



*Total Solution Provider in Saw Device*

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# SF-126801-S21

Wireless, Balanced RF SAW Filter  
Revision 0: September 2013



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

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## □ Electrical Characteristics

### Maximum Ratings

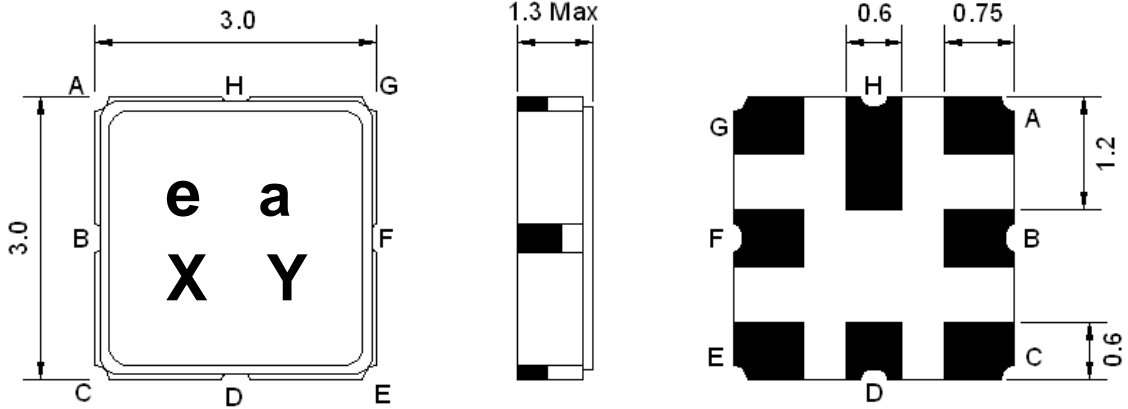
| Parameters Description                     | Unit            | Minimum | Typical   | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range                | °C              | -40     | -         | +85     |
| Storage Temperature Range                  | °C              | -40     | -         | +85     |
| Maximum DC Voltage                         | V               | -       | -         | 3       |
| Maximum Input Power                        | dBm             | -       | -         | 10      |
| Source Impedance (balanced) <sup>(1)</sup> | Ω               | -       | 200       | -       |
| Load Impedance (balanced) <sup>(1)</sup>   | Ω               | -       | 200       | -       |
| Package type & size                        | S21             |         |           |         |
| 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               | -       | 1268.0  | -       |
| Insertion Loss within 1258.0 ~ 1278.0 MHz     | dB                | -       | 2.5     | 4.0     |
| Amplitude Ripple within 1258.0 ~ 1278.0 MHz   | dB <sub>p-p</sub> | -       | 1.0     | 2.0     |
| Group Delay Ripple within 1258.0 ~ 1278.0 MHz | ns <sub>p-p</sub> | -       | 11      | 50      |
| Return Loss within 1258.0 ~ 1278.0 MHz        | dB                | 8       | 11      | -       |
| <b>Attenuation:</b>                           |                   |         |         |         |
| 10.0 ~ 970.0 MHz                              | dB                | 42      | 47      | -       |
| 1420.0 ~ 2000.0 MHz                           | dB                | 44      | 50      | -       |
| 2000.0 ~ 2400.0 MHz                           | dB                | 45      | 55      | -       |

