



**ANATECH ELECTRONICS INC**  
RF & Microwave Filters & Products

# 83.0625 MHz IF Saw Filter

**Part Number: AM83S659**

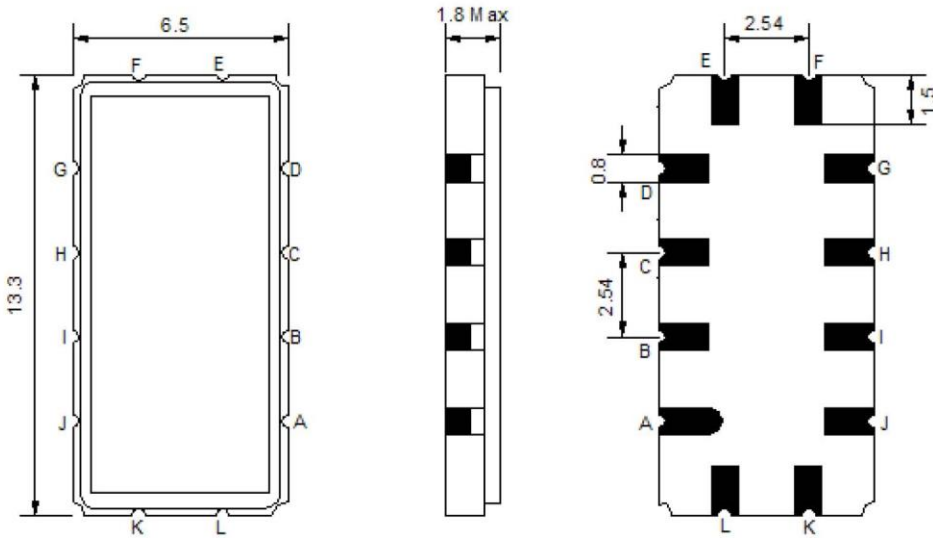


Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	83.0625	-
Insertion Loss at Fo	dB	-	21.6	23.5
Passband Ripple within Fo $\pm$ 0.9375 MHz	dB	-	0.20	1.00
Group Delay Variation within Fo $\pm$ 0.9375 MHz	nsec	-	50	100
Absolute Delay at Fo	usec	-	1.81	-
Bandwidth at -1.0 dB	MHz	1.875	2.79	-
Bandwidth at -30.0 dB	MHz	-	3.78	-
Bandwidth at -40.0 dB	MHz	-	3.92	4.62
Ultimate Rejection	dB	-	48	-
Relative Attenuation at Fo $\pm$ 2.1625 MHz	dB	30	50	-

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0	-	+60
Storage Temperature Range	°C	-20	-	+70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (Single Ended) <sub>1</sub>	$\Omega$	-	50	-
Load Impedance (Single Ended) <sub>1</sub>	$\Omega$	-	50	-
Package Size and Type		13.3 x 6.5 x 1.8 mm		V

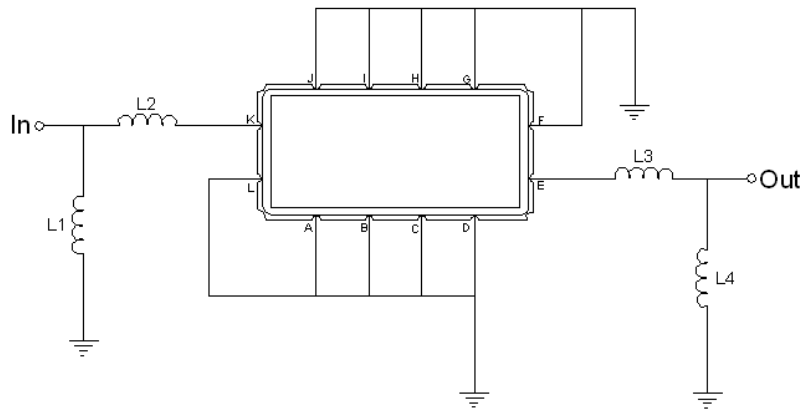


**Outline Drawing:**



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

**Testing Environment:**

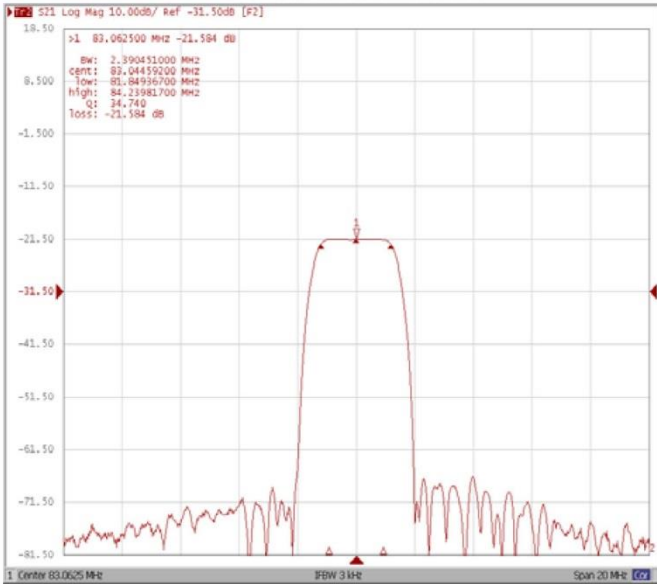


Pin Description	
Ground	L1 = 68 nH    L2 = 220 nH
Input	L3 = 180 nH    L4 = 68 nH
Source/Load Impedance	50 Ω

