

SF-031301-S39

ISM-Band, RF SAW Filter
Revision 0: April 2017



- ☐ Electrical Characteristics
 - ☐ Package Dimensions
 - ☐ Testing Environment
 - ☐ Frequency Characteristics
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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	-	-	1.4

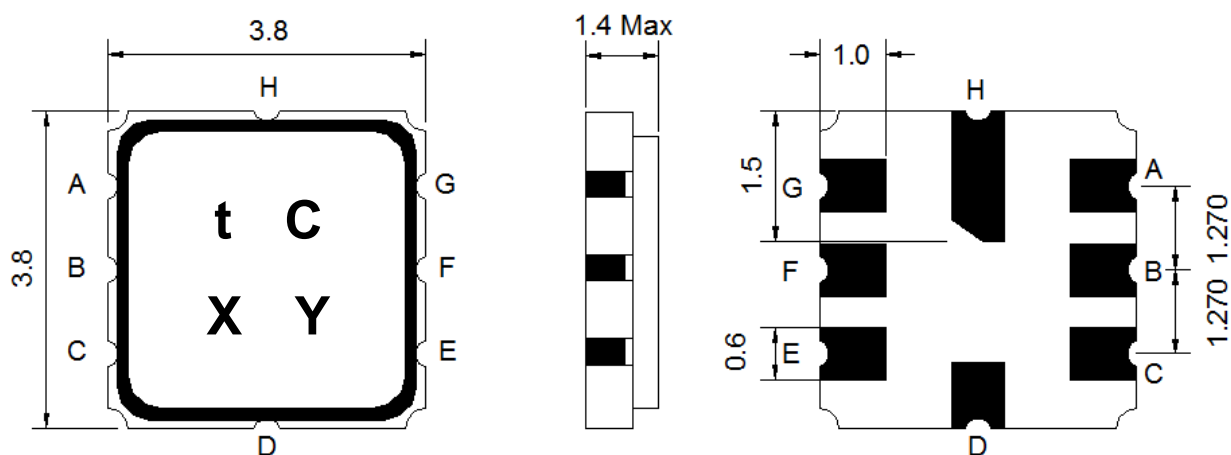
Electrical Specification

Pass Band I	Unit	Minimum	Typical	Maximum
Center frequency F_c	MHz	-	313.15	-
Insertion loss 313.05~313.25 MHz IL	dB	-	3.5	4.2
Amplitude Ripple 313.05~313.25 MHz	dB _{p-p}	-	0.7	1.2
VSWR 313.05~313.25 MHz	-	-	1.6	2.3
Attenuation (Reference level from 0 dB)				
313.9 ~ 314.1 MHz	dB	26	30	-
$F_c + 2.0$ MHz	dB	25	30	-
$F_c - 2.0$ MHz	dB	30	35	-

Pass Band II	Unit	Minimum	Typical	Maximum
Center frequency F_c	MHz	-	314.0	-
Insertion loss 313.9~314.1 MHz IL	dB	-	3.5	4.0
Amplitude Ripple 313.9~314.1 MHz	dB _{p-p}	-	0.5	1.2
VSWR 313.9~314.1 MHz	-	-	1.6	2.3
Attenuation (Reference level from 0 dB)				
313.05 ~ 313.25 MHz	dB	26	30	-
$F_c + 2.0$ MHz	dB	25	30	-
$F_c - 2.0$ MHz	dB	30	35	-

