



Total Solution Provider in Saw Device

SF-013201-SC0

132.60 MHz IF SAW Filter

4.28 MHz Bandwidth

Revision 0: October 2013



- 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

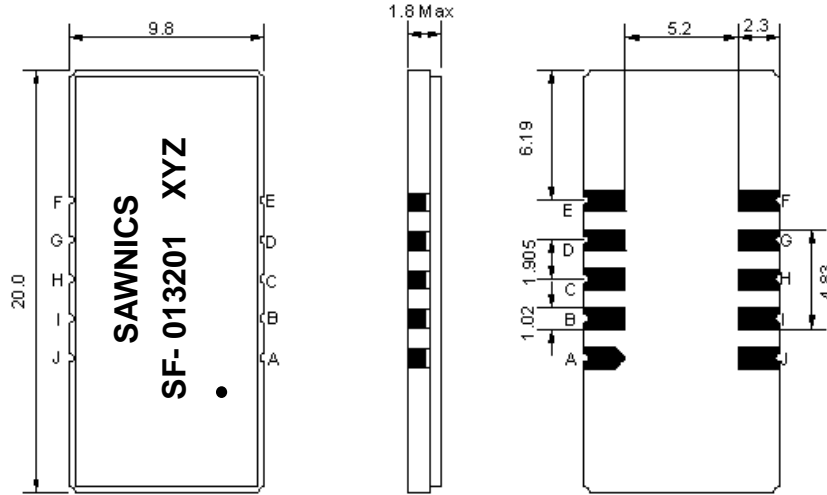
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	SC0			
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	-	132.60	-
Insertion Loss at Fo	dB	-	23.5	25.0
Group Delay Variation at Fo ± 1.92 MHz	nsec	-	150	300
Absolute Delay at Fo	usec	-	2.30	-
Passband Ripple Variation at Fo ± 1.92 MHz	dB	-	0.4	1.0
Bandwidth at -1dB	MHz	4.10	4.28	-
Bandwidth at -3dB	MHz	-	4.54	-
Bandwidth at -45dB	MHz	-	5.73	6.00
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-0.03	-

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.

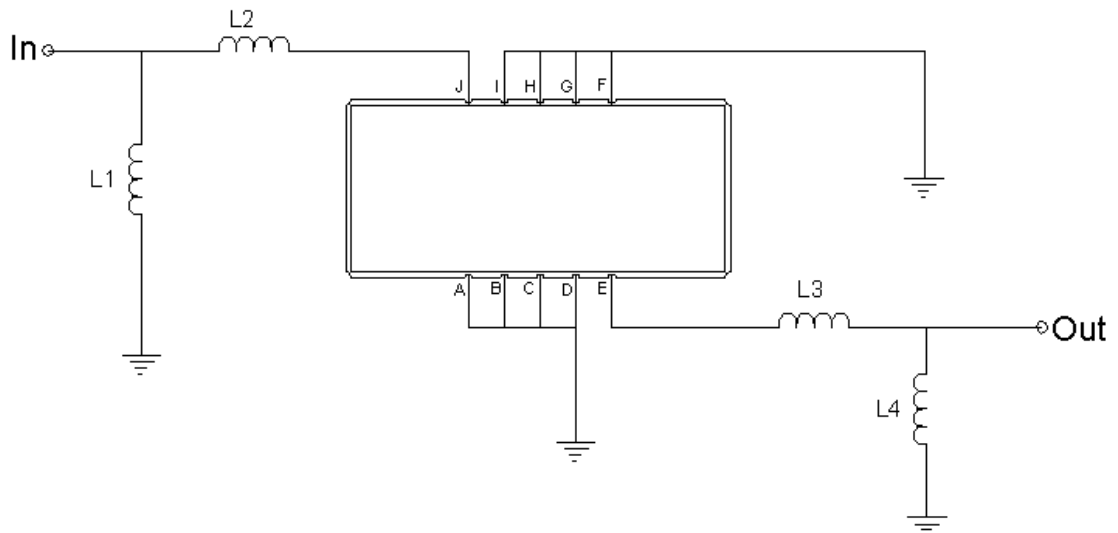
Package Dimensions



- ① SAWNICS: Brand
- ② SF-013201: 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 = 39nH, L2 = 82nH
Output	L3 = 68nH, L4 = 47nH
Source/Load Impedance	50 Ω

