



Total Solution Provider in Saw Device

SA08020CD1

80.0MHz IF SAW Filter
19.82 MHz Bandwidth
Revision 0: 10. MAR. 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	-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

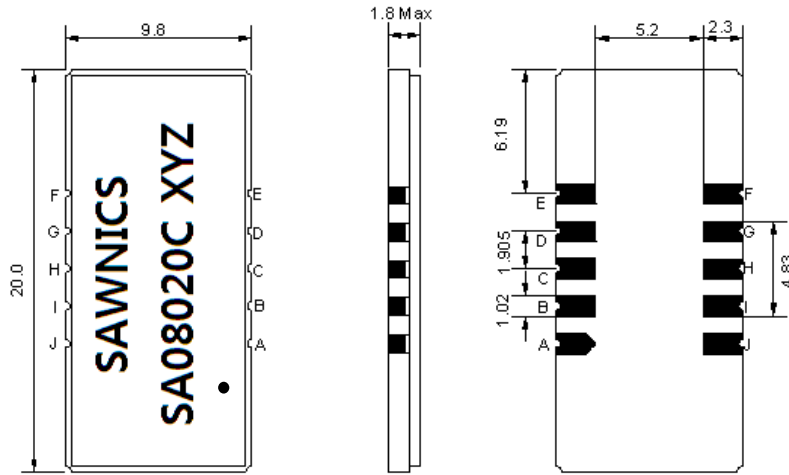
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	80.0	-
Insertion Loss at Fo	dB	-	22.4	24.0
Group Delay Variation (Fo±9.42MHz)	ns	-	35	60
Absolute Delay Time at Fo	us	-	2.37	-
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple (Fo±9.42MHz)	dB	-	0.48	0.90
Bandwidth at -1dB	MHz	19.70	19.82	-
Bandwidth at -3dB	MHz	-	20.13	-
Bandwidth at -40dB	MHz	-	21.42	21.60
Bandwidth at -50dB	MHz	-	21.55	-
Ultimate Rejection	dB	50	53	-

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.

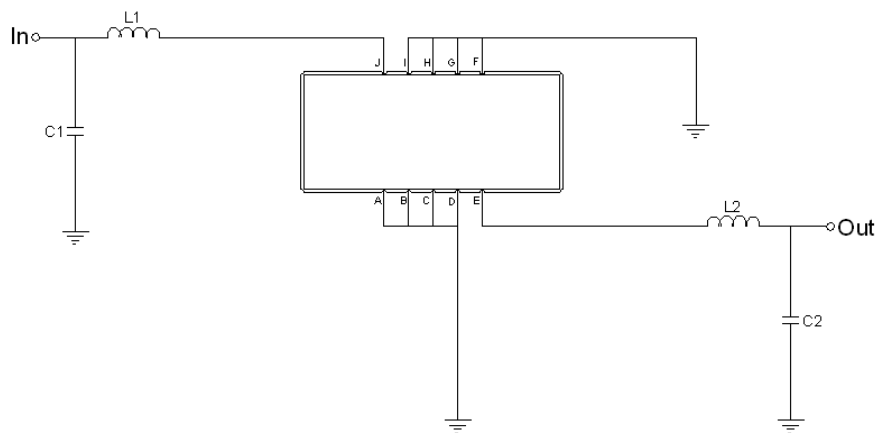
Package Dimensions



- ① SAWNICS: Brand
- ② SA08020C: 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



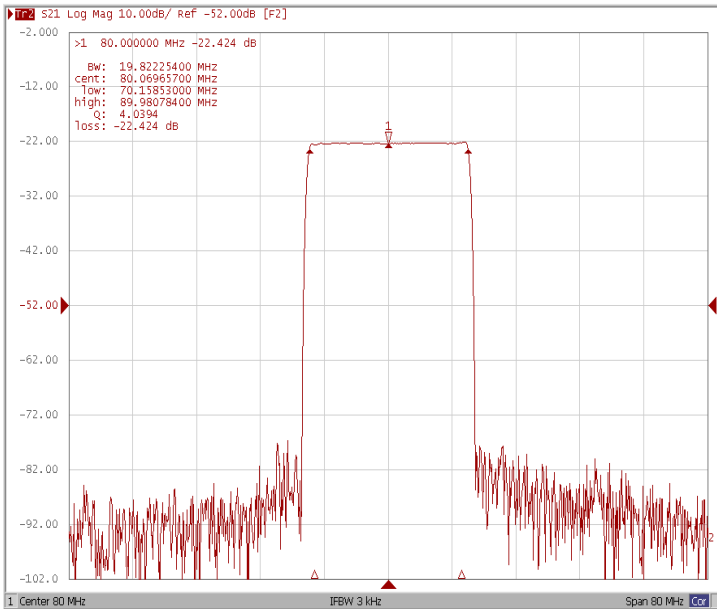
Test Fixture & Values	
Input	L1=120nH, C1=8.2pF
Output	L2=120nH, C2=15pF
Source/Load Impedance	50 Ω



