

- Wireless, RF SAW Filter
- Revision 0: February 2010

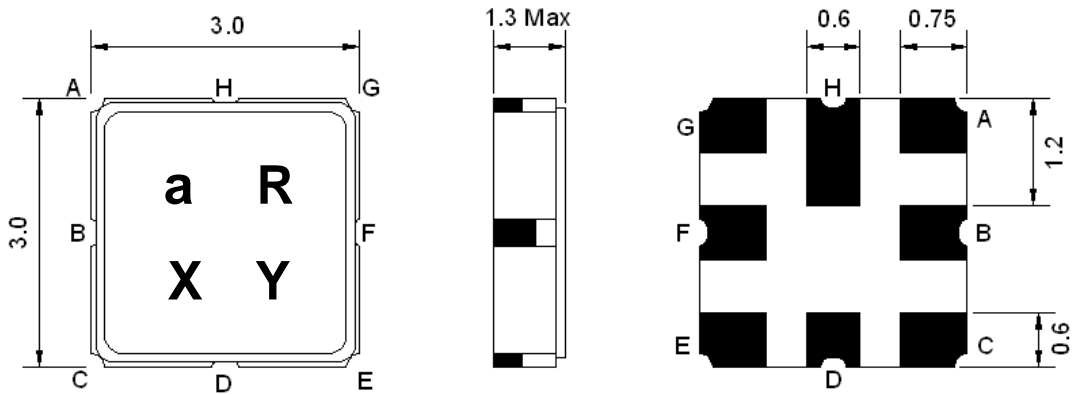
## Electrical Characteristics

MAXIMUM RATING					
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM	
Operating Temperature Range	°C	-20	-	+75	
Storage Temperature Range	°C	-40	-	+85	
Maximum DC Voltage	V	-	-	3	
Maximum Input Power	dBm	-	-	10	
Source Impedance	(single ended) <sup>(1)</sup> (balanced ended) <sup>(2)</sup>	Ω	-	50	-
Load Impedance	(single ended) <sup>(1)</sup> (balanced ended) <sup>(2)</sup>	Ω	-	50	-
Package type & size	M1				
Length x Width	mm <sup>2</sup>	-	3.0 x 3.0	-	
Height	mm	-	-	1.3	

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	400.0	-
Insertion Loss within Fo ± 75 KHz (excluding loss in matching elements)	dB	-	4.3	6.0
Insertion Loss within Fo ± 75 KHz (including loss in matching elements)	dB	-	5.2	7.5
Amplitude Ripple within Fo ± 75 KHz	dB <sub>p-p</sub>	-	0.4	2
Group Delay Ripple within Fo ± 75 KHz	μsec	-	0.6	2
Temperature coefficient of frequency (TCf)	ppm/K <sup>2</sup>	-	-0.036	-
<b>Attenuation:</b>				
Fo – 100 to Fo – 1.5 MHz	dB	35	60	-
Fo – 1.5 to Fo – 0.8 MHz	dB	20	46	-
Fo – 0.8 to Fo – 0.6 MHz	dB	10	39	-
Fo – 0.6 to Fo – 0.4 MHz	dB	7	27	-
Fo + 0.4 to Fo + 0.6 MHz	dB	7	27	-
Fo + 0.6 to Fo + 0.8 MHz	dB	10	39	-
Fo + 0.8 to Fo + 1.5 MHz	dB	20	46	-
Fo + 1.5 to Fo + 100 MHz	dB	35	57	-

