



*Total Solution Provider in Saw Device*

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# SA1330AM1

Wireless, RF SAW Filter  
Revision 0: March 2010



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

### Maximum Ratings

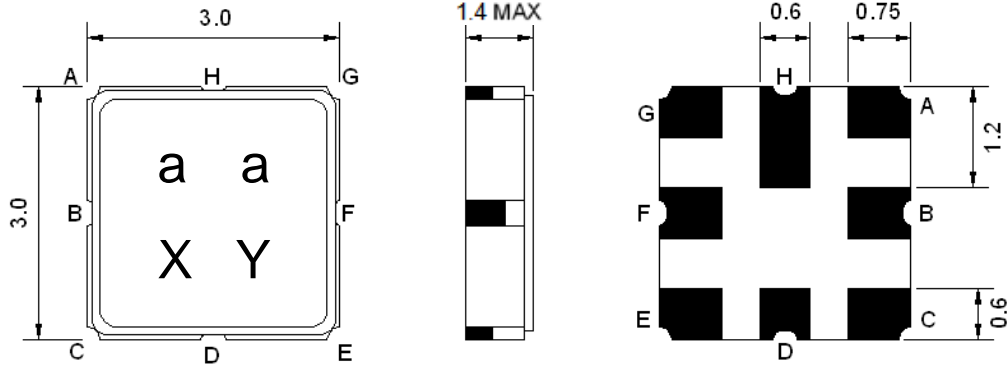
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-25	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	3
Maximum Input Power	dBm	-	-	10
Source Impedance (balanced ended) <sup>(1)</sup>	Ω	-	100	-
Load Impedance (balanced ended) <sup>(1)</sup>	Ω	-	100	-
Package type & size	M1			
Length x Width	mm <sup>2</sup>	-	3.0 x 3.0	-
Height	mm	-	-	1.4

**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	1330.0	-
Insertion Loss within 1326.0 ~ 1334.0 MHz	dB	-	3.2	4.5
Amplitude Ripple within 1326.0 ~ 1334.0 MHz	dB <sub>p-p</sub>	-	0.5	2.0
Absolute Group delay at Fo	ns	-	34	60
Group delay variation within 1326.0 ~ 1334MHz	ns <sub>p-p</sub>	-	8	35
Phase variation within 1326.0 ~ 1334MHz	Deg	-	4	25
<b>Attenuation</b>				
Fo -30 MHz	dB	8	29	-
Fo +30MHz	dB	7	18	-
Fo -60 MHz	dB	30	52	-
Fo +60 MHz	dB	30	38	-
Fo -140 MHz	dB	30	47	-
Fo +140 MHz	dB	30	42	-
Fo -250 MHz	dB	35	44	-
Fo +250MHz	dB	35	44	-

