



*Total Solution Provider in Saw Device*

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# SF-259302-C27

Band41, RF SAW Filter  
Revision 1 : May 2019

MSL 3 Device



- ☐ Electrical Characteristics
  - ☐ Package Dimensions
  - ☐ Testing Environment
  - ☐ Frequency Characteristics
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**SAWNICS Inc.**

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## Revision History

[illegible]

## □ Electrical Characteristics

### Maximum Ratings

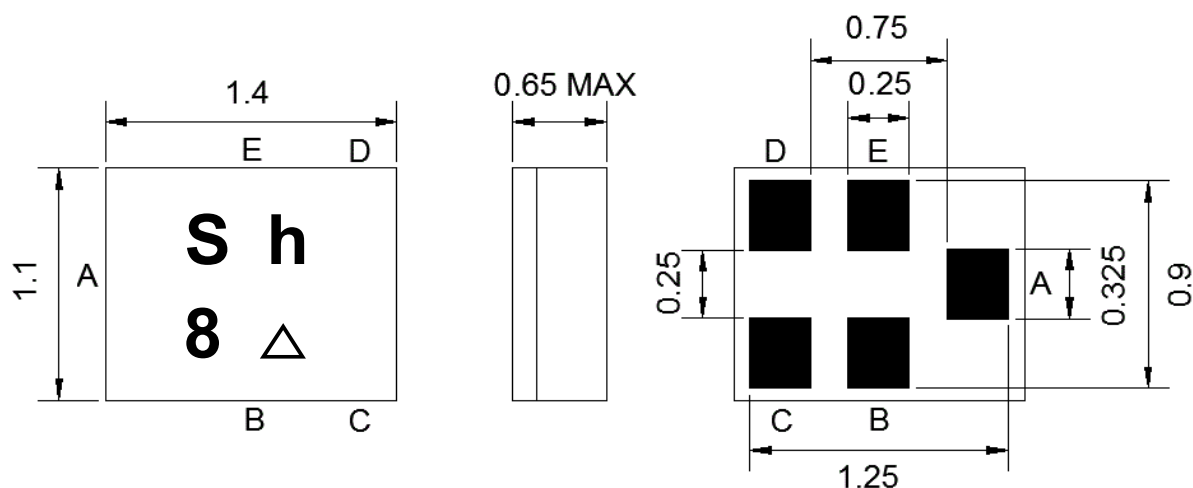
| Parameters Description                      | Unit            | Minimum                   | Typical   | Maximum |
|---------------------------------------------|-----------------|---------------------------|-----------|---------|
| Operating Temperature Range                 | °C              | -10                       | -         | +85     |
| Storage Temperature Range                   | °C              | -40                       | -         | +85     |
| Maximum DC Voltage                          | V               | 3                         |           |         |
| Maximum Input Power                         | dBm             | 29dBm, Ta=+50℃, 5000h, CW |           |         |
| Source Impedance (Unbalance) <sup>(1)</sup> | Ω               | -                         | 50        | -       |
| Load Impedance (Unbalance) <sup>(1)</sup>   | Ω               | -                         | 50        | -       |
| Package type & size                         | C27             |                           |           |         |
| Length x Width                              | mm <sup>2</sup> | -                         | 1.4 x 1.1 | -       |
| Height                                      | mm              | -                         | -         | 0.65    |

