



Total Solution Provider in Saw Device

SA07916AV

79.925 MHz IF SAW Filter
16.60 MHz Bandwidth
Revision 0: 10. FEB. 2009



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

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□ Electrical Characteristics

Maximum Ratings

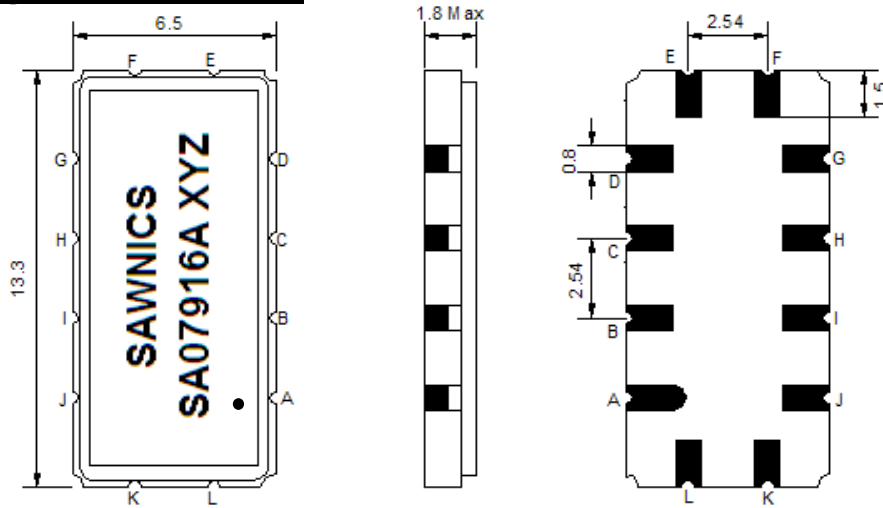
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-10	-	75
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
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	-	79.925	-
Insertion Loss at Fo	dB	-	20.50	22.00
Group Delay Variation at Fo ± 7.58 MHz	nsec	-	50	80
Absolute Delay at Fo	usec	-	1.68	-
Passband Ripple Variation at Fo ± 7.58 MHz	dB	-	0.60	1.00
Bandwidth at -1dB	MHz	16.30	16.60	-
Bandwidth at -3dB	MHz	-	17.05	-
Bandwidth at -30dB	MHz	-	18.64	18.90
Bandwidth at -40dB	MHz	-	18.85	-
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	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.

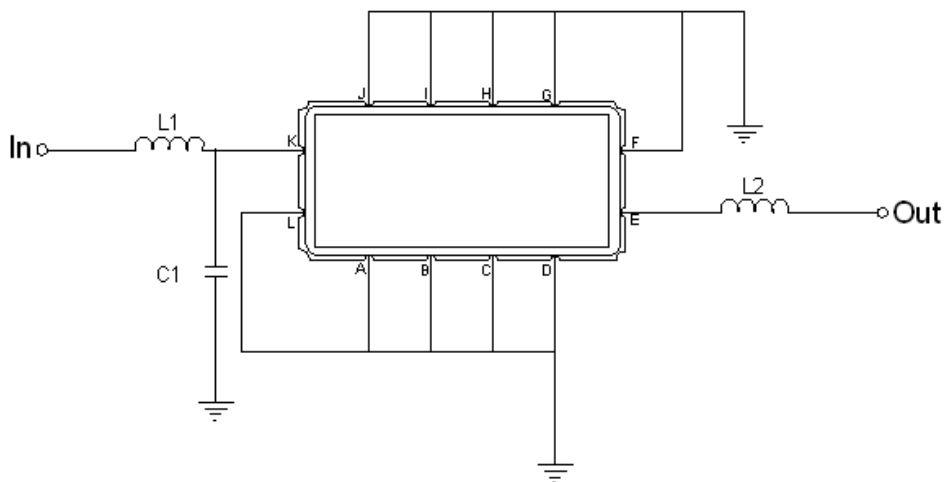
Package Dimensions



- ① SAWNICS: Brand
- ② SA07916A: 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



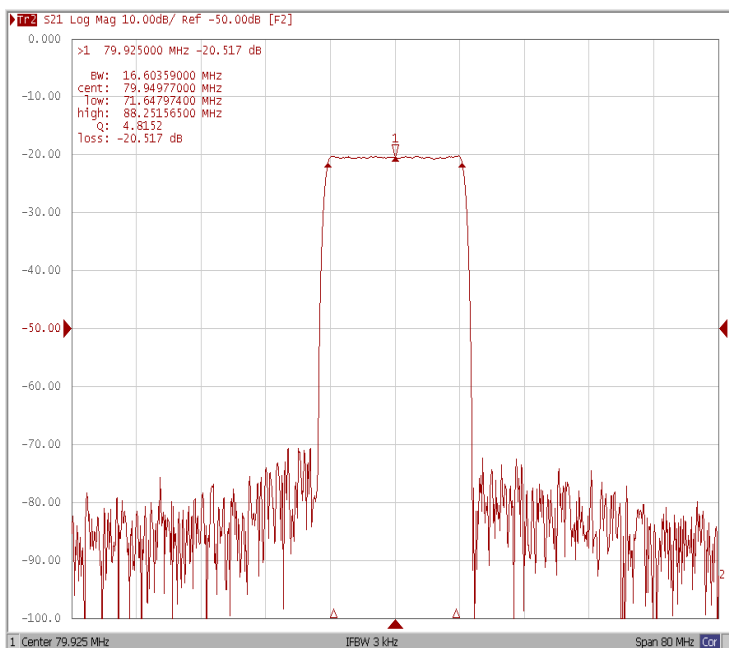
Test Fixture & Values	
Input	L1 = 150nH, C1=7pF
Output	L2 = 150nH
Source/Load Impedance	50 Ω



