



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL120.0M-22A	120.0MHz IF SAW Filter 19.5 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)



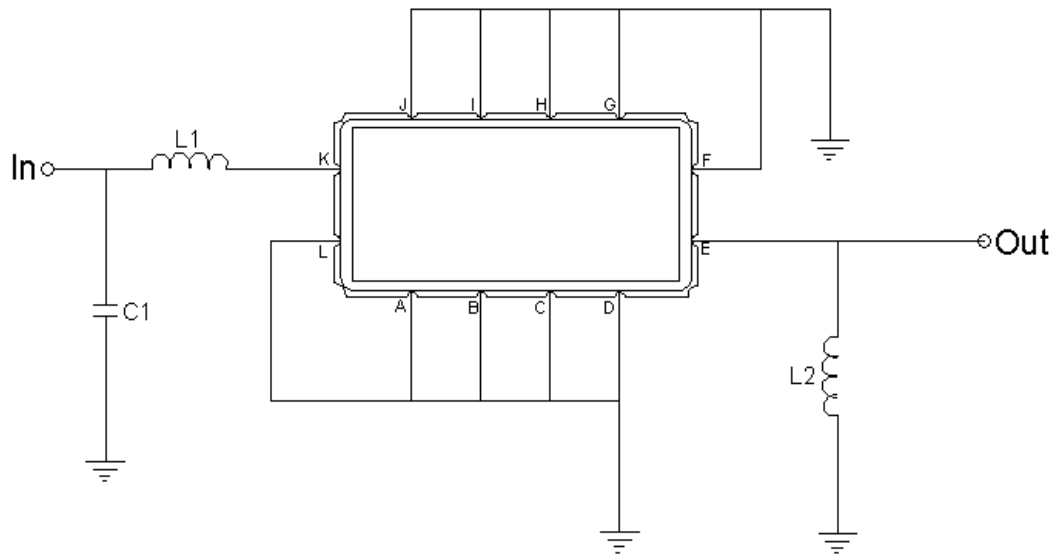


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=56 nH, C1=18pF Q>35
Output	L2=56 nH Q>35
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	-	120.0	-
Insertion Loss at Fo	dB	-	11.6	13.5
Amplitude Ripple Variation at Fo ± 9.75 MHz	dB <sub>p-p</sub>	-	0.3	0.6
Group Delay Variation at Fo ± 9.75 MHz	nsec	-	28	45
Absolute Delay at Fo	μsec	-	0.71	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	21.5	22.0	-
Bandwidth at -25.0 dB	MHz	-	27.1	28.0
Bandwidth at -40.0 dB	MHz	-	28.4	-
Relative Attenuation				
Lower Sidelobe	dB	40	45	-
Upper Sidelobe	dB	40	45	-



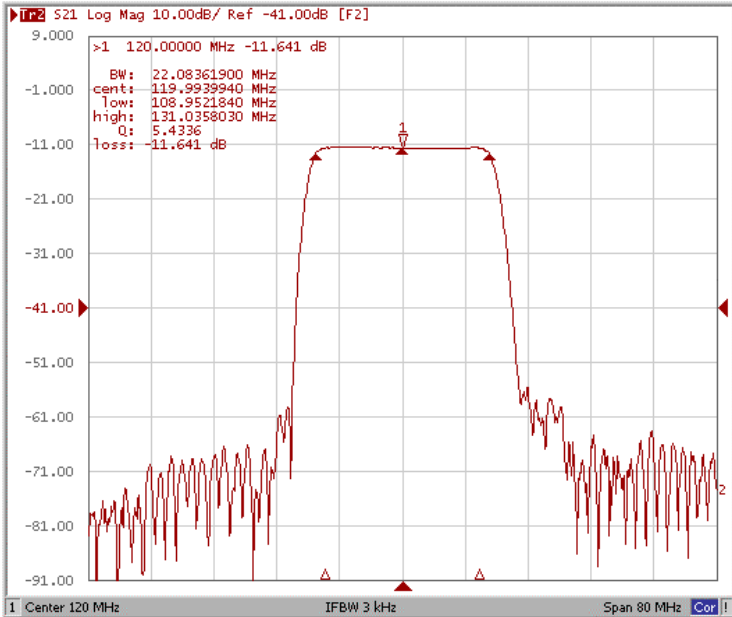
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# Oscilent Part Number 813-SL120.0M-22A

