

# SF-179502-S27

ISM-Band, RF SAW Filter  
Revision 0: May 2017



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-

## □ Electrical Characteristics

### Maximum Ratings

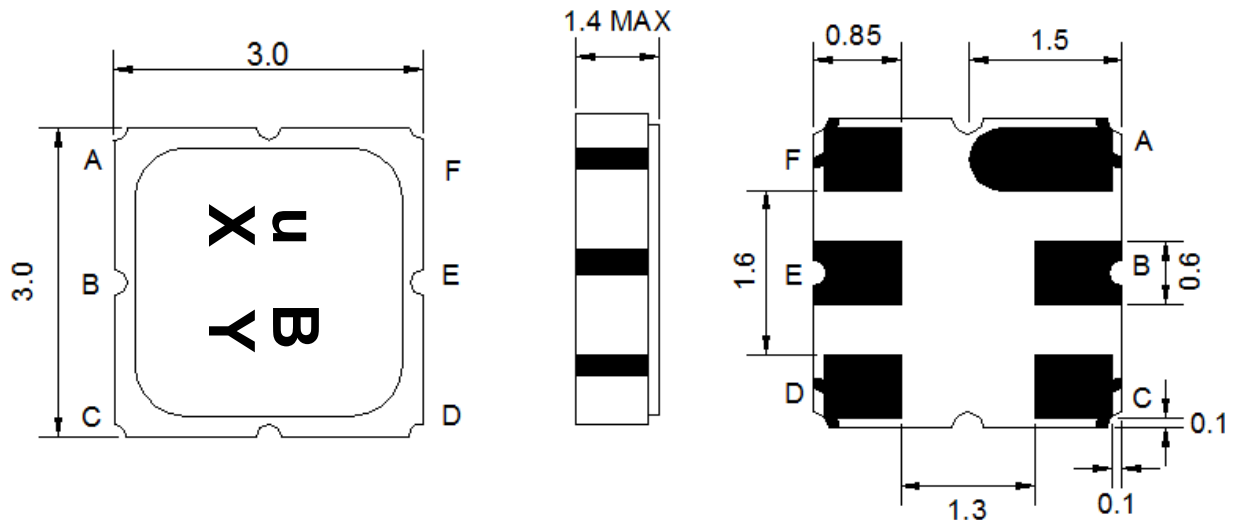
| Parameters Description                       | Unit | Minimum | Typical   | Maximum |
|----------------------------------------------|------|---------|-----------|---------|
| Operating Temperature Range                  | °C   | -40     | -         | +85     |
| Storage Temperature Range                    | °C   | -40     | -         | +85     |
| Maximum DC Voltage                           | V    | -       | -         | 3       |
| Maximum Input Power                          | dBm  | -       | -         | 10      |
| Source Impedance (unbalanced) <sup>(1)</sup> | Ω    | -       | 50        | -       |
| Load Impedance (unbalanced) <sup>(1)</sup>   | Ω    | -       | 50        | -       |
| Package type & size                          | S27  |         |           |         |
| Length x Width                               | -    | -       | 3.0 x 3.0 | -       |
| Height                                       | mm   | -       | -         | 1.4     |

### Electrical Specification

| Parameters Description                             | Unit              | Minimum | Typical | Maximum |
|----------------------------------------------------|-------------------|---------|---------|---------|
| Center Frequency <b>Fc</b>                         | MHz               | -       | 1795.0  | -       |
| Insertion loss within 1787.5 ~1802.5 MHz <b>IL</b> | dB                | -       | 1.5     | 3.5     |
| Amplitude ripple (p-p) within 1787.5 ~ 1802.5 MHz  | dB <sub>p-p</sub> | -       | 0.2     | 2.0     |
| Group Delay within 1787.5 ~ 1802.5 MHz             | ns                | -       | 15.0    | 40.0    |
| Return Loss within 1787.5 ~ 1802.5 MHz             | dB                | 10      | 15      | -       |
| Attenuation (Reference level from 0 dB)            |                   |         |         |         |
| 800.0 ~ 1730.0 MHz                                 | dB                | 30      | 37      | -       |
| 1730.0 ~ 1740.0 MHz                                | dB                | 20      | 37      | -       |
| 1740.0 ~ 1755.0 MHz                                | dB                | 6       | 17      | -       |
| 1835.0 ~ 1845.0 MHz                                | dB                | 6       | 19      | -       |
| 1845.0 ~ 2800.0 MHz                                | dB                | 30      | 41      | -       |

