



*Total Solution Provider in Saw Device*

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# SA1580AM

GPS, RF SAW Filter  
Revision 0: July 2008



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

### Maximum Ratings

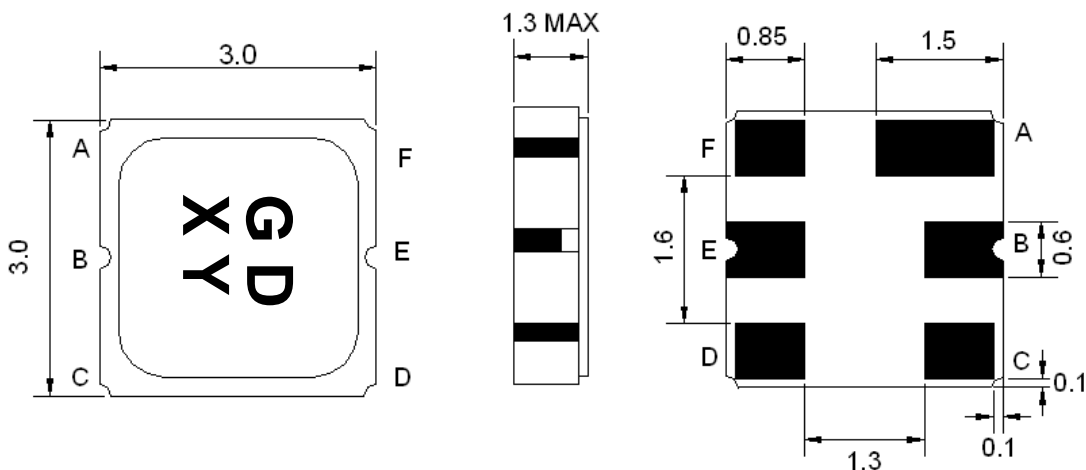
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package 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	-	1580.5	-
Insertion Loss within 1552.0 ~ 1609.0 MHz	dB	-	3.5	5.0
Amplitude Ripple within 1552.0 ~ 1609.0 MHz	dB <sub>p-p</sub>	-	1.1	3.0
Group Delay Ripple within 1552.0~1609.0 MHz	ns <sub>p-p</sub>	-	7	13
Return Loss within 1552.0~1609.0 MHz	dB	8	12	
<b>Attenuation:</b>				
D.C ~ 1400.0 MHz	dB	30	35	-
1400.0 ~ 1485.0 MHz	dB	25	38	-
1485.0 ~ 1515.0 MHz	dB	7	14	-
1658.0 ~ 1685.0 MHz	dB	10	14	-
1685.0 ~ 2000.0 MHz	dB	30	40	-

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

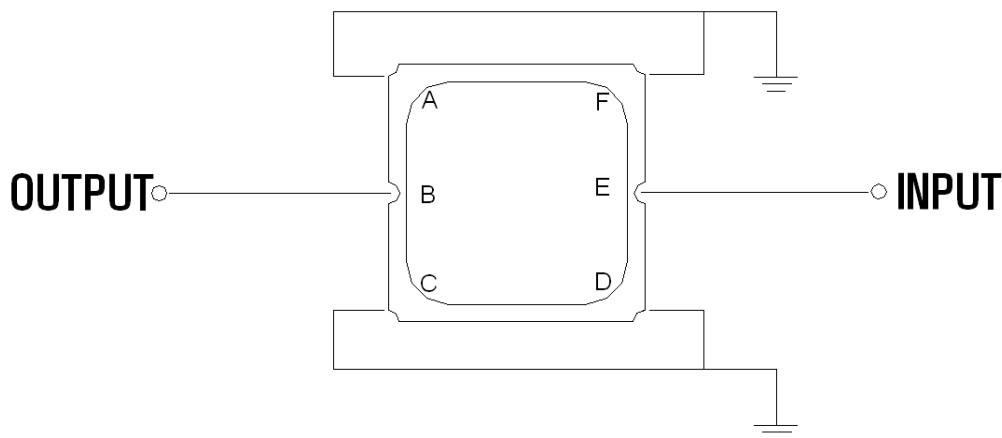
**Package Dimensions**



Marking Descriptions	
G	AWS Application
D	Series Number
X	Date Code(Year)
Y	Date Code(Month)