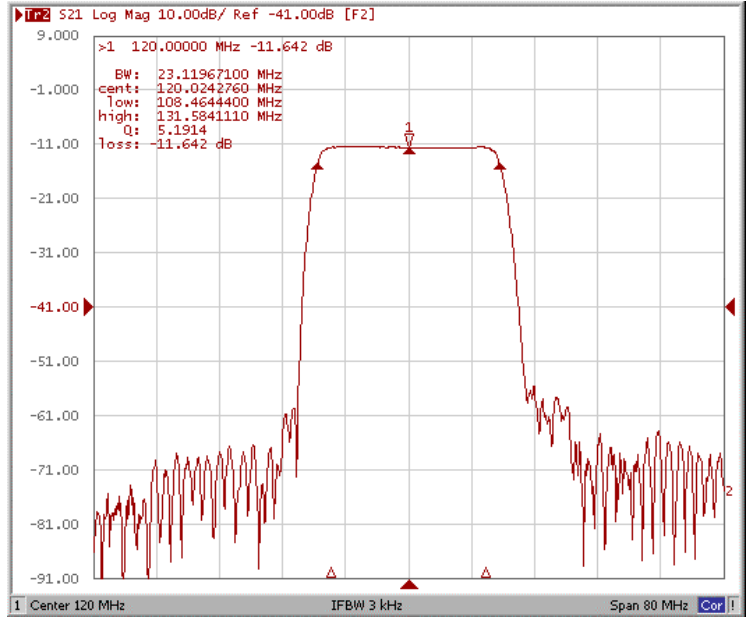
120.0MHz IF SAW Filter 19.5 MHz Bandwidth

