



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL125.0M-09A	125.0 MHz IF SAW Filter 9.40 MHz Bandwidth

### Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
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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)



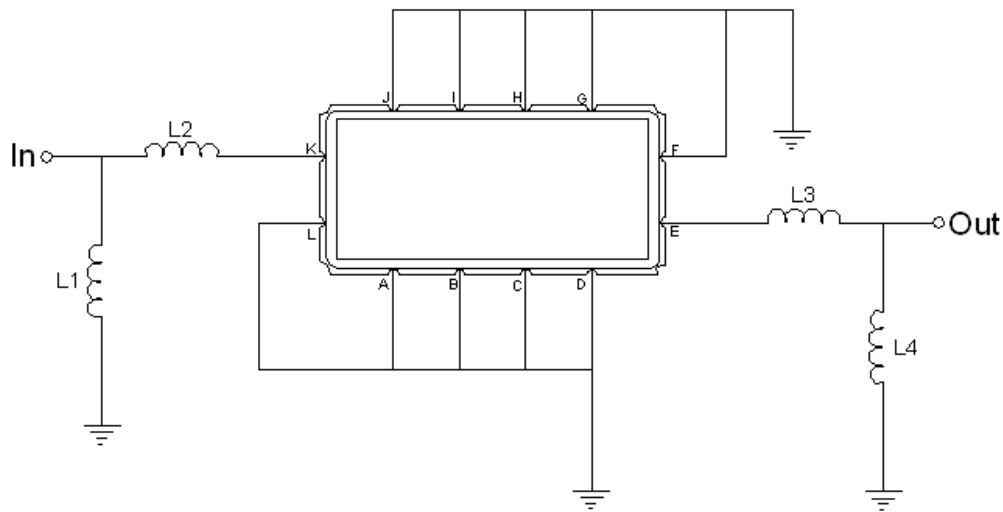


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=56nH, L2=10nH
Output	L3=10nH, L4=47nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

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

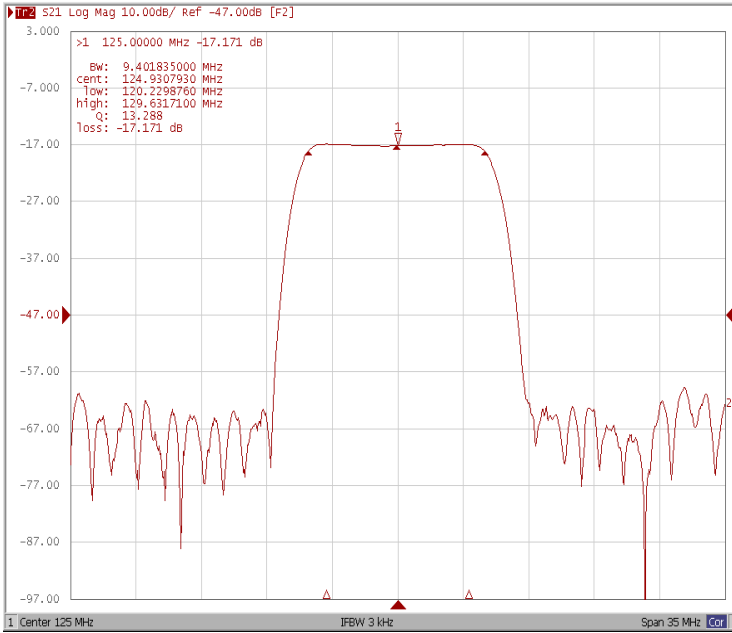
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	124.85	125.0	125.15
Insertion Loss at Fo	dB	-	17.3	19.0
Amplitude Ripple within fo ±3.8 MHz	dB <sub>p-p</sub>	-	0.45	0.9
Group Delay Variation within fo ±3.8 MHz	nsec	-	25	60
Absolute Delay at Fo	μsec	-	0.85	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at -1.0 dB	MHz	9.00	9.40	-
Bandwidth at -3.0 dB	MHz	-	10.10	-
Bandwidth at -40.0 dB	MHz	-	13.30	15.00
Relative Attenuation:				
Lower sidelobe	dB	-	48	-
Upper sidelobe	dB	-	48	-

