



PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF91.25M-02A	91.25MHz IF SAW Filter 2.08MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
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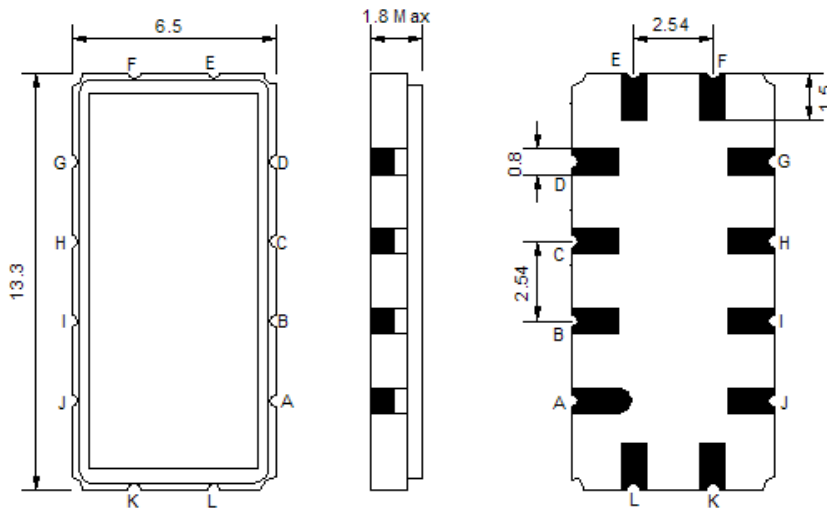
Notes

- 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)



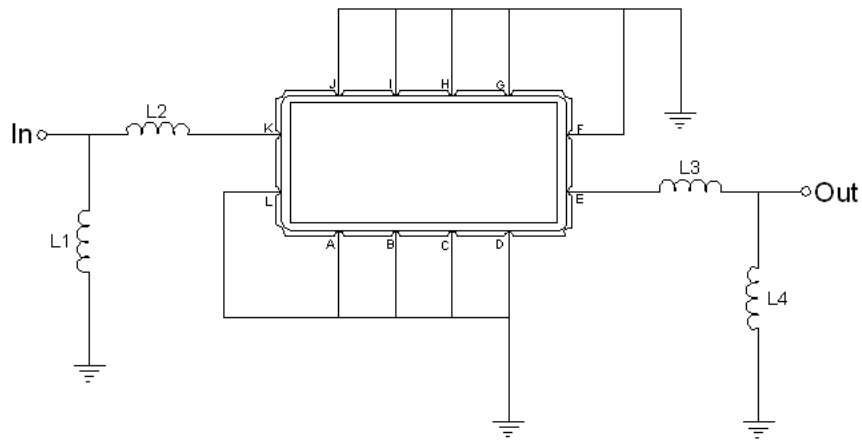


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=82nH, L2=150nH
Output	L3=120nH, L4=68nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	-	60
Storage Temperature Range	°C	-20	-	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.

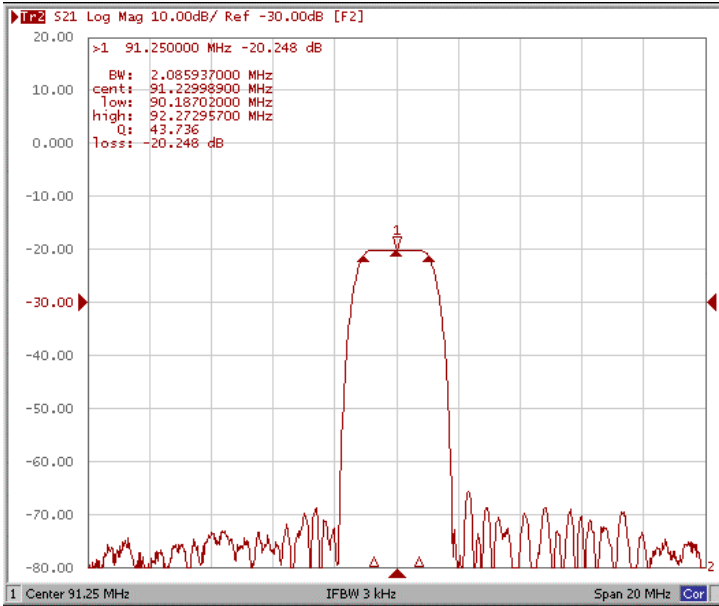
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	91.25	-
Insertion Loss at Fo	dB	-	20.3	22.5
Group Delay Variation (Fo±0.75MHz)	ns	-	52	100
Absolute Delay	us	-	1.80	-
Temperature Coefficient	ppm/°C		-0.03	
Passband Ripple (Fo±0.75MHz)	dB	-	0.17	1.00
Bandwidth at -1dB	MHz	1.5	2.08	-
Bandwidth at -30dB	MHz	-	3.42	-
Bandwidth at -45dB	MHz	-	3.60	5.5
Ultimate Rejection	dB	-	45	-
Relative Attenuation Fo±1.75MHz/ Fo±2.75MHz	dB	-	32 / 55	-

