



*Total Solution Provider in Saw Device*

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# SA1315BM

Wireless, RF SAW Filter  
Revision 0: July 2009



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## □ Electrical Characteristics

### Maximum Ratings

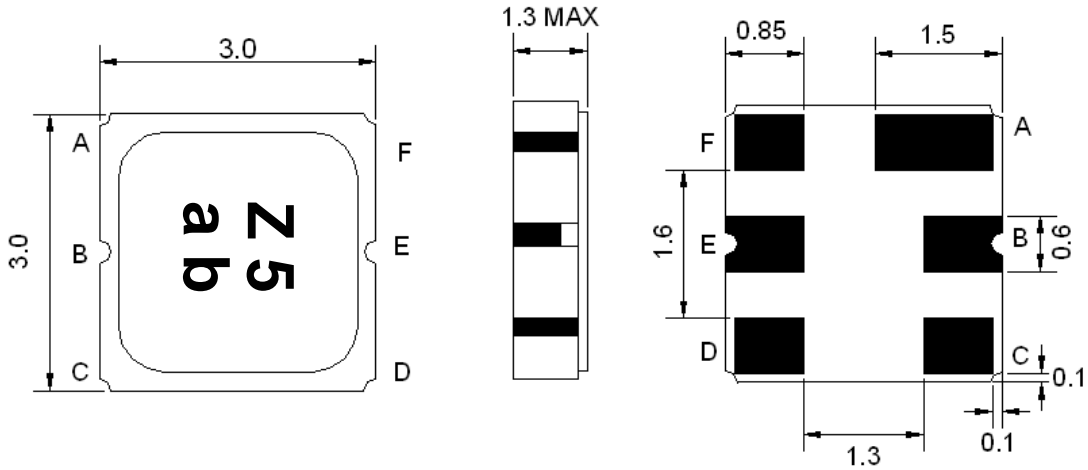
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	+80
Storage Temperature Range	°C	-40	-	+95
Maximum DC Voltage	V	-	-	3
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	M			
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	-	1315.0	-
Insertion Loss at Fo	dB	-	1.6	3.0
2dB Bandwidth	MHz	30	40	-
Amplitude Ripple within 1300.0 ~ 1330.0 MHz	dB <sub>p-p</sub>	-	0.7	2.0
<b>Attenuation:</b>				
1000.0 ~ 1200.0 MHz	dB	30	38	-
1200.0 ~ 1275.0 MHz	dB	35	40	-
1355.0 ~1365.0 MHz	dB	40	65	-
1365.0 ~ 1600.0 MHz	dB	35	42	-
VSWR within 1300.0 ~ 1330.0 MHz	-	-	1.4	2.2

**Notes :** (1 ) No Matching Network (Ref. Testing Environment Circuit as shown below).

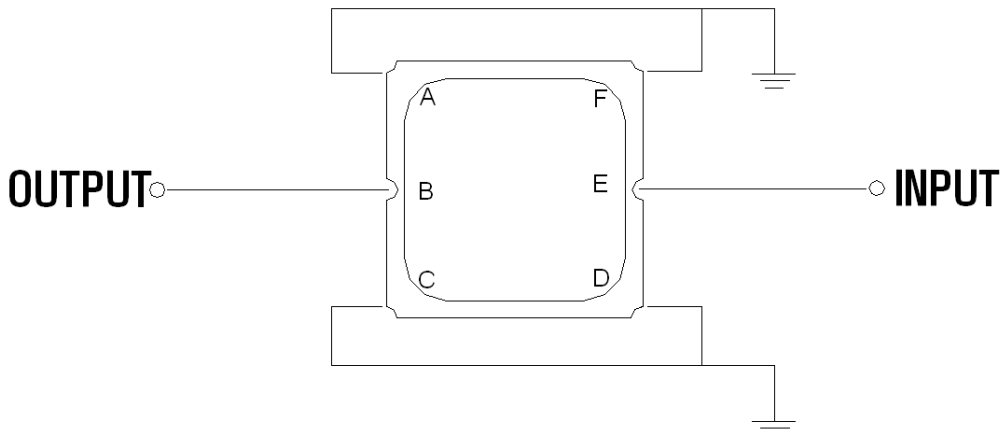
**Package Dimensions**



Marking Descriptions	
Z	Wireless Application
5	Series Number
a	Date Code(Year)
b	Date Code(Month)