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

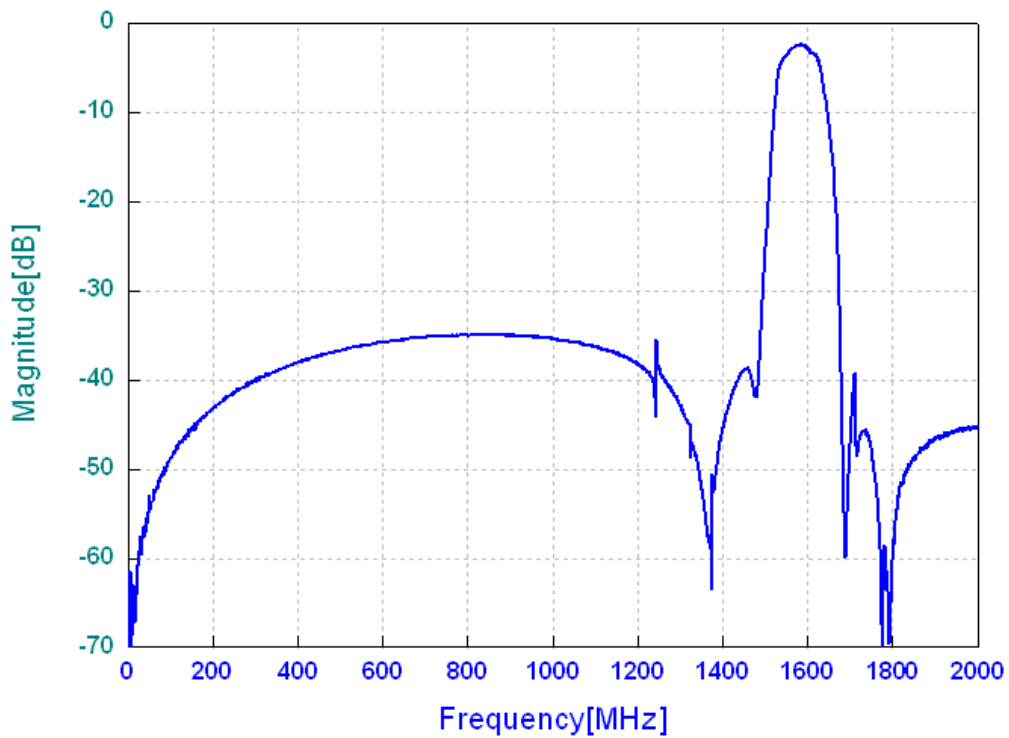
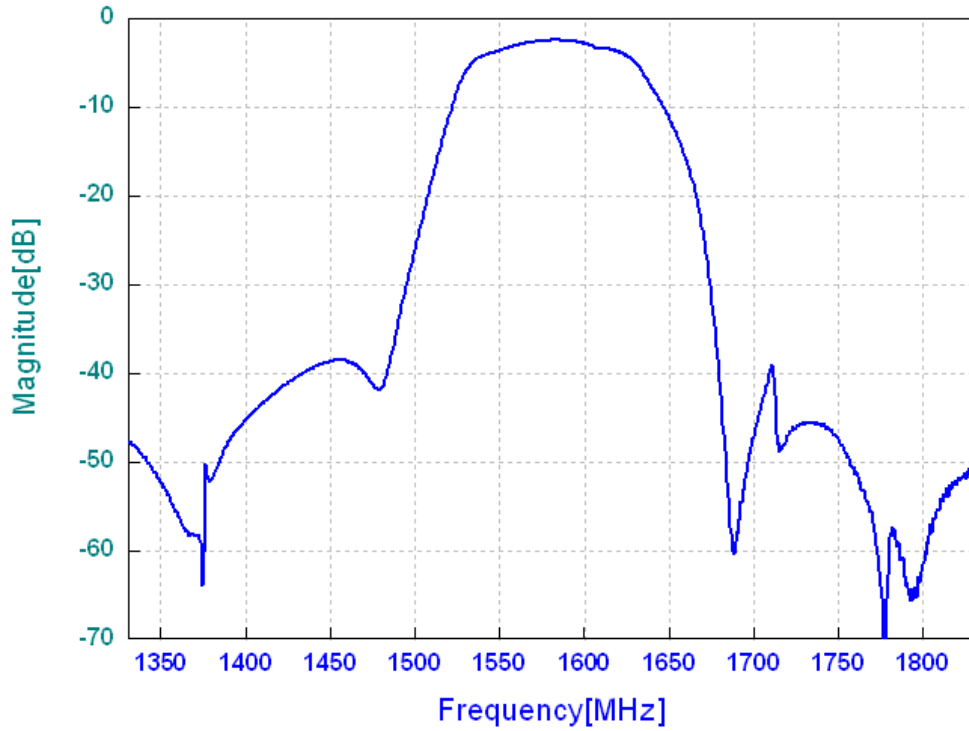
**Testing Environment**



