



117 MHz IF Saw Filter 14 MHz Bandwidth



ANATECH ELECTRONICS INC
RF & Microwave Filters & Products

Part Number: AM117S592

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	117.50	-
Insertion Loss at Fo	dB	-	29.00	30.00
Group Delay Variation at Fo ± 7.09 MHz	nsec	-	45	100
Phase Linearity at Fo ± 7.09 MHz	Deg	-	9.3	13
Absolute Delay at Fo	usec	-	3.94	4.20
Temperature Coefficient	ppm/°C	-	-18	-
Amplitude Ripple at Fo ± 7.09 MHz	dBp-p	-	0.7	1.0
Bandwidth at -1.0 dB	MHz	14.18	14.32	-
Bandwidth at -45.0 dB	MHz	-	15.65	15.75
Input/Output Return Loss	dB	-	2.5	-
Triple Transit Attenuation	dBc	35	-	-
Relative Attenuation:				
10.0 ~ 105.0 MHz	dBc	40	58	-
109.84 MHz	dBc	18	22	-
109.94 MHz	dBc	9	14	-
125.06 MHz	dBc	9	16	-
125.16 MHz	dBc	18	21	-
130.0 ~ 300.0 MHz	dBc	40	56	-

Parameters Description	Unit	Minimum	Typical	Maximum	
Operation Temperature Range	°C	-	+45	-	
Storage Temperature Range	°C	-20	-	+70	
Maximum DC Voltage	V	-	-	10	
Maximum Input Power	dBm	-	-	28	
Source Impedance (Single Ended) ₁	Ω	-	50	-	
Load Impedance (Single Ended) ₁	Ω	-	50	-	
Package Size and Type	34.7 x 12.6 x 5.05 mm			F	



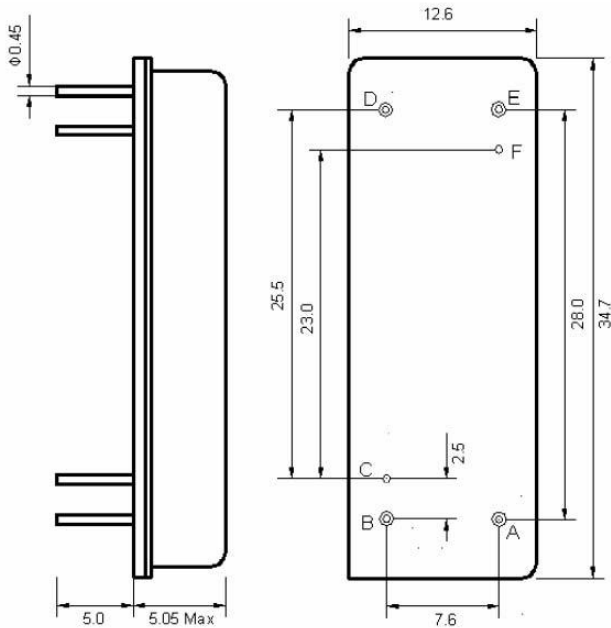
117 MHz IF Saw Filter 14 MHz Bandwidth

Part Number: AM117S592



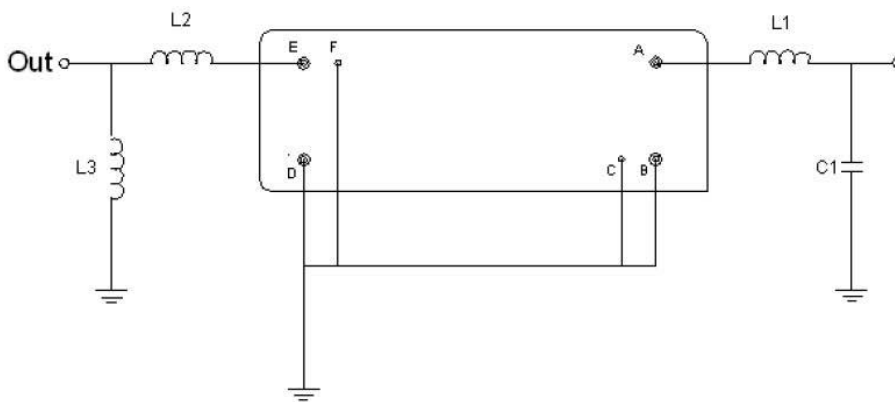
ANATECH ELECTRONICS INC
RF & Microwave Filters & Products

