

SF-043304-S27

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



- ☐ 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	-	+105
Maximum DC Voltage	V	-	-	6
Maximum Input Power	dBm	-	-	10
Source Impedance (unbalanced) ⁽¹⁾	Ω	-	50	-
Load Impedance (unbalanced) ⁽¹⁾	Ω	-	50	-
Package type & size	S27			
Length x Width	-	-	3.0 x 3.0	-
Height	mm	-	-	1.4

Electrical Specification

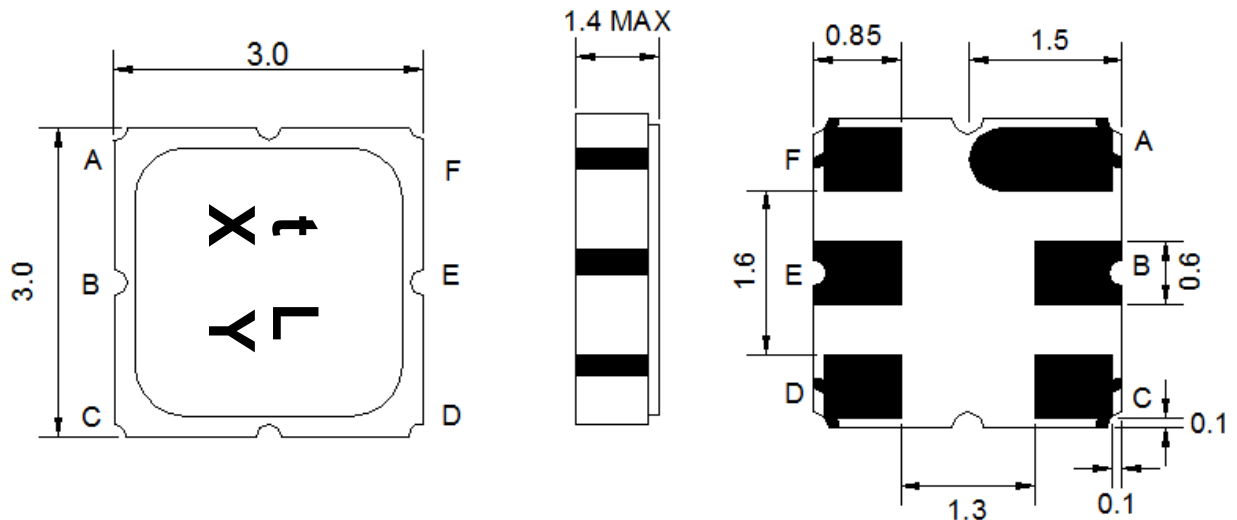
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency Fc	MHz	-	433.92	-
1.5dB BW	KHz	300	550	-
3dB BW	KHz	-	670	900
Minimum Insertion Loss IL_{min}				
Incl. loss of matching elements(Q=) *1)	dB	-	2.6	3.4
Exclude loss in matching elements *2)	dB	-	2.4	3.2
Passband (relative to IL_{min}) *1)				
433.770 ~ 434.070 MHz	-	-	0.5	3.0
Attenuation (relative to IL_{min}) *1)				
10.0 ~ 420.0 MHz	dB	47	55	-
420.0 ~ 427.0 MHz	dB	43	50	-
427.0 ~ 432.0 MHz	dB	27	33	-
432.0 ~ 433.0 MHz	dB	17	24	-
435.0 ~ 436.0 MHz	dB	15	21	-
436.0 ~ 445.0 MHz	dB	21	27	-
445.0 ~ 450.0 MHz	dB	44	51	-
450.0 ~ 2000.0 MHz	dB	42	49	-

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

*1) : The matching circuit is real by actual passive components.
0805 Coilcraft CS series chip conductor is used for inductor.
0402 muRata GRM series is used for capacitor.

*2) : The matching circuit is ideal by simulation.

