PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF184.0M-05A	184.0 MHz IF SAW Filter 5.7 MHz Bandwidth

Specification Contents

Notes

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

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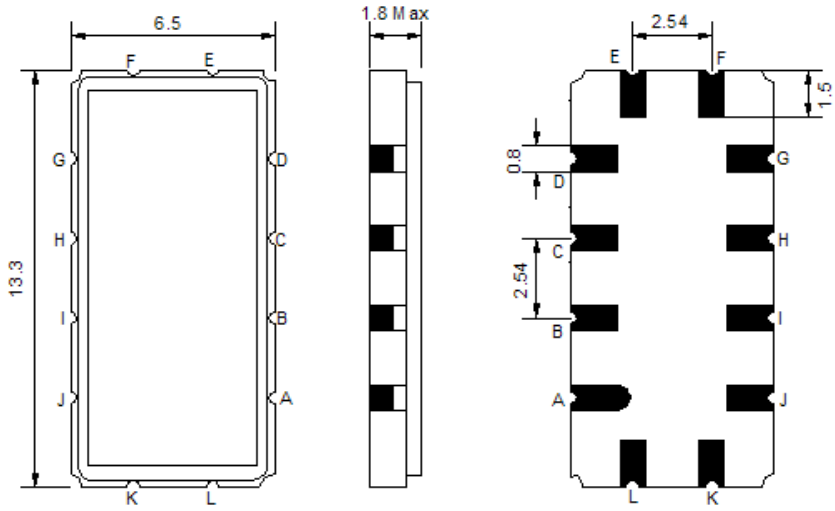
Oscilent Part Number

813-IF184.0M-05A

January 2011 Rev A

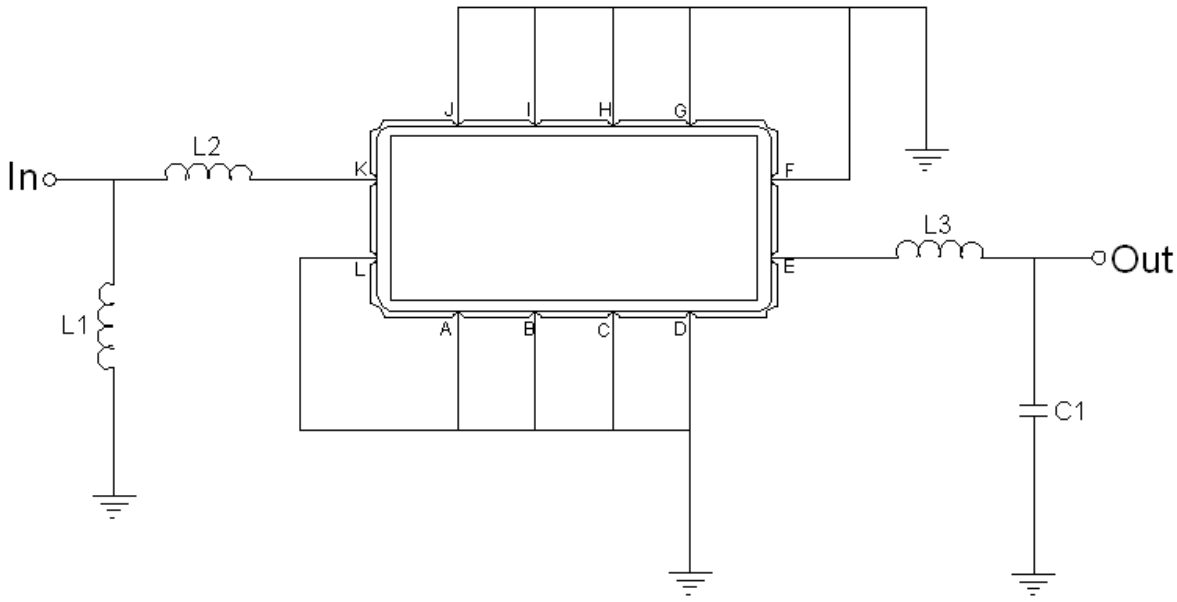
184.0 MHz IF SAW Filter 5.7 MHz Bandwidth

Mechanical Dimensions (mm)



Pin Description	
A, B, C, D, F, G, H, I, J, L	Ground
K	Input
E	Output

Test Circuit



Test Fixture & Values	
Input	L1=18 nH, L2=27 nH
Output	L3=47 nH, C1=43 pF
Source/Load Impedance	50 Ω

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	-	70
Storage Temperature Range	°C	-45	-	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	-

