



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL67.5M-20A	67.50MHz IF SAW Filter 20.30MHz 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)



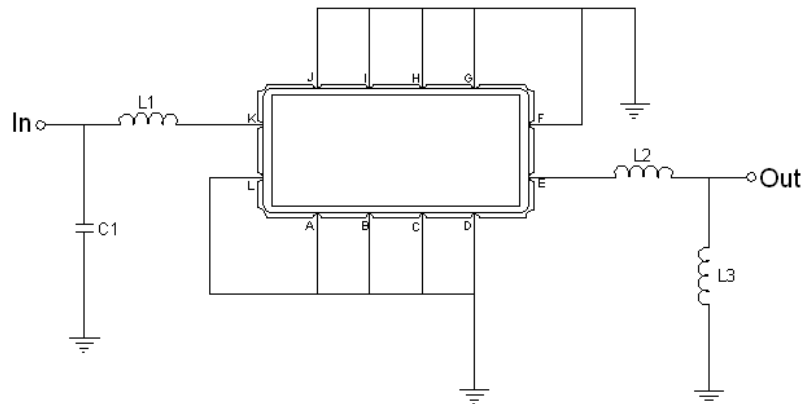


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 120 nH, C1 = 75 pF
Output	L2 = 33 nH, L3 = 120 nH
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.

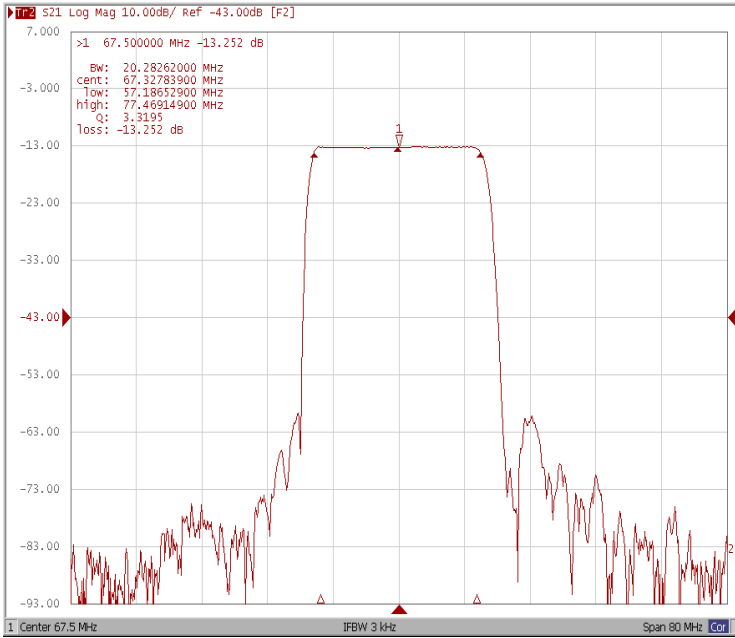
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	67.50	-
Insertion Loss at Fo	dB	-	13.20	15.50
Group Delay Variation at Fo±9.52MHz	ns	-	35	60
Absolute Delay Time at Fo	us	-	1.04	-
Amplitude Ripple at Fo±9.52MHz	dB	-	0.38	0.90
Bandwidth at -1dB	MHz	-	20.30	-
Bandwidth at -3dB	MHz	20.90	21.05	-
Bandwidth at -40dB	MHz	-	24.30	24.60
Relative Attenuation				
Lower Sidelobe	dB	40	47	-
Upper Sidelobe	dB	40	47	-
Temperature Coefficient	ppm/°C	-	-86	-

