



Total Solution Provider in Saw Device

SA06010AD1

60.0 MHz IF SAW Filter
10.11 MHz Bandwidth
Revision 0: 08. JAN. 2009



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

SAWNICS Inc.

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / www.sawnics.com

□ Electrical Characteristics

Maximum Ratings

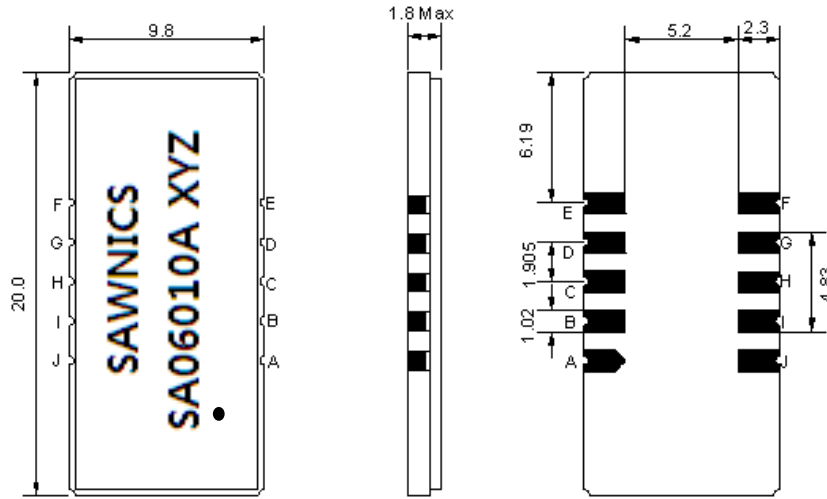
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
Length x Width	mm ²	-	20.0x 9.8	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	60.0	-
Insertion Loss at Fo	dB	-	20.6	22.5
Group Delay Variation (Fo±4.42MHz)	ns	-	49	100
Absolute Delay	us	-	2.08	-
Passband Ripple (Fo±4.42MHz)	dB	-	0.4	1.00
Bandwidth at -1dB	MHz		10.11	-
Bandwidth at -3dB	MHz	10.3	10.44	
Bandwidth at -25dB	MHz	-	11.55	11.60
Bandwidth at -40dB	MHz		11.84	-
Ultimate Rejection	dB	50	53	-
Temperature Coefficient of Frequency	ppm/°C		-72	

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.

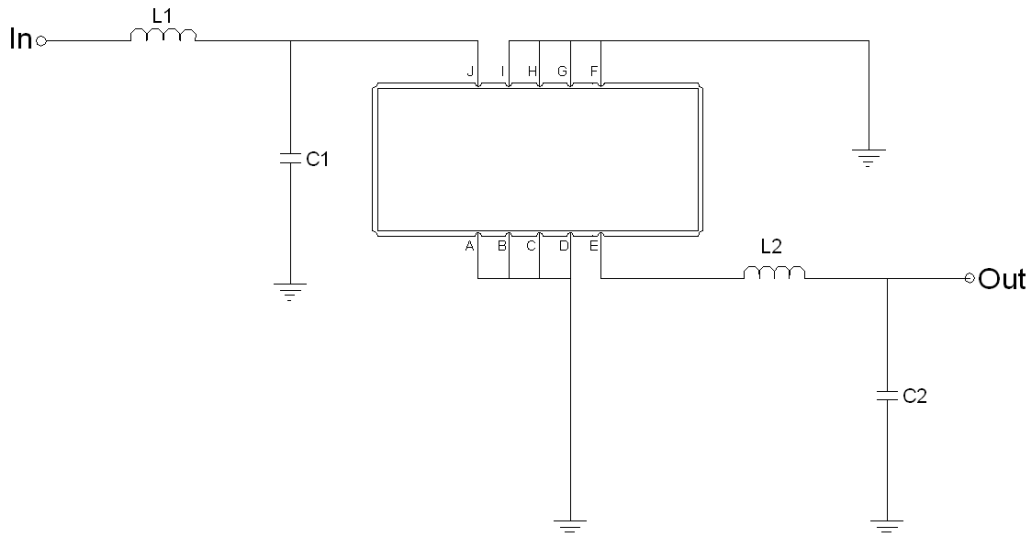
Package Dimensions



- ① SAWNICS: Brand
- ② SA06010A: 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

