

SF-043306-S39

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



- ☐ Electrical Characteristics
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 - ☐ Frequency Characteristics
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□ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	+95
Storage Temperature Range	°C	-40	-	+95
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	S39			
Length x Width	-	-	3.8 x 3.8	-
Height	mm	-	-	1.7

Electrical Specification

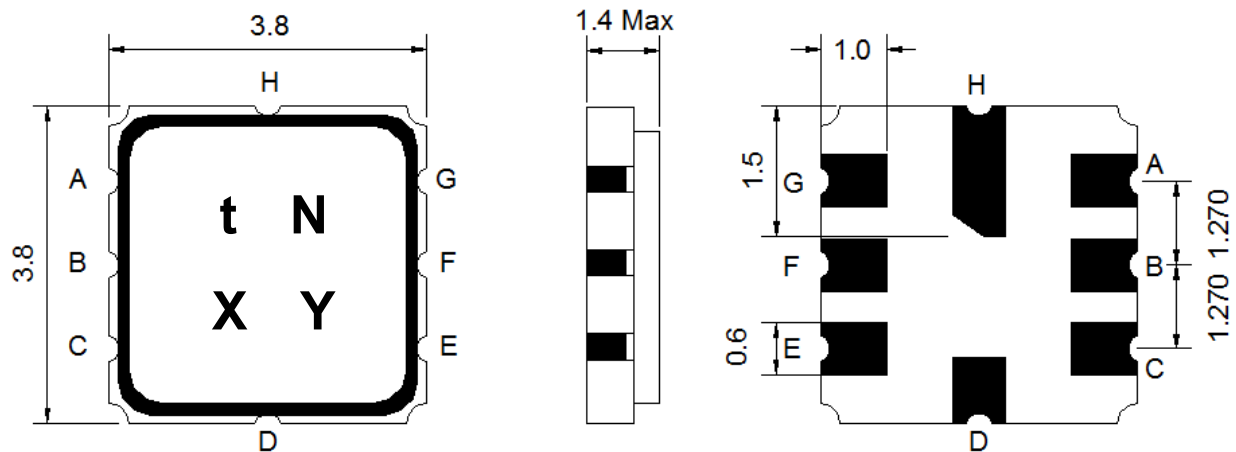
Parameters Description	Unit	Minimum	Typical	Maximum
Center frequency Fc	MHz	-	433.92	-
3dB BW	MHz	-	0.63	-
Minimum insertion loss IL_(min)				
Incl. loss of matching elements(Q=) *1)	dB	-	2.7	3.4
Exclude loss in matching elements *2)	dB	-	2.5	3.2
Passband (relative to IL_{min}) *1)				
433.76 ~ 434.08 MHz	dB	-	0.5	2.0
433.74 ~ 434.10 MHz	dB	-	0.7	3.0
433.70 ~ 434.14 MHz	dB	-	1.2	6.0
Attenuation (relative to IL_{min}) *1)				
10.0 ~ 414.0 MHz	dB	38	43	-
414.0 ~ 423.5 MHz	dB	38	43	-
423.50 ~ 431.72 MHz	dB	29	34	-
431.72 ~ 432.12 MHz	dB	26	36	-
432.12 ~ 433.10 MHz	dB	10	24	-
434.70 ~ 434.92 MHz	dB	10	17	-
434.92 ~ 442.0 MHz	dB	13	21	-
442.0 ~ 500.0 MHz	dB	40	44	-
500.0 ~ 700.0 MHz	dB	50	54	-
700.0 ~ 805.0 MHz	dB	45	55	-
805.0 ~ 1000.0 MHz	dB	60	70	-

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.

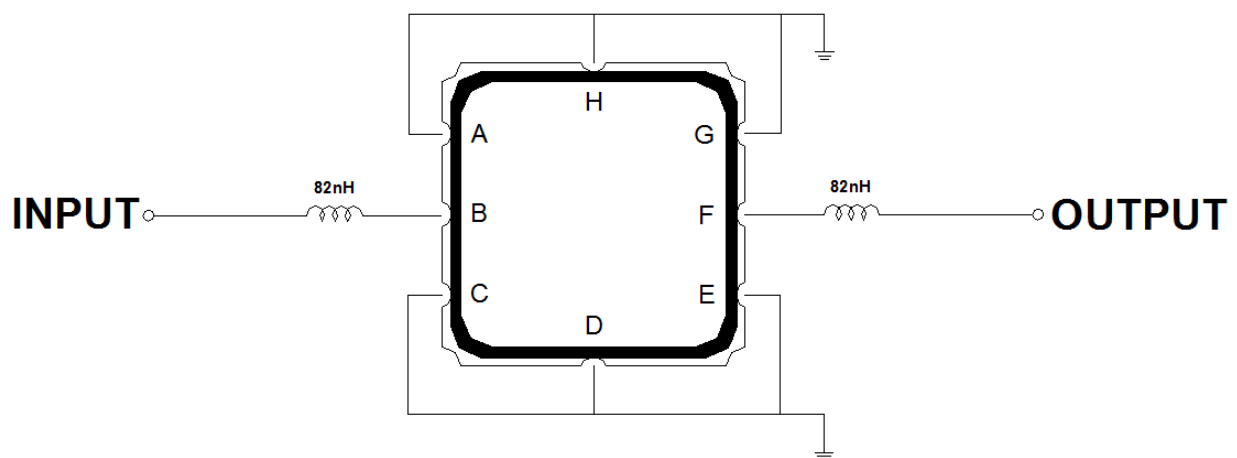
Package Dimensions



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

Pin Description	
C,D,G,H	Ground
A	Input Ground or Input
B	Input or Input Ground
E	Output Ground or Output
F	Output or Output Ground