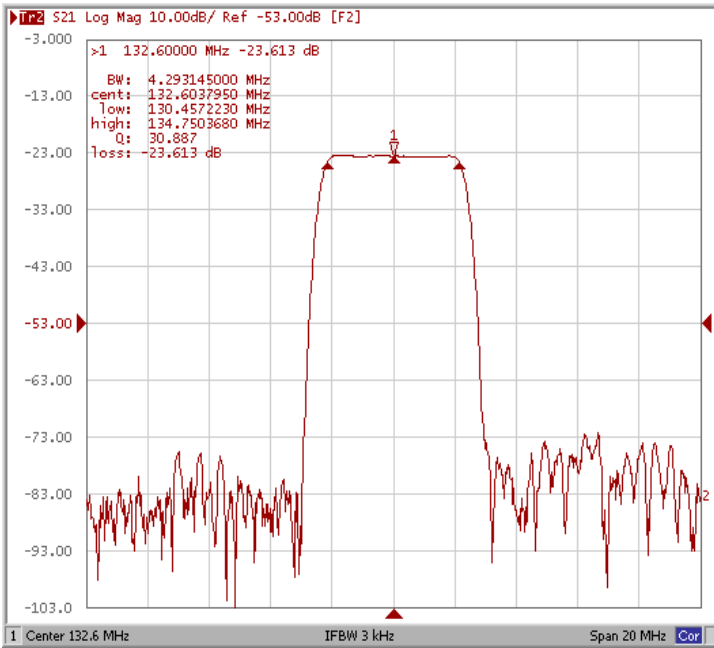


Frequency Characteristics

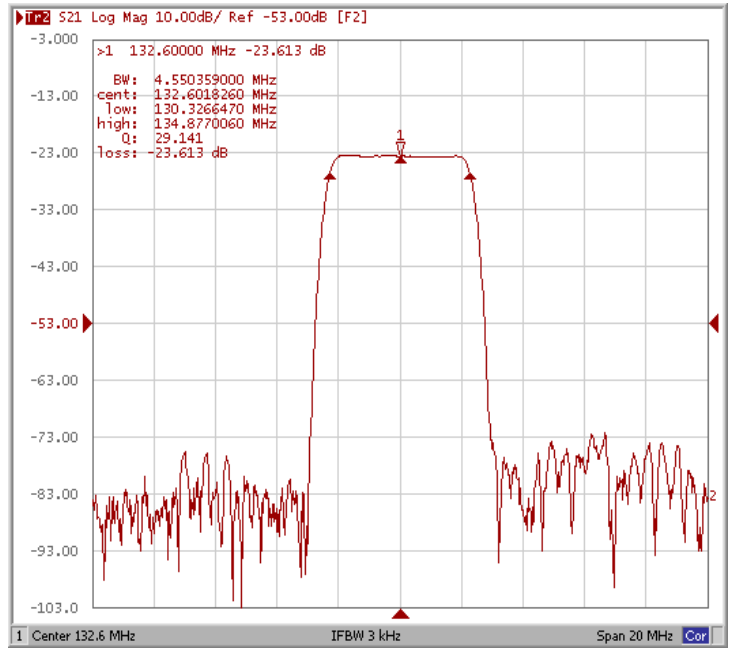
Frequency Response

Operating Temperature : +25 °C

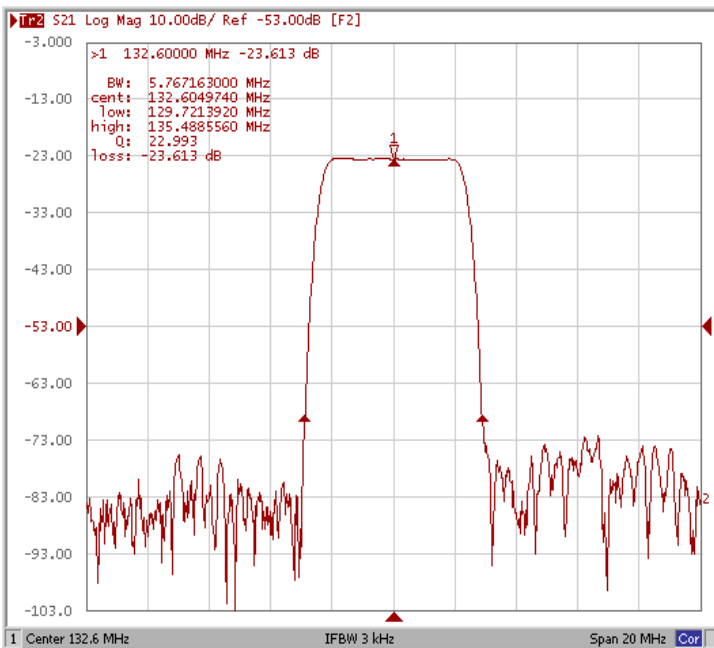
