



Total Solution Provider in Saw Device

SA18425AV

184.0 MHz IF SAW Filter
25.90 MHz Bandwidth
Revision 0: 11. May. 2010



- 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

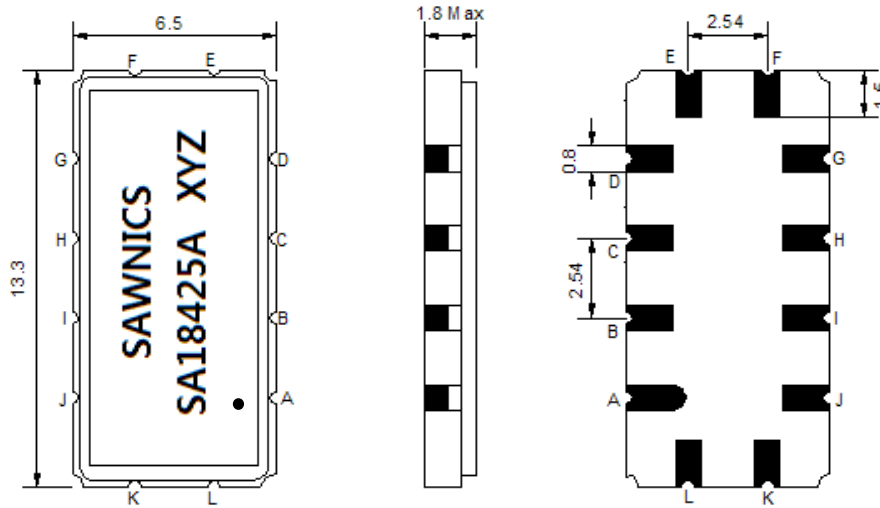
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	60
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	184.00	-
Insertion Loss at Fo	dB	-	29.50	31.50
Group Delay Variation at Fo ± 12.50 MHz	nsec	-	18	50
Absolute Delay at Fo	usec	-	2.14	-
Passband Ripple Variation at Fo ± 12.50 MHz	dB	-	0.60	1.00
Bandwidth at -1dB	MHz	25.60	25.90	-
Bandwidth at -3dB	MHz	-	26.33	-
Bandwidth at -40dB	MHz	-	28.25	28.50
Ultimate Rejection	dB	48	53	-
Temperature Coefficient	ppm/°C	-	-20	-

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.

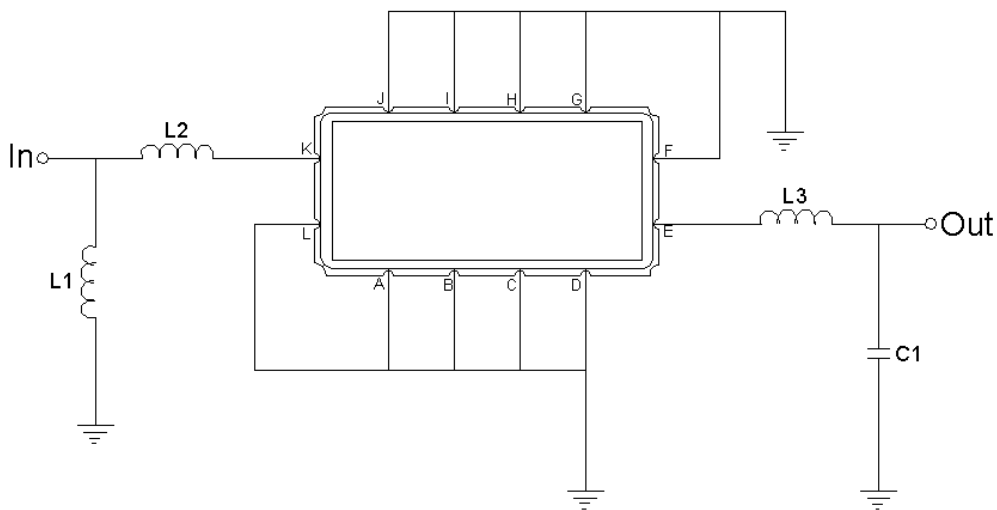
□ Package Dimensions



- ① SAWNICS: Brand
- ② SA18425: 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, J, L	Ground
K	Input
E	Output