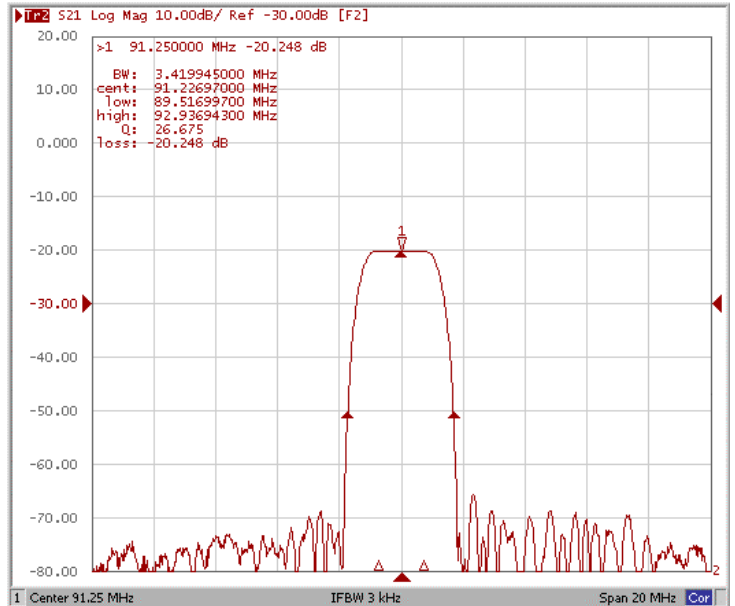


Frequency Response

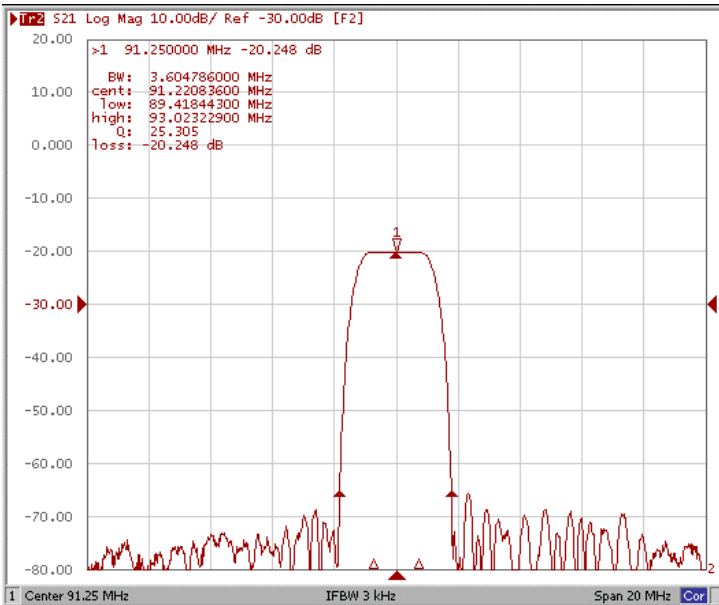
Bandwidth at -1.0 dB



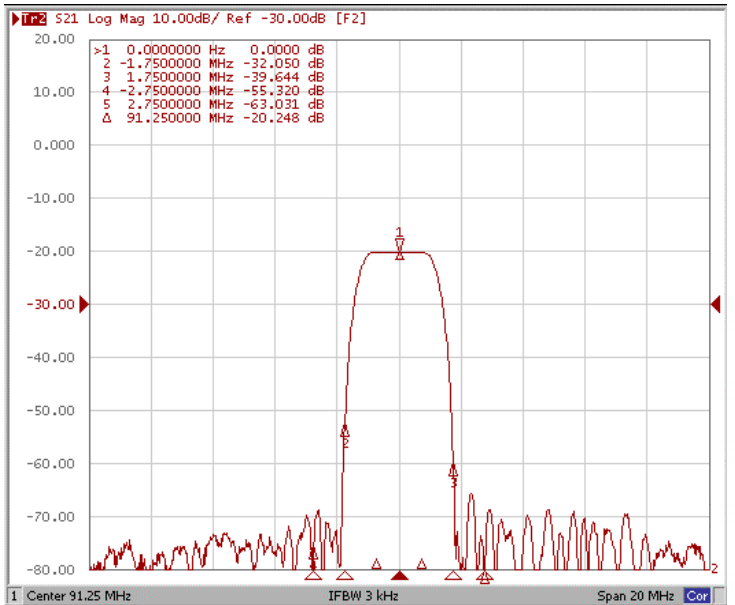
Bandwidth at -30.0 dB



Bandwidth at -45.0 dB