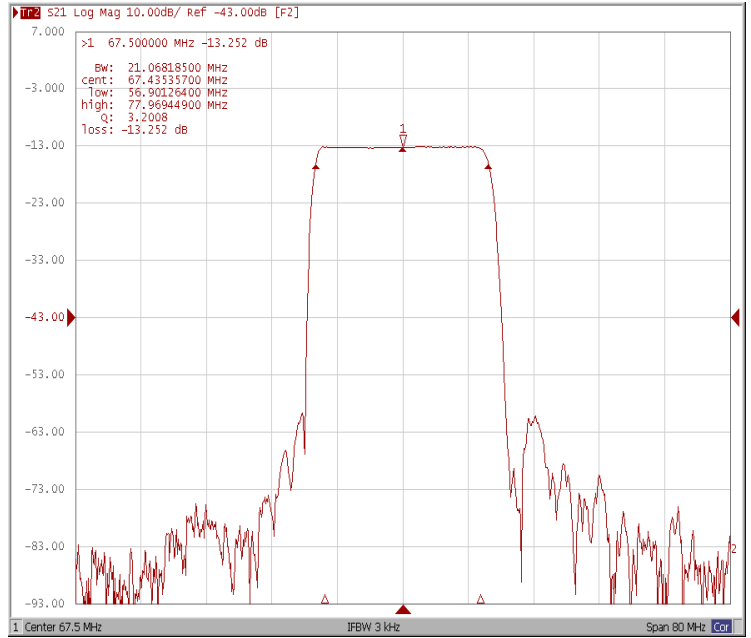


### Frequency Response

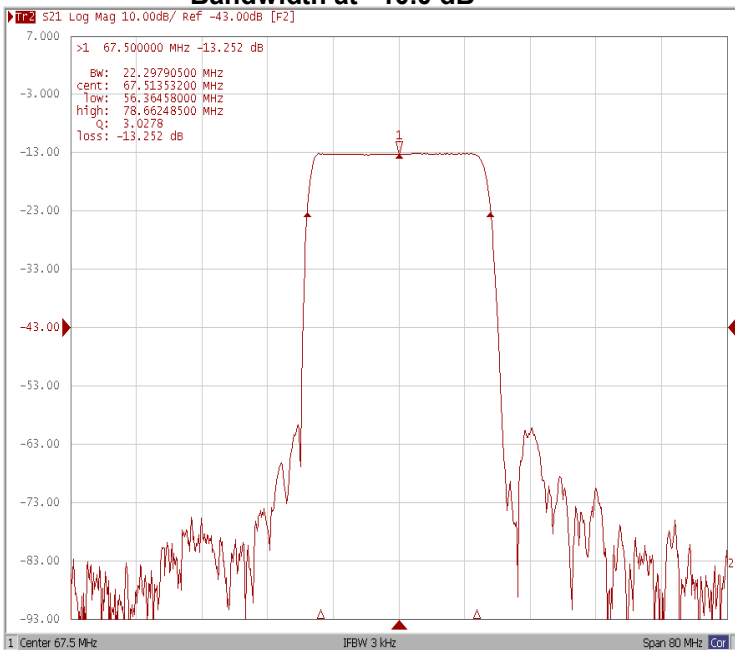
#### Bandwidth at -1.0 dB



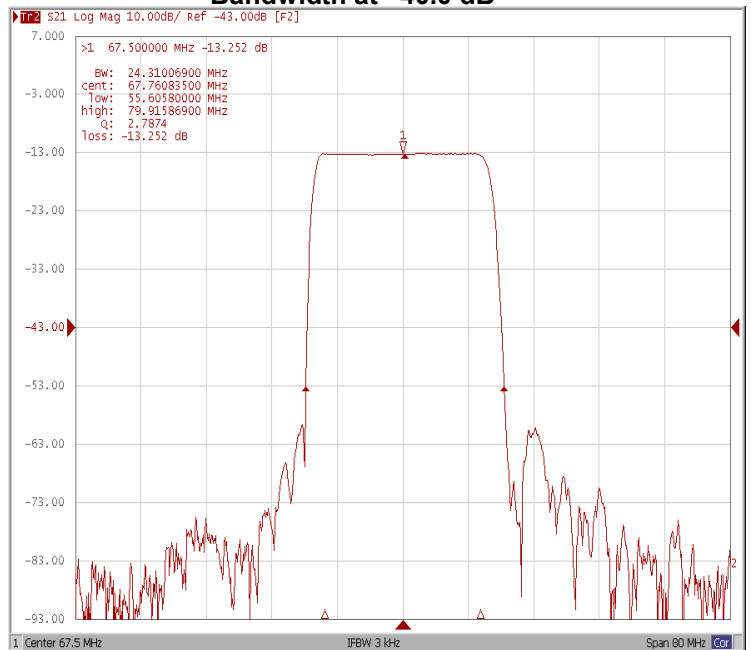
#### Bandwidth at -3.0 dB



#### Bandwidth at -10.0 dB

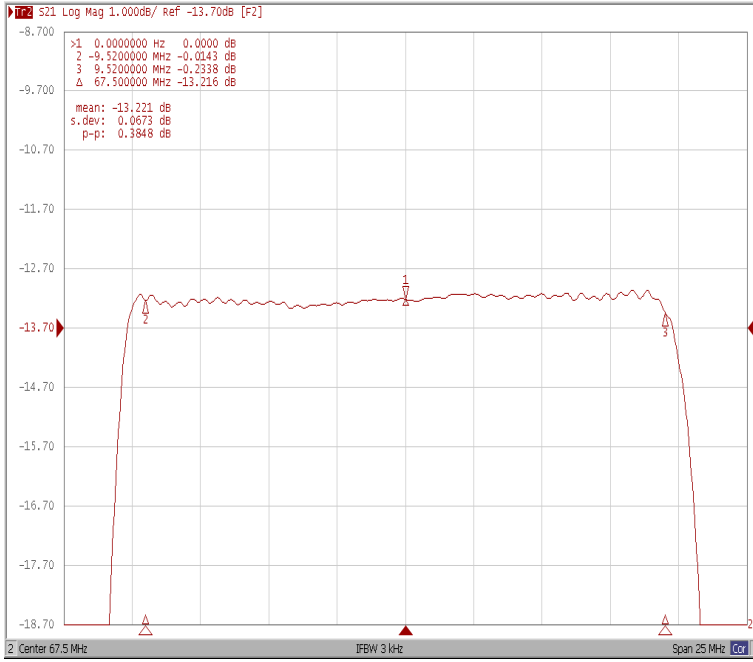


