



# 45 MHz IF Saw Filter

## Part Number: AM45S777

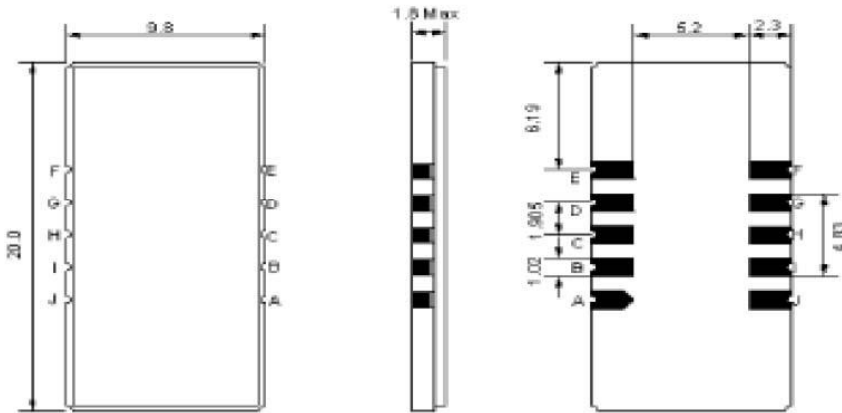


Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	44.9	45.0	45.1
Insertion Loss at Fo	dB	-	12.6	15.0
Group Delay Variation at Fo ± 4.5 MHz	nsec	-	60	100
Absolute Delay at Fo	µsec	-	1.51	-
Passband Ripple Variation at Fo ± 4.5 MHz	dB	-	0.45	1.00
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	9.80	9.88	-
Bandwidth at -3.0 dB	MHz	-	10.40	-
Bandwidth at -20.0 dB	MHz	-	11.88	-
Bandwidth at -40.0 dB	MHz	-	12.80	13.0

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	0	-	+60
Storage Temperature Range	°C	-30	-	+80
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	20.0 x 9.8 x 1.8 mm		D1	

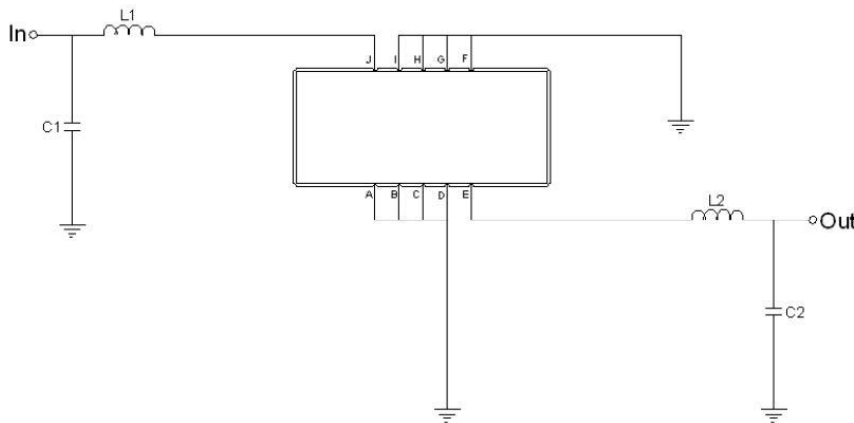


**Outline Drawing:**



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

**Testing Environment:**



Test Fixture & Values	
Input	L1=270nH, C1=33pF
Output	L2=270nH, C2=36pF
Source/Load Impedance	50 Ω

