SF-043302-S39

ISM-Band, Dual SAW Diplexer Filter

Revision 0: May 2017

RoHS compliance
Pb free

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

SAWNICS Inc.
112 Seonggeo-Street, Seonggeo-eup, Seobuk-gu, Cheonan-si, Chungcheongnam-do, South Korea
/ 31044Tel : +82-41-550-9372 / Fax : +82-41-622-9116 / www.sawnics.com

❒ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	10
Source Impedance (unbalanced)(1)	Ω	-	50	-
Load Impedance (unbalanced)(1)	Ω	-	50	-
Package type & size	S39			
Length x Width	-	-	3.8 x 3.8	-
Height	mm	-	-	1.7

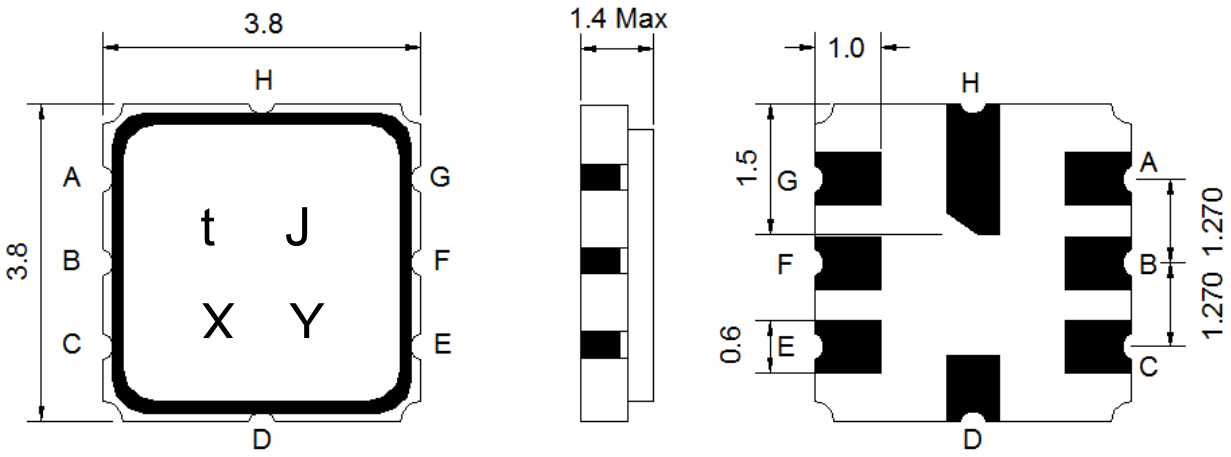
Electrical Specification

Pass Band I		Unit	Minimum	Typical	Maximum
Center Frequency	Fc	MHz	-	433.2	-
Insertion loss (433.10~433.30 MHz)	IL	dB	-	4.0	4.5
Amplitude Ripple (433.10~433.30 MHz)		dB	-	1.0	1.5
VSWR (433.10~433.30 MHz)		-	-	2.0	2.3
Attenuation (Reference level from 0 dB)					
434.54 ~ 434.74 MHz		dB	25	30	-
Fc + 2.4 MHz		dB	25	30	-
Fc – 2.4 MHz		dB	25	30	-

Pass Band II		Unit	Minimum	Typical	Maximum
Center frequency	Fc	MHz	-	434.64	-
Insertion loss (434.54~434.74 MHz)	IL	dB	-	4.0	4.5
Amplitude Ripple (434.54~434.74 MHz)		dB	-	1.0	1.5
VSWR (434.54~434.74 MHz)		-	-	2.0	2.3
Attenuation (Reference level from 0 dB)					
433.10 ~ 433.30 MHz		dB	25	30	-
Fc + 2.4 MHz		dB	30	35	-
Fc – 2.4 MHz		dB	30	35	-

Notes : (1)With Matching Network (Ref. Testing Environment Circuit as shown below).

