



Total Solution Provider in Saw Device

SA04305AF

43.75 MHz IF SAW Filter
5.33 MHz Bandwidth
Revision 0: 17. March. 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

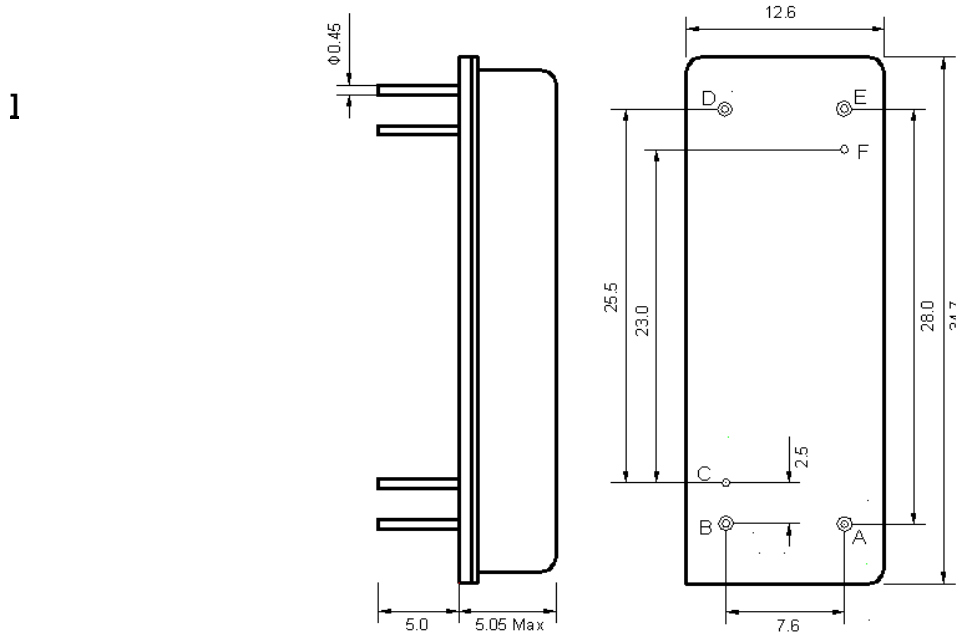
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	43.75	-
Insertion Loss at Fo	dB	-	24.0	26.0
Amplitude Ripple Variation at 41.25 ~ 45.75 MHz	dB _{p-p}	-	0.5	0.8
Group Delay Variation at 41.25 ~ 45.75 MHz	nsec	-	80	120
Absolute Delay at Fo	μsec	-	4.15	-
Temperature Coefficient	ppm/°C	-	-94	-
Bandwidth at -1.0 dB	MHz	5.20	5.33	-
Bandwidth at -3.0 dB	MHz	-	5.54	-
Bandwidth at -40.0 dB	MHz	-	6.32	6.50
Ultimate Rejection	dB	50	55	-
Relative Attenuation				
39.75MHz	dB	50	55	-
47.25MHz	dB	50	55	-

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

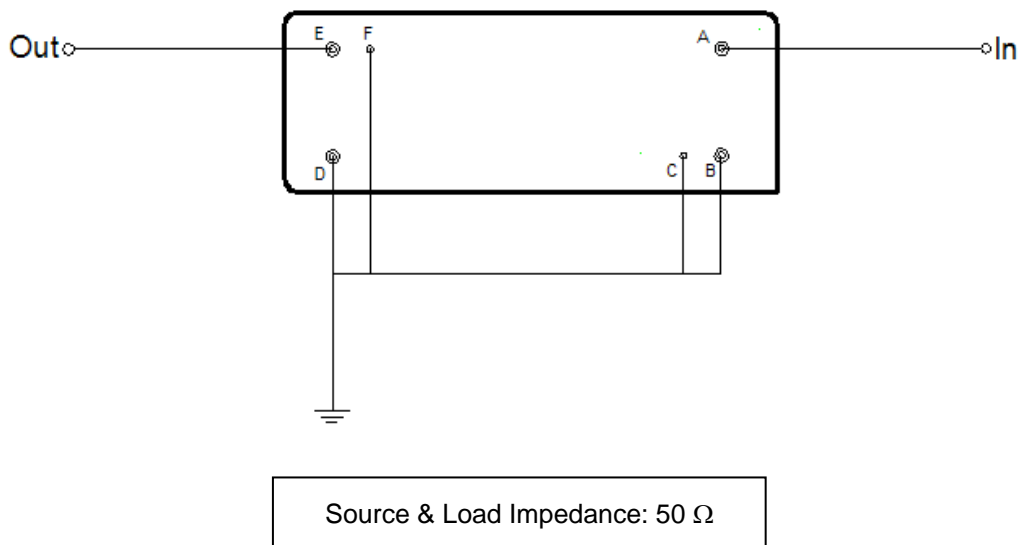
Those impedances could be modified with different impedance values and/or structures, if necessary.

