



Total Solution Provider in Saw Device

SA04405AF

44.0 MHz IF SAW Filter

5.40 MHz Bandwidth

Revision 0: 16. January. 2008



- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
-

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□ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type&size	F			
Length x Width	mm ²	-	34.7 x 12.6	-
Height	mm	-	-	5.05

Electrical Specification

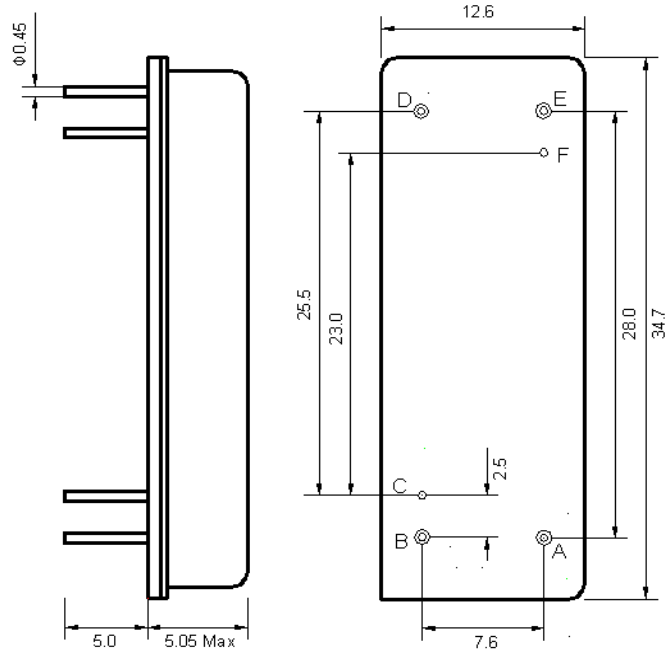
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	43.95	44.0	44.05
Insertion Loss at Fo	dB	-	25.0	26.5
Amplitude Ripple Variation at Fo ± 2.7 MHz	dB _{p-p}	-	0.5	0.8
Group Delay Variation at Fo ± 2.7 MHz	nsec	-	60	100
Absolute Delay at Fo	µsec	-	4.1	-
Temperature Coefficient	ppm/°C	-	-94	-
Bandwidth at -1.0 dB	MHz	5.5	5.70	-
Bandwidth at -3.0 dB	MHz	5.8	5.88	-
Bandwidth at -40.0 dB	MHz	-	6.65	6.8
Ultimate Rejection	dB	45	50	-

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

Those impedances could be modified with different impedance values and/or structures, if necessary.