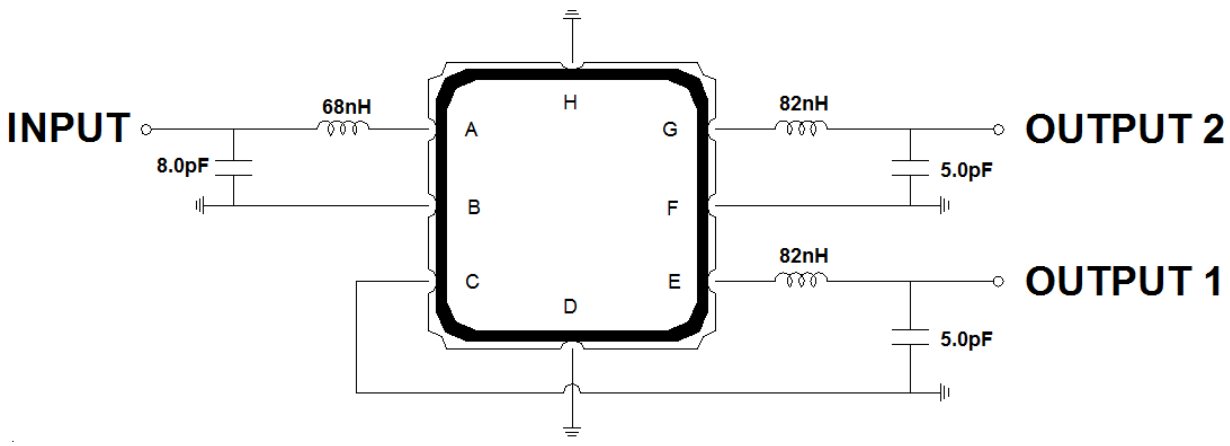
❒ Package Dimensions



Marking Descriptions	
t	ISM-Band Application
J	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A	Input
B,C,F	RF Ground
D, H	Case Ground
E	Band 1 Output
G	Band 2 Output

