



Total Solution Provider in Saw Device

SA07530BD1

75.0MHz IF SAW Filter
30.10 MHz Bandwidth
Revision 0: 10. MAR. 2009



- 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	-10	-	70
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	D1			
Length x Width	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

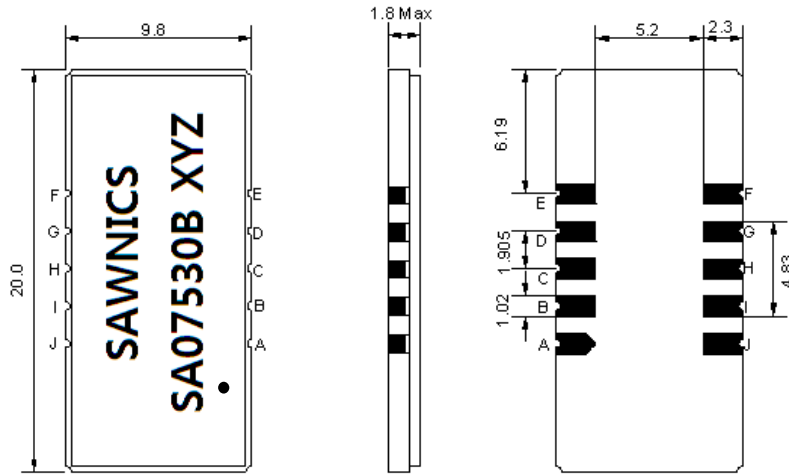
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	28.0	29.5
Group Delay Variation (Fo±14.52MHz)	ns	-	25	60
Absolute Delay Time at Fo	us	-	2.36	-
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple (Fo±14.52MHz)	dB	-	0.5	1.0
Bandwidth at -1dB	MHz	29.90	30.10	-
Bandwidth at -3dB	MHz	-	30.43	-
Bandwidth at -40dB	MHz	-	31.84	31.95
Bandwidth at -50dB	MHz	-	31.98	-
Ultimate Rejection	dB	50	54	-

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.

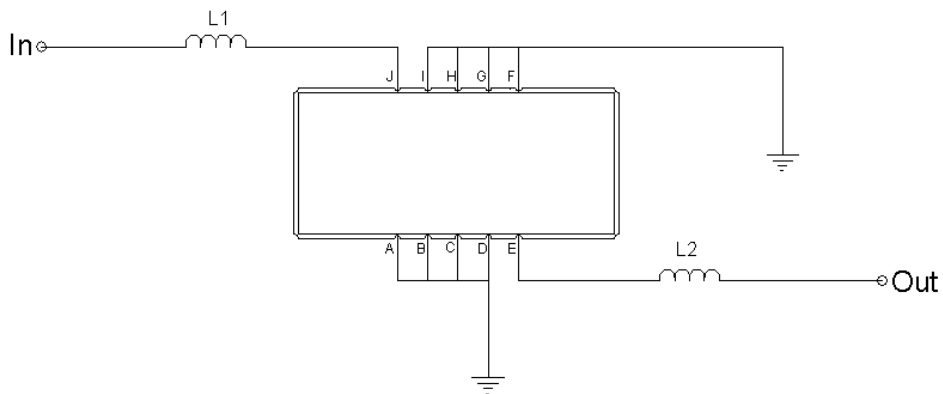
Package Dimensions



- ① SAWNICS: Brand
- ② SA07530B: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