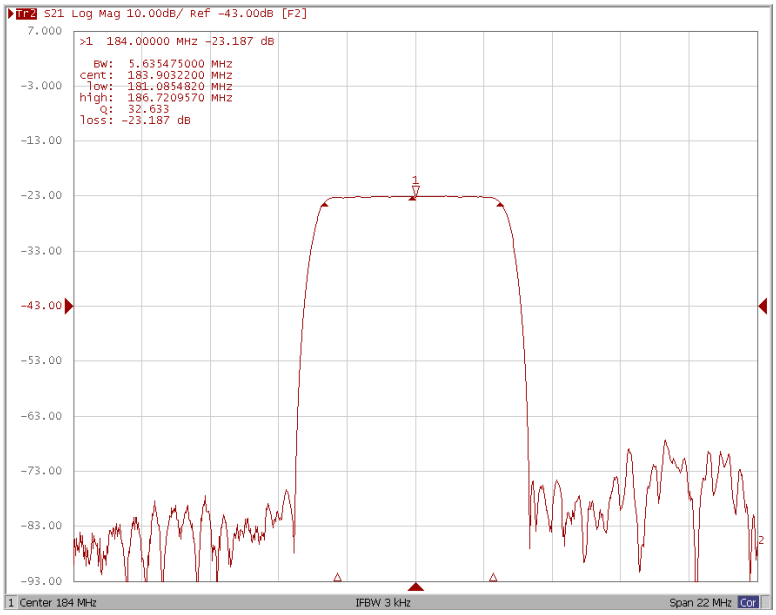
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

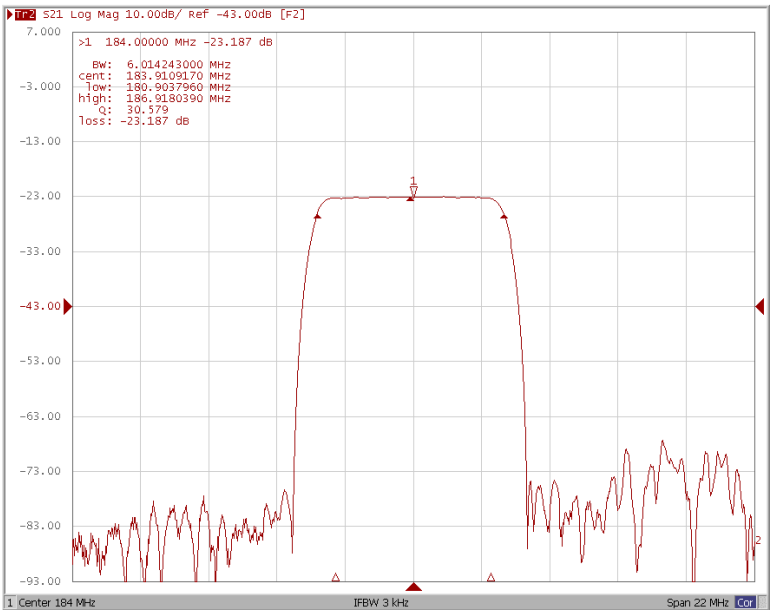
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	184.00	-
Insertion Loss at Fo	dB	-	23.5	25.0
Group Delay Variation (Fo±2.5MHz)	ns	-	45	100
Absolute Delay	us	-	1.75	-
Passband Ripple (Fo±2.5MHz)	dB	-	0.25	0.80
Bandwidth at -1dB	MHz	5.00	5.65	-
Bandwidth at -3dB	MHz	-	6.00	-
Bandwidth at -40dB	MHz	-	7.40	-
Ultimate Rejection	dB	40	45	-
Relative Attenuation Fo±4MHz	dB	-	45	-