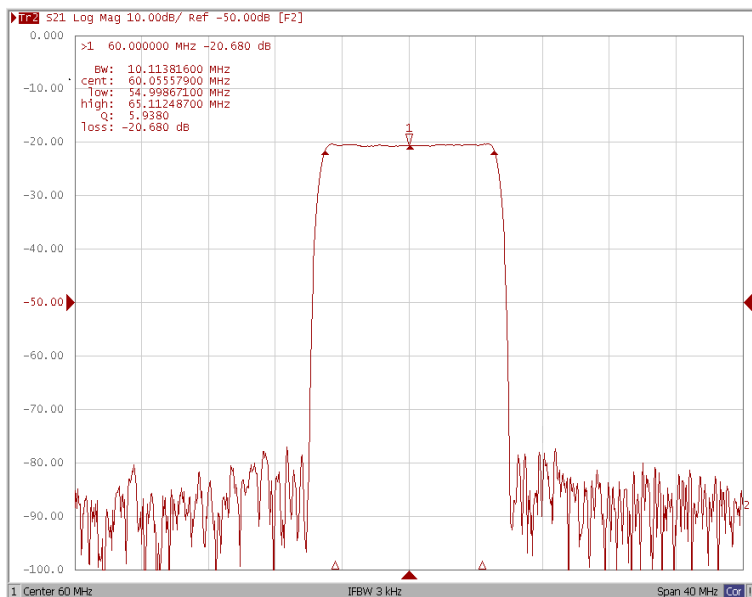


Test Fixture & Values	
Input	L1=120 nH, C1=11 pF
Output	L2=100 nH, C2=22 pF
Source/Load Impedance	50 Ω