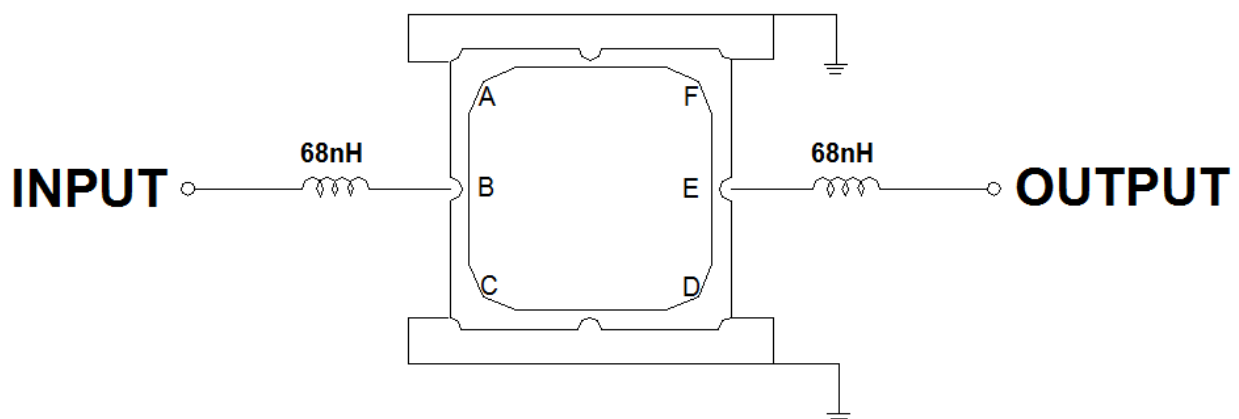
Package Dimensions



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

Pin Description	
C,F	Ground
A	Input (recommended) or Input ground
B	Input ground (recommended) or Input
D	Output (recommended) or Output ground
E	Output ground (recommended) or Output

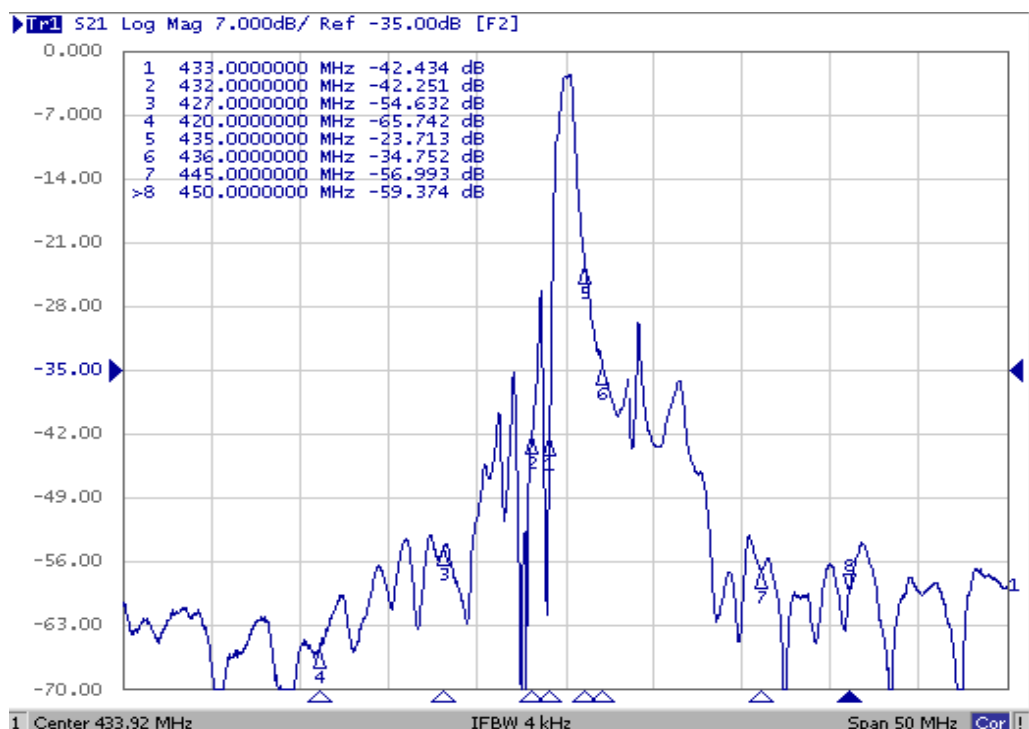
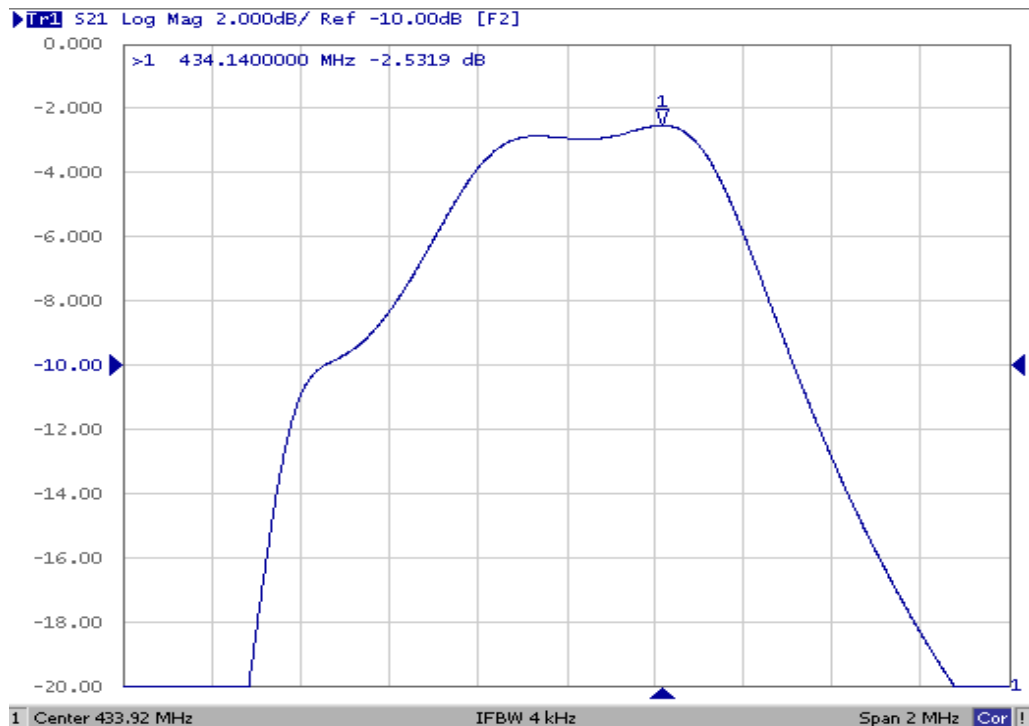
Testing Environment

