



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

# 45 MHz IF Saw Filter

## Part Number: AM45S778

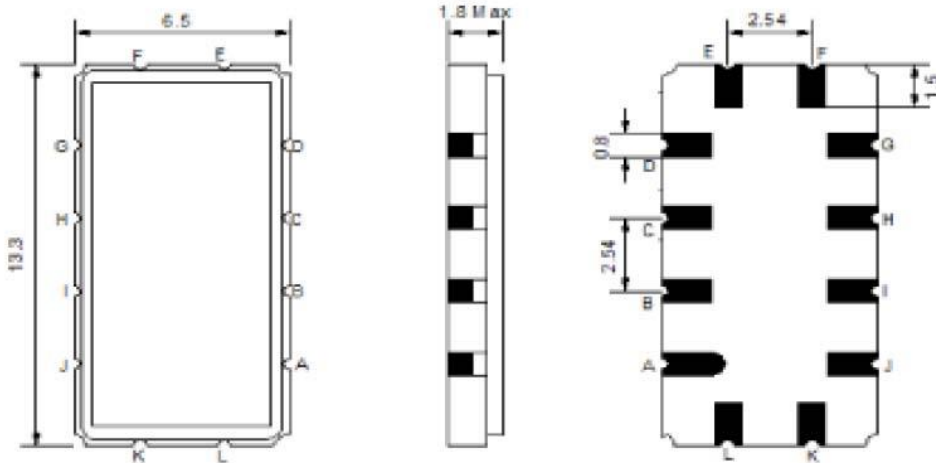


Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	44.92	45.0	45.05
Insertion Loss at Fo	dB	-	18.0	20.0
Group Delay Variation	nsec	-	40	90
Absolute Delay at Fo	µsec	-	1.61	-
Passband Ripple Variation	dB	-	0.70	1.00
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	-	13.85	-
Bandwidth at -3.0 dB	MHz	14.50	14.60	-
Bandwidth at -40.0 dB	MHz	-	18.10	18.50
Ultimate Rejection	dB	-	45	-

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	+25	-
Storage Temperature Range	°C	-40	-	+85
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	