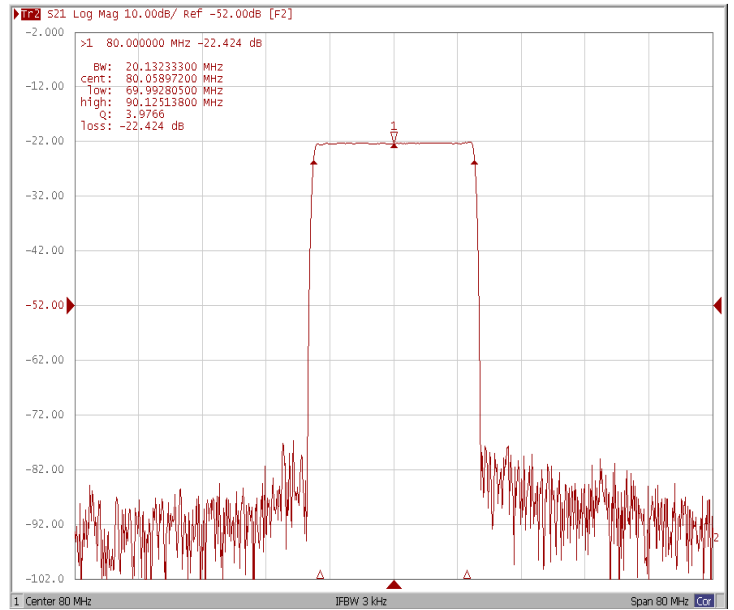
Frequency Characteristics

Frequency Response

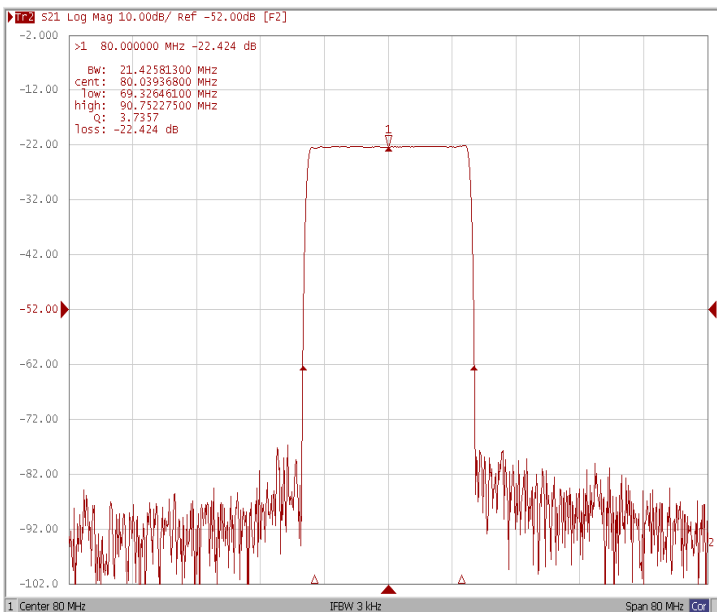
Bandwidth at -1.0 dB



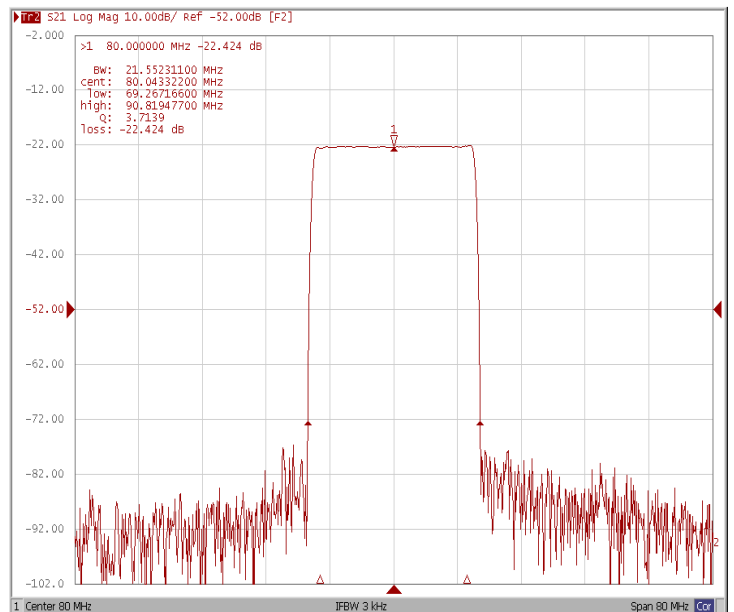
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Bandwidth at -50.0 dB