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

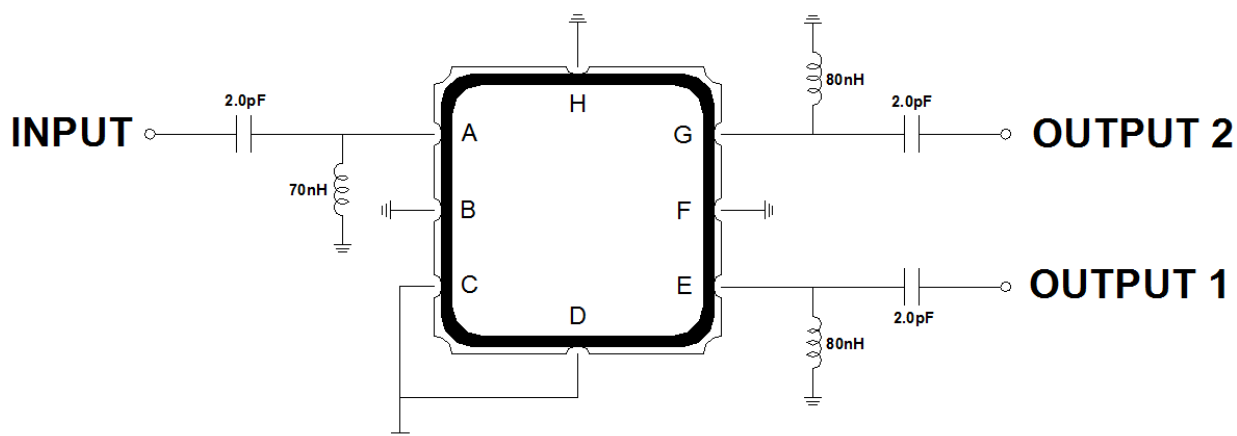
Package Dimensions



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

Pin Description	
B,C,F	Ground
D,H	Case Ground
A	Input
E	Band1 Output
G	Band2 Output