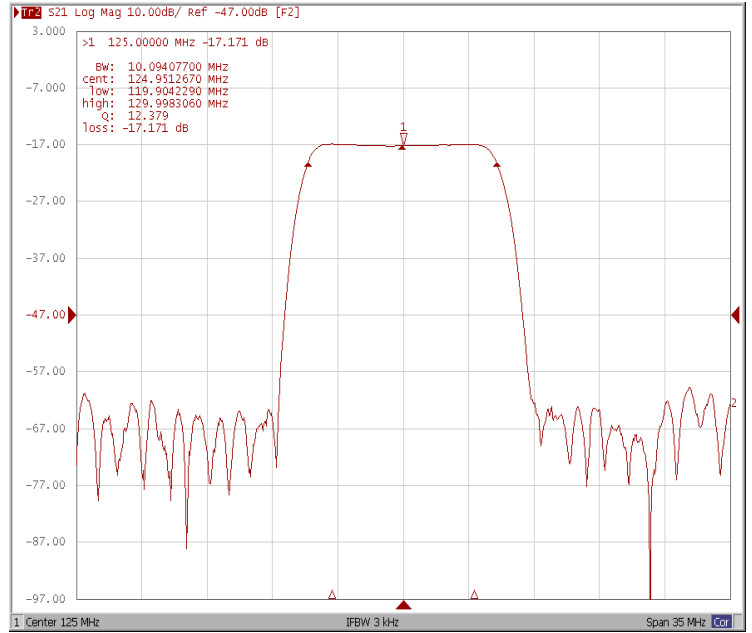


### Frequency Response

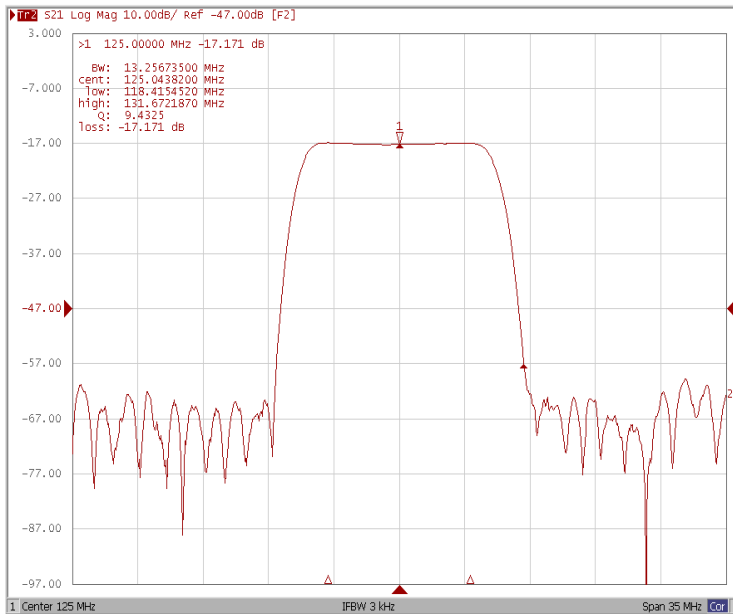
#### Bandwidth at -1.0 dB



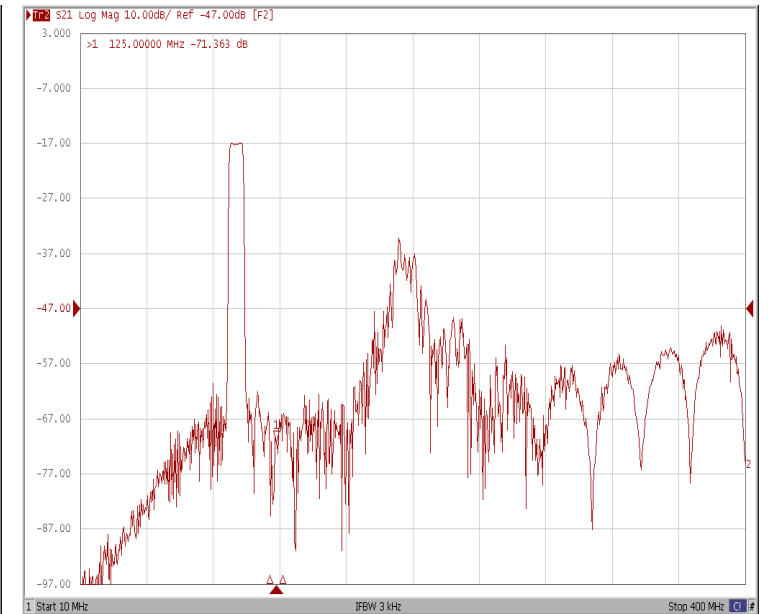
#### Bandwidth at -3.0 dB



#### Bandwidth at -40.0 dB

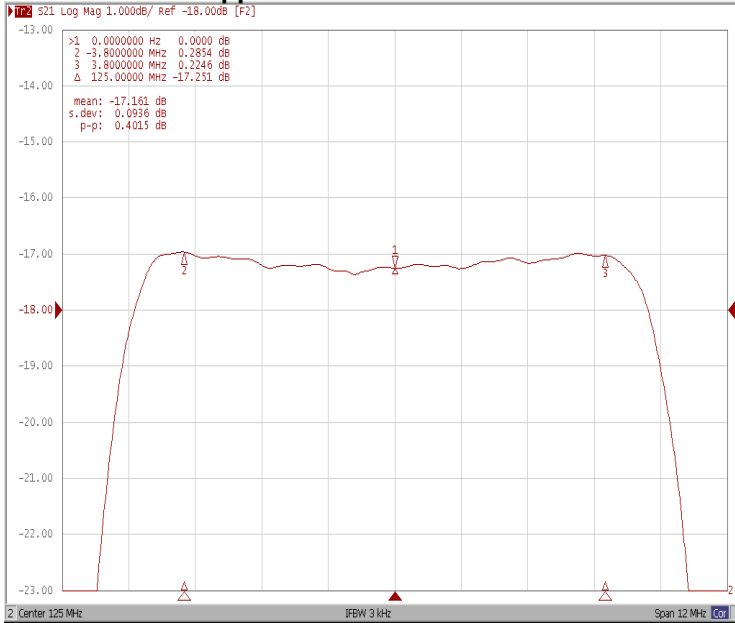


