



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF79.925-16A	79.925 MHz IF SAW Filter 16.60 MHz Bandwidth

### Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Smith Chart
- o VSWR

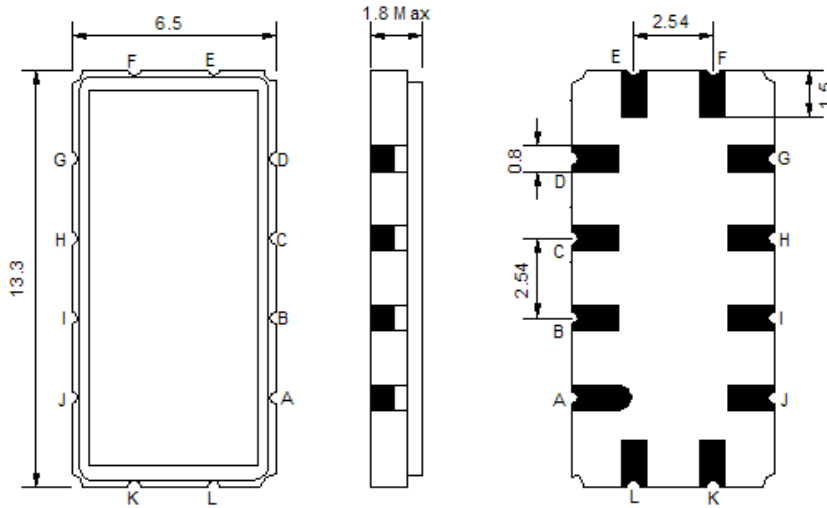
### Notes

- 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)



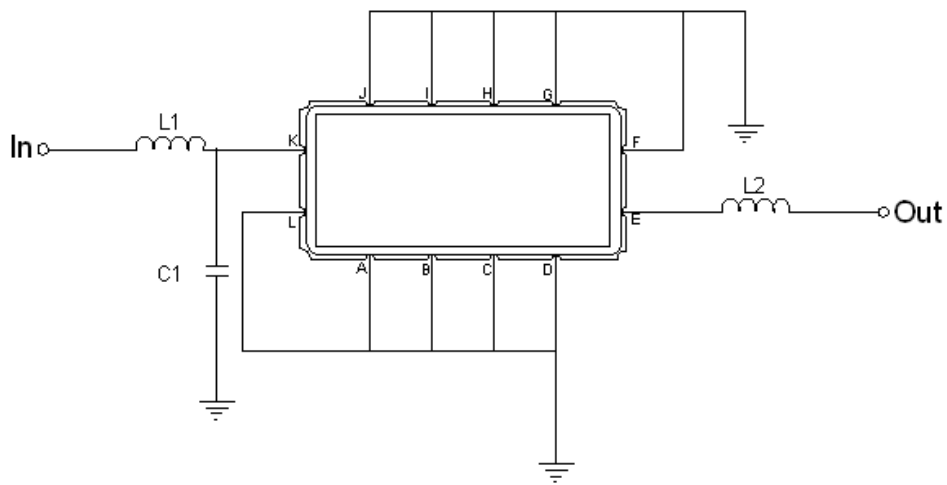


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 150nH, C1=7pF
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.

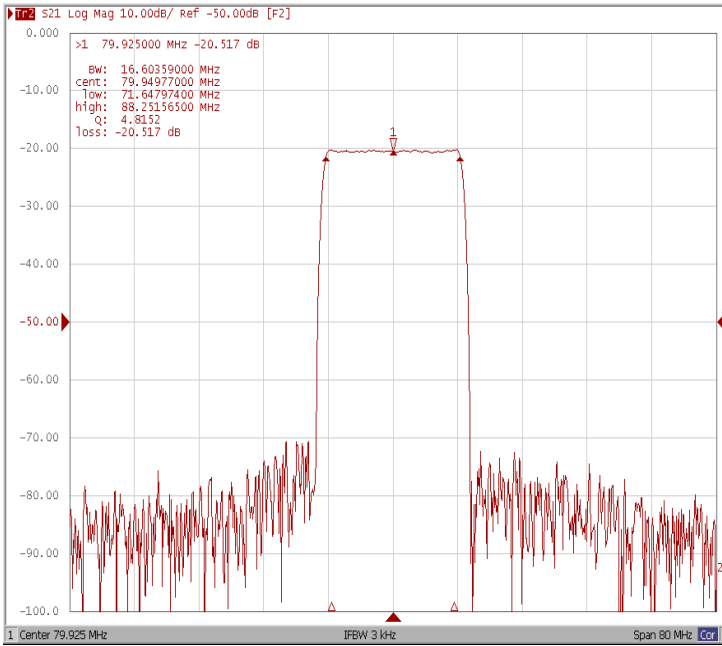
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	79.925	-
Insertion Loss at Fo	dB	-	20.50	22.00
Group Delay Variation at Fo ± 7.58 MHz	nsec	-	50	80
Absolute Delay at Fo	usec	-	1.68	-
Passband Ripple Variation at Fo ± 7.58 MHz	dB	-	0.60	1.00
Bandwidth at -1dB	MHz	16.30	16.60	-
Bandwidth at -3dB	MHz	-	17.05	-
Bandwidth at -30dB	MHz	-	18.64	18.90
Bandwidth at -40dB	MHz	-	18.85	-
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-72	-