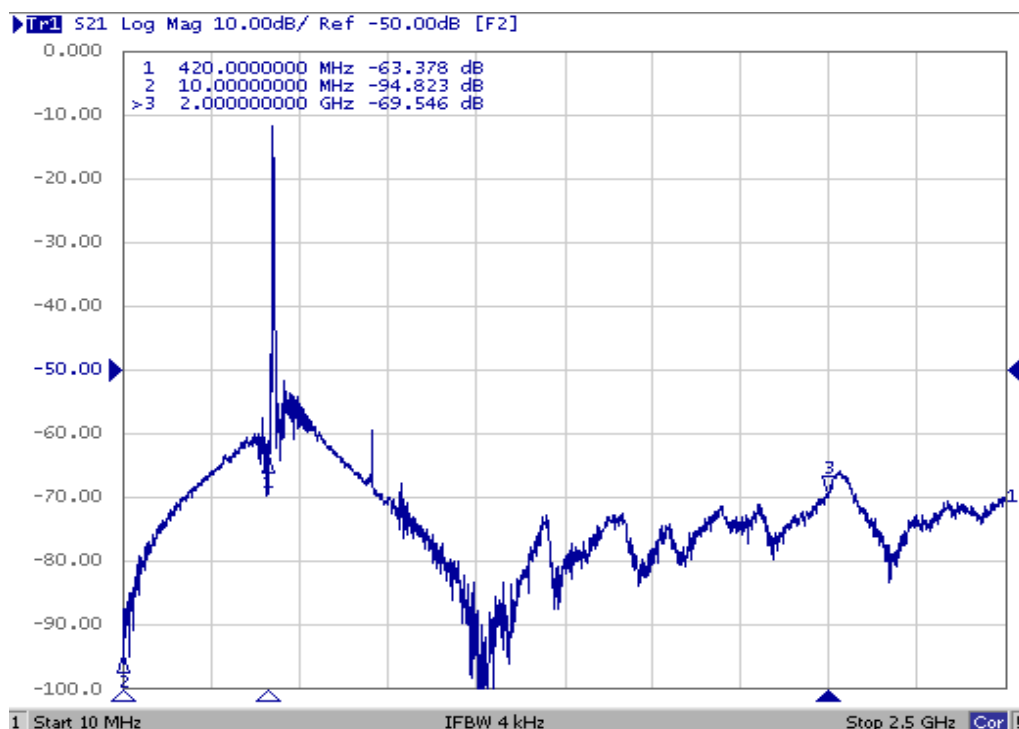


Source & Load Impedance: 50 Ω

□ Frequency Characteristics

Frequency Response

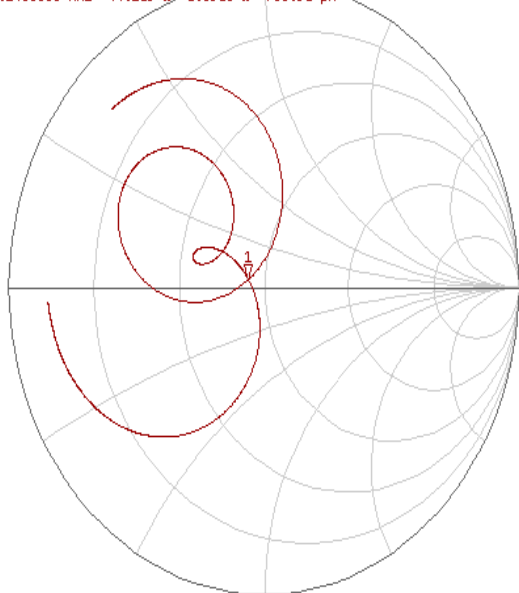




Smith chart

►Tr2 S11 Smith (R+jX) Scale 1.000U [F2]

>1 434.140000 MHz 44.129 Ω -2.0920 Ω 766.92 pF



►Tr3 S22 Smith (R+jX) Scale 1.000U [F2]

>1 434.1362500 MHz 40.164 Ω -6.7522 Ω 54.293 pF