Testing Environment



Test Fixture & Values	
Input	L1=120nH
Output	L2=150nH
Source/Load Impedance	50 Ω

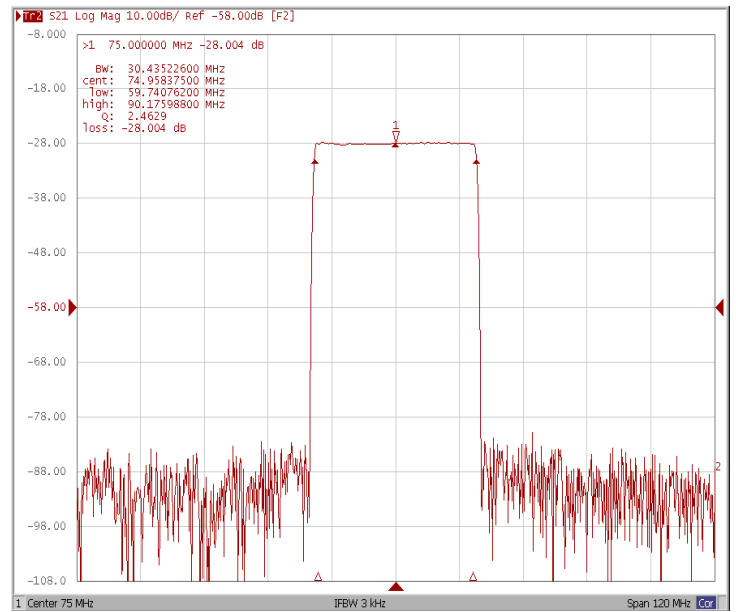
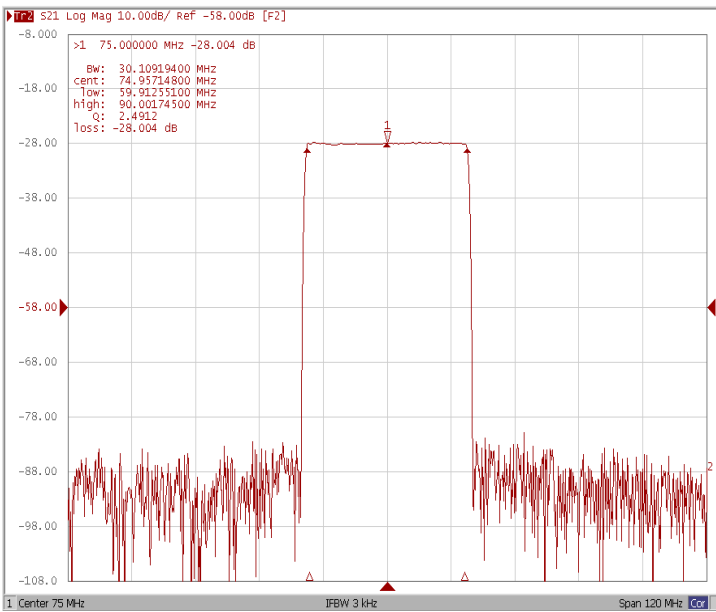


Frequency Characteristics

Frequency Response

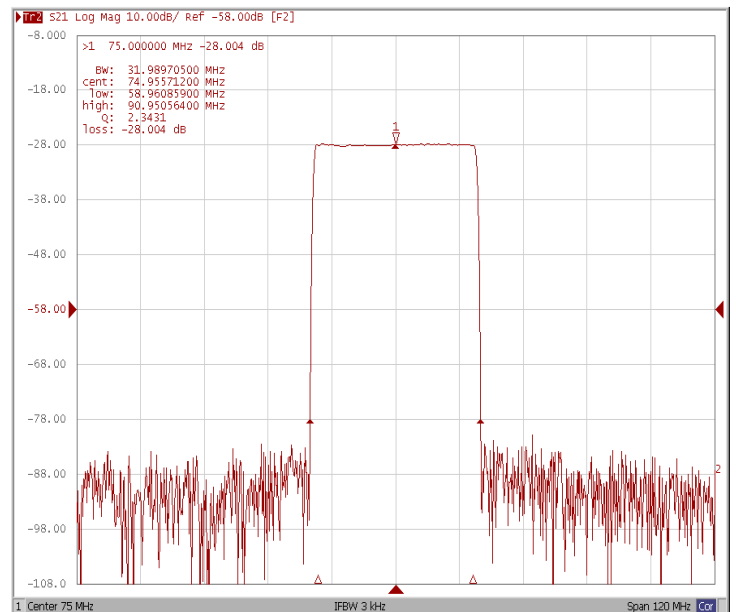
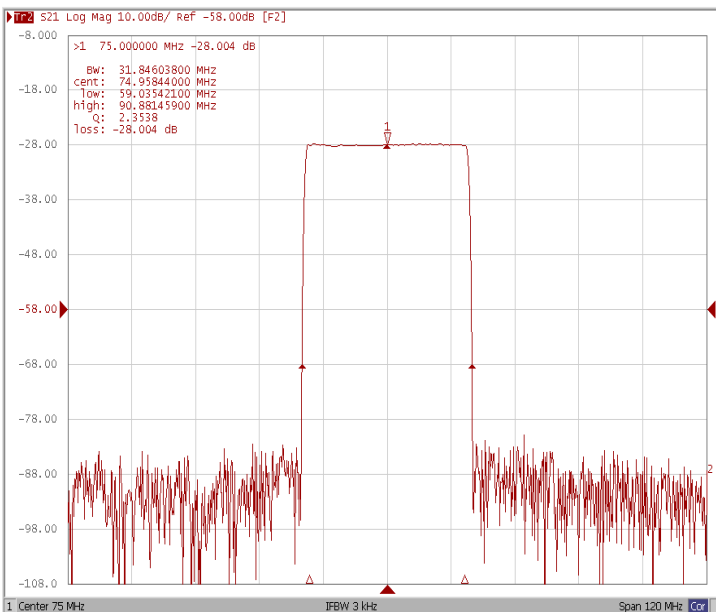
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

