



*Total Solution Provider in Saw Device*

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# SA1690BM1

Wireless, Balanced RF SAW Filter

Revision 0: January 2005



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

### Maximum Ratings

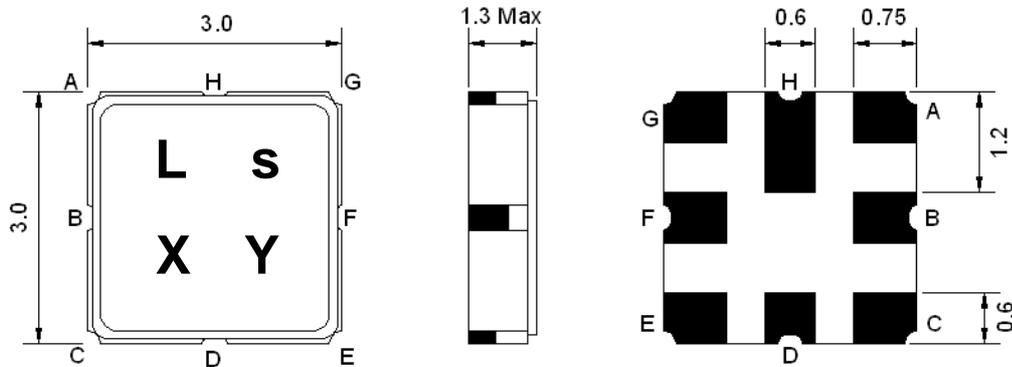
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-10	-	+70
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	3
Maximum Input Power	dBm	-	-	-
Source Impedance (balanced ended) <sup>(1)</sup>	Ω	-	200	-
Load Impedance (balanced ended) <sup>(1)</sup>	Ω	-	200	-
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	-	1690.0	-
Insertion Loss within 1679.7 ~ 1698.8 MHz	dB	-	3.3	4.5
Amplitude Ripple within 1679.7 ~ 1698.8 MHz	dB <sub>p-p</sub>	-	0.6	1.5
Group Delay Ripple within 1679.7 ~ 1698.8 MHz	ns <sub>p-p</sub>	-	8.0	20.0
Input / Output VSWR within 1679.7 ~ 1698.8 MHz	-	-	2.30	2.70
<b>Attenuation:</b>				
54.0 ~ 1100.0 MHz	dB	50	63	-
3262.7 ~ 3352.6 MHz	dB	30	37	-
4911.0 ~ 5009.0 MHz	dB	35	43	-
6559.4 ~ 6665.1 MHz	dB	30	38	-
8211.1 ~ 8319.4 MHz	dB	15	24	-

**Notes :** (1) No Matching Network .

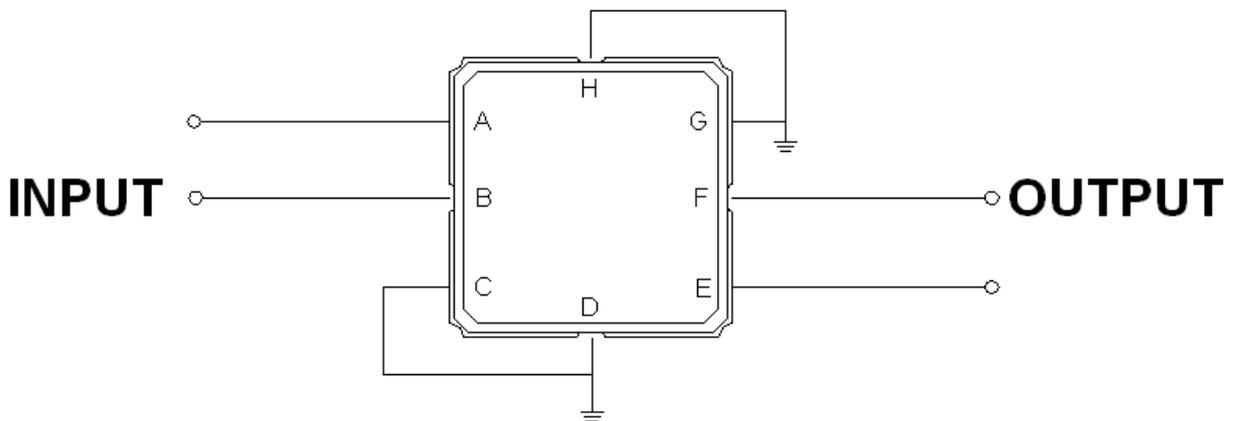
**Package Dimensions**



Marking Descriptions	
L	Wireless Application
s	Series Number
X	Date Code(Year)
Y	Date Code(Month)