Frequency Response

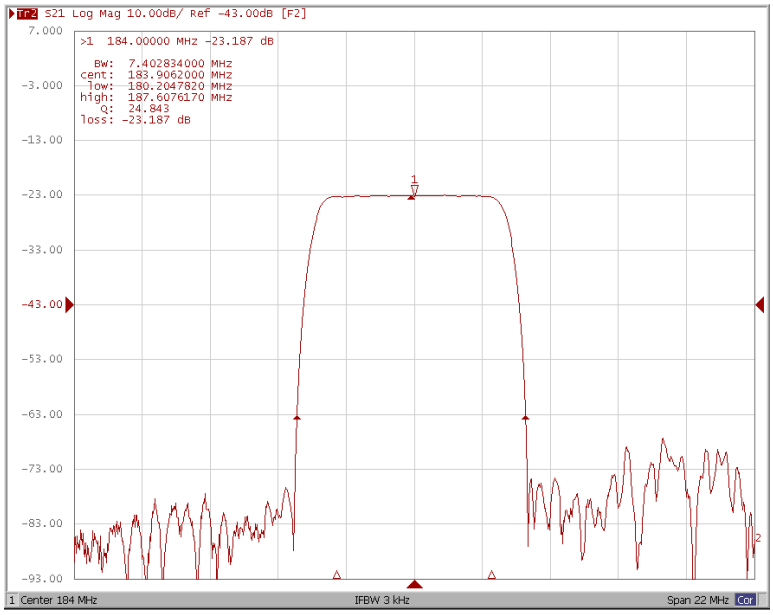
Bandwidth at –1.0 dB



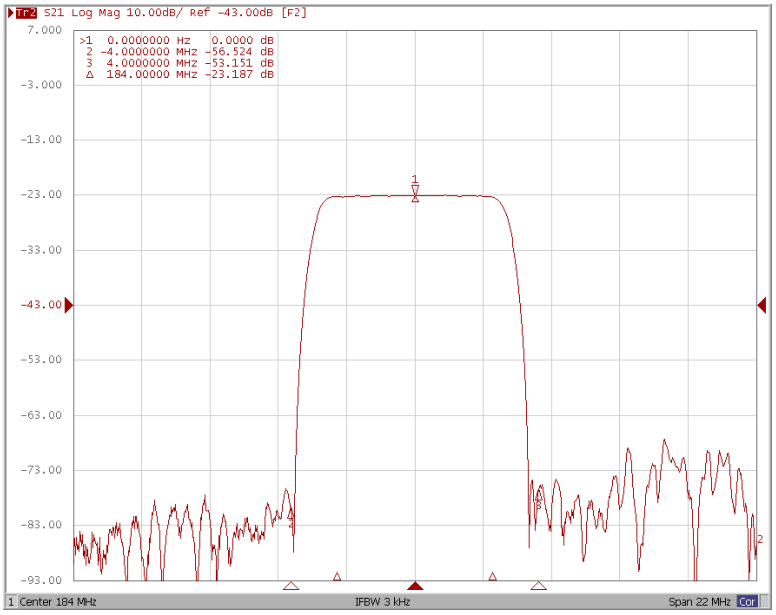
Bandwidth at –3.0 dB



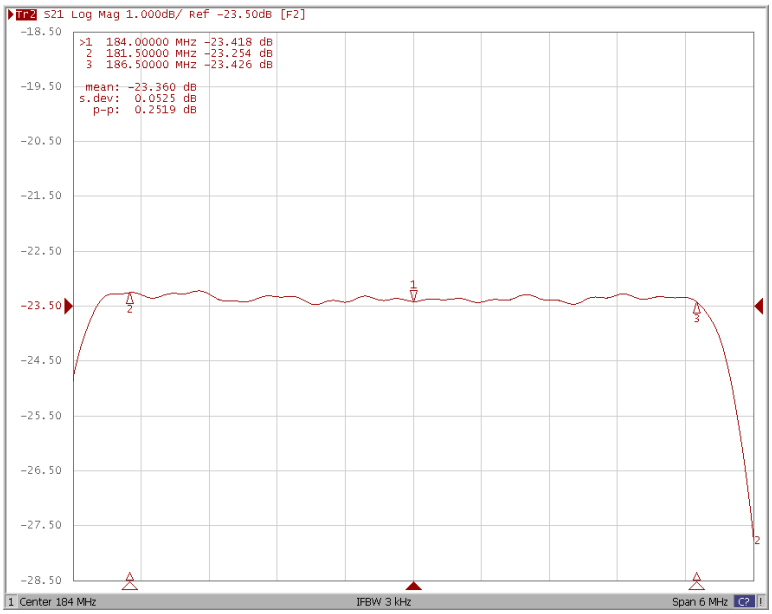
Bandwidth at –40.0 dB



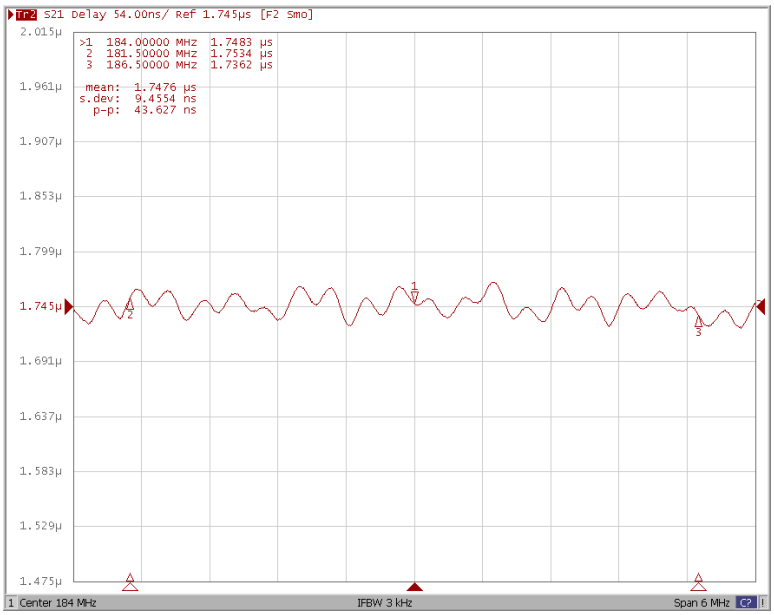
Relative Attenuation Fo±4MHz



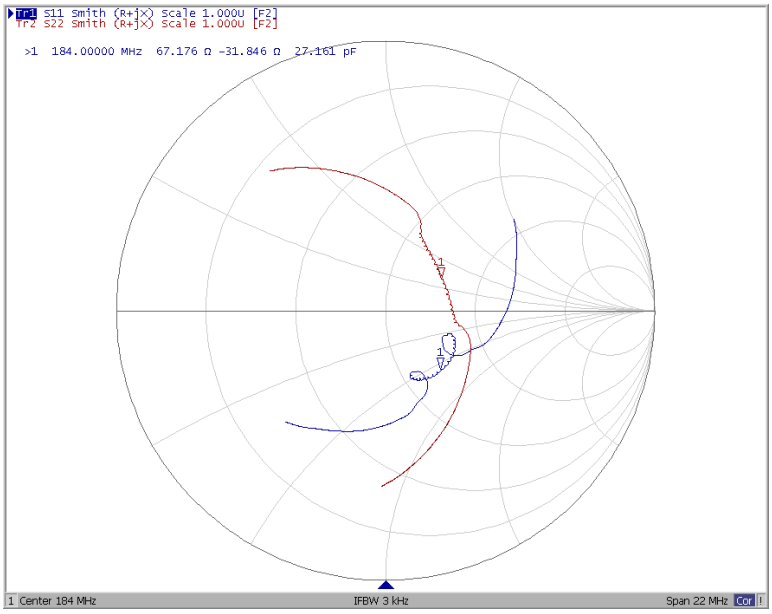
