



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

# 147 MHz IF Saw Filter

## Part Number: AM147S716



Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	146.6	147.0	147.4
Insertion Loss at Fo	dB	-	7.80	11.00
Amplitude Ripple Variation at Fo ± 4.0 MHz	dB <sub>p-p</sub>	-	0.60	1.00
Group Delay Variation at Fo ± 4.0 MHz	nsec	-	60	150
Absolute Delay at Fo	µsec	-	0.93	-
Temperature Coefficient	ppm/°C	-	-89	-
Bandwidth at -1.0 dB	MHz	8.0	9.0	-
Bandwidth at -3.0 dB	MHz	9.5	10.1	-
Bandwidth at -35.0 dB	MHz	-	13.6	15.0
Lower Sidelobe	dB	42	50	-
Upper Sidelobe	dB	42	45	-

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0	-	+80
Storage Temperature Range	°C	-40	-	+55
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (Single Ended) <sub>1</sub>	Ω	-	50	-
Load Impedance (Single Ended) <sub>1</sub>	Ω	-	50	-
Package Size and Type		13.3 x 6.5 x 1.8 mm		V

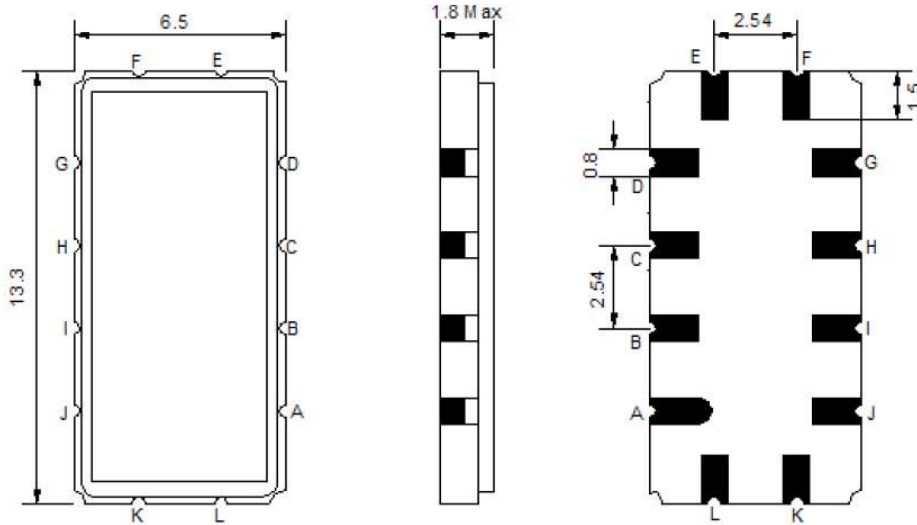


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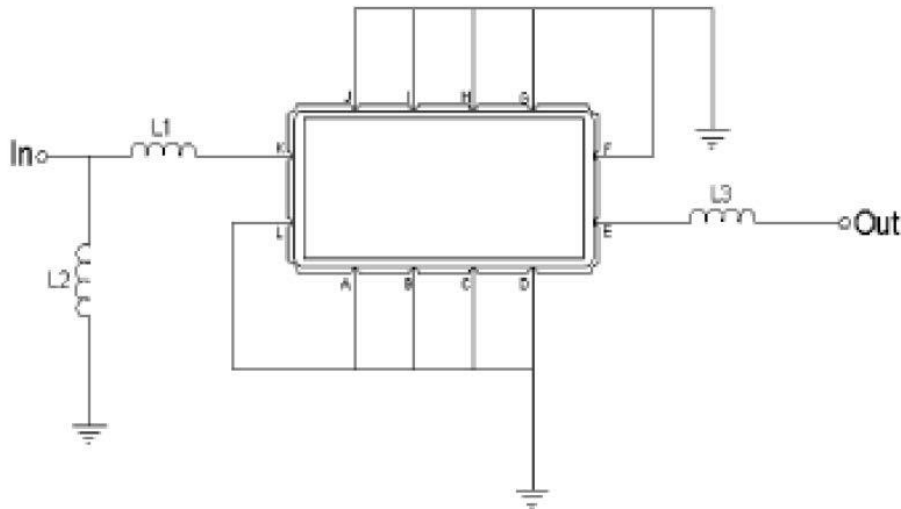