Outline Drawing:



Pin Description	
Ground	B C D F
Input	A
Output	E

Testing Environment:



Test Fixture & Values	
Input	L1=56 nH Q >40, C1=24 pF
Output	L2=10 nH Q >40, L3=39 nH Q >40
Source/Load Impedance	50 Ω



117 MHz IF Saw Filter 14 MHz Bandwidth

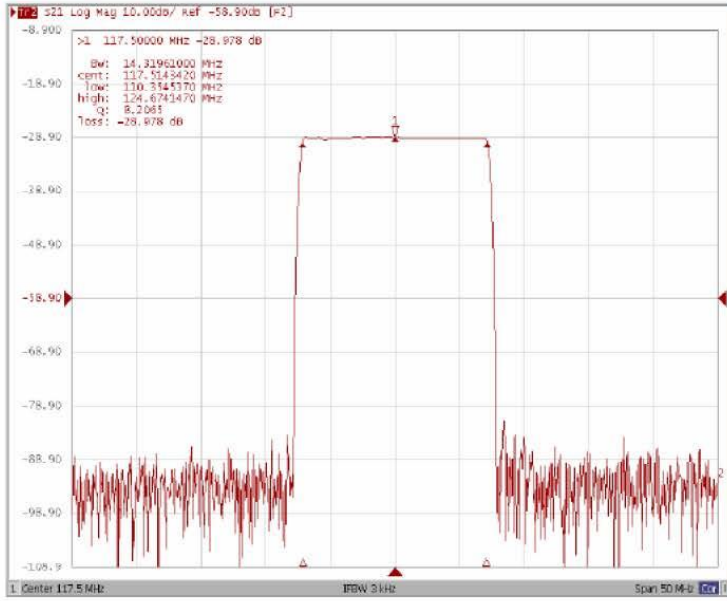
Part Number: AM117S592



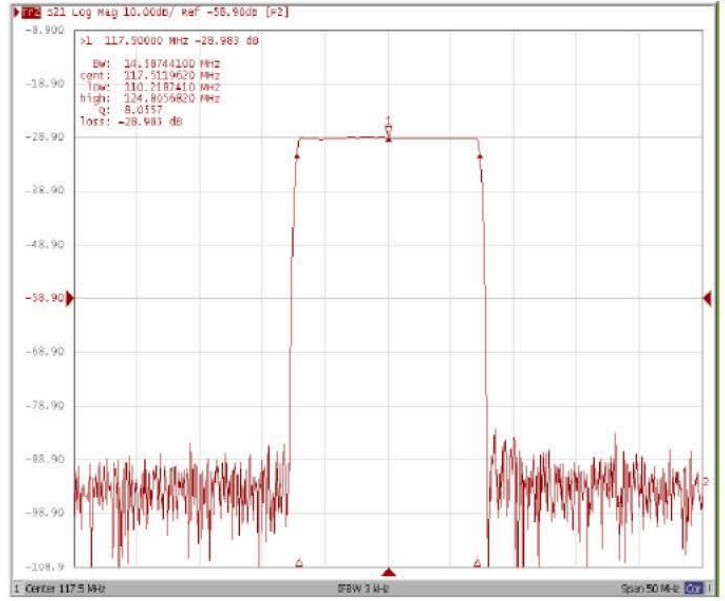
ANATECH ELECTRONICS INC
RF & Microwave Filters & Products

Frequency Response:

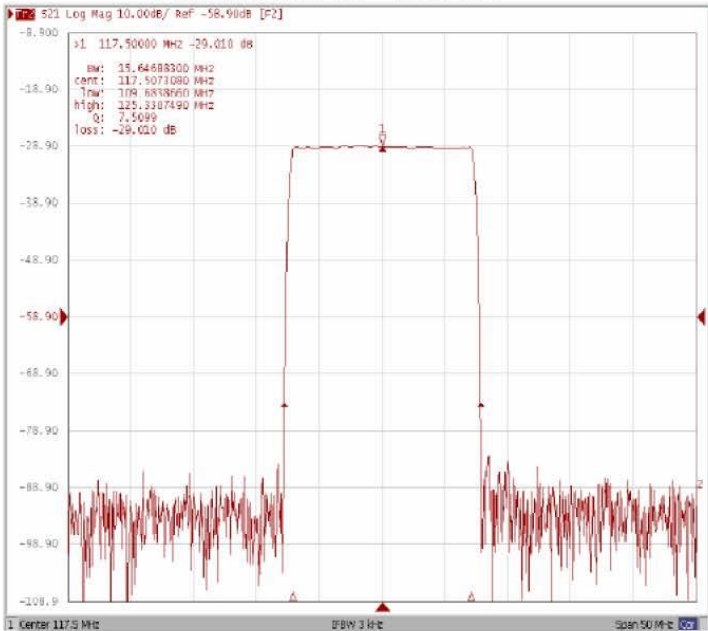
Bandwidth at -1.0 dB



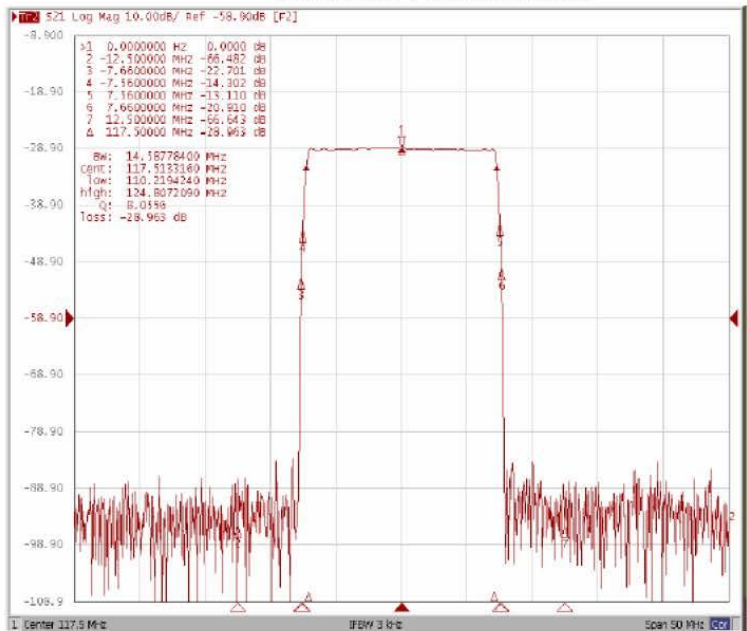
Bandwidth at -3.0 dB



Bandwidth at -45.0 dB



Relative Attenuation





117 MHz IF Saw Filter 14 MHz Bandwidth

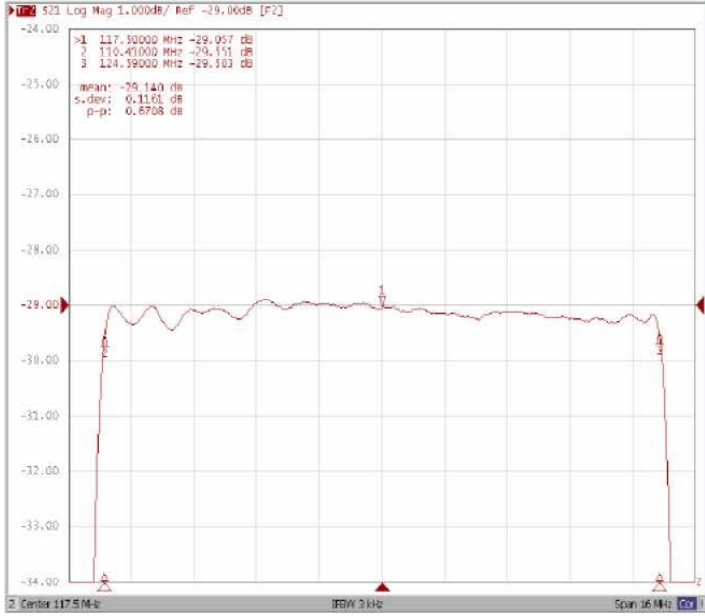
Part Number: AM117S592