Bandwidth at -50.0 dB

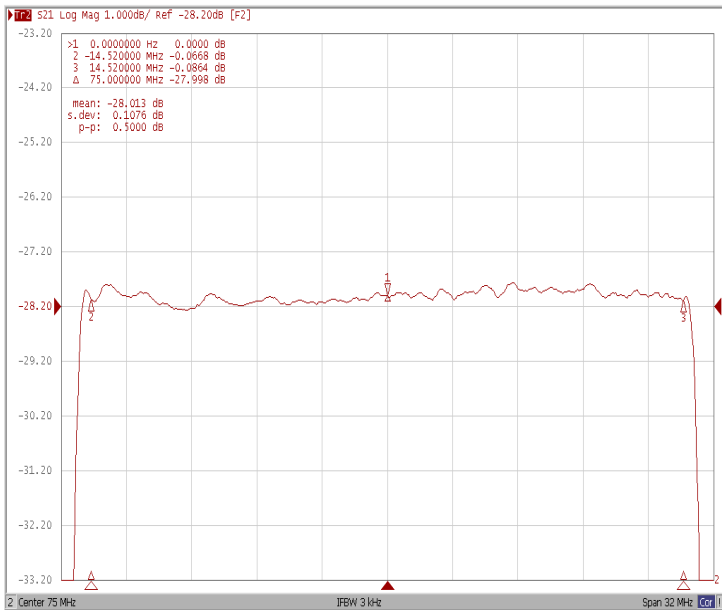




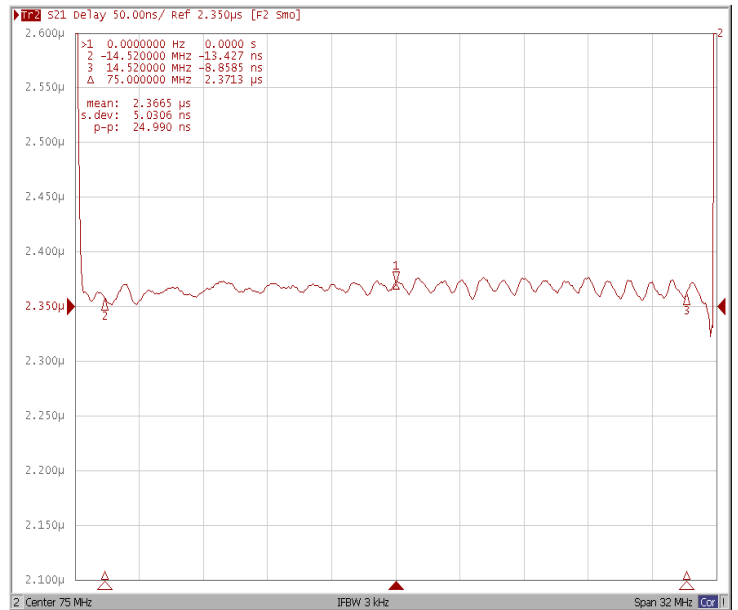
Frequency Characteristics

Frequency Response

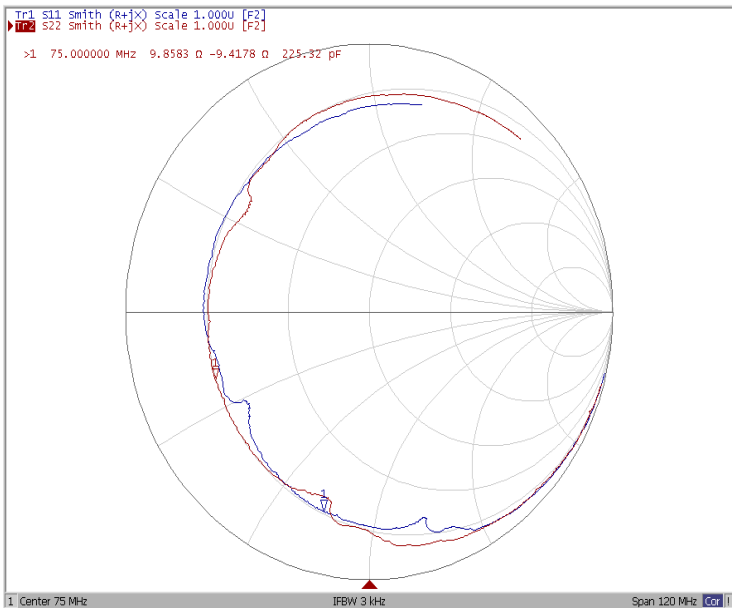
Ripple Variation $Fo \pm 14.52\text{MHz}$



Group Delay Variation $Fo \pm 14.52\text{MHz}$



Smith Chart



VSWR