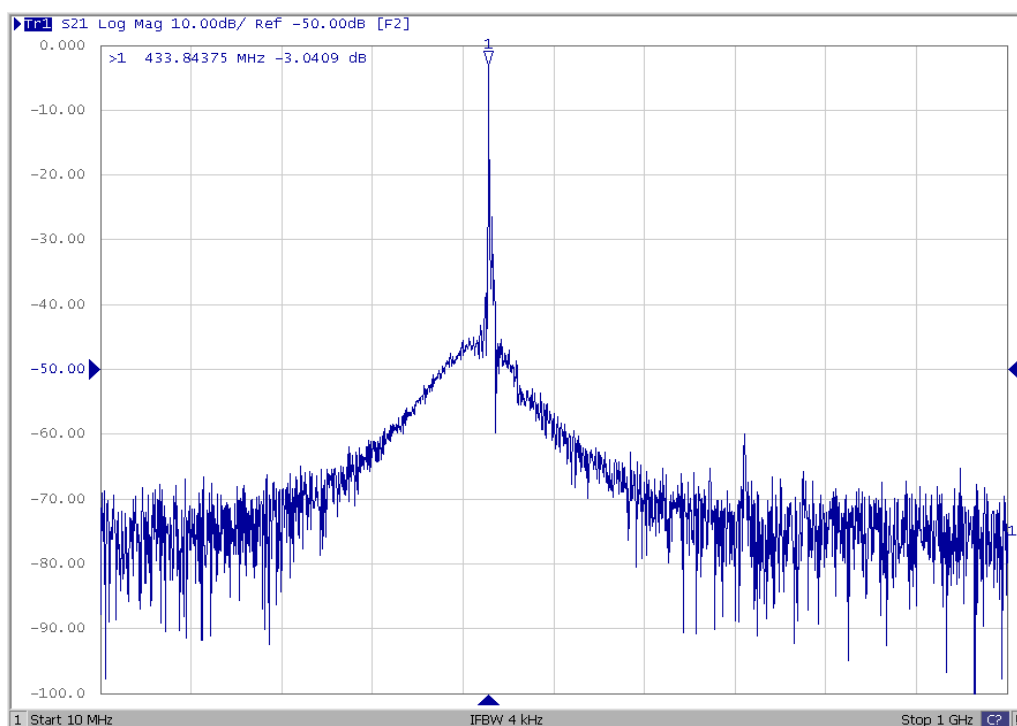
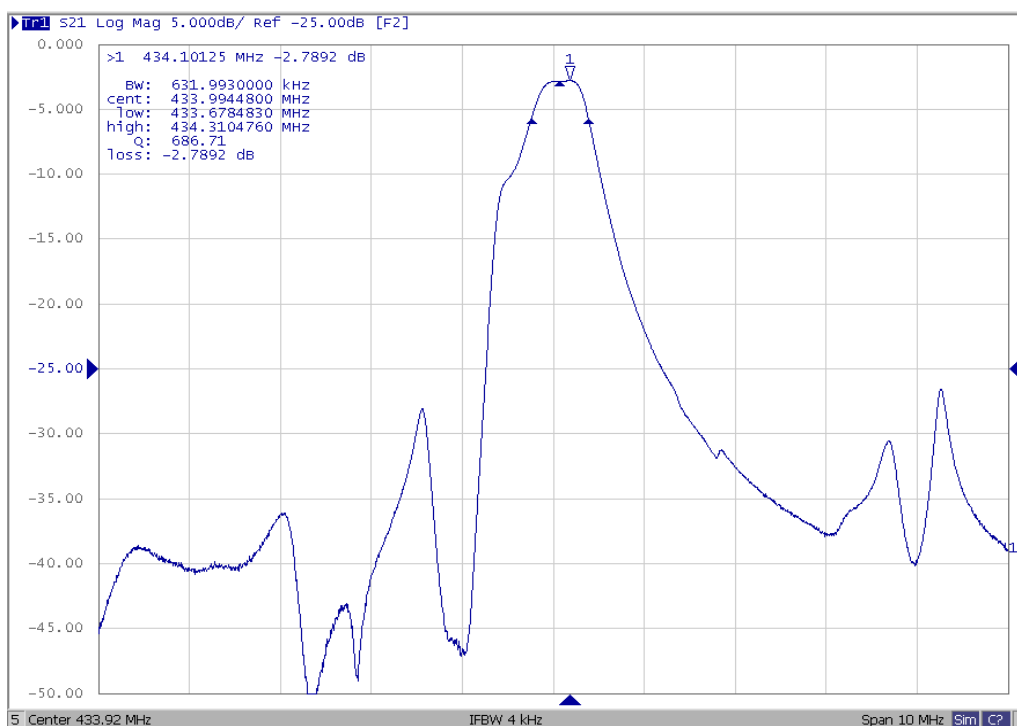
Testing Environment



Source & Load Impedance: 50 Ω

Frequency Characteristics

Frequency Response



Smith chart

