



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL60.0M-10D	60.0 MHz IF SAW Filter 10.68 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)



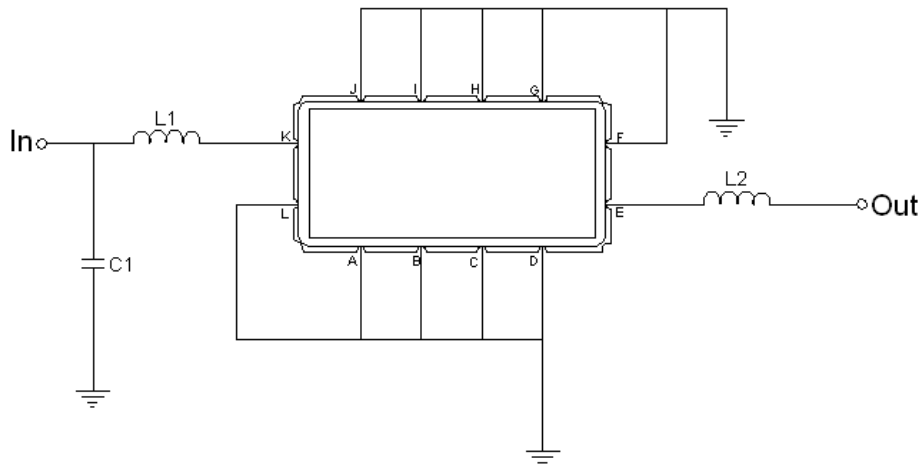


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 180nH, C1=36pF
Output	L2 = 150nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	-	75
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.

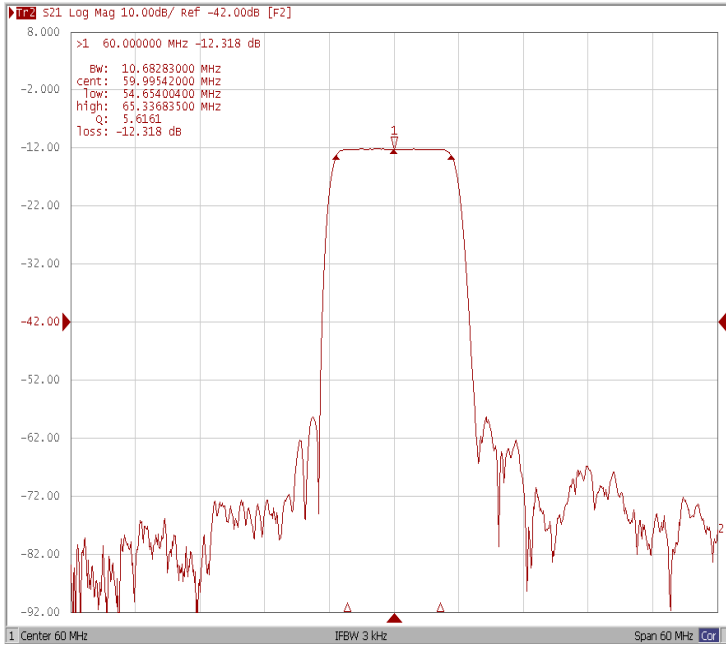
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	60.00	-
Insertion Loss at Fo	dB	-	12.50	15.00
Group Delay Variation at Fo ± 4.32 MHz	nsec	-	20	35
Absolute Delay at Fo	usec	-	1.23	-
Passband Ripple Variation at Fo ± 4.32 MHz	dB	-	0.20	0.60
Bandwidth at -1dB	MHz	10.00	10.68	-
Bandwidth at -3dB	MHz	-	11.36	-
Bandwidth at -30dB	MHz	-	13.68	14.00
Bandwidth at -40dB	MHz	-	14.13	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient	ppm/°C	-	-86	-