Pin Description	
A, C, D, F	Ground
E	In or Out
B	Out or In

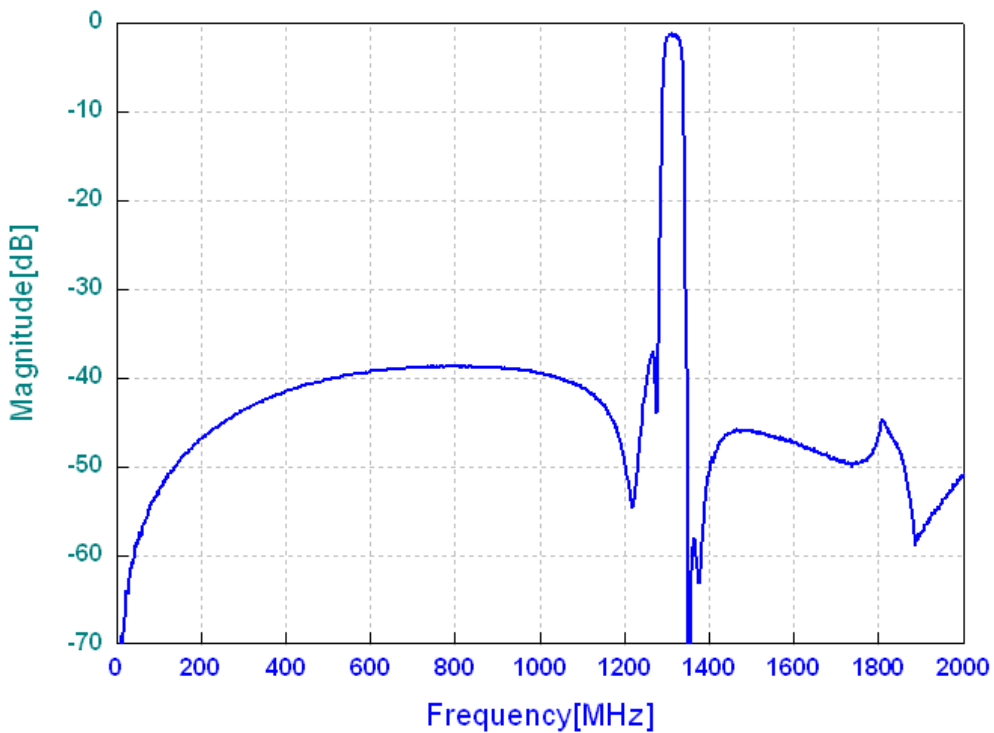
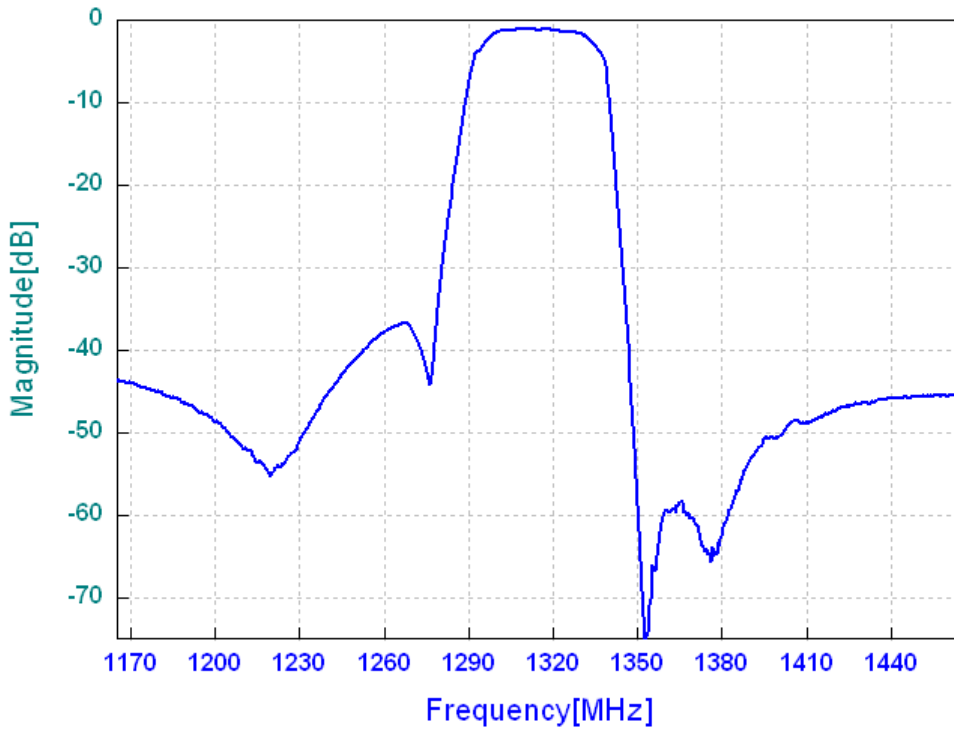
**Testing Environment**