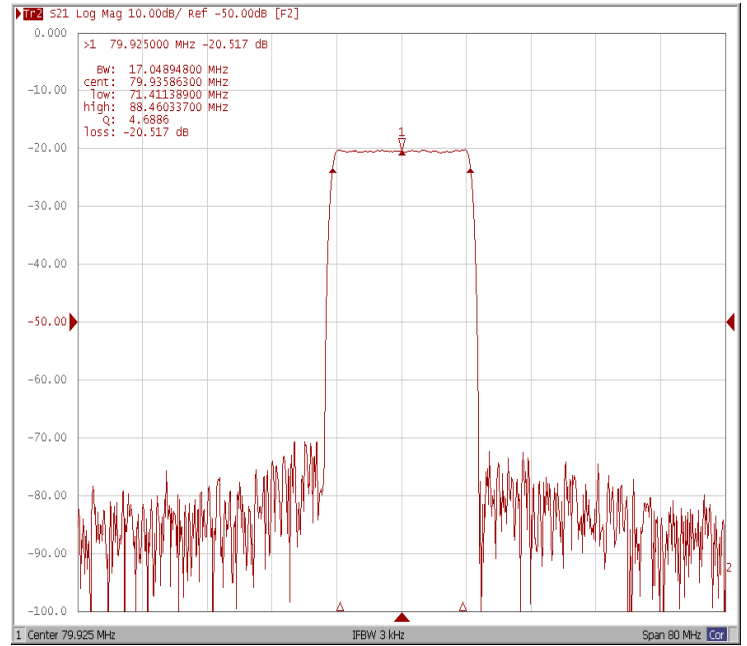


### Frequency Response

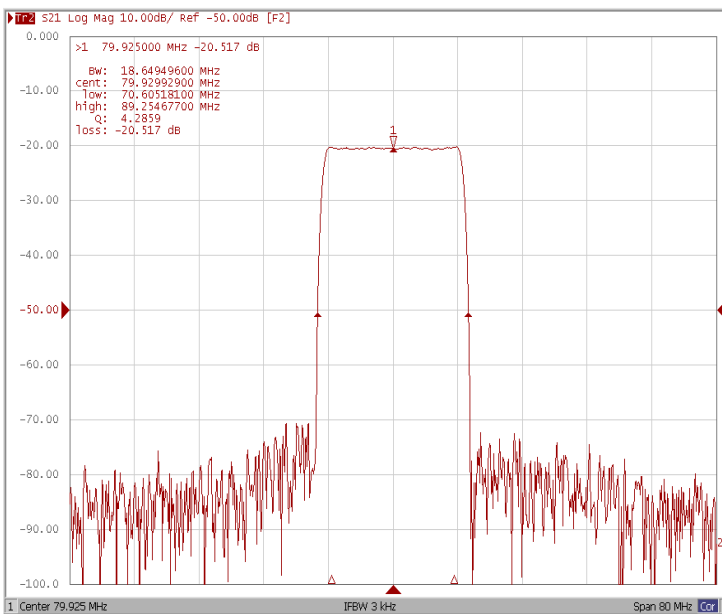
#### Bandwidth at -1.0 dB



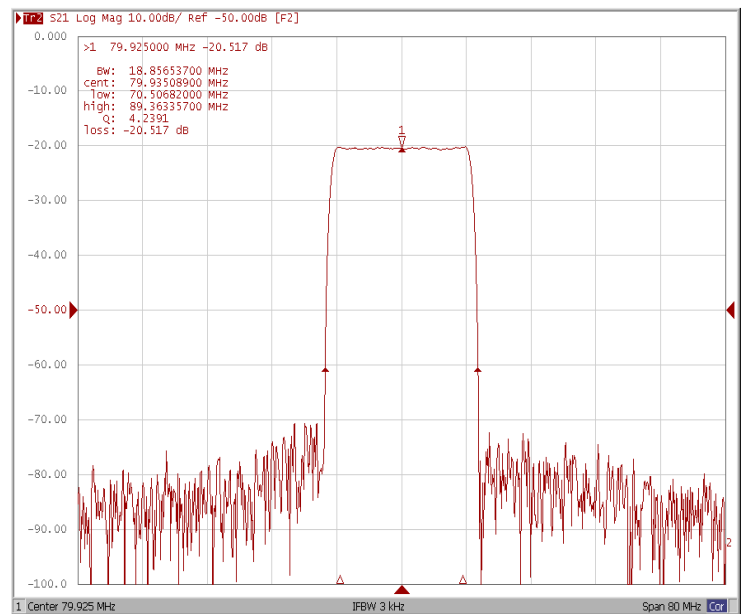
#### Bandwidth at -3.0 dB



#### Bandwidth at -30 dB

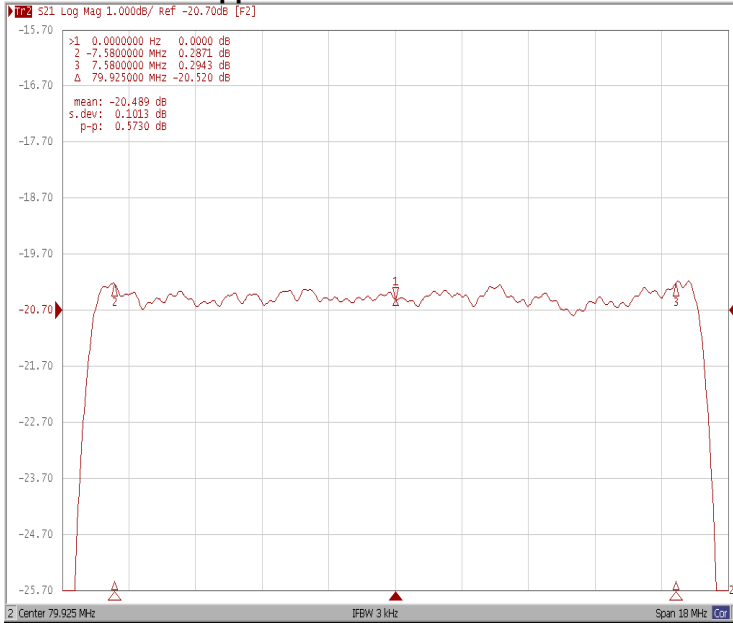