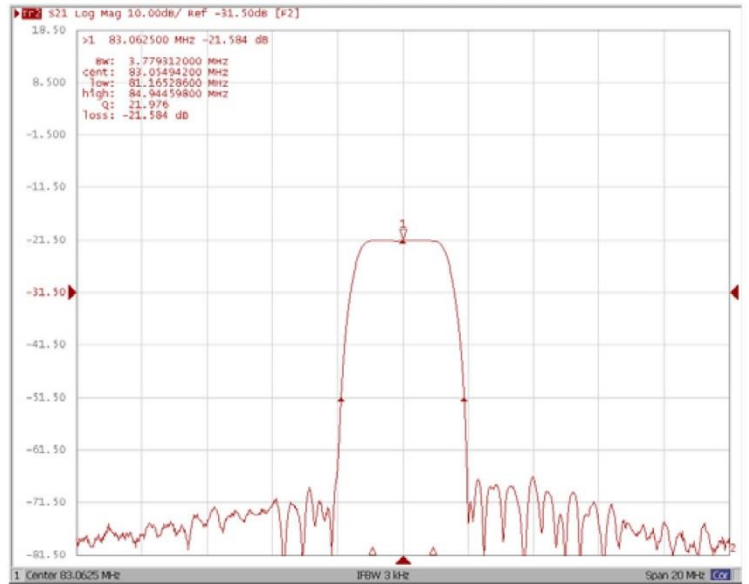


**Frequency Response:**

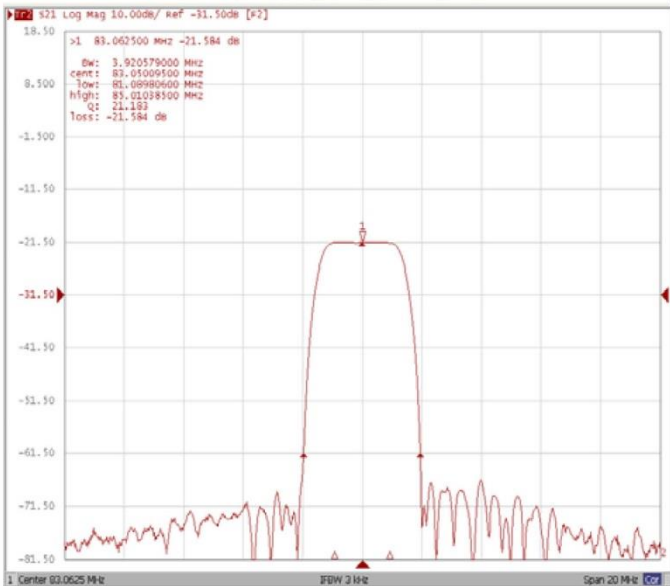
**B**      bandwidth at -1.0 dB



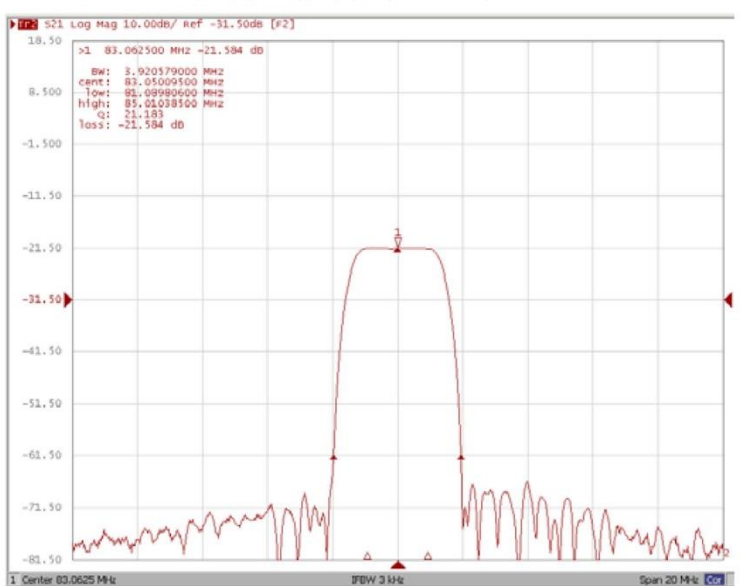
**B**      bandwidth at -30.0 dB



**B**      bandwidth at -40.0 dB



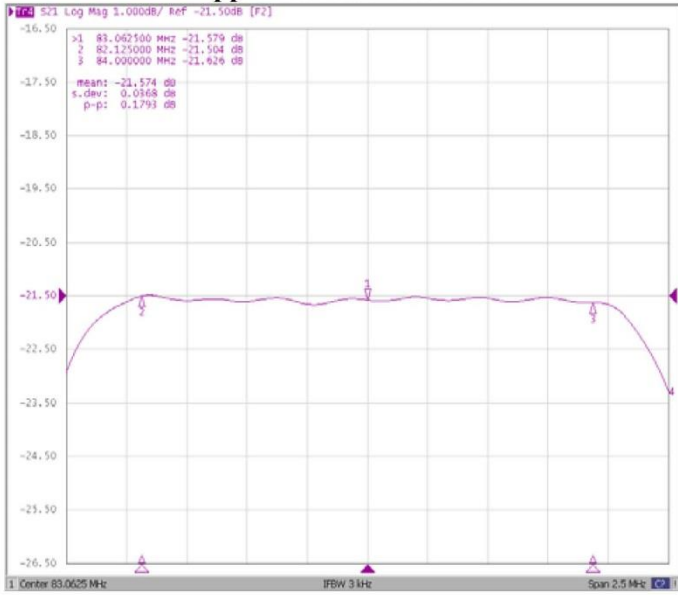