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

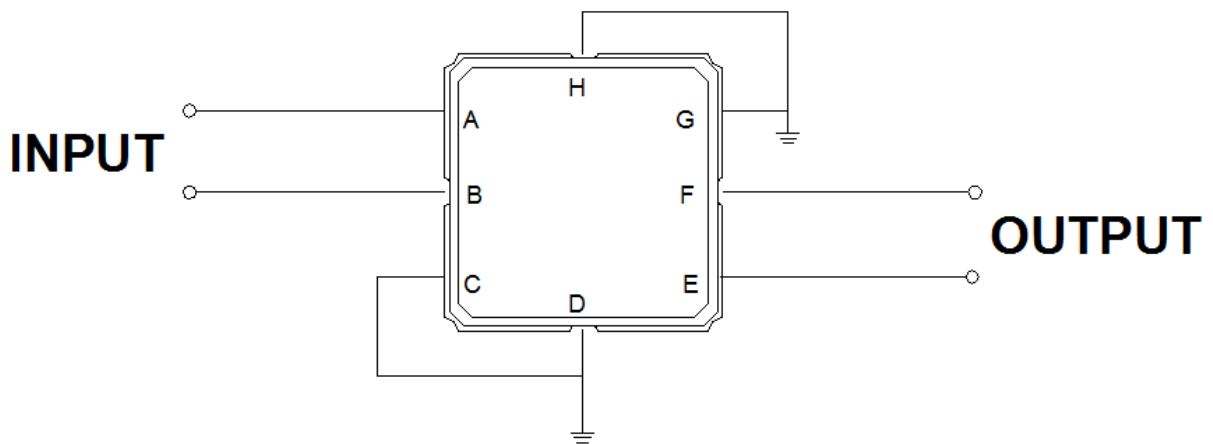
**Package Dimensions**



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

| Pin Description |                 |
|-----------------|-----------------|
| C,D,G,H         | Ground          |
| A,B             | Balanced Input  |
| E,F             | Balanced Output |

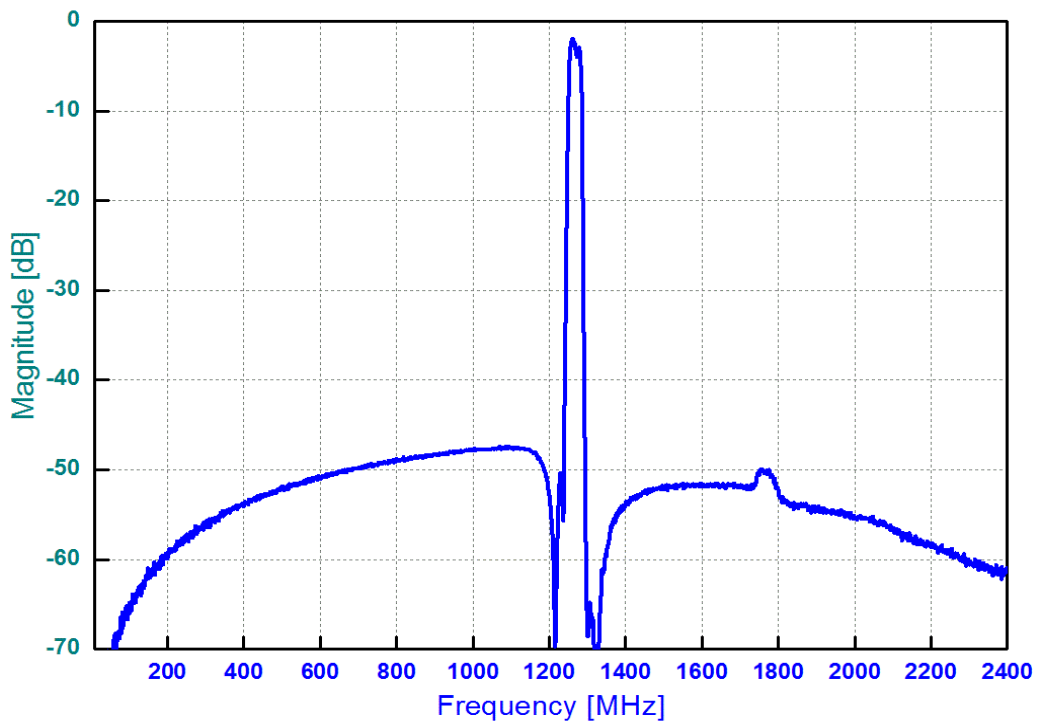
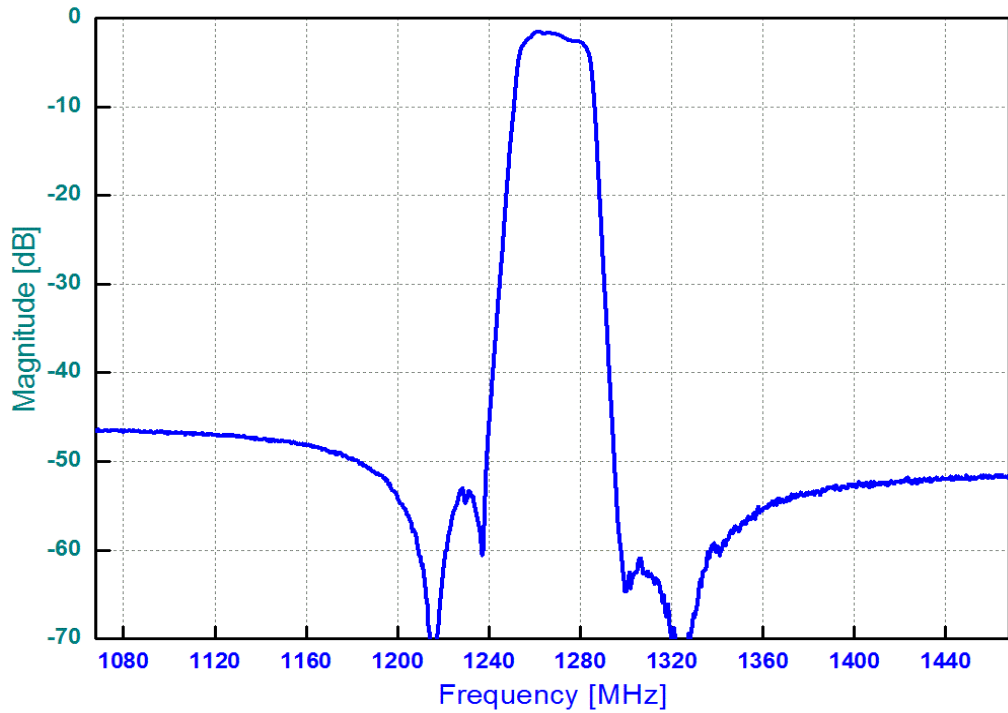
**Testing Environment**