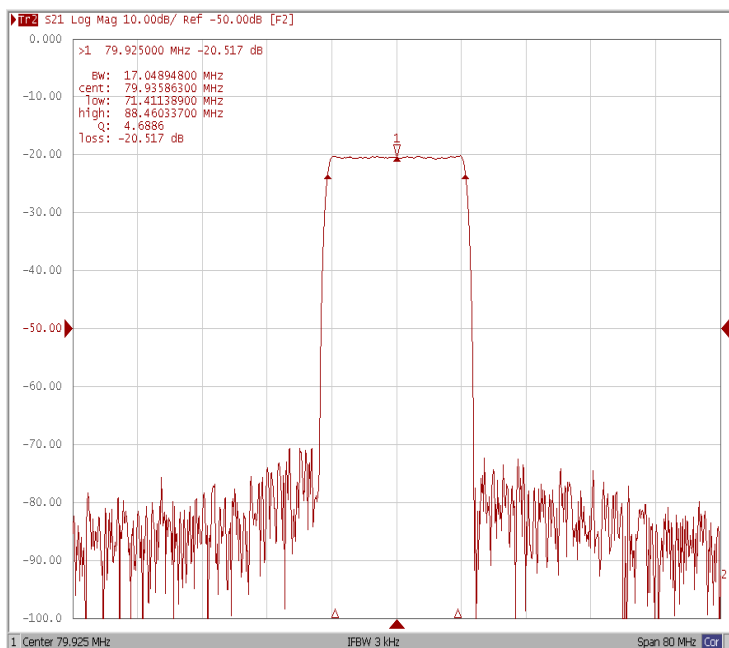
Frequency Characteristics

Frequency Response

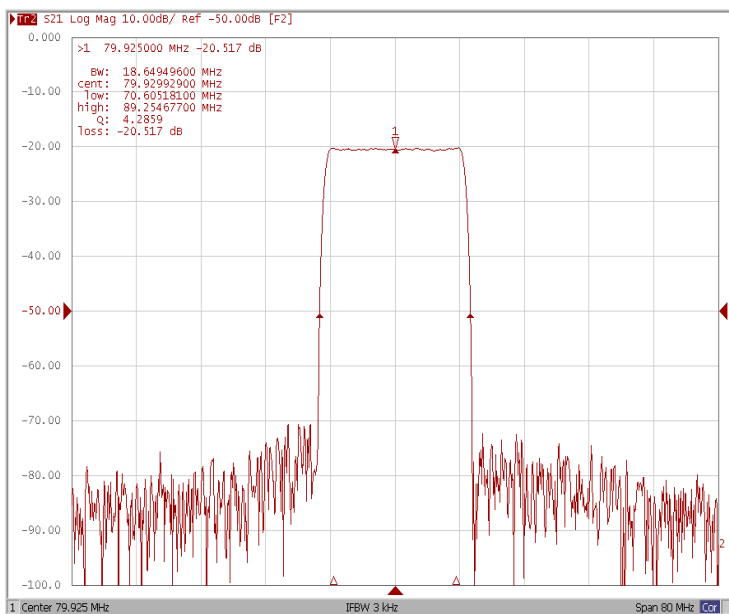
Bandwidth at -1.0 dB



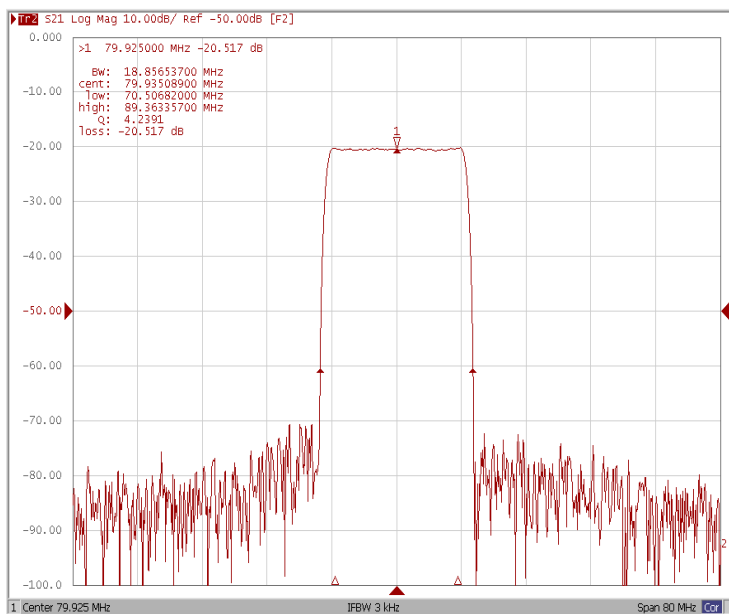
Bandwidth at -3.0 dB



Bandwidth at -30 dB



Bandwidth at -40 dB