#### Bandwidth at -40 dB

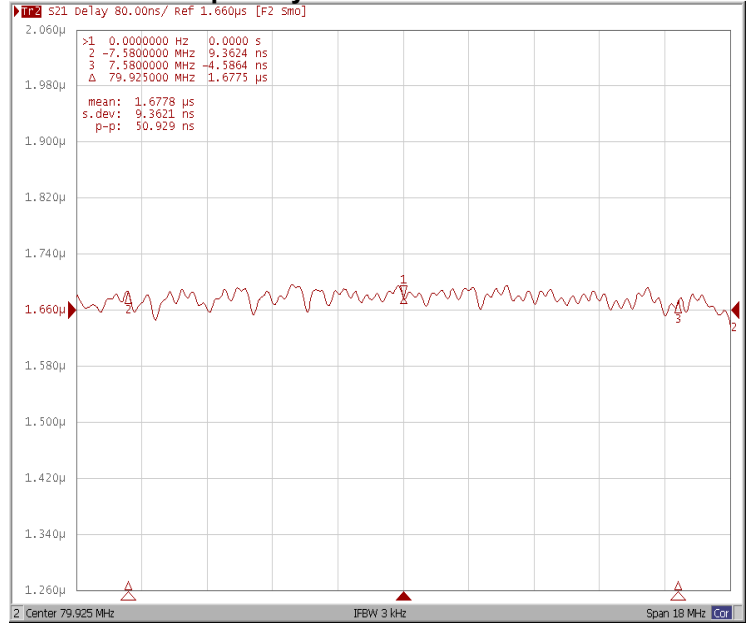




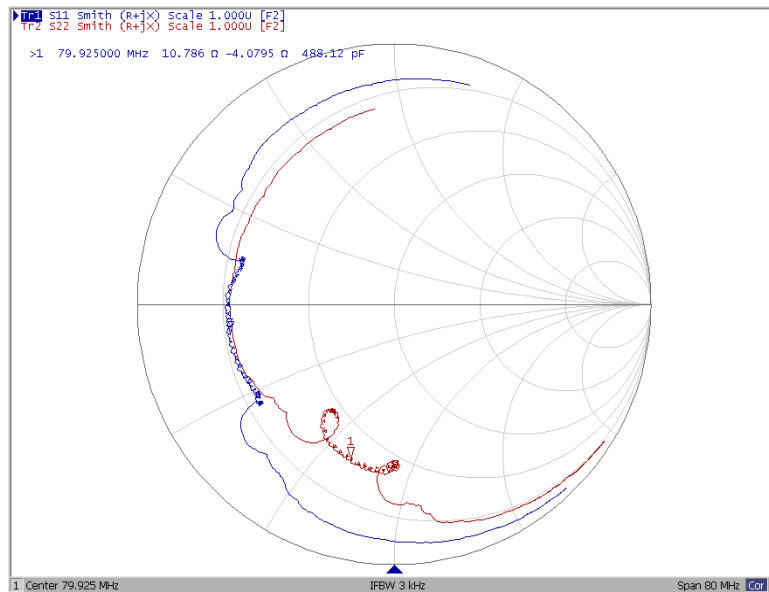
### Ripple Variation $F_o \pm 7.58\text{MHz}$



### Group Delay Variation $F_o \pm 7.58\text{MHz}$



### Smith Chart





### VSWR