**Rel**      ative Attenuation Fo±2.1625MHz



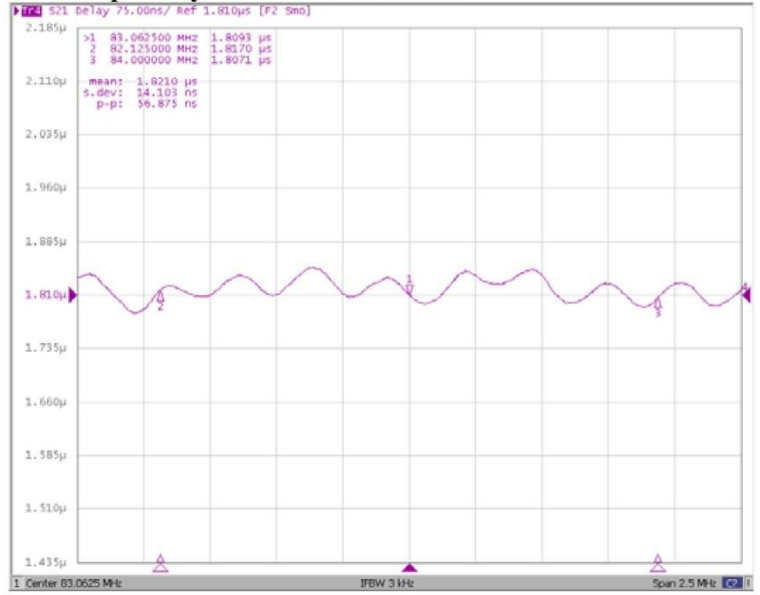


### Frequency Response:

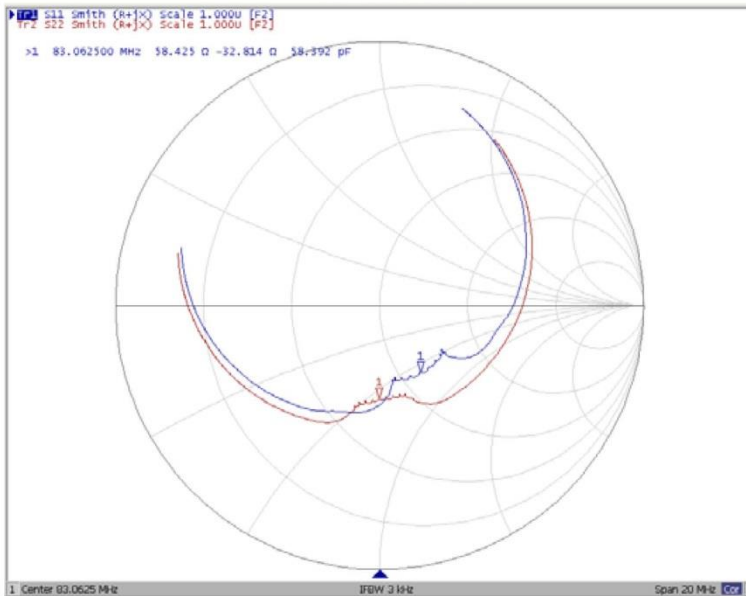
#### Ripple Variation Fo±0.9375



#### Group Delay Variation Fo±0.9375



#### Smith Chart



#### VSWR