**Notes:** (1) With Matching Network. (2) With Matching Network.

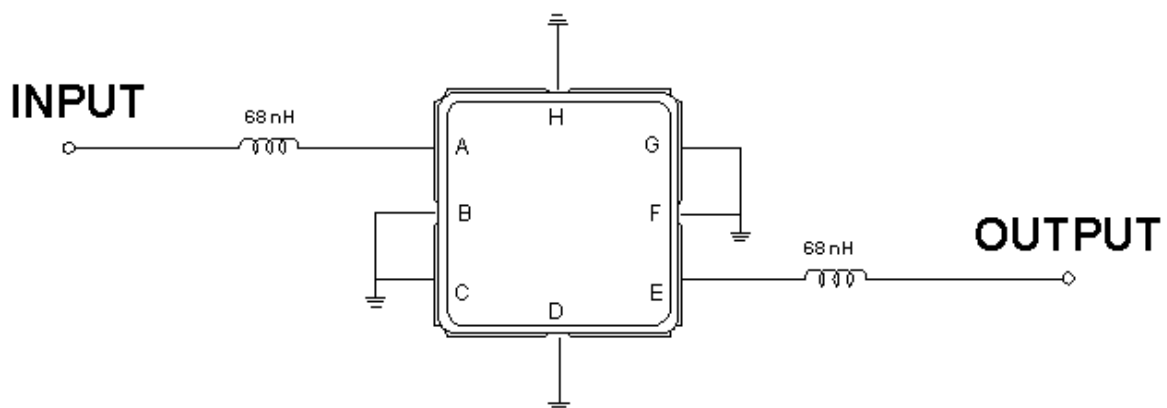
## Package Dimensions



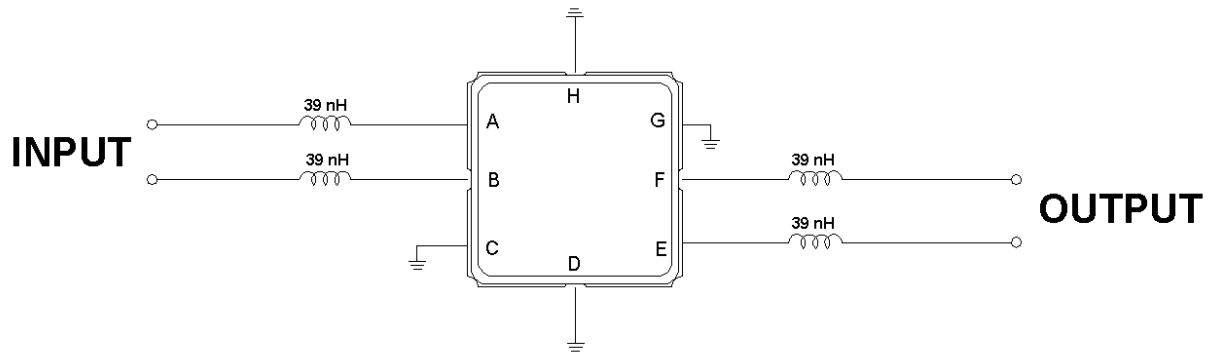
Marking Descriptions	
a	Wireless Application
R	Series Number
X	Date Code (Year)
Y	Date Code (Month)

Pin Description	
C, D, G, H	Ground
A	Input
B	Input ground or balanced input
E	Output
F	Output ground or balanced output

## Testing Environment



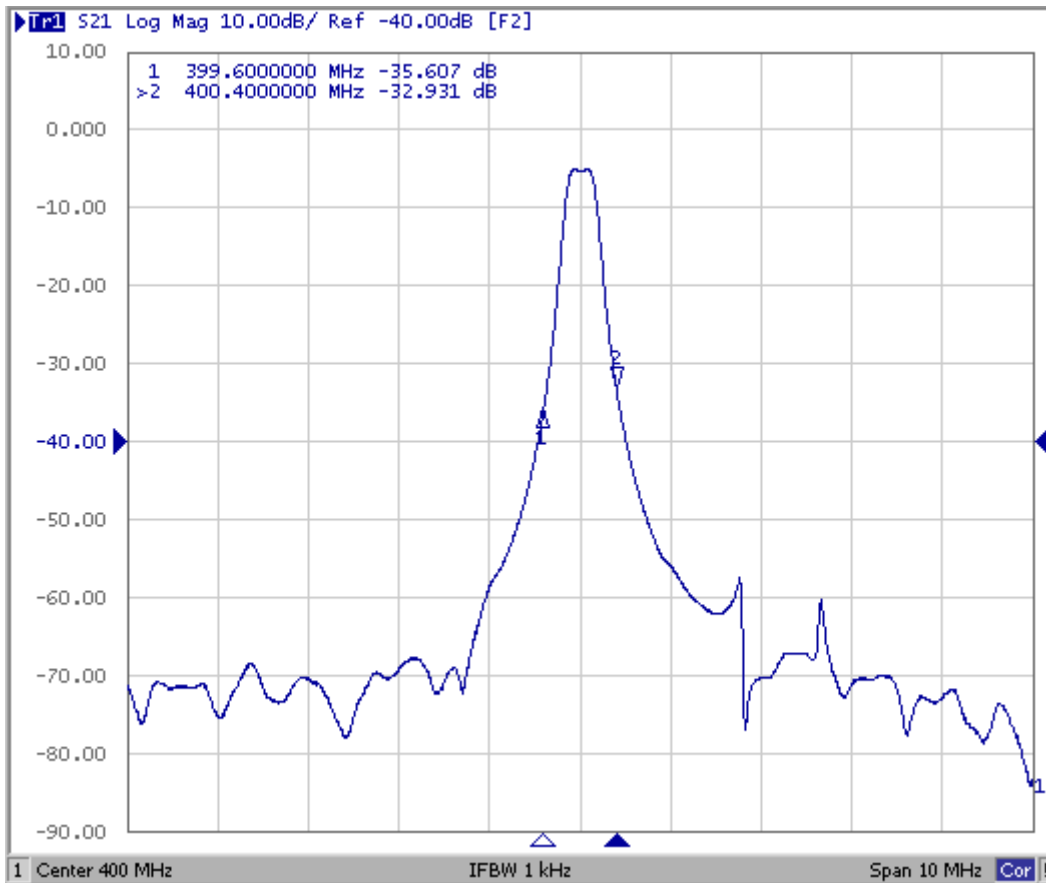
Single-ended (Source & Load Impedance: 50  $\Omega$ ) <sup>(1)</sup>



