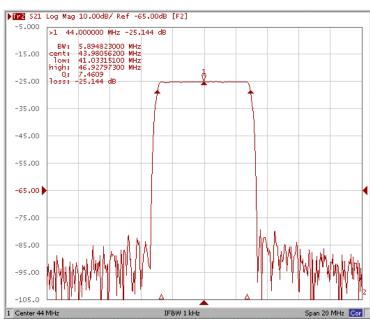
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#### **Frequency Response**

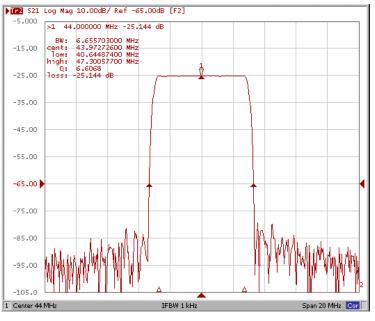
#### Bandwidth at -1.0 dB



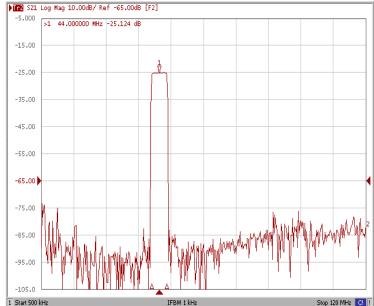
#### Bandwidth at -3.0 dB



#### Bandwidth at -40.0 dB



#### Wide-Band

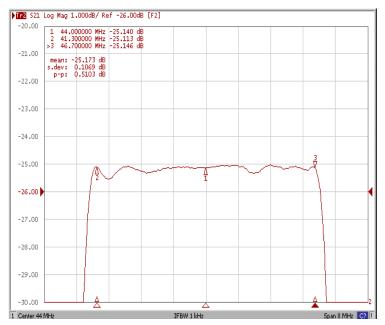


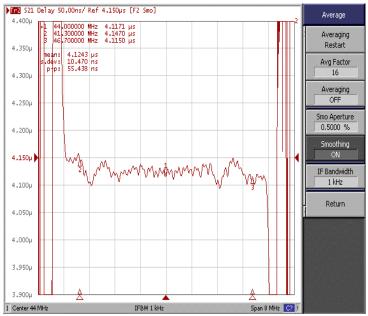
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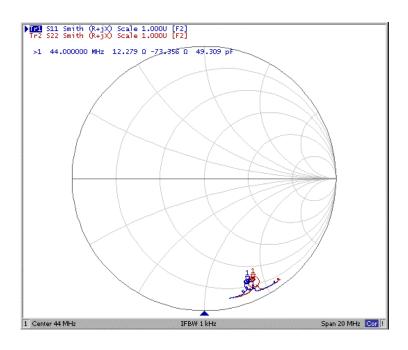
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#### Ripple Variation Fo±2.7MHz **Group Delay Variation Fo±2.7MHz**





#### **Smith Chart**



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#### **SWR**