Source & Load Impedance: 50 Ω

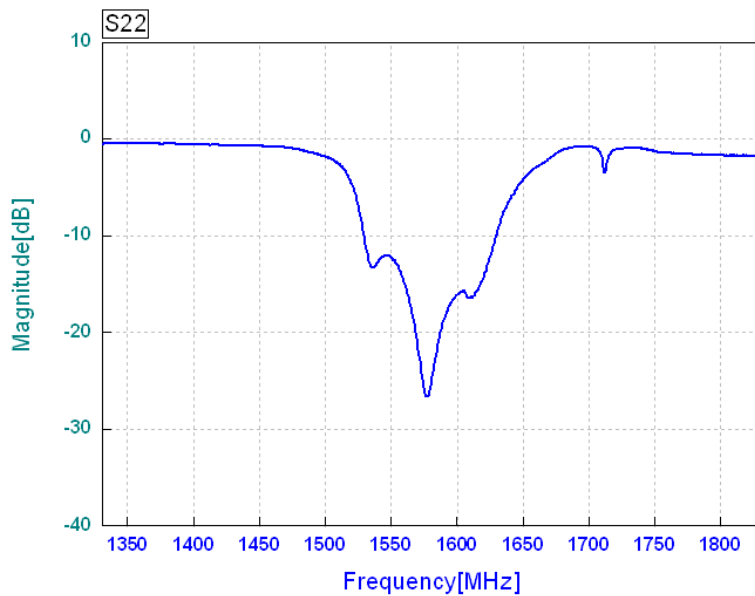
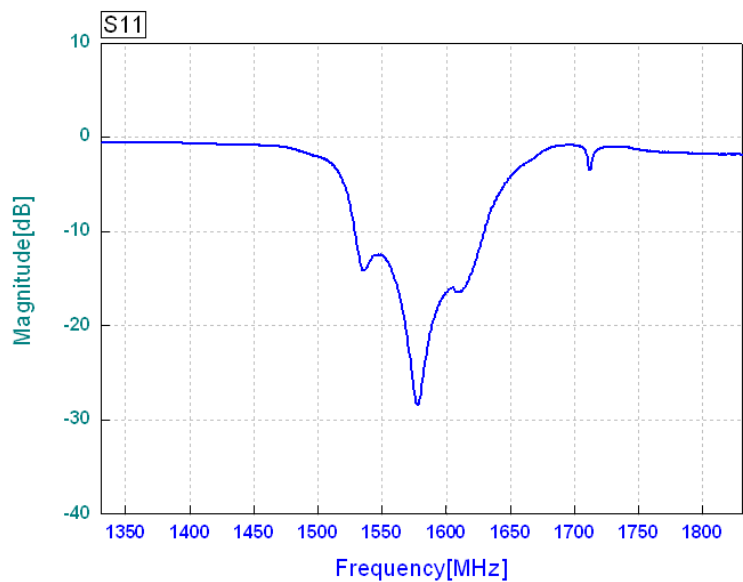
**□ Frequency Characteristics**

Frequency Response





Return Loss



Smith Chart