## Frequency Response

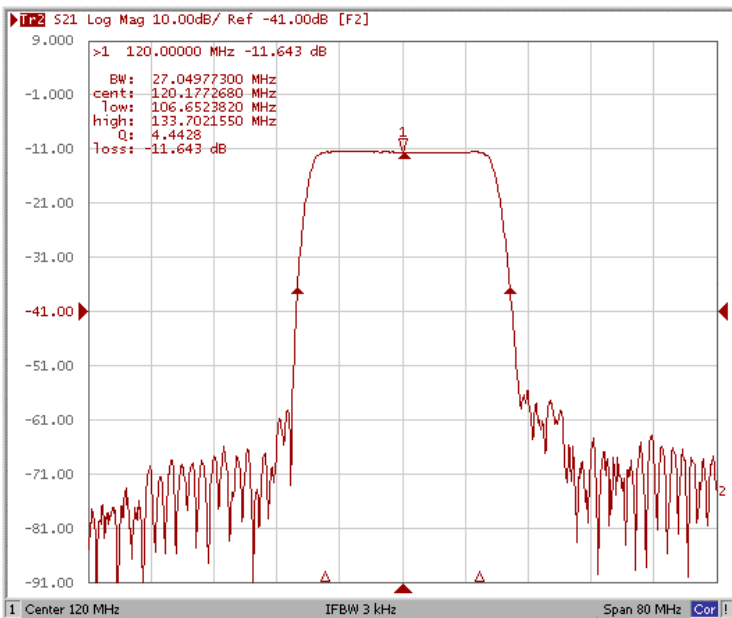
### Bandwidth at -1.0 dB



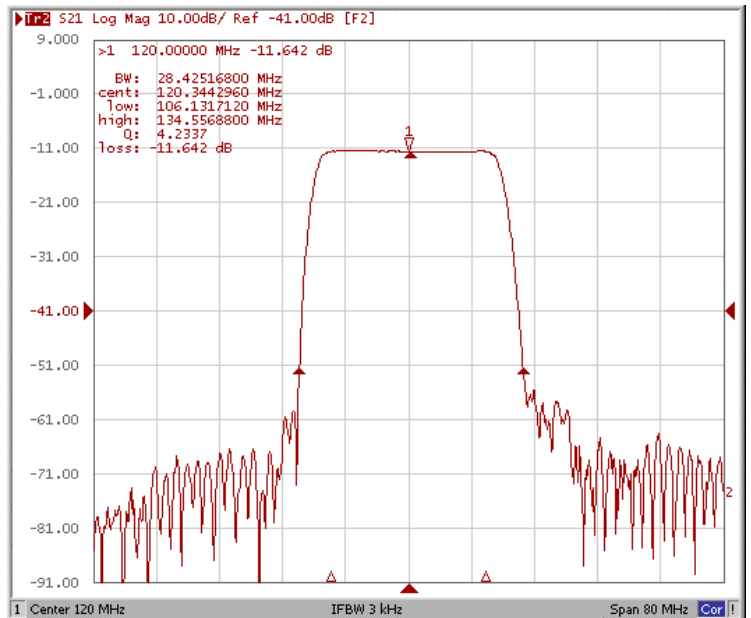
### Bandwidth at -3.0 dB



### Bandwidth at -25.0 dB

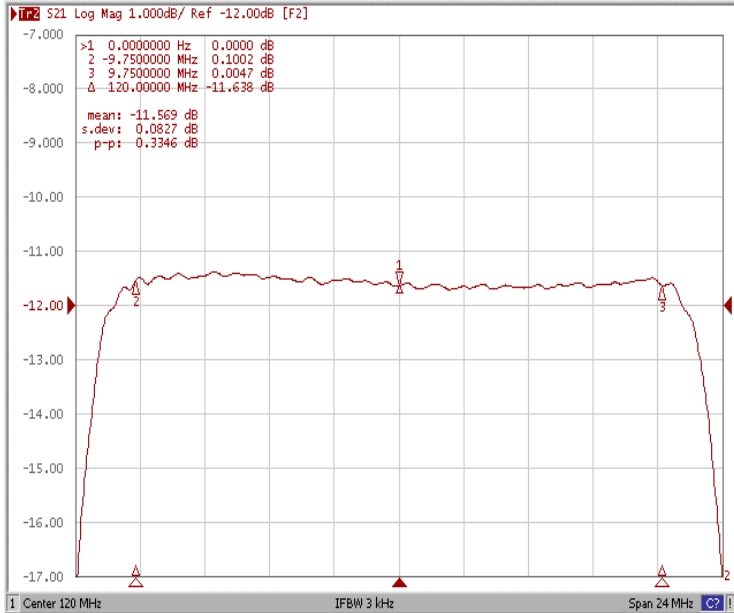


### Bandwidth at -40.0 dB

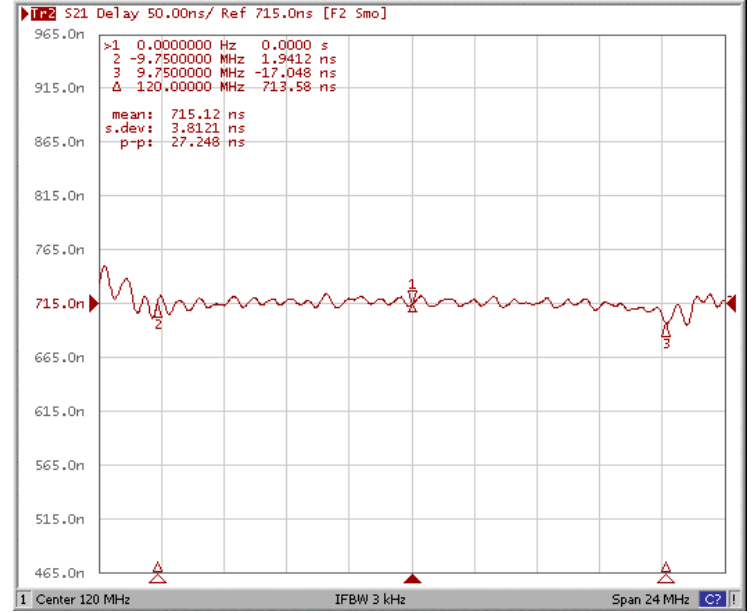




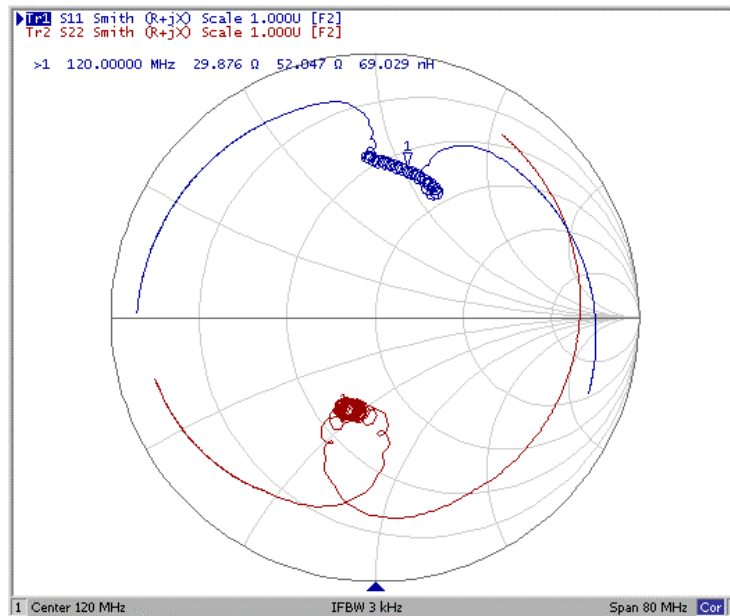
### Ripple Variation Fo±9.75MHz



### Group Delay Variation Fo±9.75MHz



### Smith Chart





### VSWR