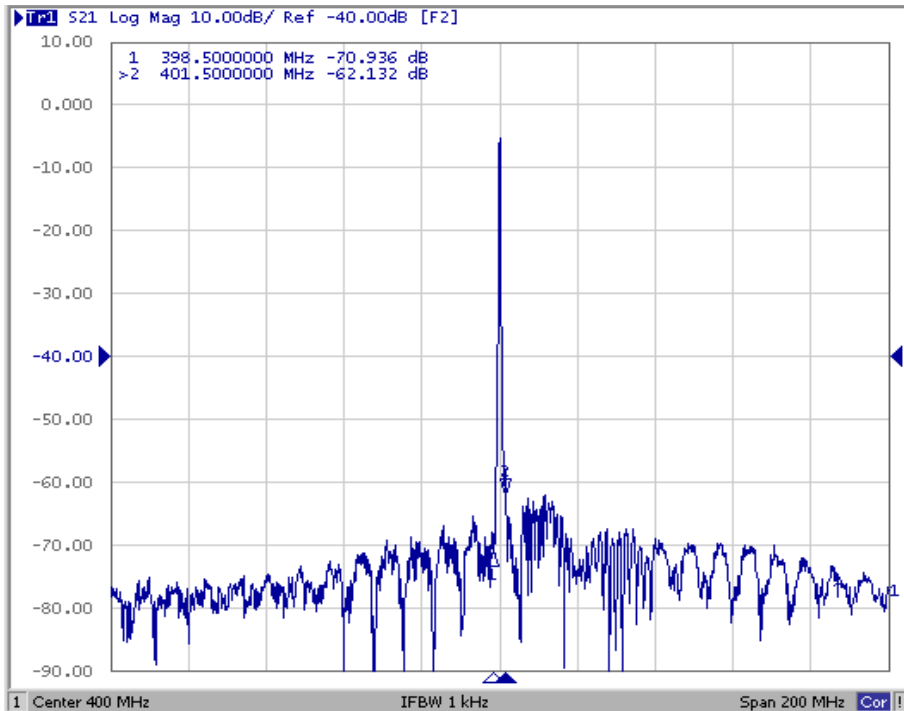
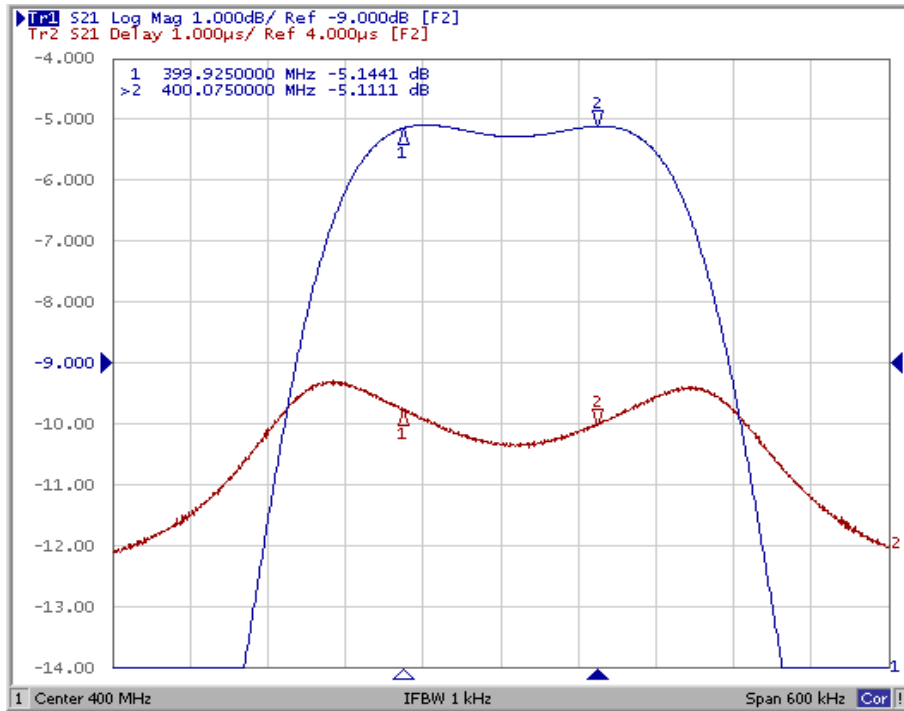
Balanced-ended (Source & Load Impedance: 50  $\Omega$ ) <sup>(2)</sup>

## Frequency Characteristics

### Frequency Response



**Frequency Response**



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