Bandwidth at -1.0 dB



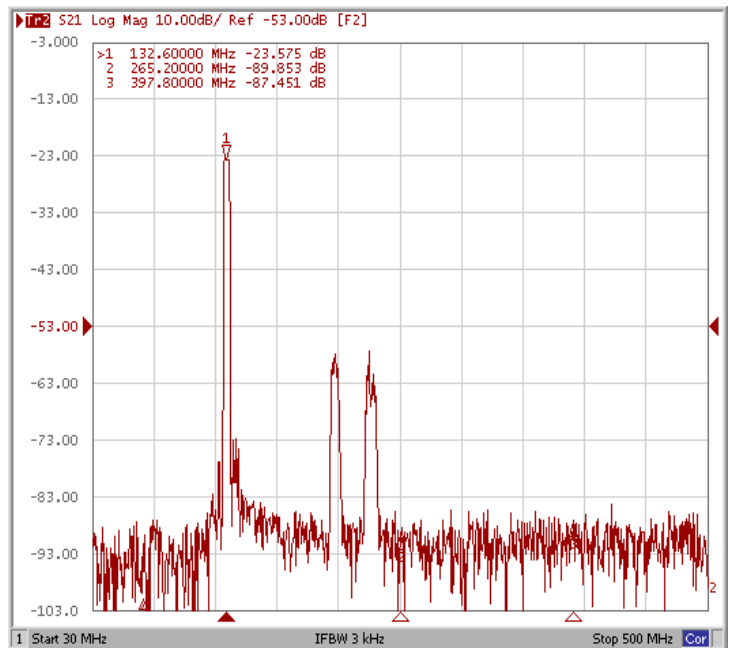
Bandwidth at -3.0 dB



Bandwidth at -45 dB



Wide-Band

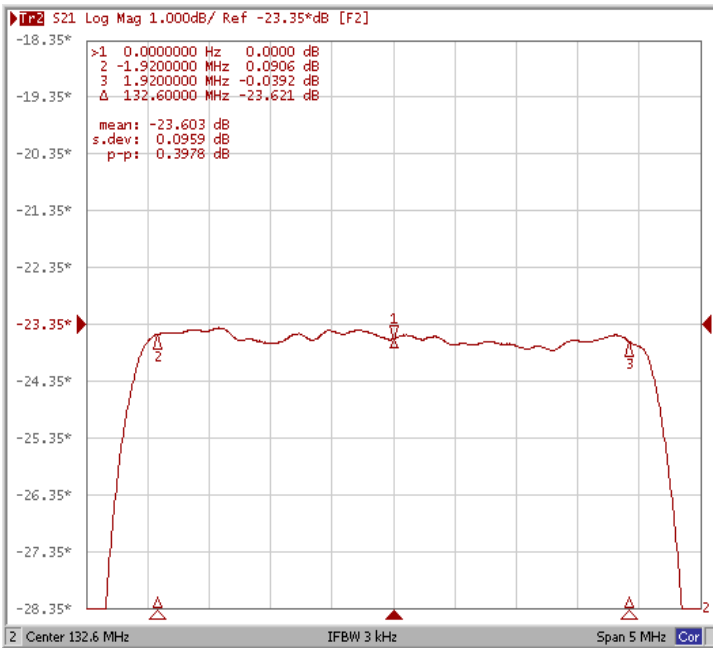




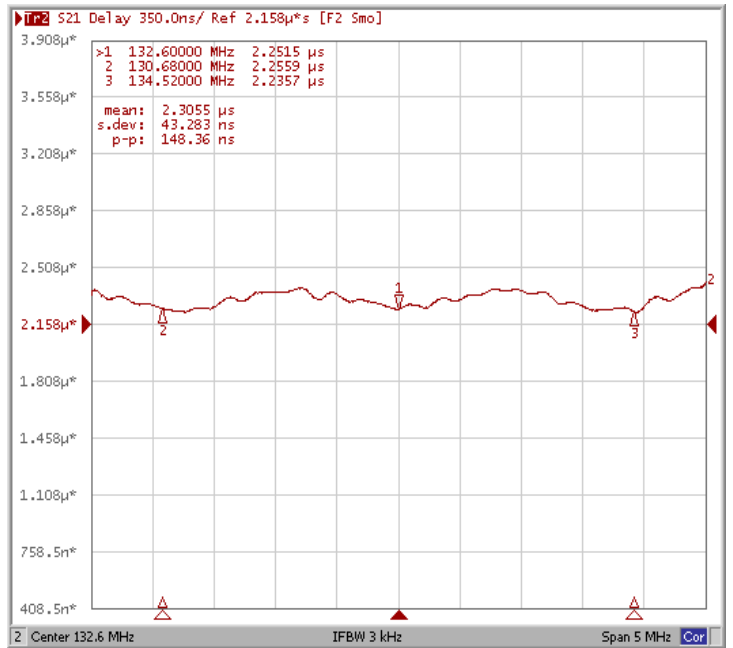