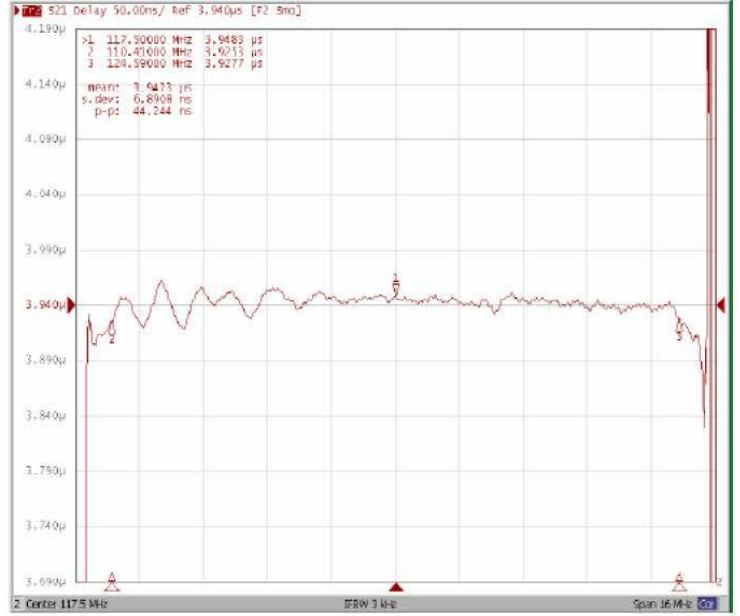
ANATECH ELECTRONICS INC
RF & Microwave Filters & Products

Frequency Response:

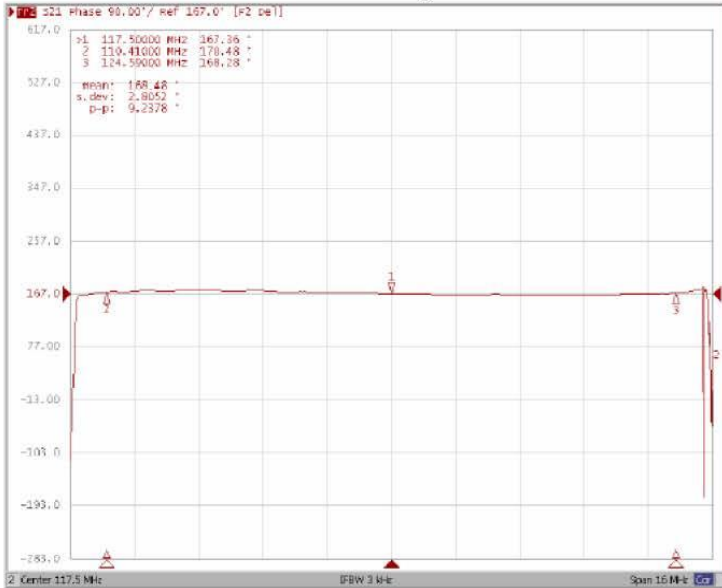
Ripple Variation Fo±7.09MHz



Group Delay Variation Fo±7.09MHz



Phase Linearity Fo±7.09MHz



Smith Chart