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

**Testing Environment**

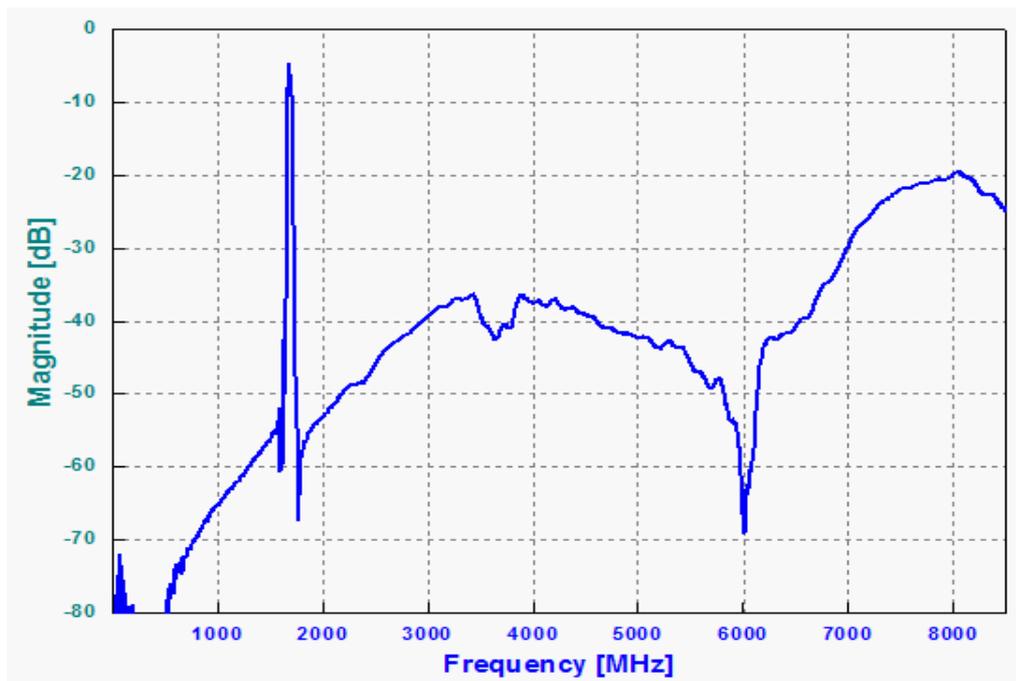
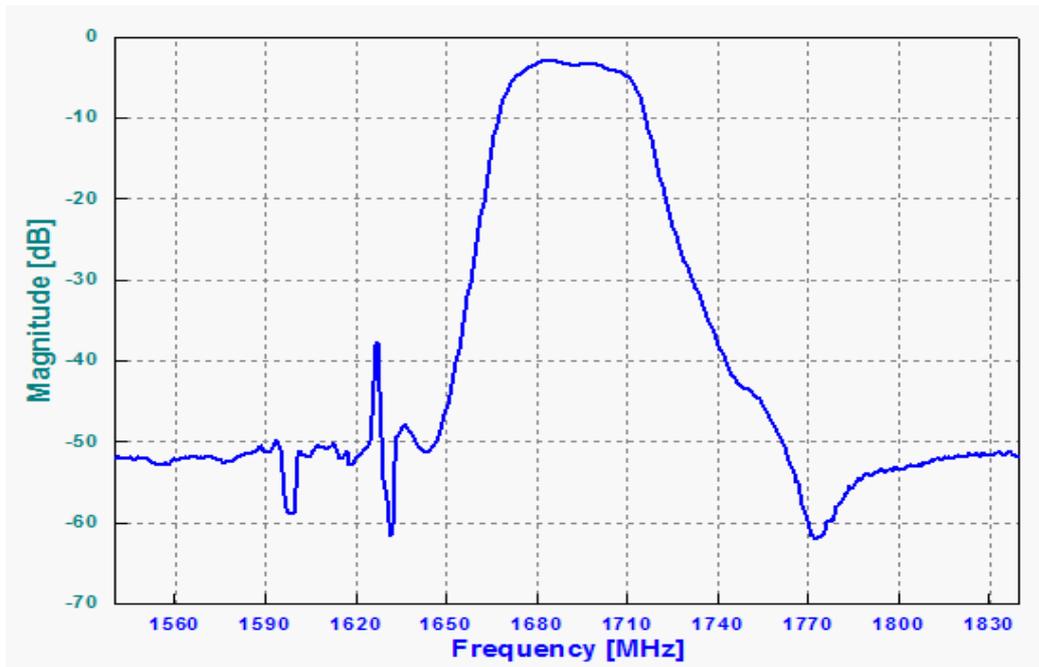


Source Impedance : 200 Ω

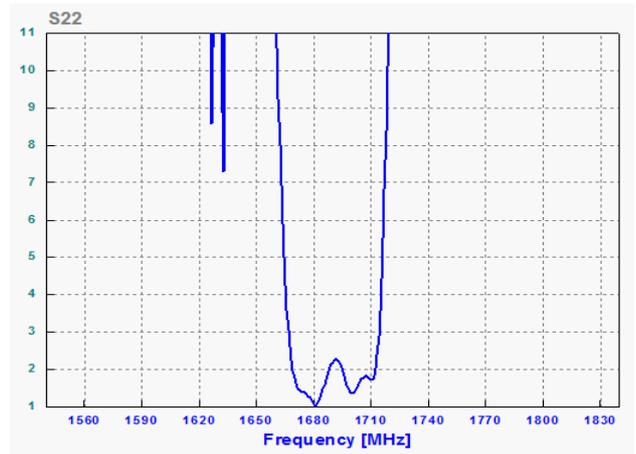
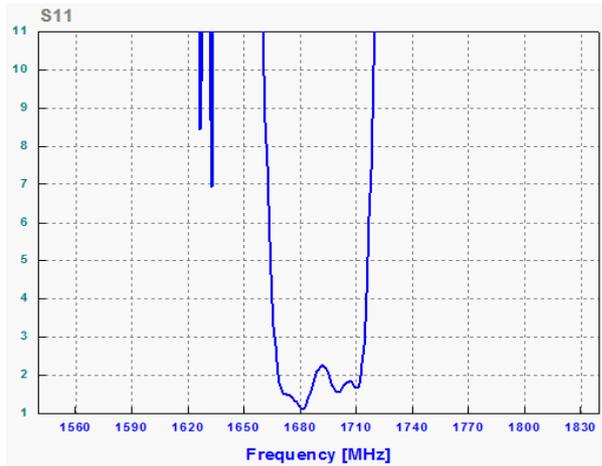
Load Impedance : 200 Ω

## □ Frequency Characteristics

Frequency Response



### VSWR



### Smith Chart