□ Package Dimensions



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

□ Testing Environment

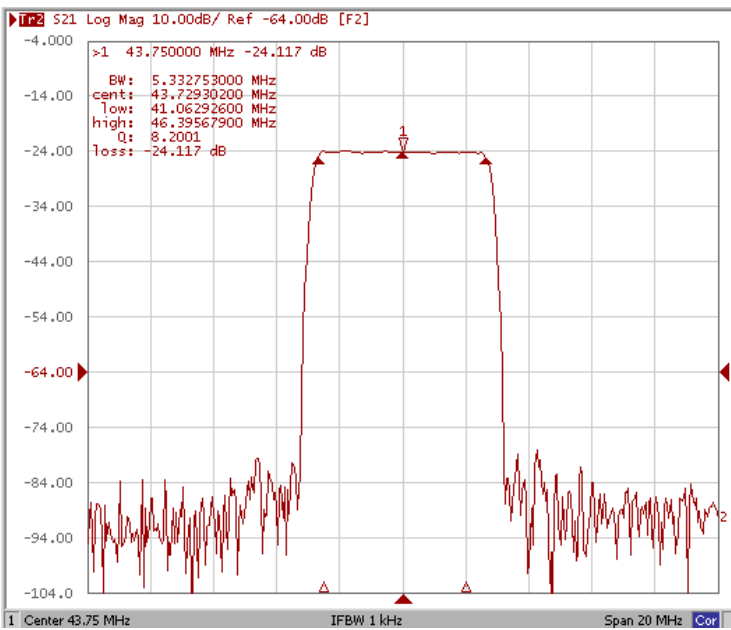




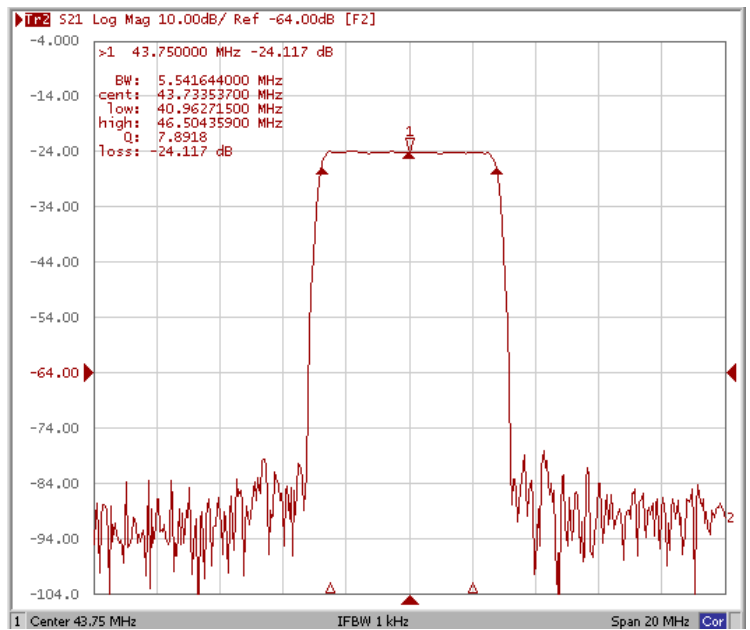
Frequency Characteristics