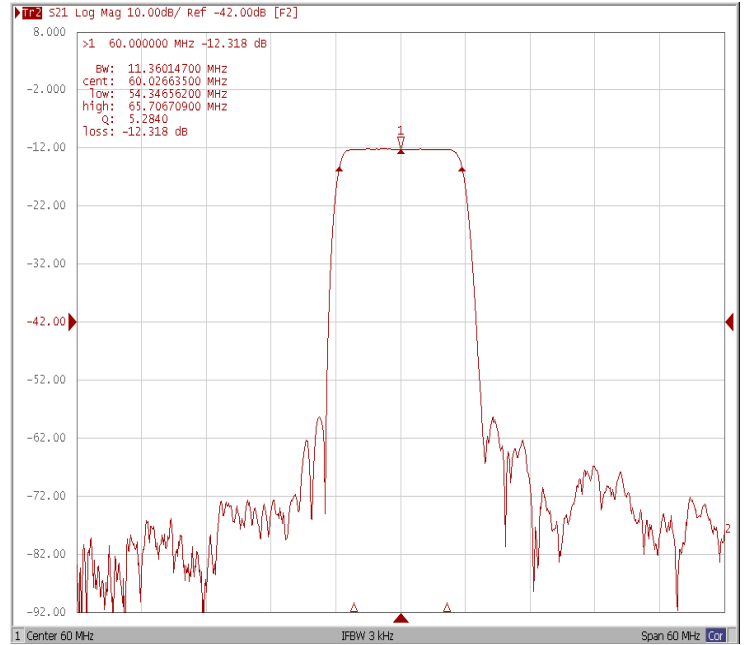


### Frequency Response

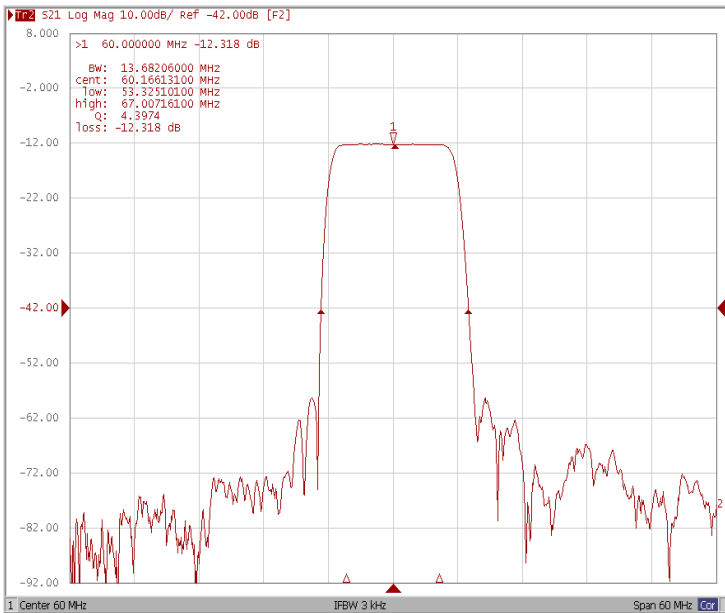
Bandwidth at -1.0 dB



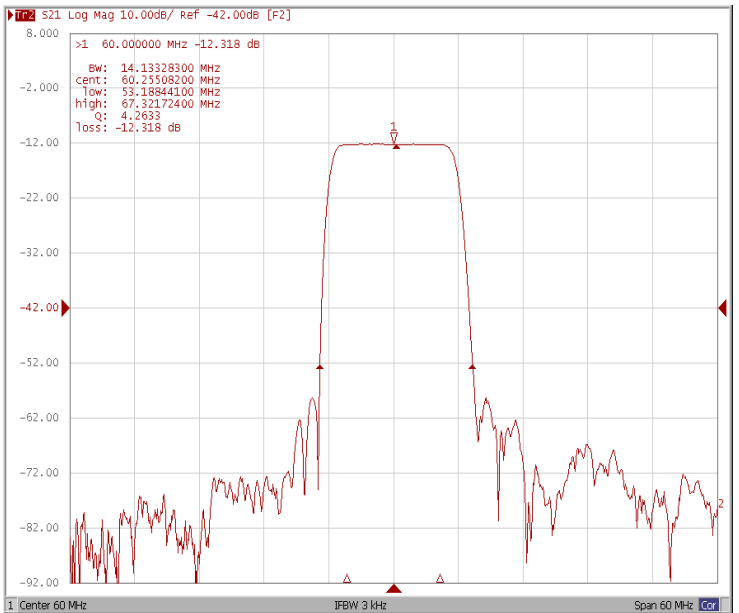
Bandwidth at -3.0 dB



Bandwidth at -30 dB