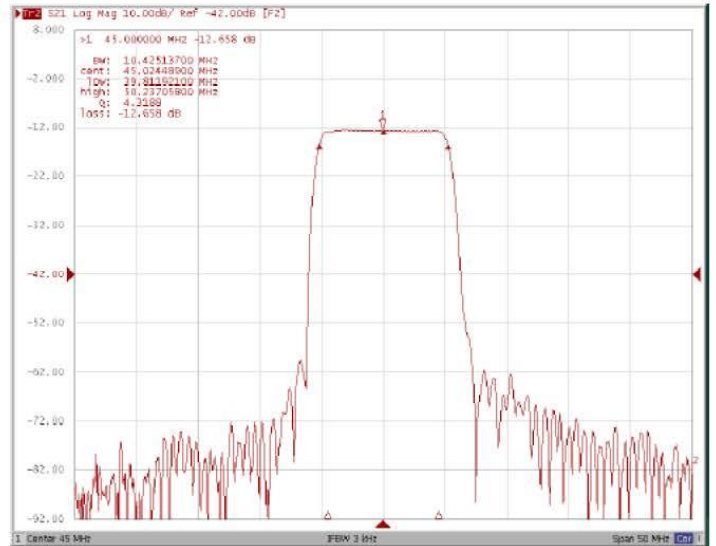


### Frequency Response:

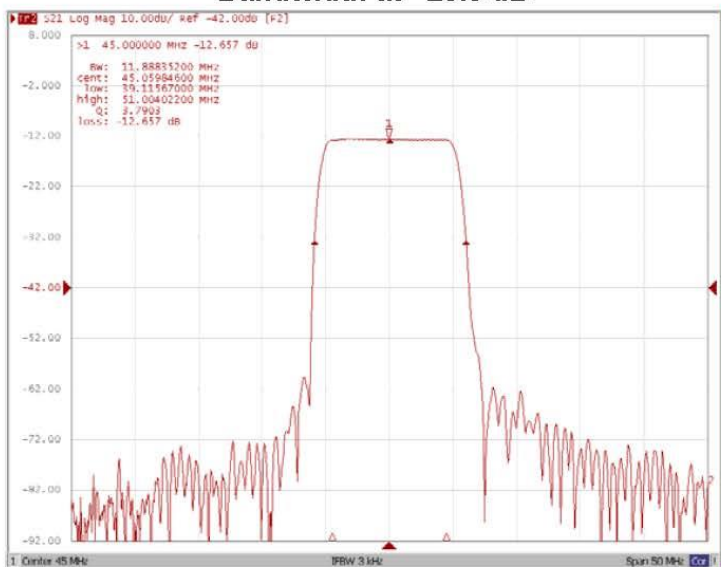
**Bandwidth at -1.0 dB**



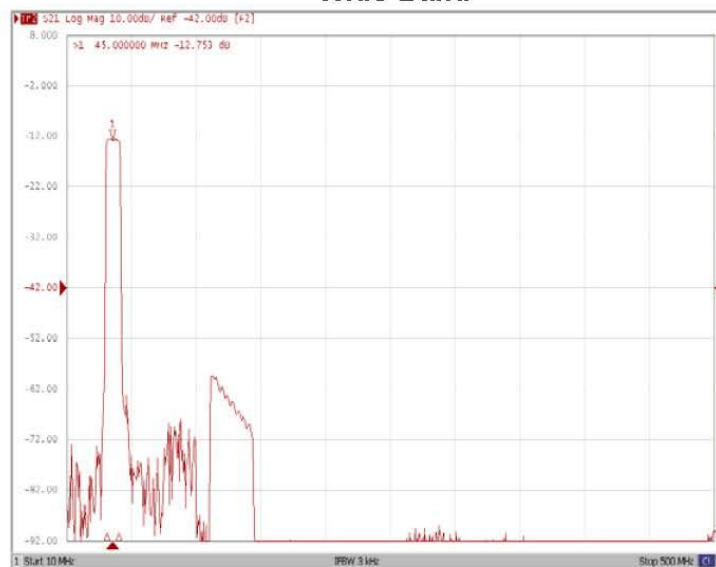
**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**