Frequency Response

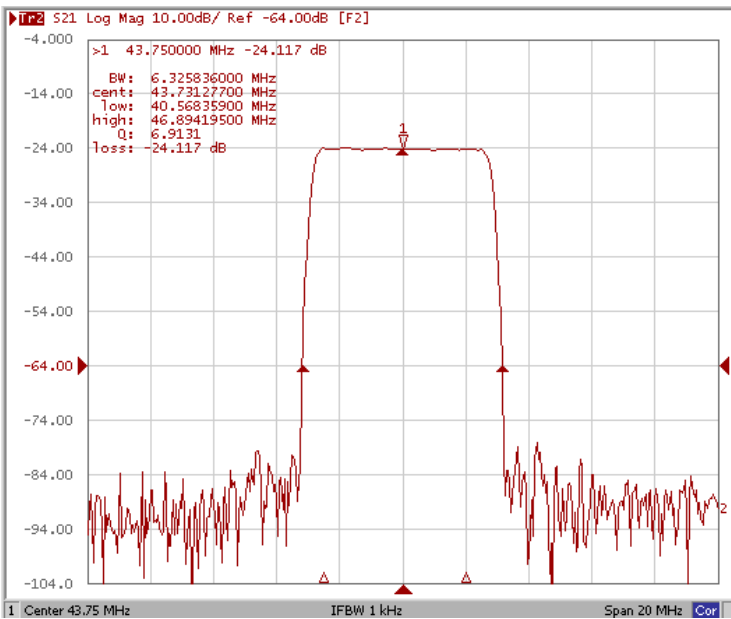
Bandwidth at -1.0 dB



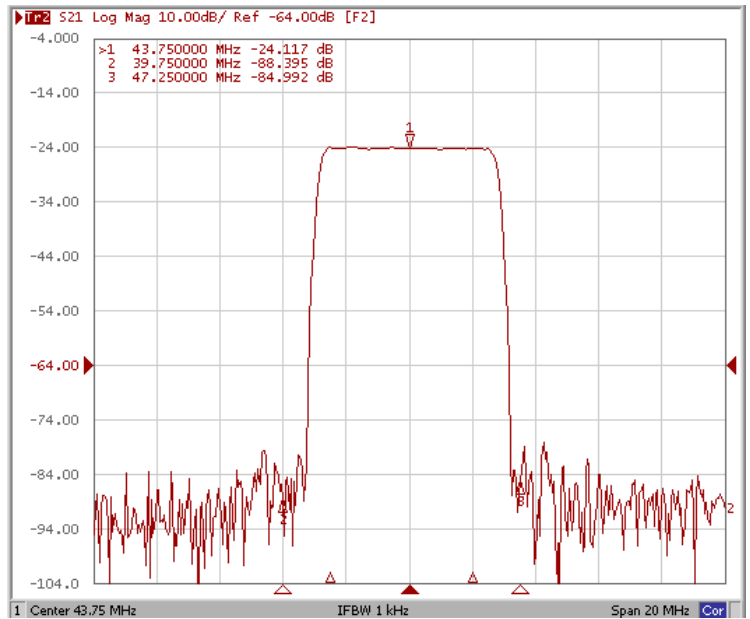
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Attenuation 39.75 / 47.25MHz