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

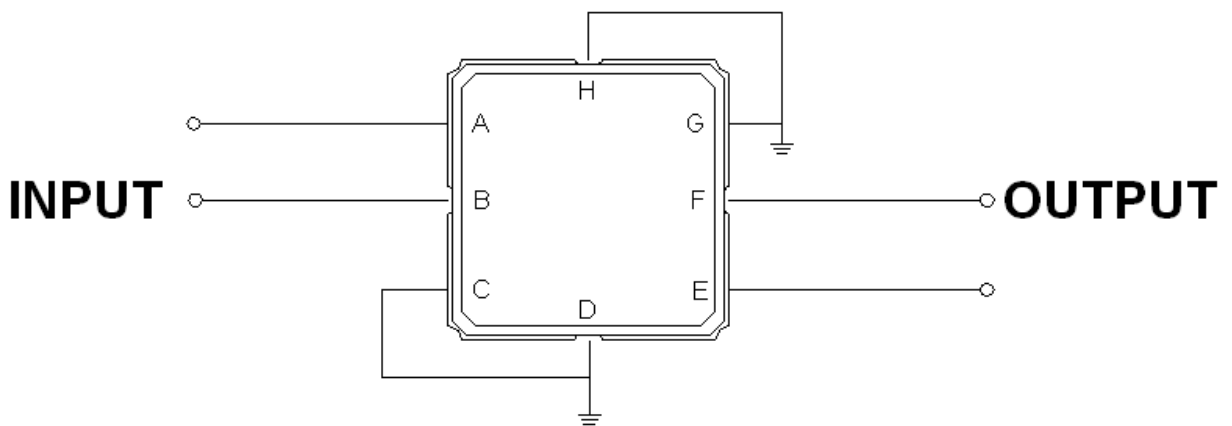
**Package Dimensions**



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

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

**Testing Environment**

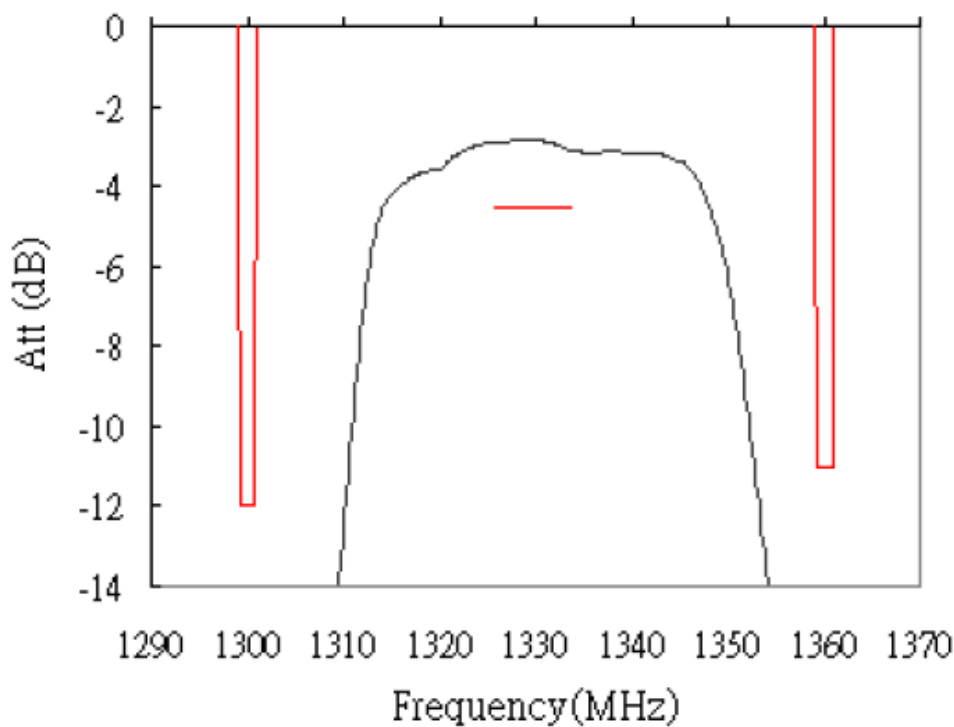
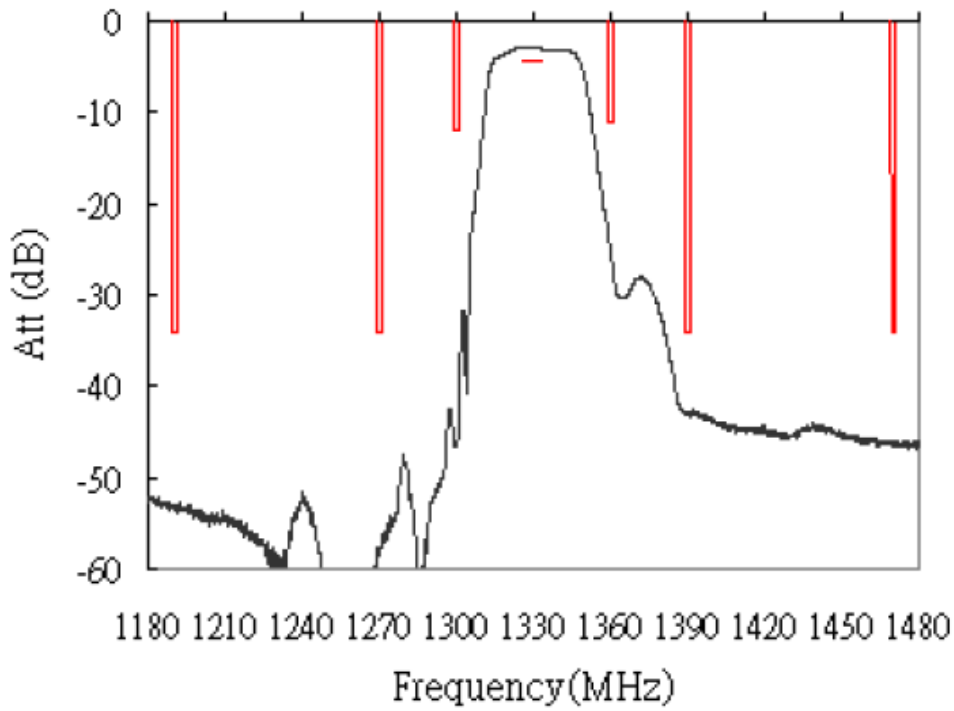