Source & Load Impedance: 50 Ω

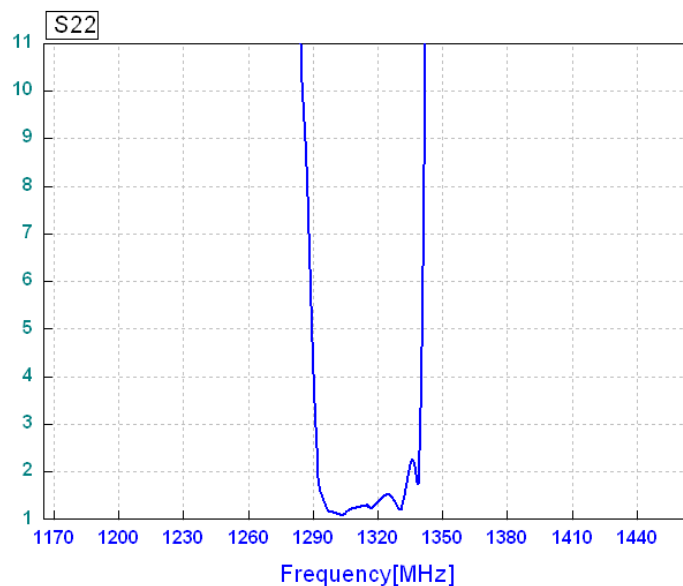
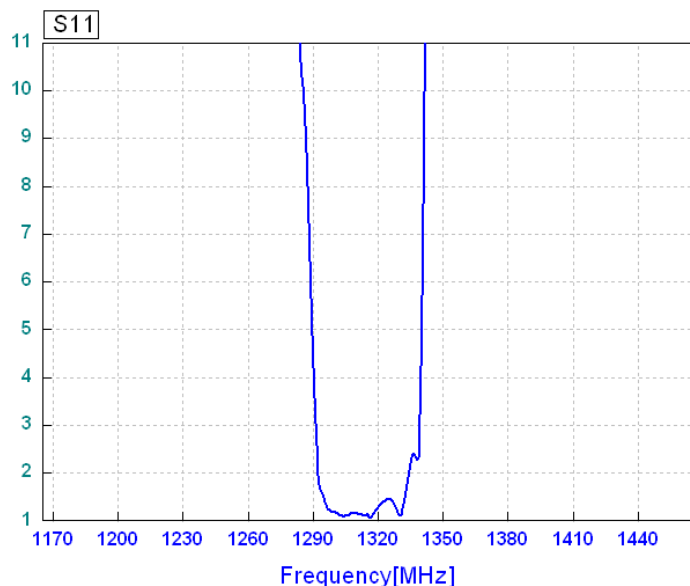
**□ Frequency Characteristics**

Frequency Response





VSWR



Smith Chart