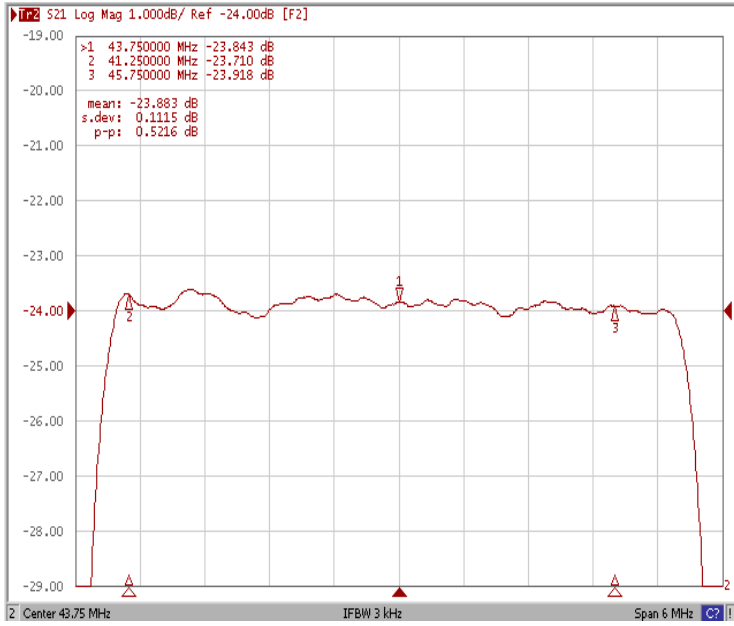




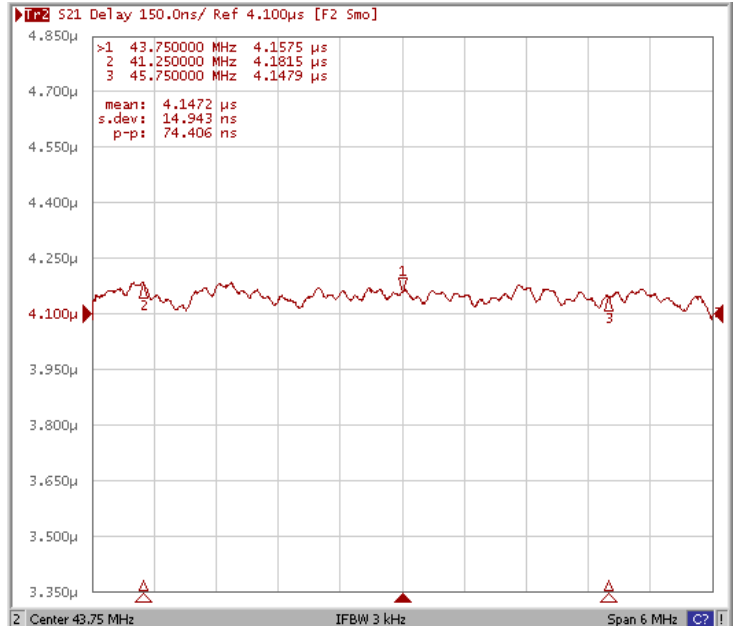
Frequency Characteristics

Frequency Response

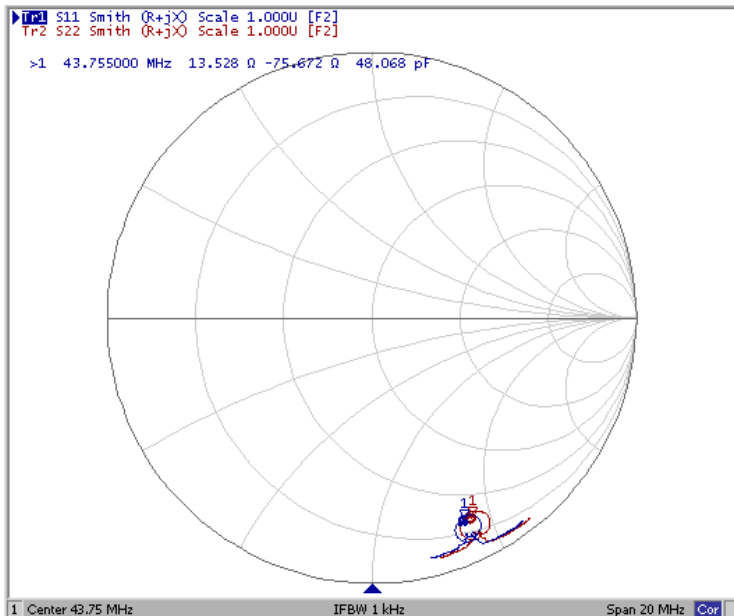
Ripple Variation at 41.25 ~ 45.75 MHz



Group Delay Variation at 41.25 ~ 45.75MHz



Smith Chart



SWR