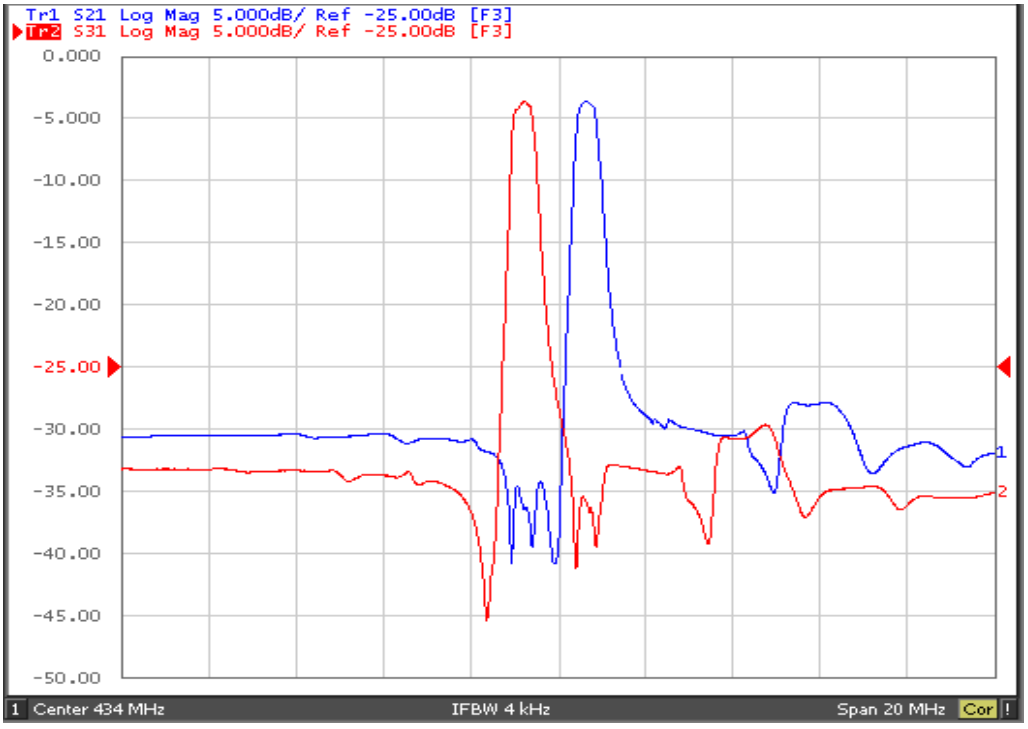
❒ Testing Environment

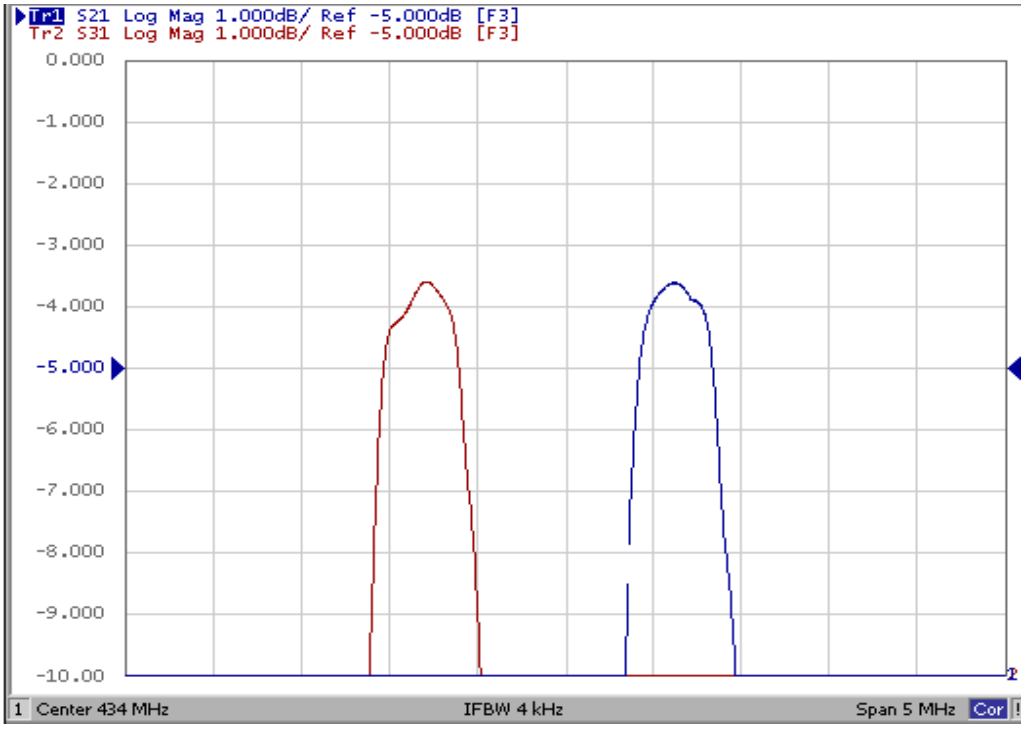


Source & Load Impedance: 50 Ω

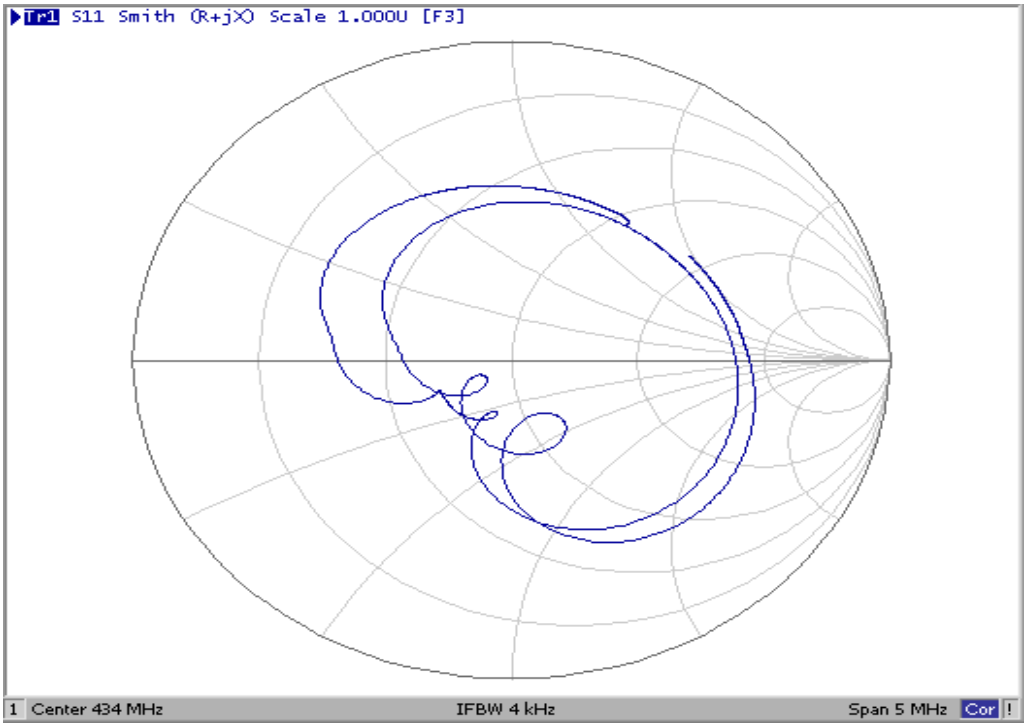
❒ Frequency Characteristics

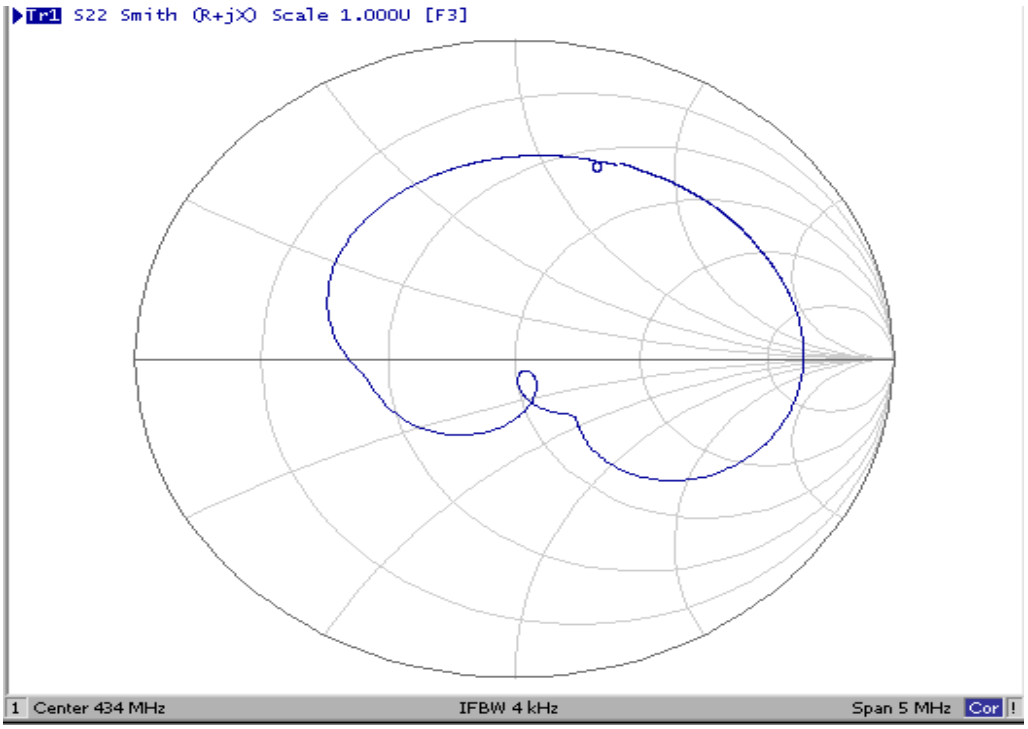
Frequency Response





Smith Chart