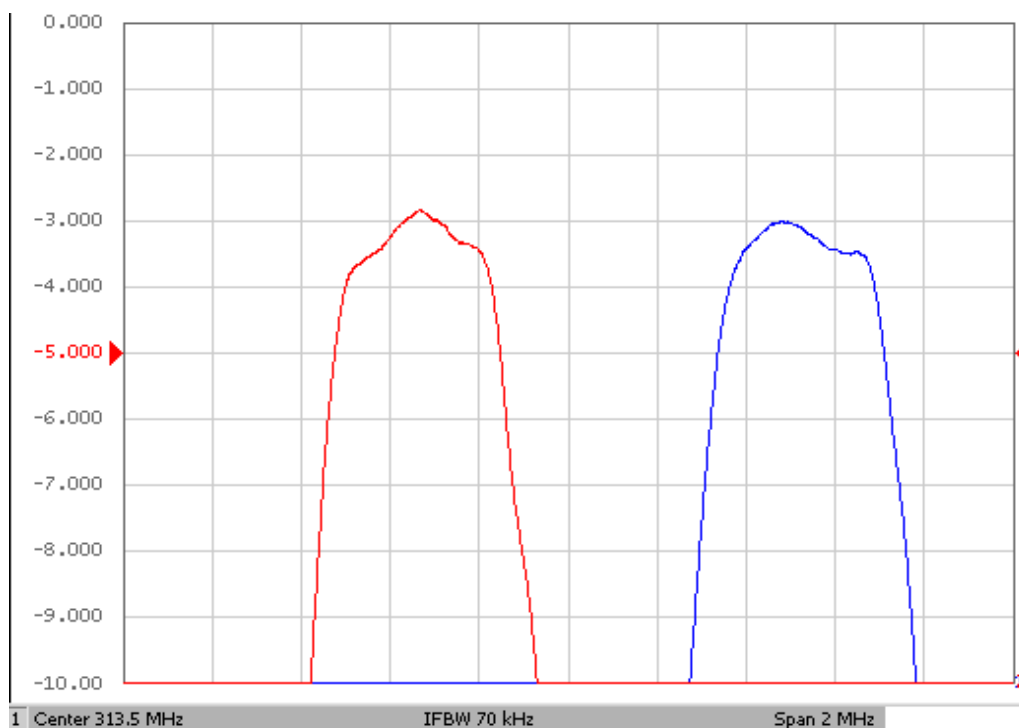
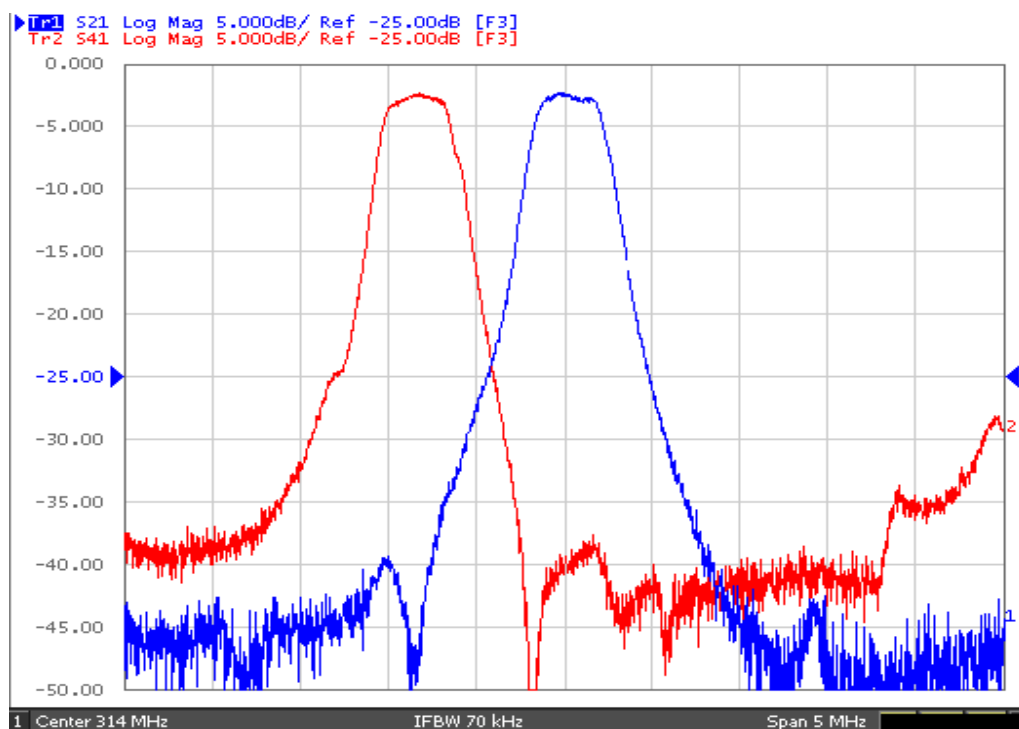
Testing Environment