□ Testing Environment



Test Fixture & Values	
Input	L1 = 18 nH, L2 = 12 nH
Output	L3 = 47 nH, C1 = 33 pF
Source/Load Impedance	50 Ω

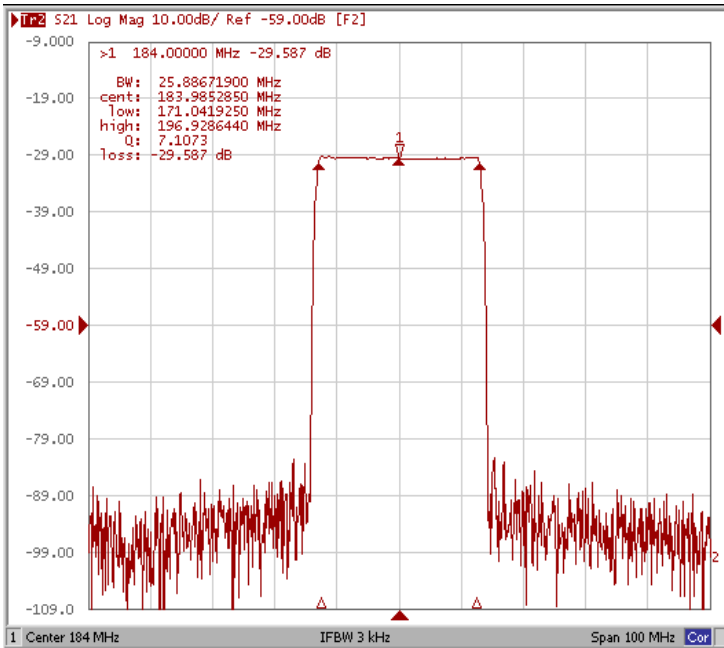


Frequency Characteristics

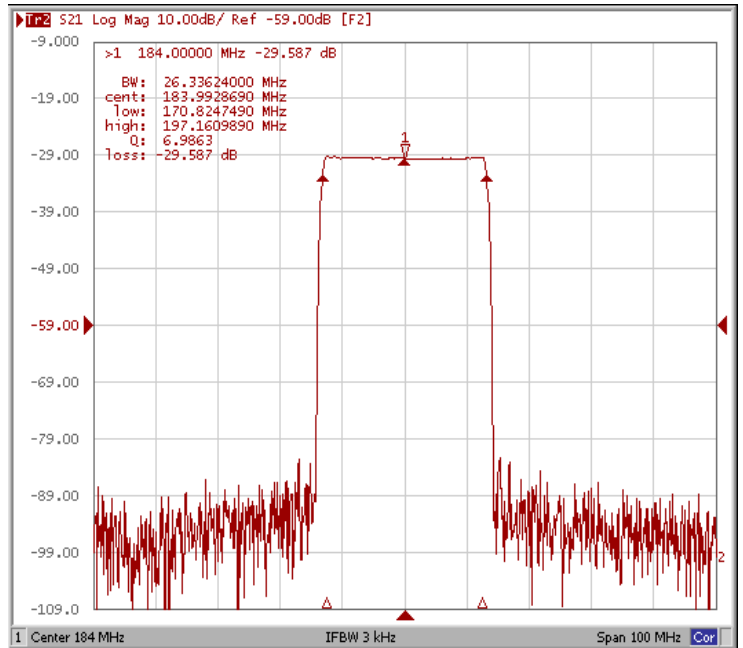