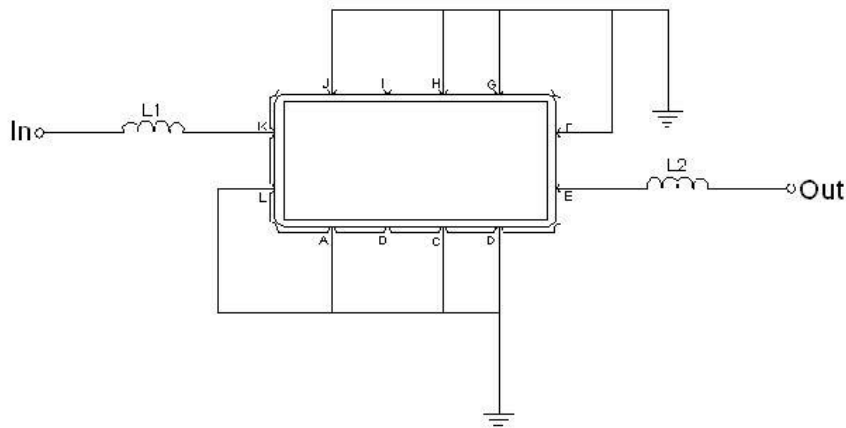


**Outline Drawing:**



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

**Testing Environment:**

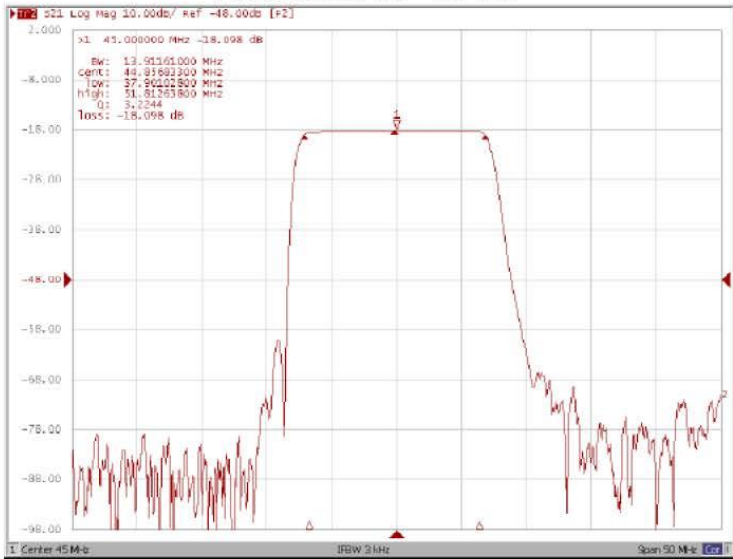


Test Fixture & Values	
<b>Input</b>	L1 = 180 nH
<b>Output</b>	L2 = 120 nH
<b>Source/Load Impedance</b>	50 Ω