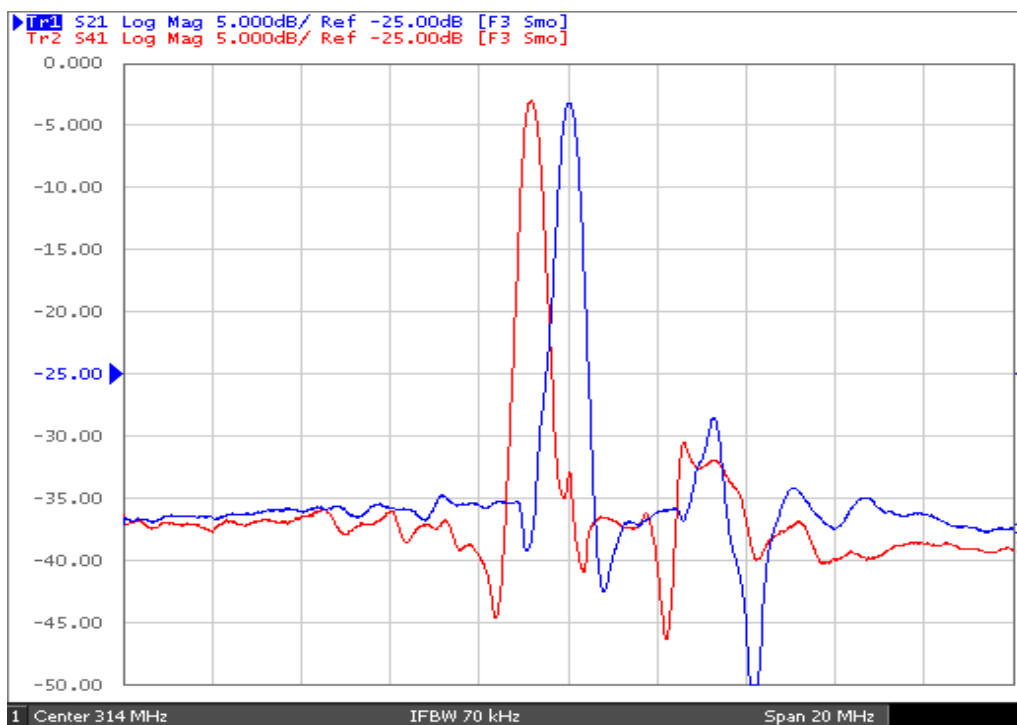


Source & Load Impedance: 50 Ω

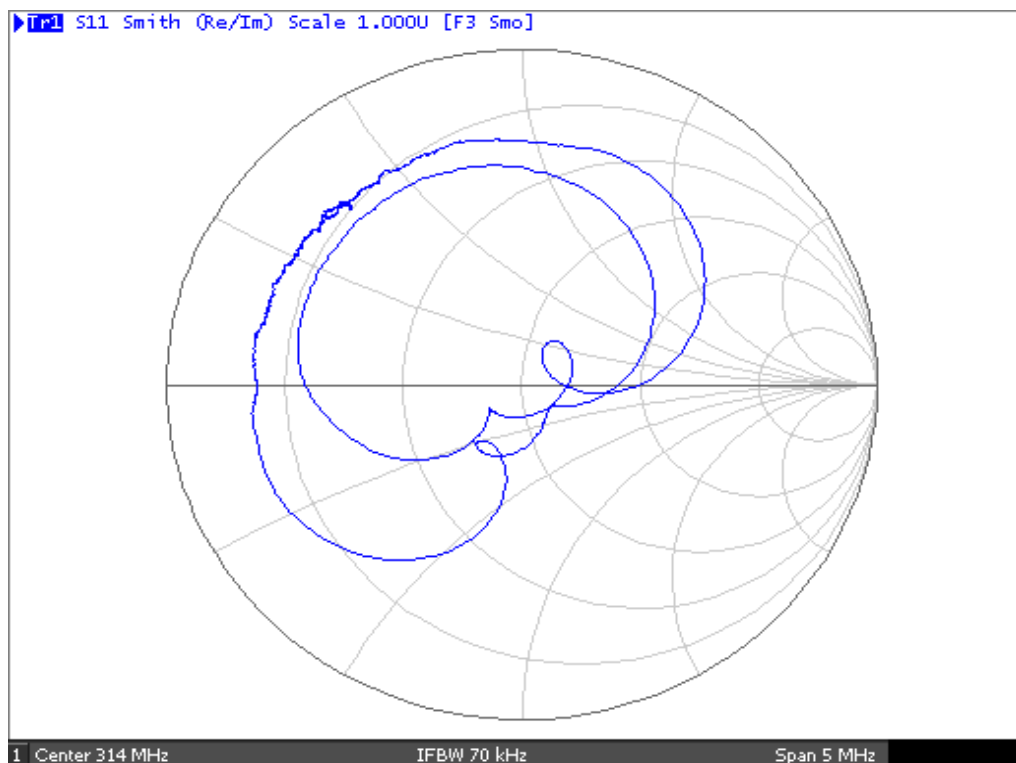
□ Frequency Characteristics

Frequency Response

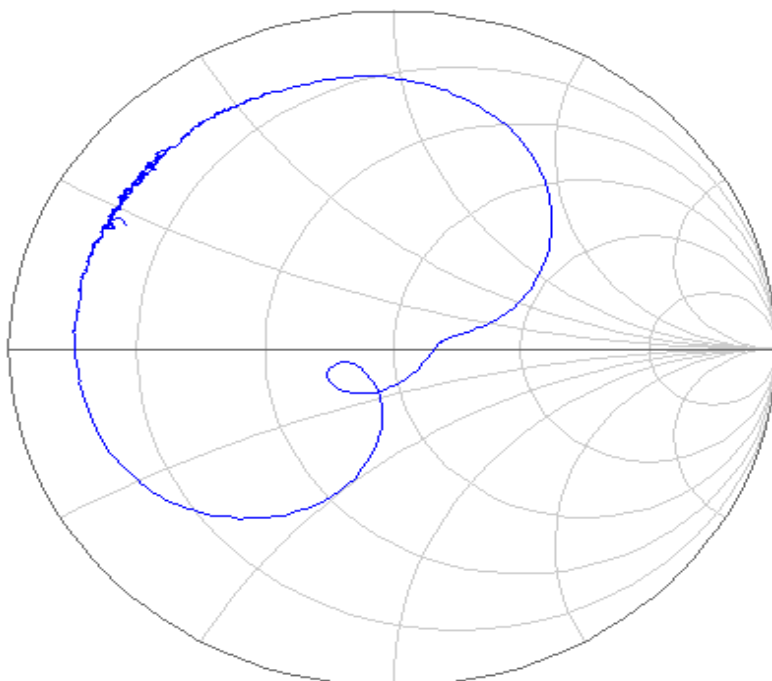




Smith Chart