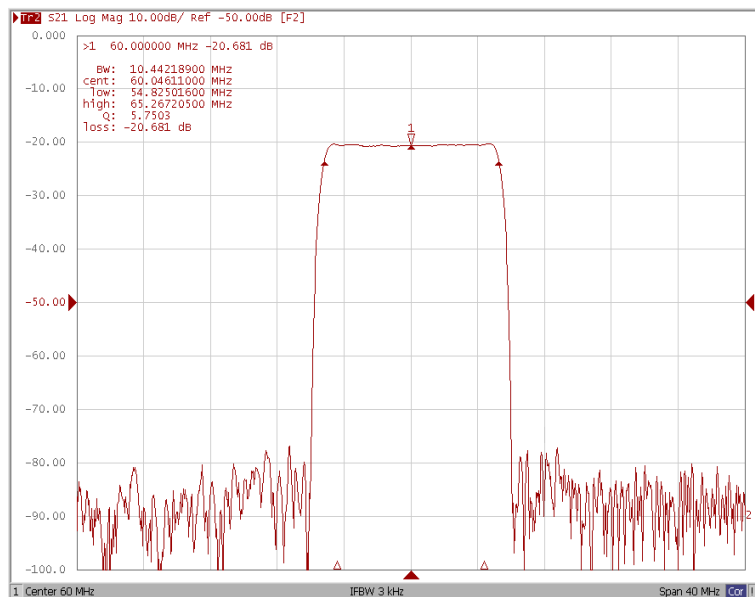
Frequency Characteristics

Frequency Response

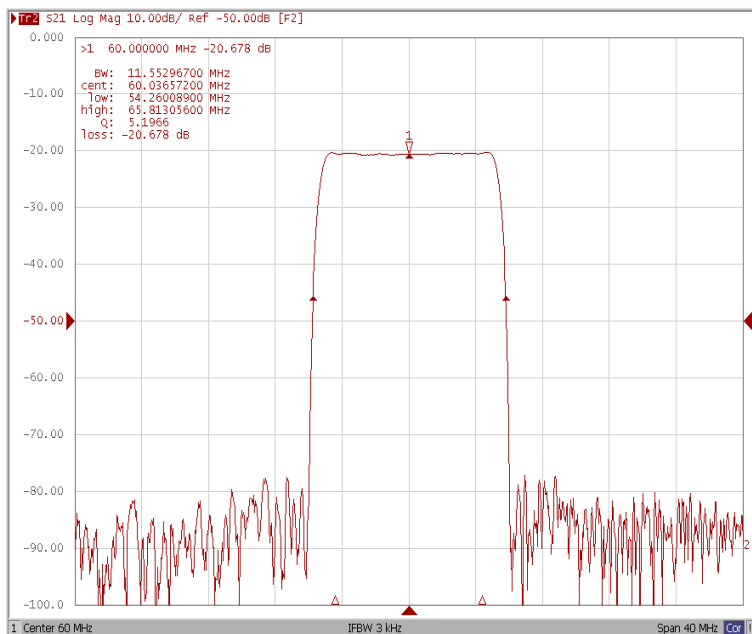
Bandwidth at -1.0 dB



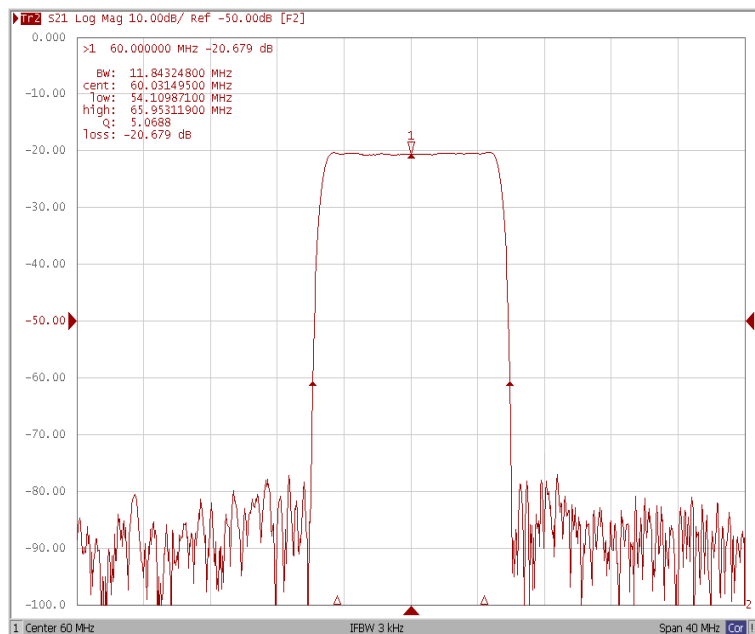
Bandwidth at -3.0 dB



Bandwidth at -25.0 dB



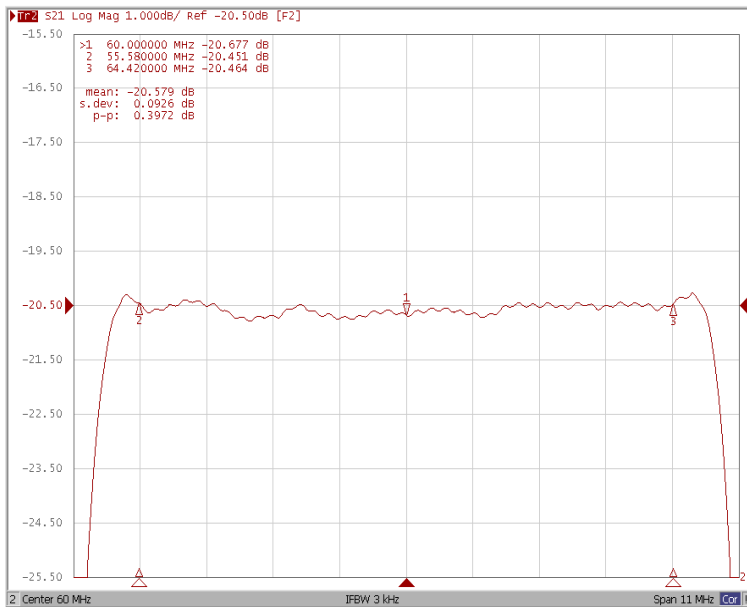