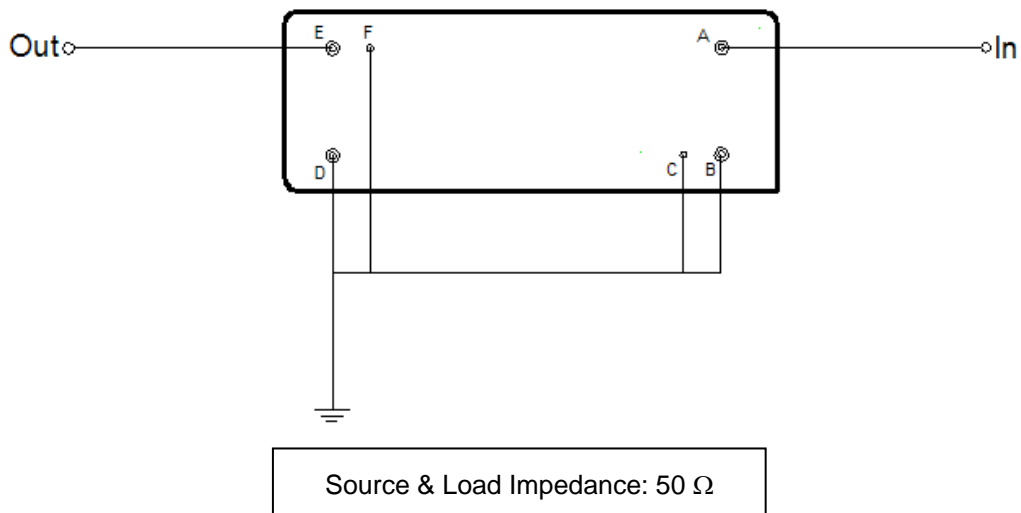
Package Dimensions

1



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

Testing Environment

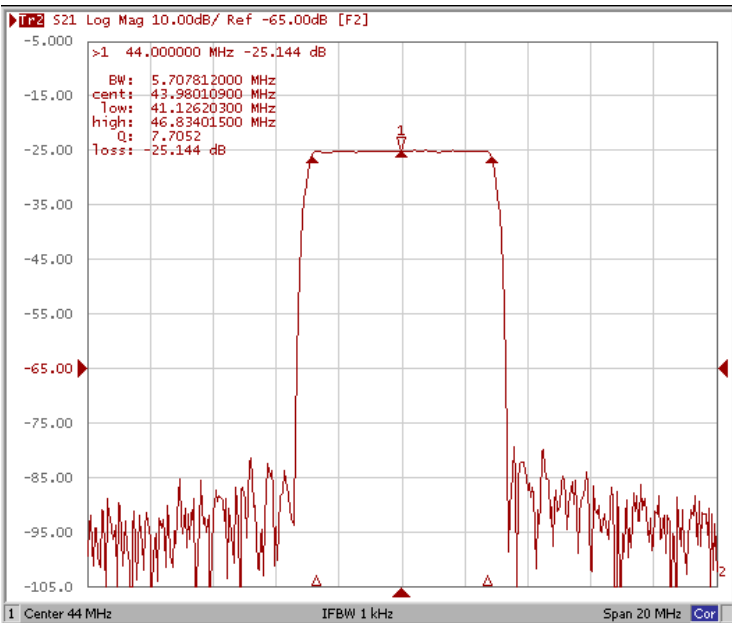




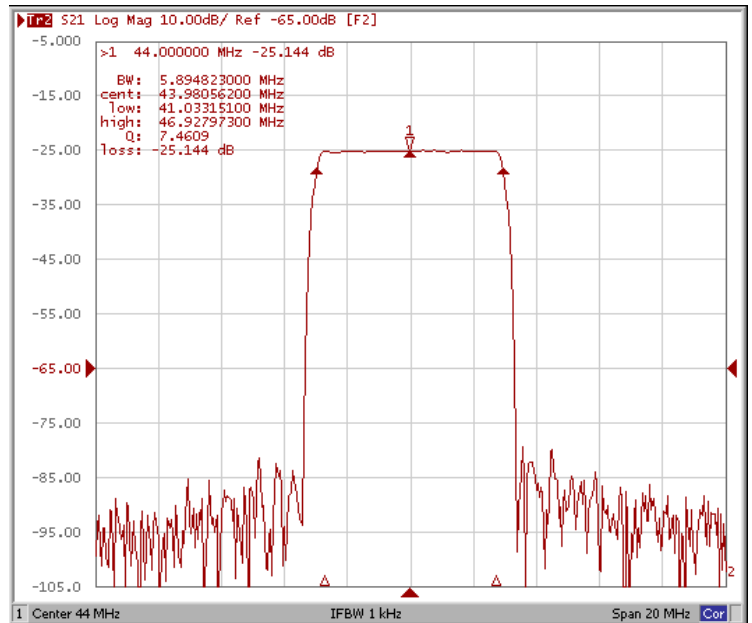