Frequency Response

*Room Temp. 25 degree

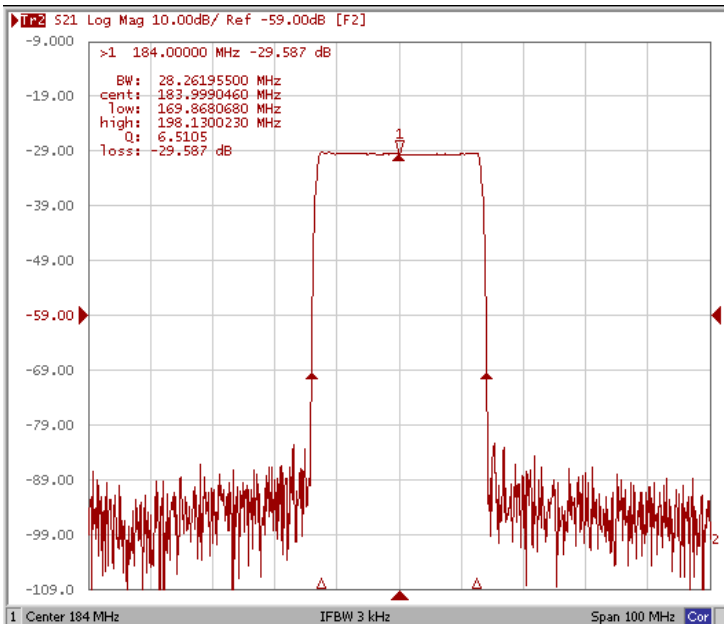
Bandwidth at -1.0 dB



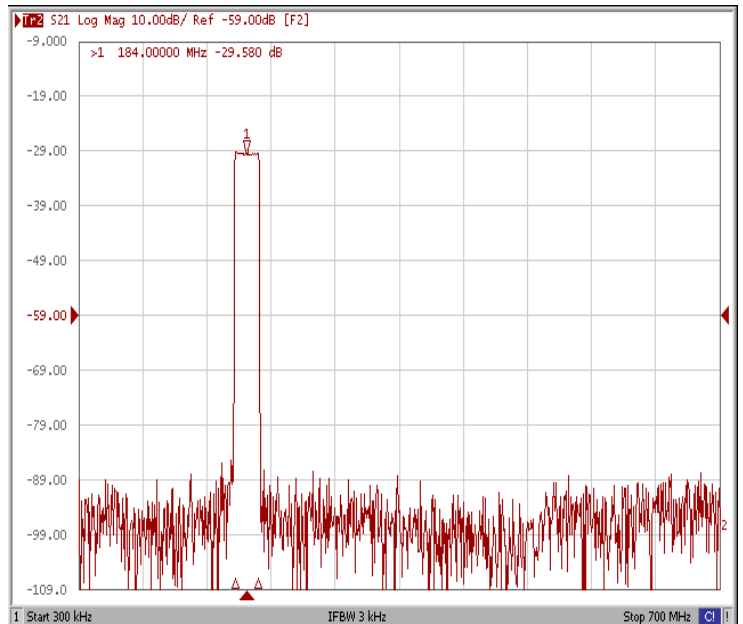
Bandwidth at -3.0 dB



Bandwidth at -40 dB



Wide-Band



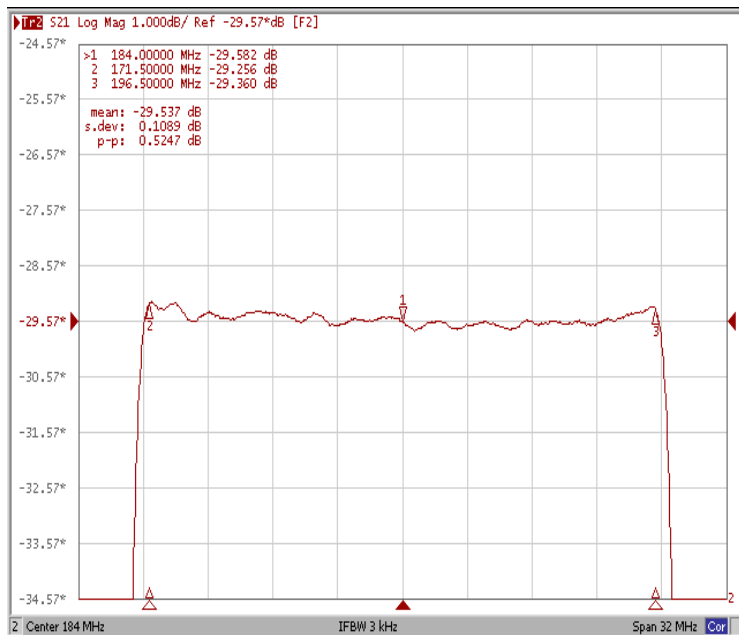