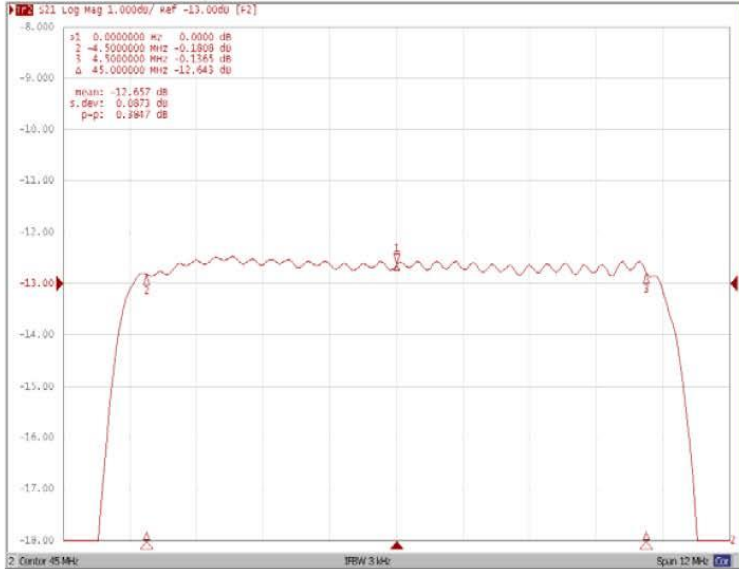
**Wide-Band**



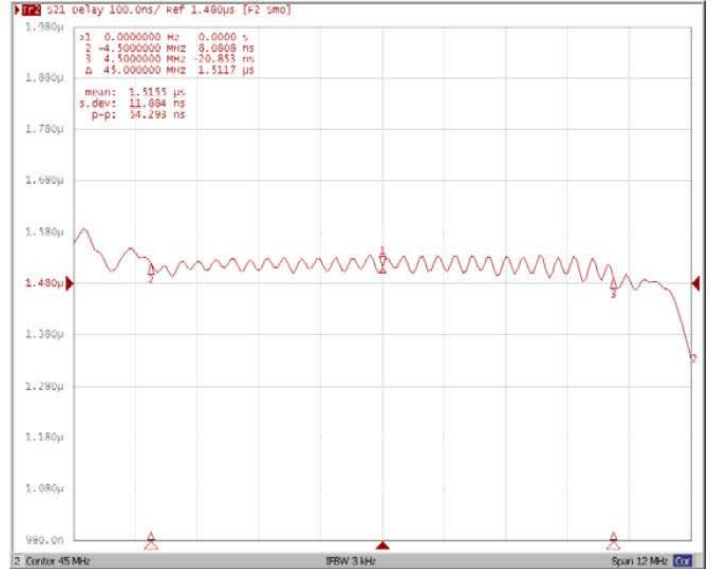


**Frequency Response:**

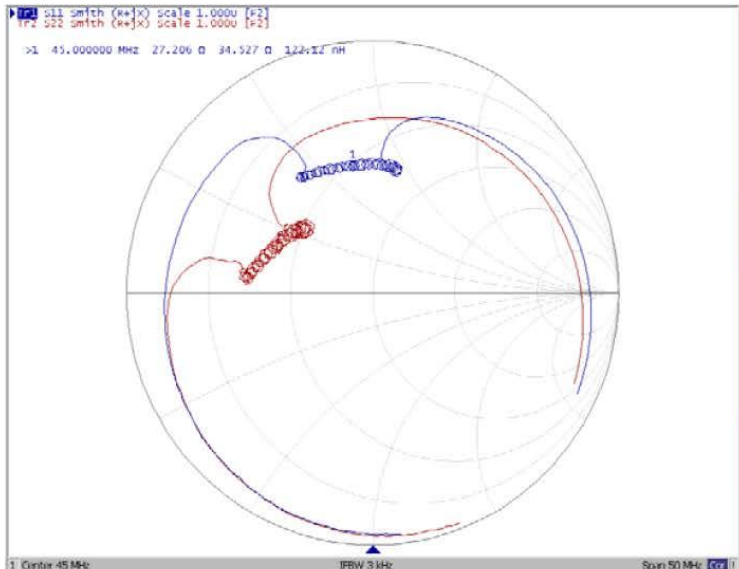
**Ripple Variation Fo±4.5MHz**



**Group Delay Variation Fo±4.5MHz**



**Smith Chart**



**VSWR**