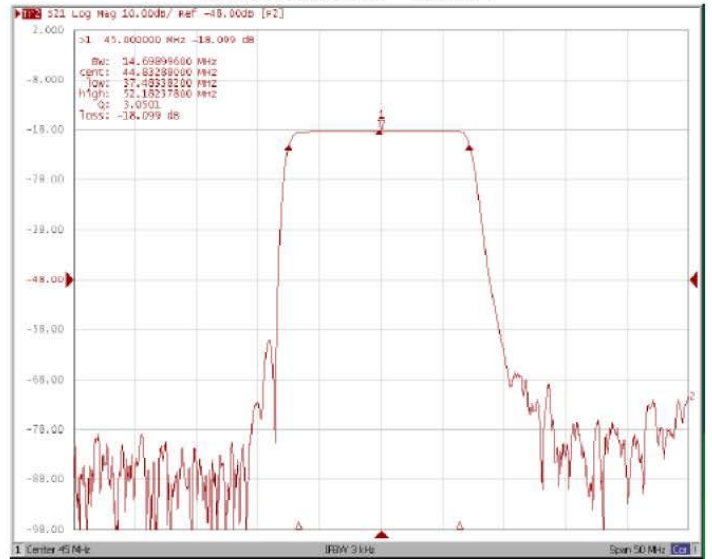


**Frequency Response:**

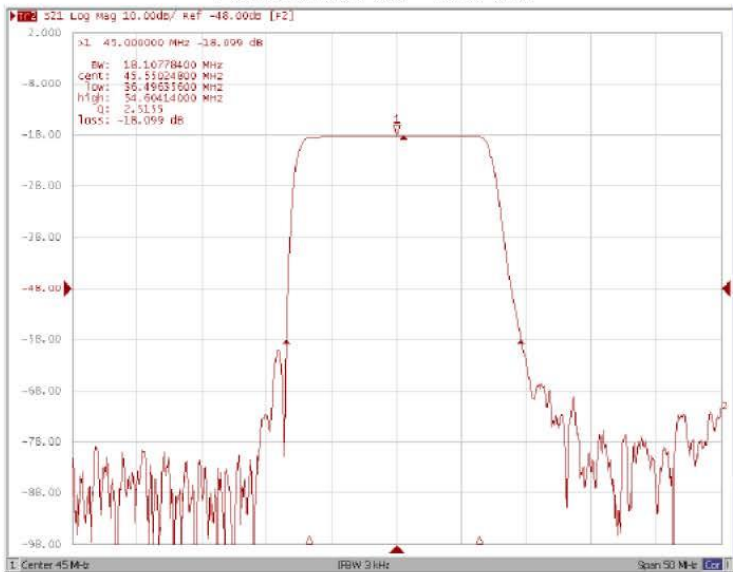
**Bandwidth at -1.0 dB**



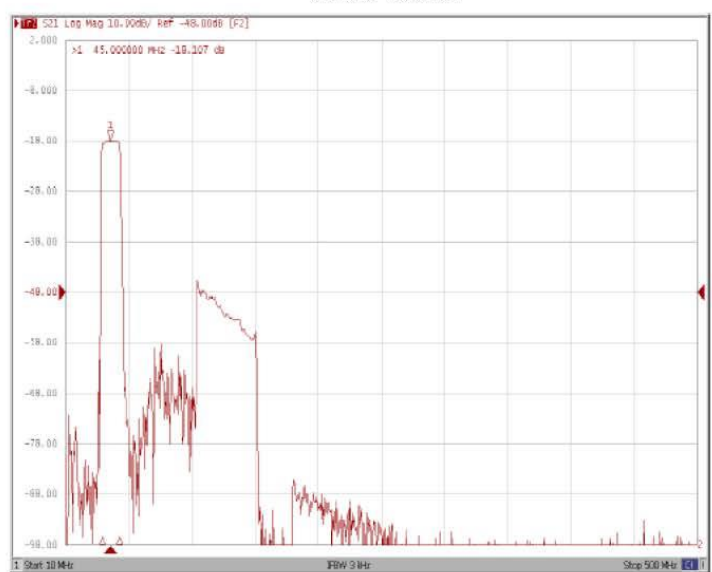
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**



**Wide-Band**



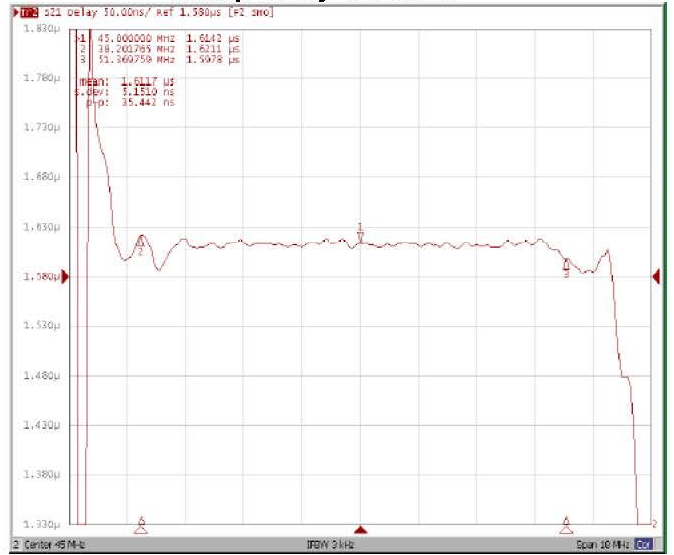


### Frequency Response:

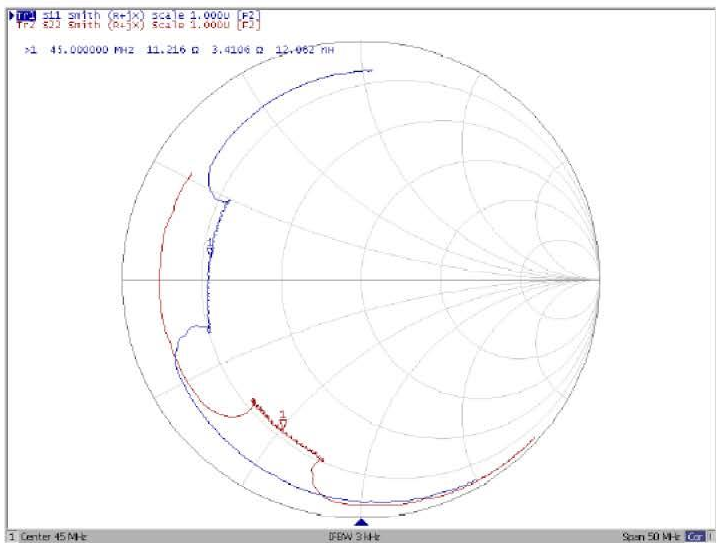
#### Ripple Variation



#### Group Delay Variation



#### Smith Chart



#### SWR