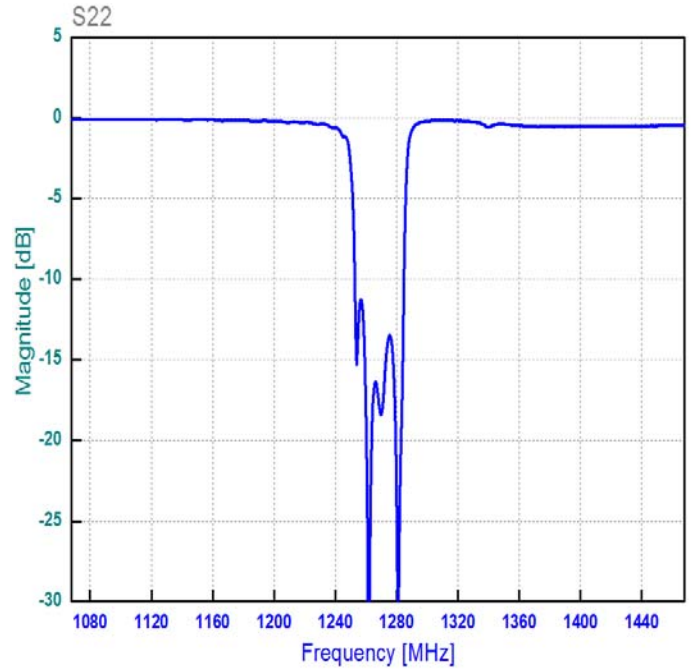
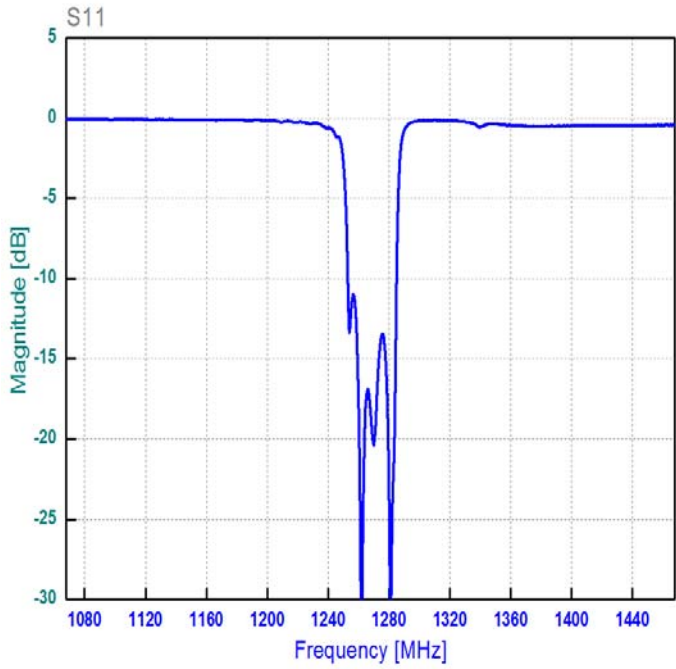
Source & Load Impedance: 200 Ω

### □ Frequency Characteristics

Frequency Response



Return Loss



Smith Chart