Frequency Characteristics

Frequency Response

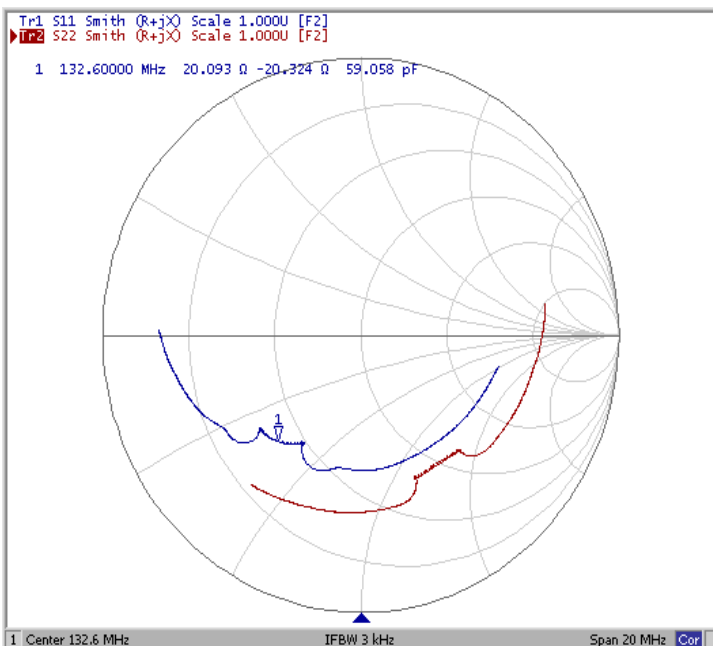
Ripple Variation $F_o \pm 1.92\text{MHz}$



Group Delay Variation $F_o \pm 1.92\text{MHz}$



Smith Chart



VSWR