Tr1 S11 Smith (R+jX) Scale 1.000U [F3]
1 Center 434 MHz
IFBW 4 kHz
Span 5 MHz
Cor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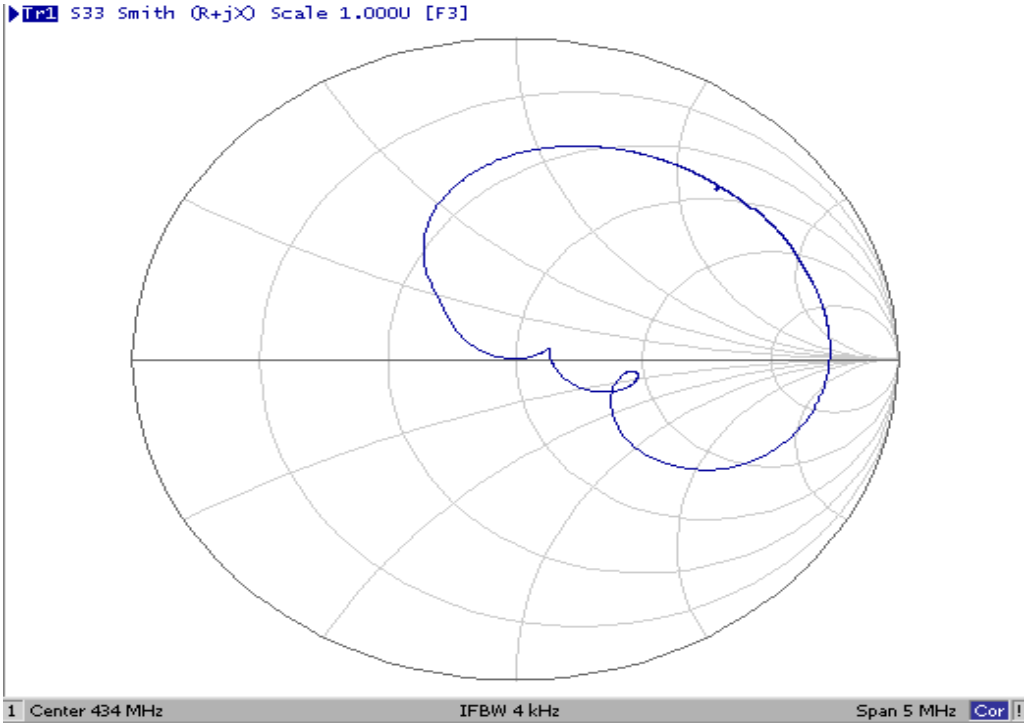
IFBW 4 kHz
Span 5 MHz
Cor


Tr1 S33 Smith (R+jX) Scale 1.000U [F3]
1 Center 434 MHz
IFBW 4 kHz
Span 5 MHz
Cor