Frequency Characteristics

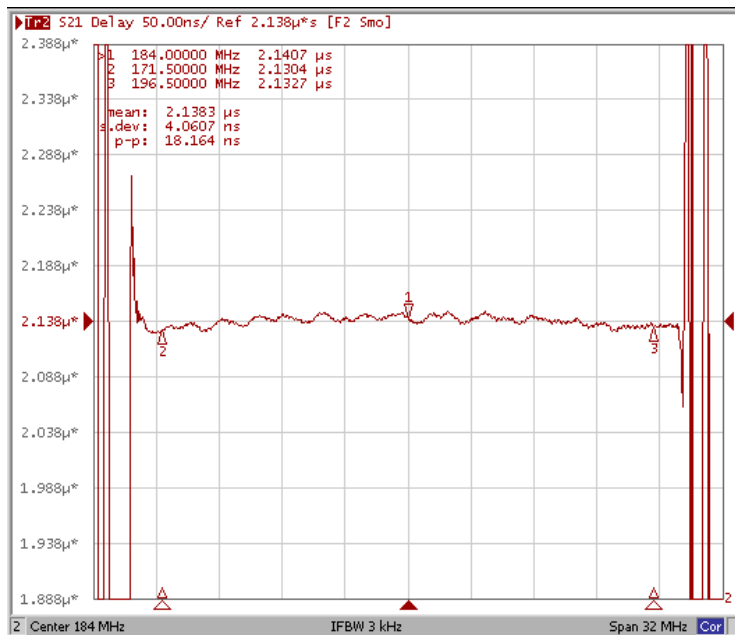
Frequency Response

*Room Temp. 25 degree

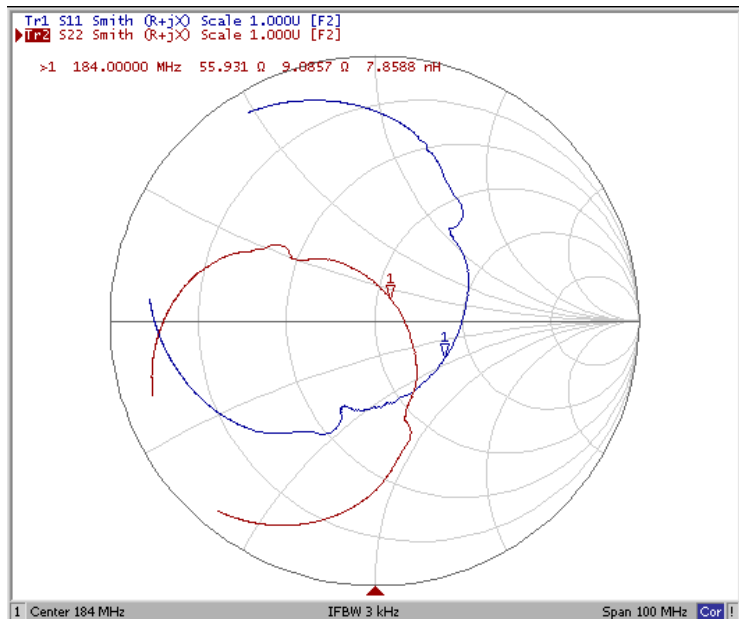
Ripple Variation Fo±12.50 MHz



Group Delay Variation Fo±12.50 MHz



Smith Chart



VSWR