Bandwidth at -40.0 dB



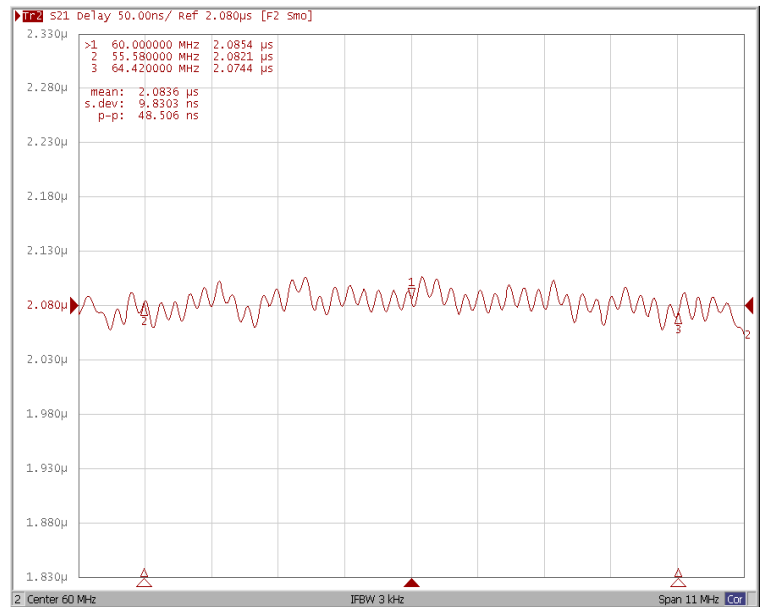
□ Frequency Characteristics

Frequency Response

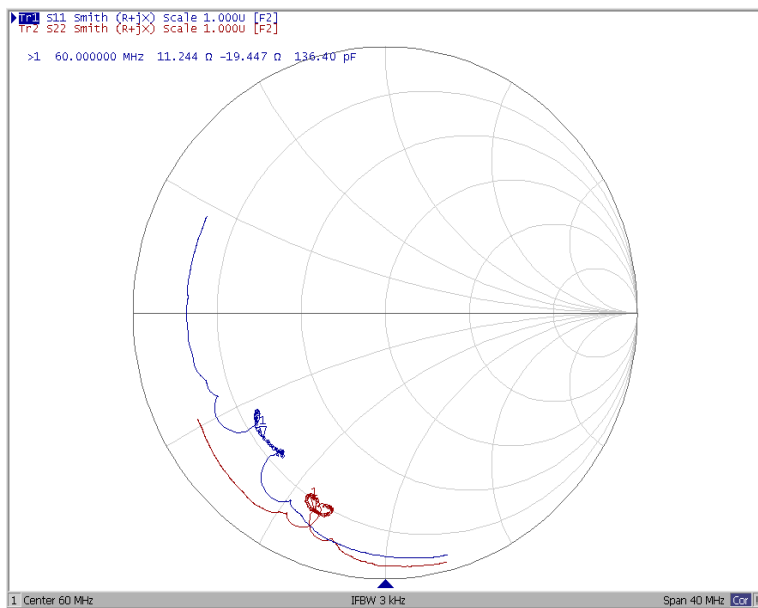
Ripple Variation $F_o \pm 4.42\text{MHz}$



Group Delay Variation $F_o \pm 4.42\text{MHz}$



Smith Chart



VSWR