Ripple Variation Fo±2.5MHz



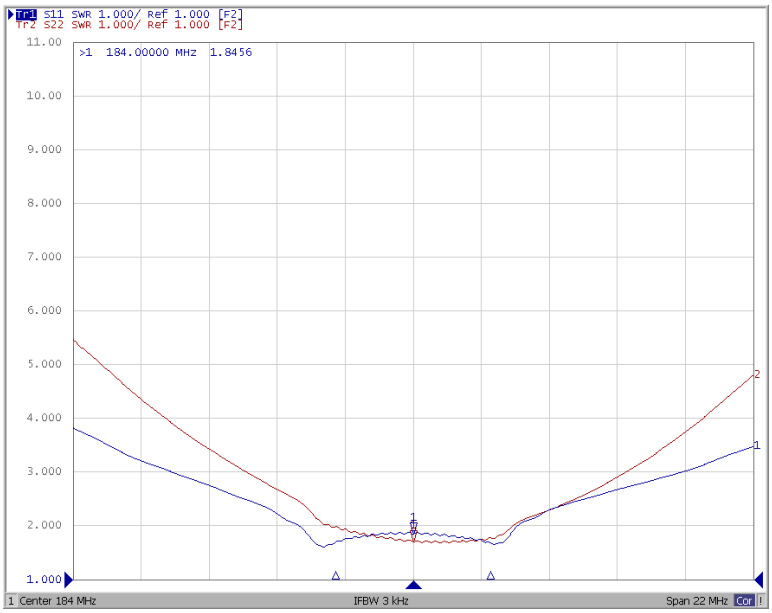
Group Delay Variation Fo±2.5MHz



Smith Chart



VSWR


Tr1 S11 SWR 1.000/ Ref 1.000 [F2]
Tr2 S22 SWR 1.000/ Ref 1.000 [F2]
>1 184.00000 MHz 1.8456
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Center 184 MHz
IFBW 3 kHz
Span 22 MHz
Cor