#### Bandwidth at -40.0 dB

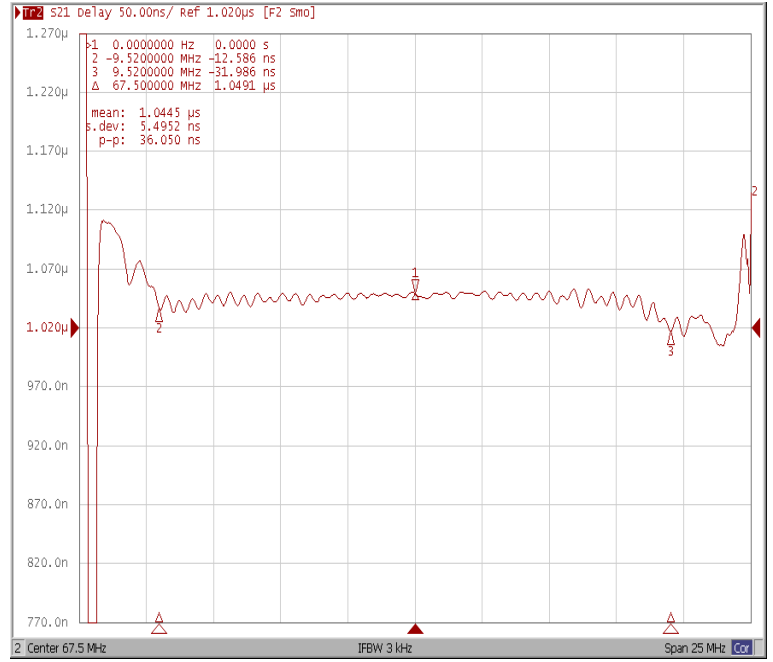




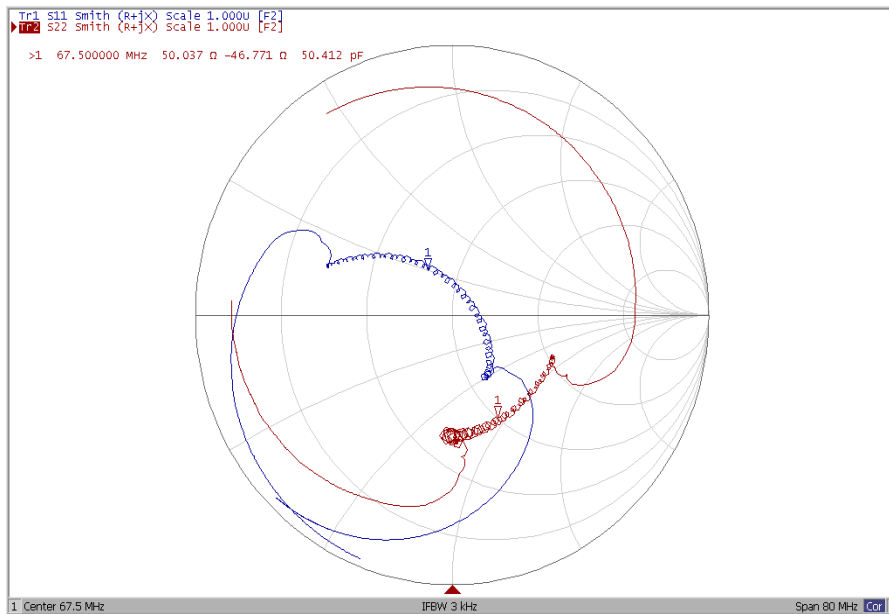
### Ripple Variation at $F_o \pm 9.52\text{MHz}$



### Group Delay Variation at $F_o \pm 9.52\text{MHz}$



### Smith Chart





### VSWR