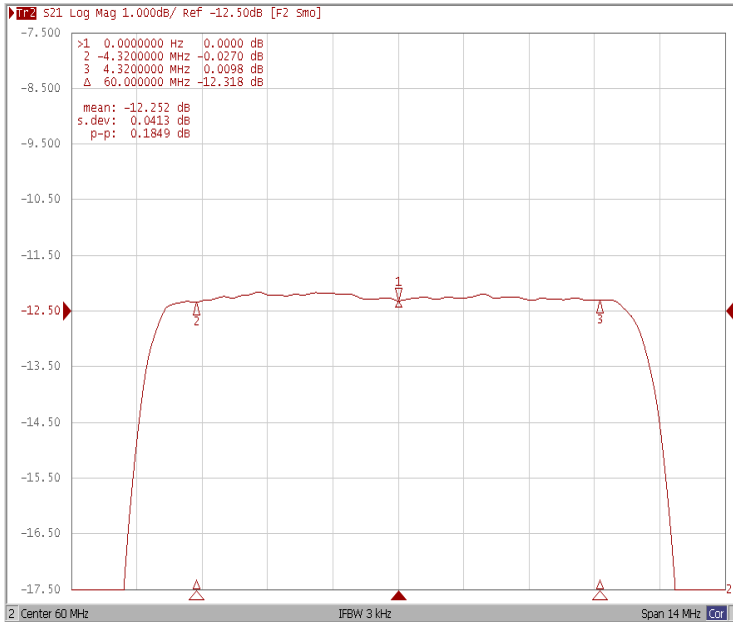


Bandwidth at -40 dB

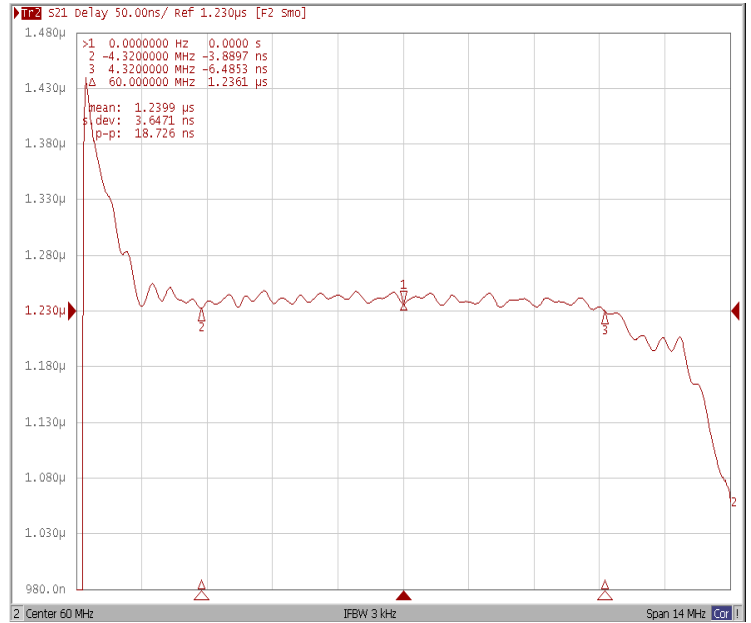




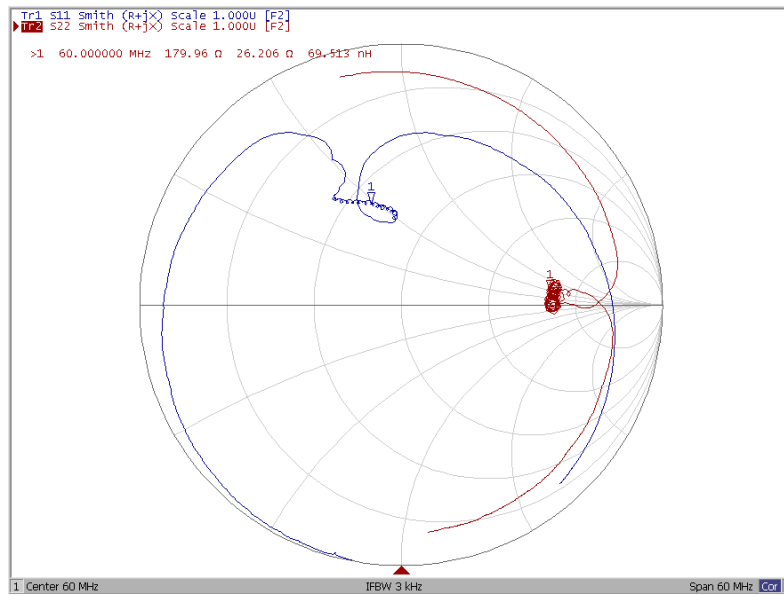
### Ripple Variation Fo±4.32MHz



### Group Delay Variation Fo±4.32MHz



### Smith Chart





### VSWR