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

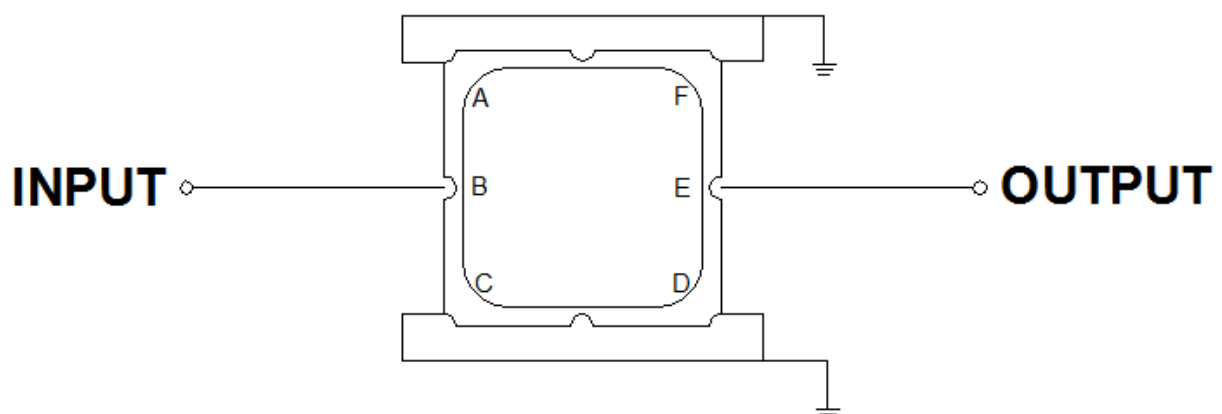
## Package Dimensions



| Marking Descriptions |                      |
|----------------------|----------------------|
| u                    | ISM-Band Application |
| B                    | Series Number        |
| X                    | Date Code(Year)      |
| Y                    | Date Code(Month)     |

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

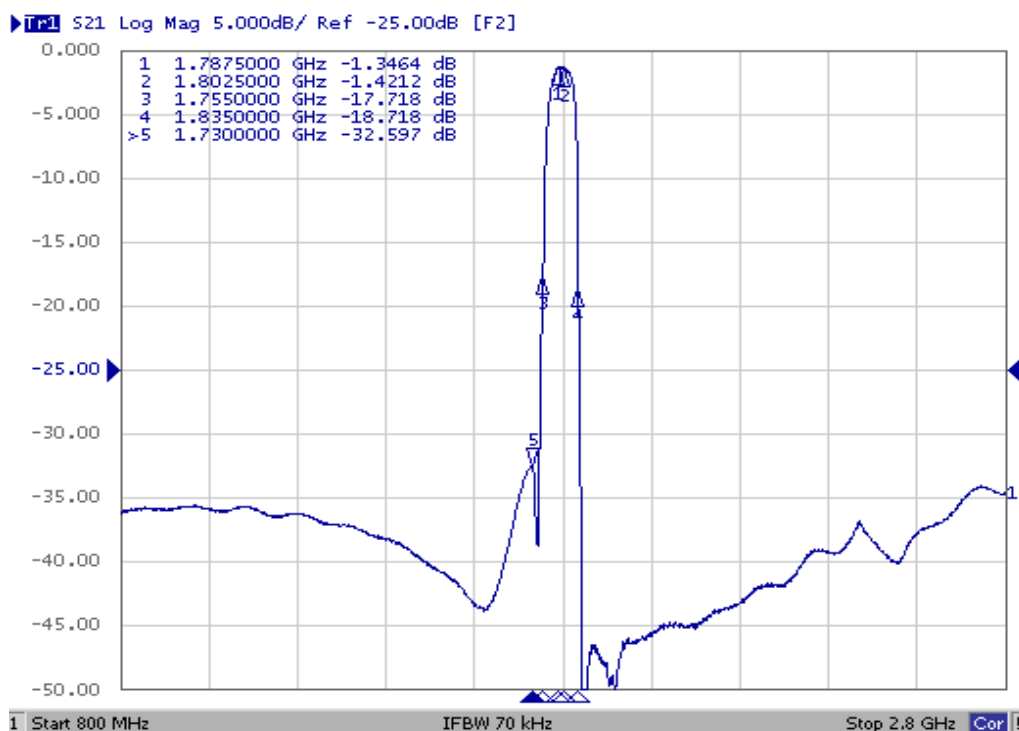
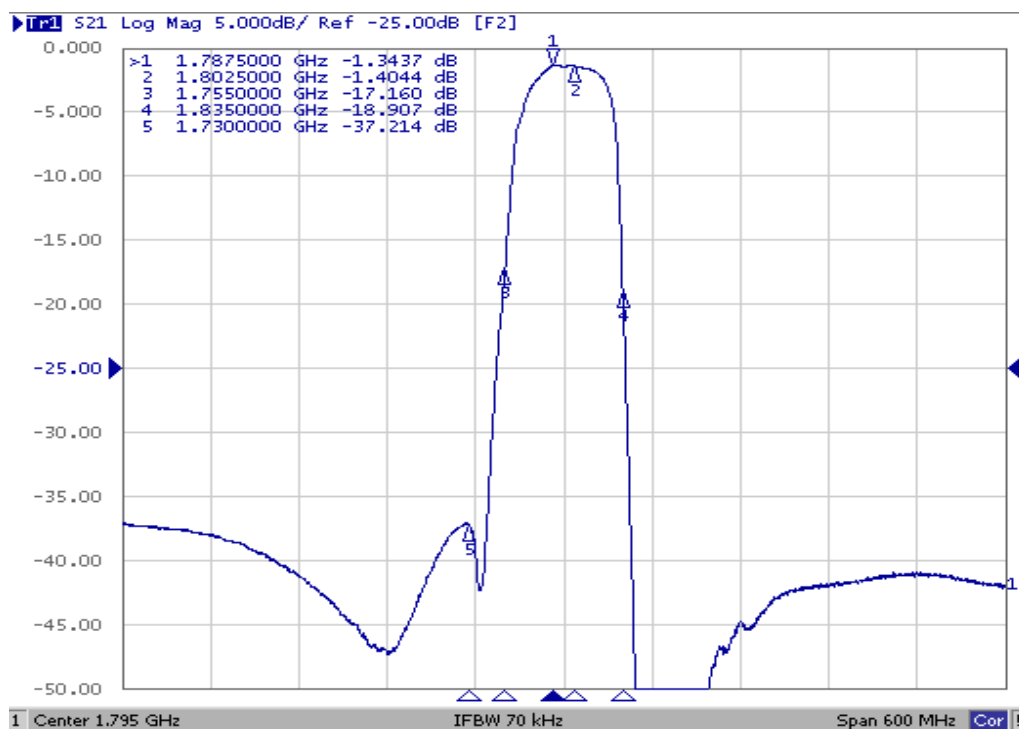
## Testing Environment