Frequency Characteristics

Frequency Response

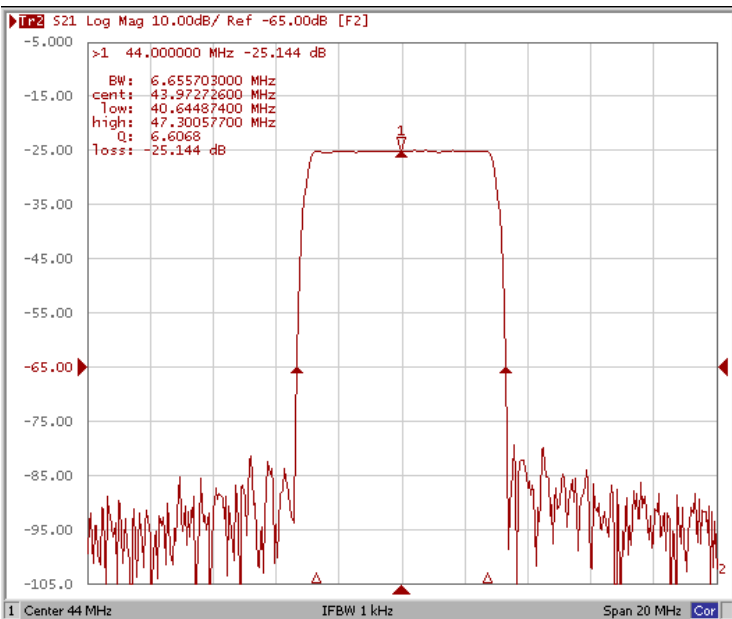
Bandwidth at -1.0 dB



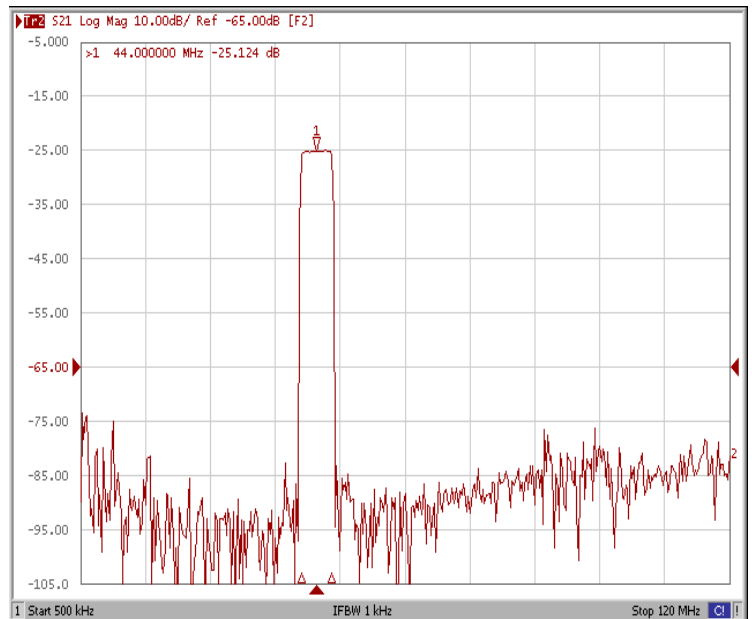
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Wide-Band