### Outline Drawing:



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

### Testing Environment:

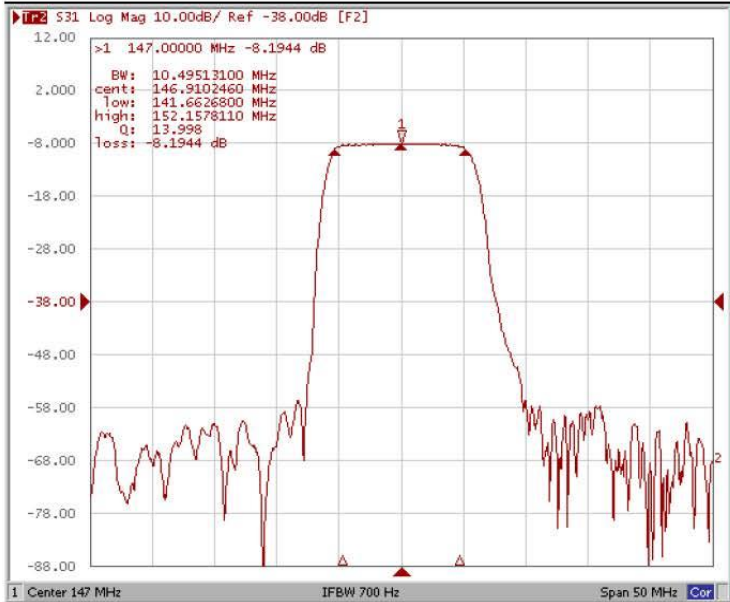


Test Fixture & Values	
Input	L1=8.2 nH, L2=47 nH
Output	L3=22 nH
Source/Load Impedance	50 Ω