▶ Tr1 S22 Smith (Re/Im) Scale 1.000U [F3 Smo]

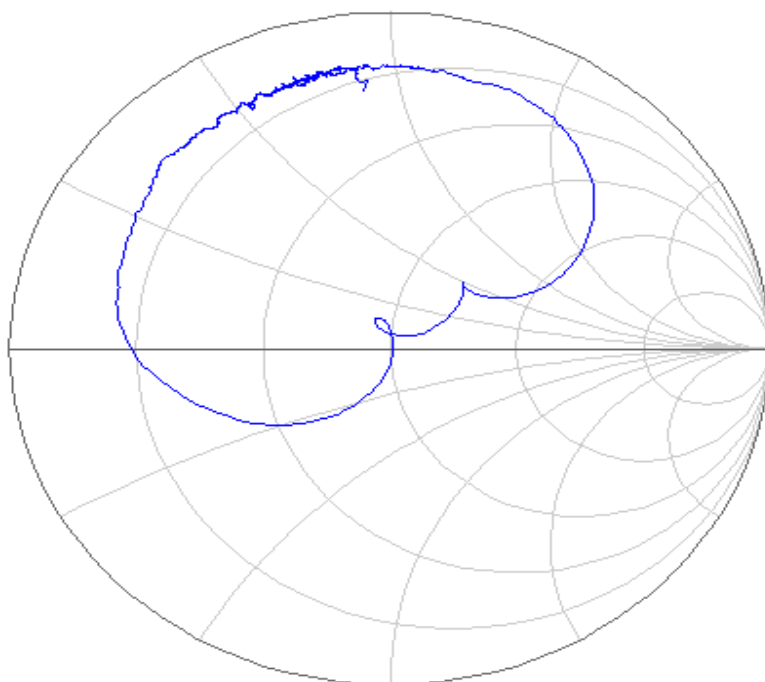


1 Center 314 MHz

IFBW 70 kHz

Span 5 MHz

▶ Tr1 S44 Smith (Re/Im) Scale 1.000U [F3 Smo]



1 Center 314 MHz

IFBW 70 kHz

Span 5 MHz