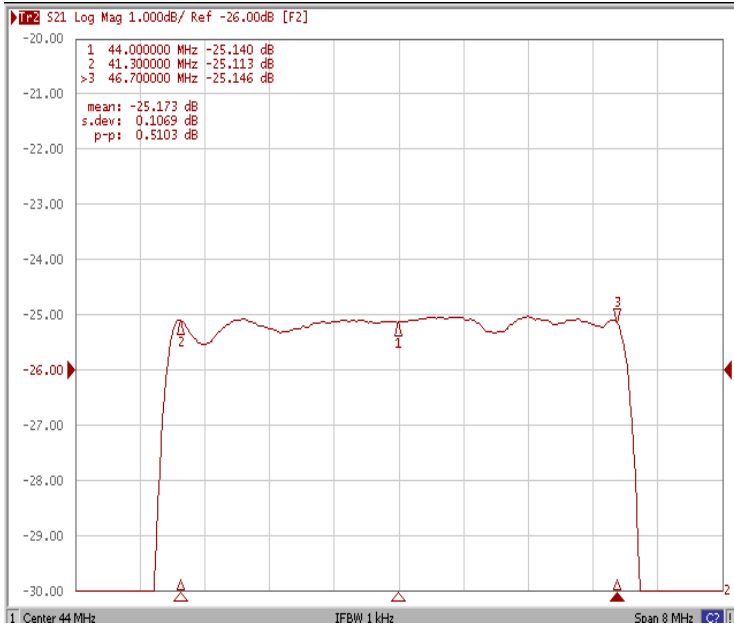




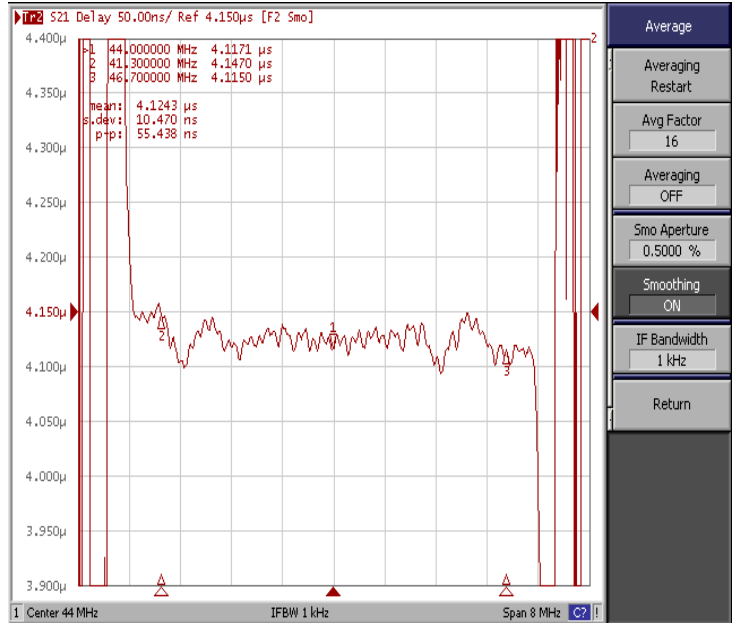
Frequency Characteristics

Frequency Response

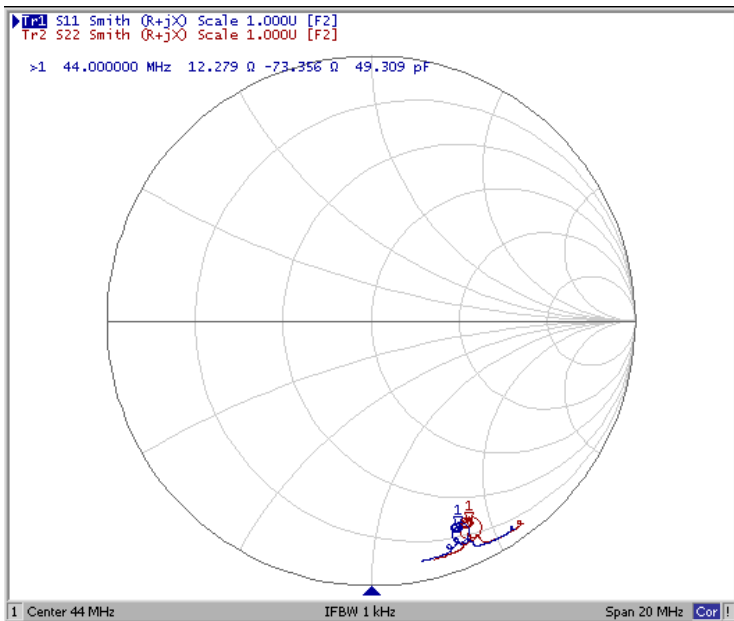
Ripple Variation Fo±2.7MHz



Group Delay Variation Fo±2.7MHz



Smith Chart



SWR