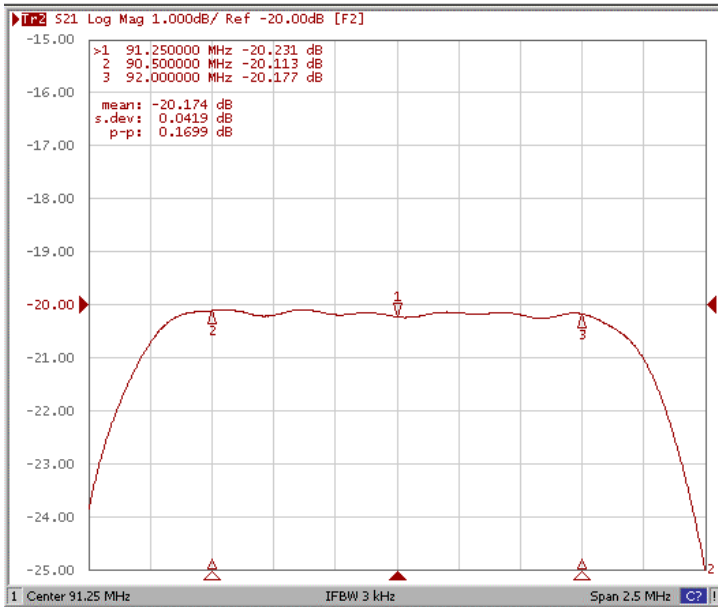


Relative Attenuation Fo±1.75MHz/ Fo±2.75MHz

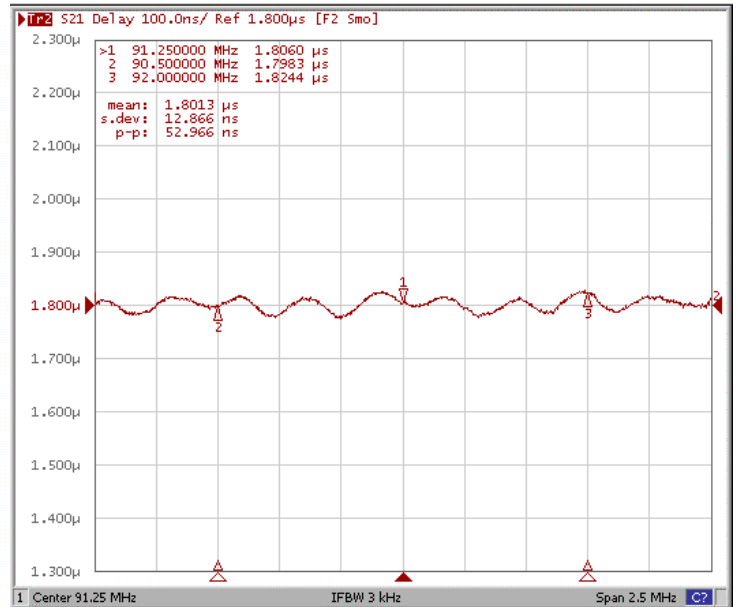




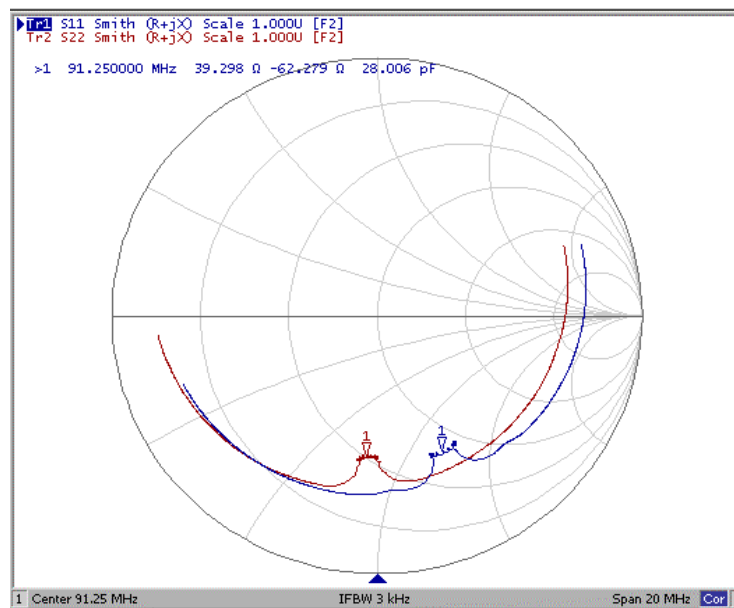
Ripple Variation Fo±0.75



Group Delay Variation Fo±0.75



Smith Chart





VSWR