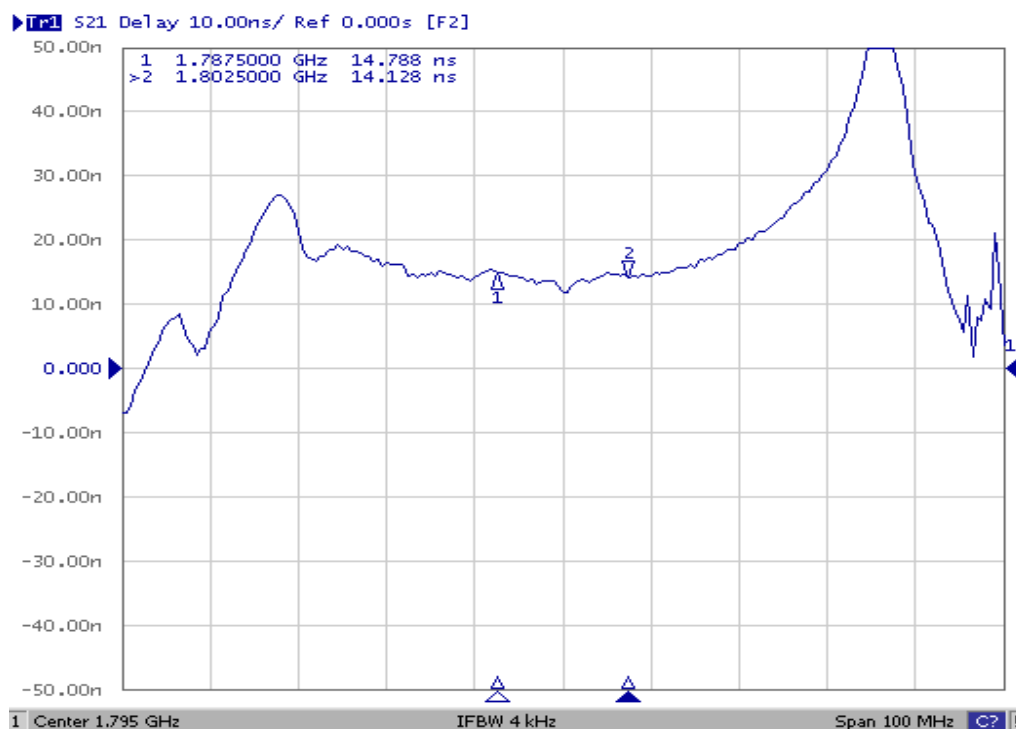
Source & Load Impedance: 50  $\Omega$

### Frequency Characteristics

#### Frequency Response



### Group Delay



### Return Loss

