



*Total Solution Provider in Saw Device*

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# SA311AP

Wireless, RF SAW Filter  
Revision 0: October 2003



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

### Maximum Ratings

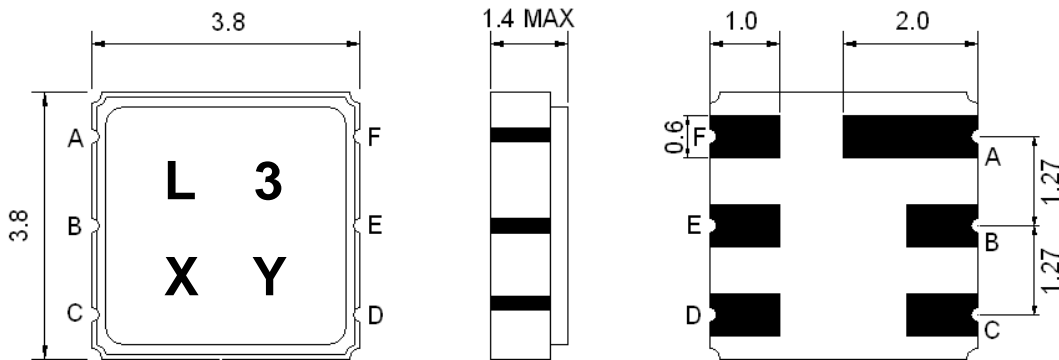
| Parameters Description                         | Unit            | Minimum | Typical   | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range                    | °C              | -10     | -         | +65     |
| Storage Temperature Range                      | °C              | -40     | -         | +85     |
| Maximum DC Voltage                             | V               | -       | -         | 10      |
| Maximum Input Power                            | dBm             | -       | -         | 0       |
| Source Impedance (single ended) <sup>(1)</sup> | Ω               | -       | 150       | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 150       | -       |
| Package type & size                            | P               |         |           |         |
| Length x Width                                 | mm <sup>2</sup> | -       | 3.8 x 3.8 | -       |
| Height   | mm              | -       | -         | 1.4     |

### Electrical Specification

| Parameters Description                      | Unit              | Minimum | Typical | Maximum |
|---|-------------------|---------|---------|---------|
| Center Frequency (Fo)                       | MHz               | -       | 311.0   | -       |
| Insertion Loss within 309.35 ~ 312.65 MHz   | dB                | -       | 1.6     | 3.0     |
| Amplitude Ripple within 309.35 ~ 312.65 MHz | dB <sub>p-p</sub> | -       | 0.6     | 2.0     |
| <b>Attenuation:</b>                         |                   |         |         |         |
| DC ~ Fo-42.8 MHz                            | dB                | 50      | 55      | -       |
| Fo+40.0 ~ Fo+200 MHz                        | dB                | 50      | 55      | -       |

**Notes :** (1) ) With Matching Network (Ref. Testing Environment Circuit as shown below).  
Those impedances could be modified with different impedance values and/or structures, if necessary.

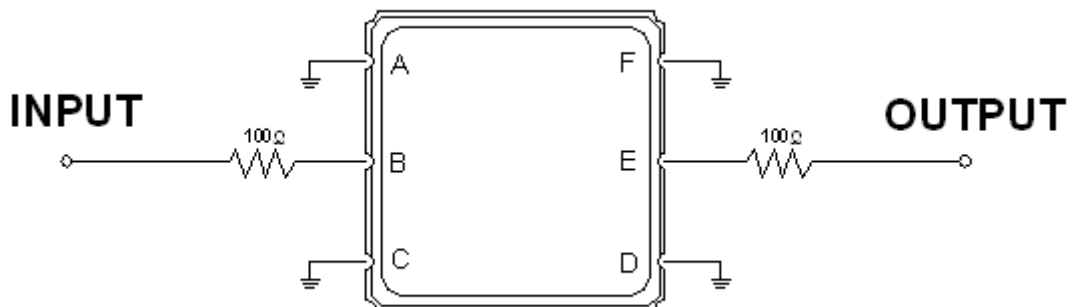
**Package Dimensions**



| Marking Descriptions |                      |
|----------------------|----------------------|
| L                    | Wireless Application |
| 3                    | Series Number        |
| X                    | Date Code(Year)      |
| Y                    | Date Code(Month)     |

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

**Testing Environment**



Source & Load Impedance: 50 Ω

□ Frequency Characteristics

Frequency Response