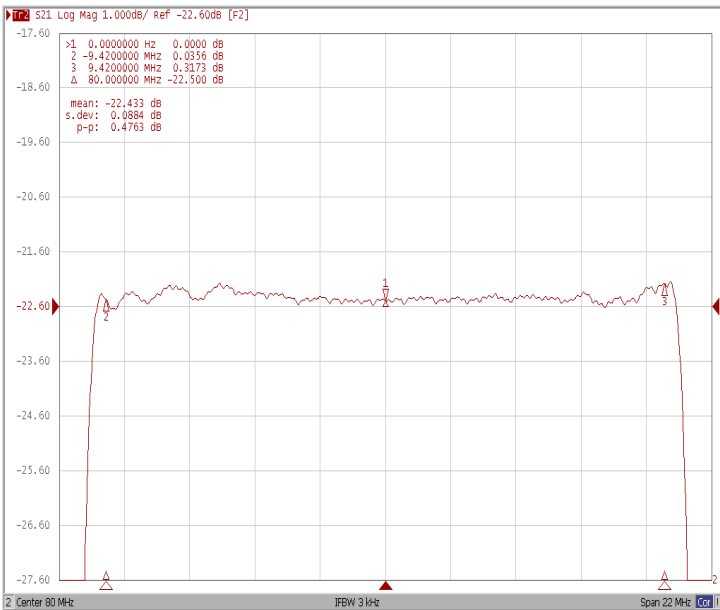




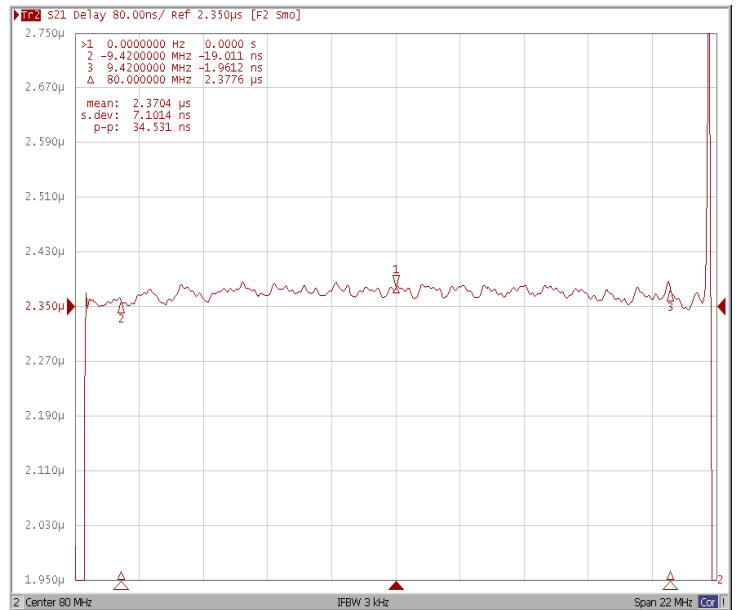
Frequency Characteristics

Frequency Response

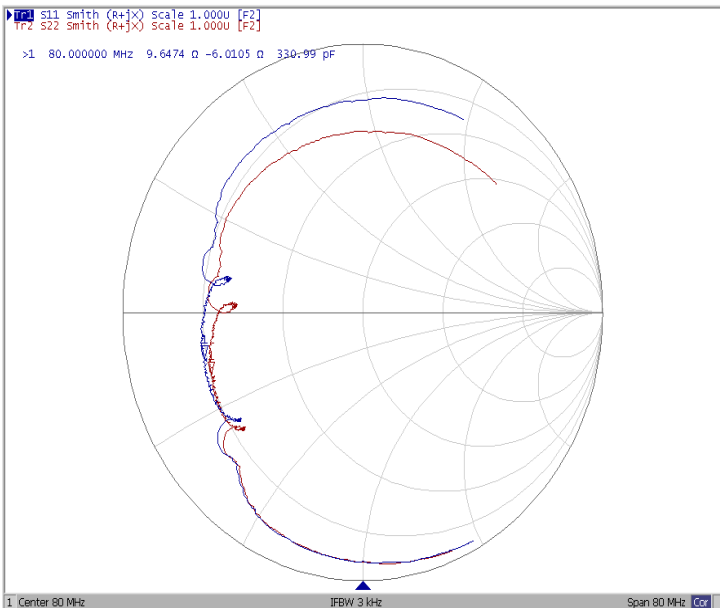
Ripple Variation Fo±9.42Hz



Group Delay Variation Fo±9.42MHz



Smith Chart



VSWR