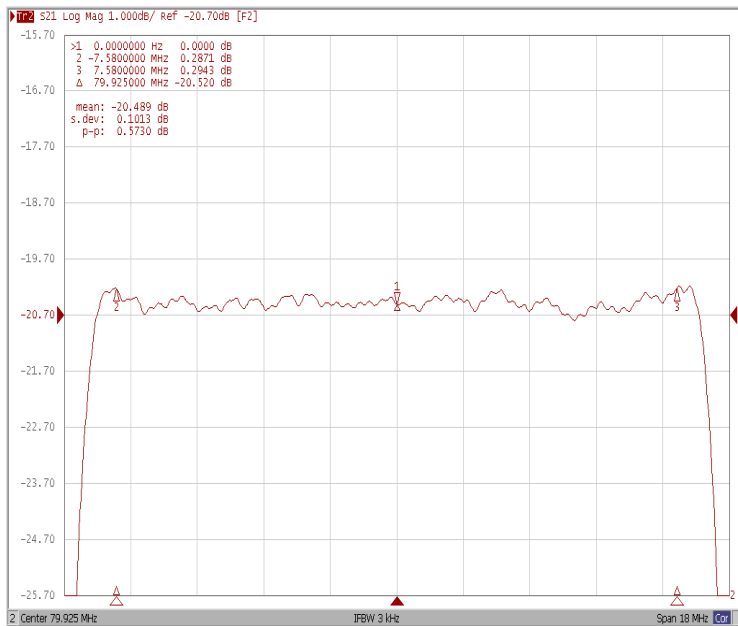




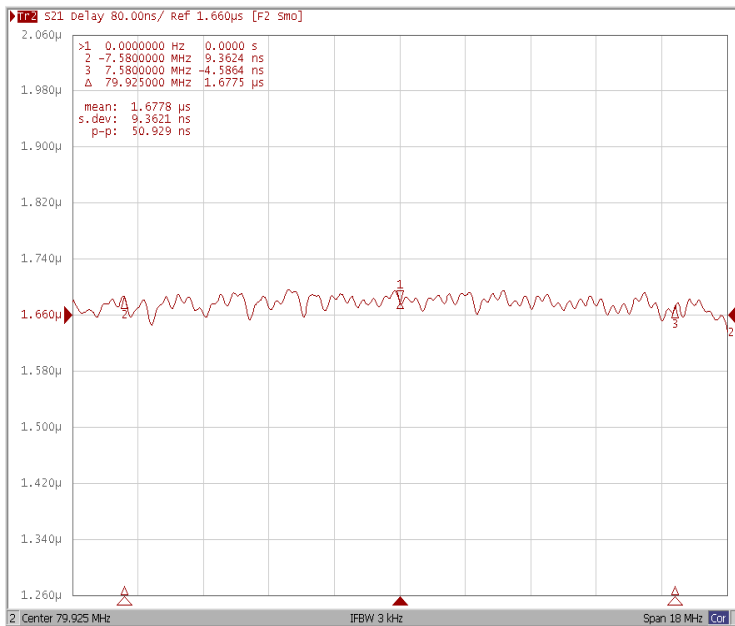
Frequency Characteristics

Frequency Response

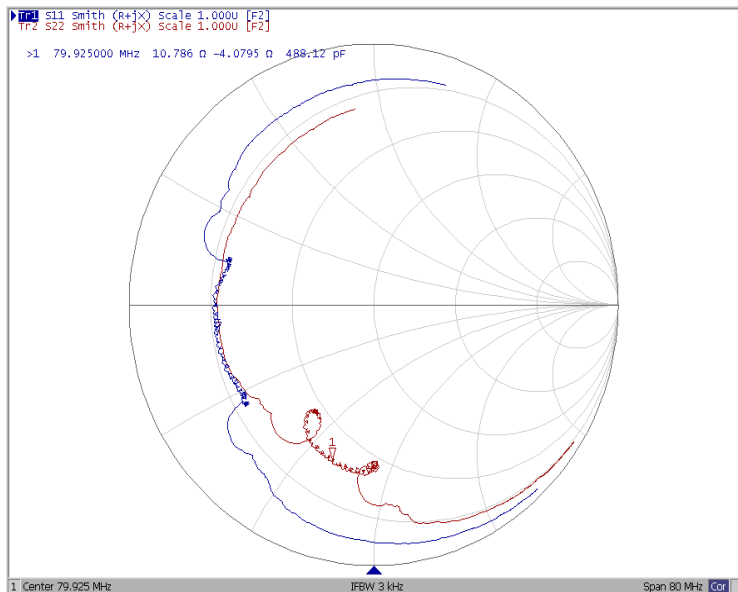
Ripple Variation Fo±7.58MHz



Group Delay Variation Fo±7.58MHz



Smith Chart



VSWR