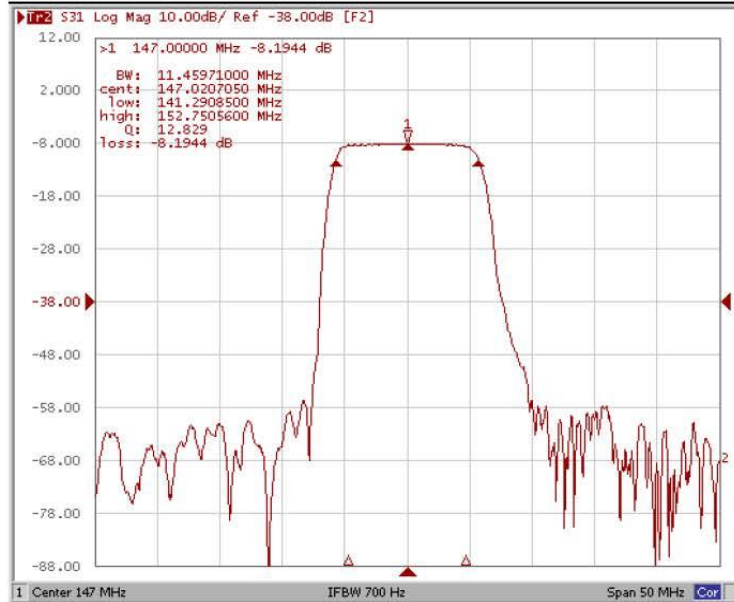


### Frequency Response:

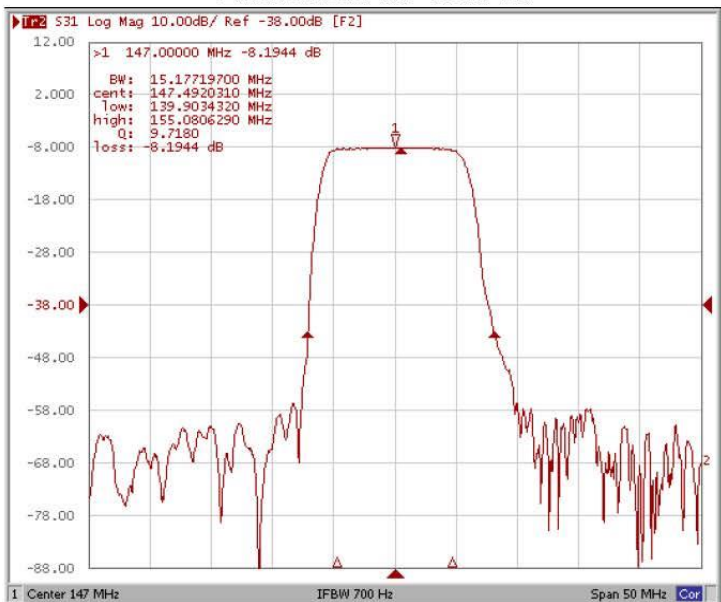
**Bandwidth at -1.0 dB**



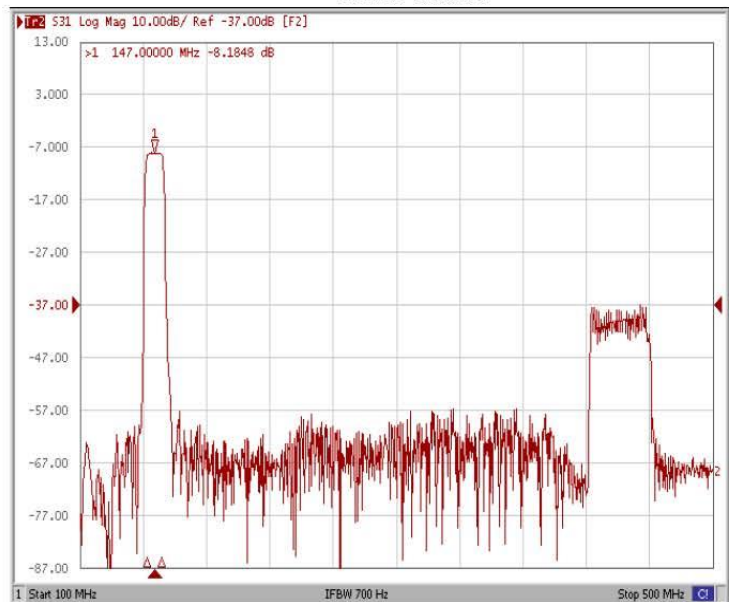
**Bandwidth at -3.0 dB**



**Bandwidth at -35.0 dB**



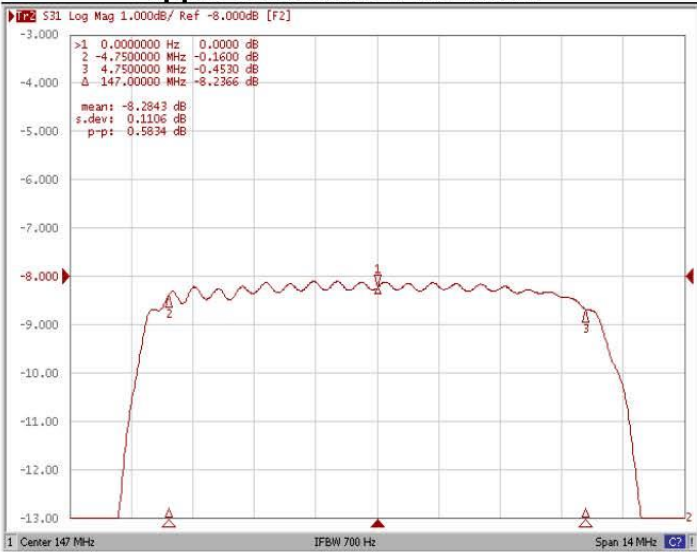
**Wide-Band**



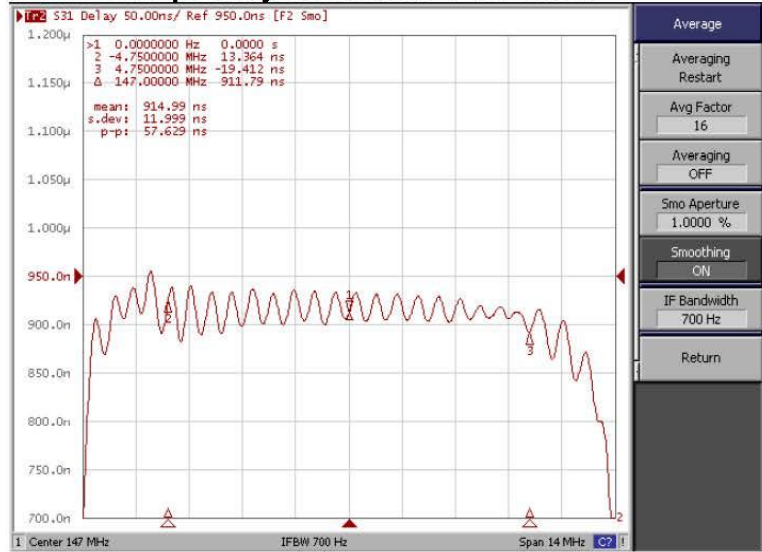


## Frequency Response:

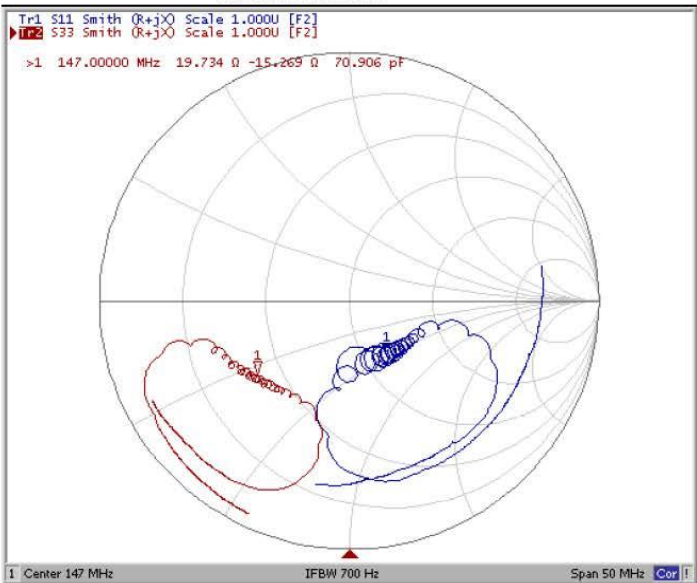
**Ripple Variation Fo±4.75MHz**



**Group Delay Variation Fo±4.75MHz**



**Smith Chart**



**SWR**