Source Impedance : 100 Ω

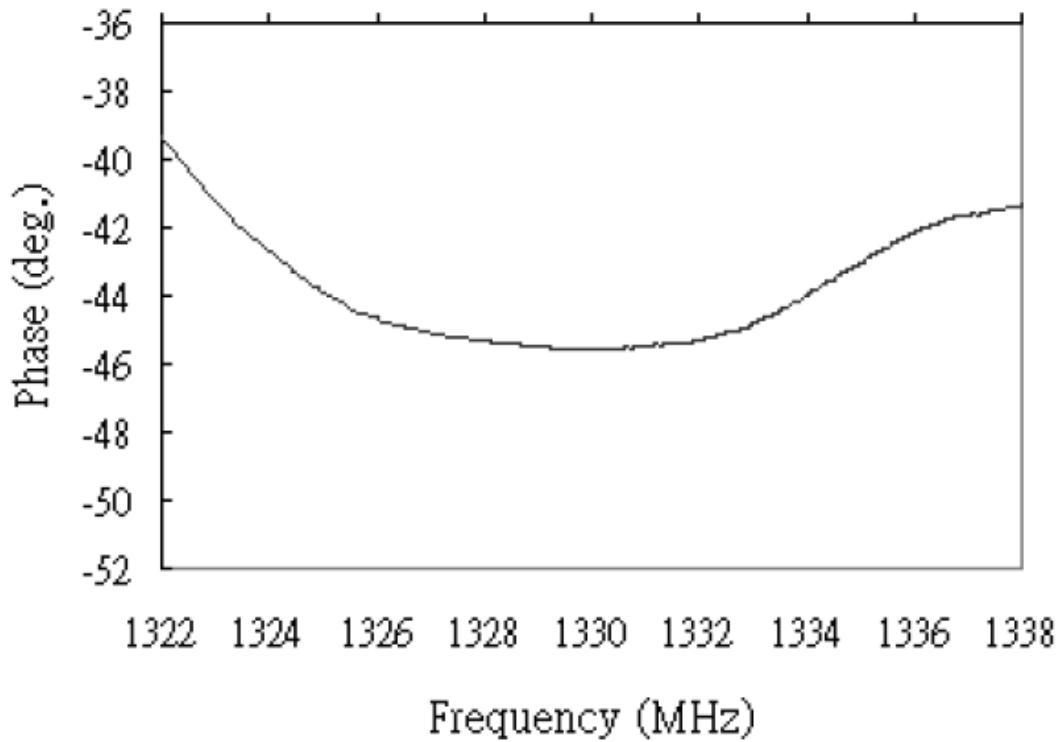
Load Impedance : 100 Ω

**□ Frequency Characteristics**

Frequency Response



Phase Variation



Group delay