#### Wide-Band

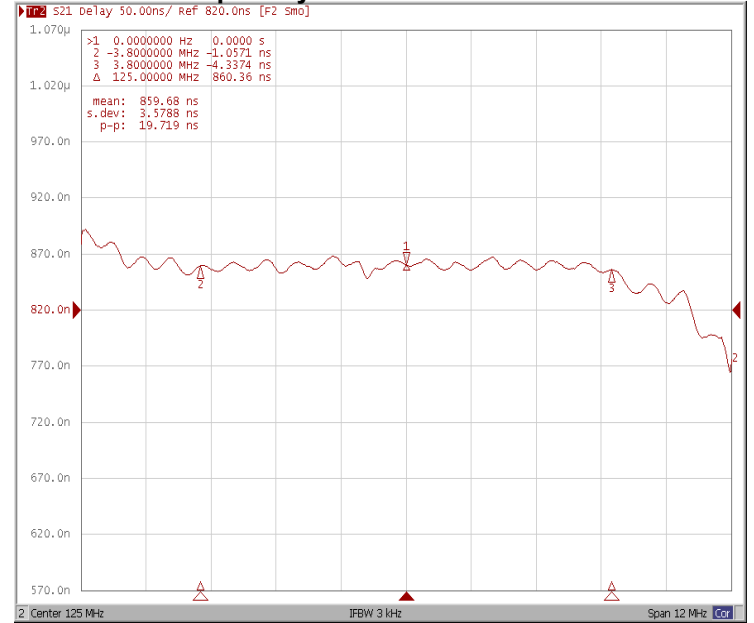




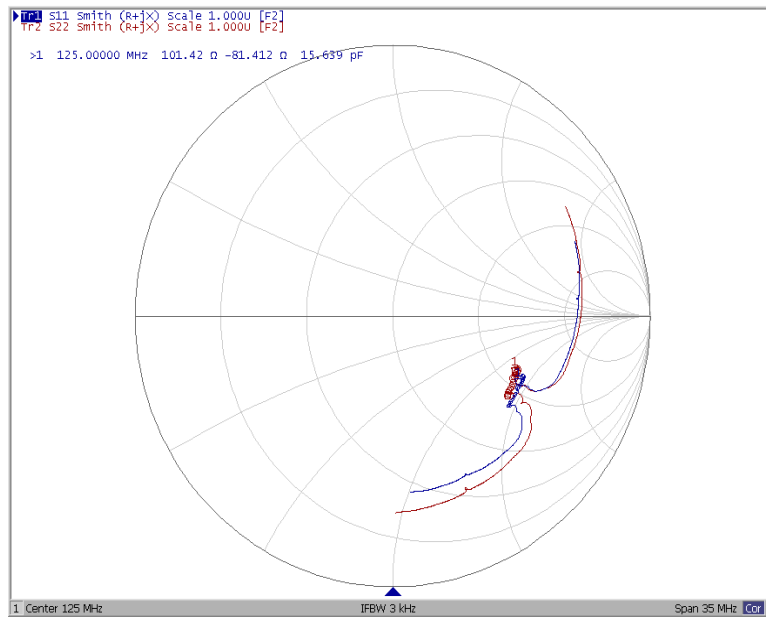
### Ripple Variation Fo±3.8MHz



### Group Delay Variation Fo±3.8MHz



### Smith Chart





### VSWR