**Electrical Specification**

| Parameters Description                      | Unit              | Minimum | Typical | Maximum | Remarks                  |
|---------------------------------------------|-------------------|---------|---------|---------|--------------------------|
| Center Frequency (Fo)                       | MHz               | -       | 2593.0  | -       | -                        |
| Insertion Loss within 2496.0 ~ 2501.0 MHz   | dB                | -       | 3.0     | 4.3     | -                        |
| 2501.0 ~ 2690.0 MHz                         | dB                | -       | 2.6     | 3.8     | -                        |
| 2500.0 ~ 2680.0 MHz                         | dB                | -       | 2.6     | 3.8     | -                        |
| 2680.0 ~ 2690.0 MHz                         | dB                | -       | 2.6     | 3.5     | -                        |
| 2555.0 ~ 2655.0 MHz                         | dB                | -       | 1.8     | 2.8     | -                        |
| 2545.0 ~ 2575.0 MHz                         | dB                | -       | 1.4     | 2.5     | -                        |
| 2620.0 ~ 2690.0 MHz                         | dB                | -       | 2.6     | 3.3     | -                        |
| Amplitude Ripple within 2496.0 ~ 2501.0 MHz | dB <sub>p-p</sub> | -       | 0.7     | 2.6     | -                        |
| 2501.0 ~ 2690.0 MHz                         | dB <sub>p-p</sub> | -       | 1.3     | 2.4     | -                        |
| <b>Attenuation:</b>                         |                   |         |         |         |                          |
| 0.0 ~ 916.0 MHz                             | dB                | 40      | 46      | -       | -                        |
| 925.0 ~ 960.0 MHz                           | dB                | 37      | 44      | -       | -                        |
| 1226.57 ~ 1228.63 MHz                       | dB                | 27      | 37      | -       | -                        |
| 1242.42 ~ 1249.14 MHz                       | dB                | 27      | 36      | -       | -                        |
| 1248.0 ~ 1564.0 MHz                         | dB                | 22      | 28      | -       | -                        |
| 1559.0 ~ 1605.89 MHz                        | dB                | 22      | 28      | -       | -                        |
| 1615.0 ~ 2400.0 MHz                         | dB                | 12      | 16      | -       | -                        |
| 1710.0 ~ 1785.0 MHz                         | dB                | 17      | 23      | -       | -                        |
| 1805.0 ~ 1850.0 MHz                         | dB                | 17      | 21      | -       | -                        |
| 1880.0 ~ 1920.0 MHz                         | dB                | 15      | 20      | -       | -                        |
| 1920.0 ~ 1980.0 MHz                         | dB                | 13      | 18      | -       | -                        |
| 2110.0 ~ 2170.0 MHz                         | dB                | 10      | 14      | -       | -                        |
| 2401.0 ~ 2468.0 MHz                         | dB                | 20      | 35      | -       | WLAN Ch1 -10 (18MHz –BW) |
| 2451.0 ~ 2473.0 MHz                         | dB                | 7       | 25      | -       | WLAN Ch11 (18MHz –BW)    |
| 2456.0 ~ 2478.0 MHz                         | dB                | 4       | 11      | -       | WLAN Ch12 (18MHz –BW)    |
| 2461.0 ~ 2483.0 MHz                         | dB                | 3       | 6.7     | -       | WLAN Ch13 (18MHz –BW)    |
| 2775.0 ~ 4992.0 MHz                         | dB                | 15      | 19      | -       | -                        |
| 4992.0 ~ 5380.0 MHz                         | dB                | 25      | 33      | -       | -                        |
| 5381.0 ~ 7487.0 MHz                         | dB                | 25      | 37      | -       | -                        |
| 7488.0 ~ 8070.0 MHz                         | dB                | 25      | 38      | -       | -                        |
| VSWR within 2496.0 ~ 2501.0 MHz             | -                 | -       | 1.4     | 2.0     | -                        |
| 2501.0 ~ 2690.0 MHz                         | -                 | -       | 1.6     | 2.0     | -                        |

**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

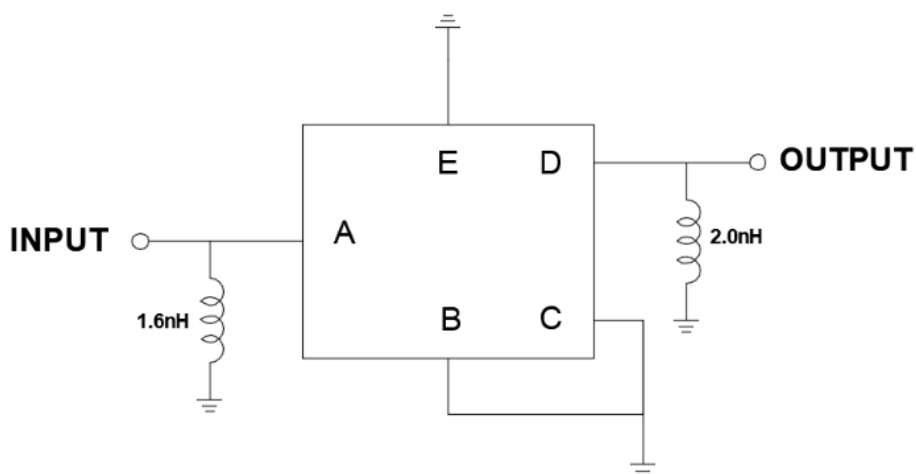
## Package Dimensions



| Marking Descriptions |                       |
|----------------------|-----------------------|
| S                    | SAWNICS               |
| h                    | Band Class            |
| 8                    | Series Number         |
| △                    | Date Code(Year+Month) |

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

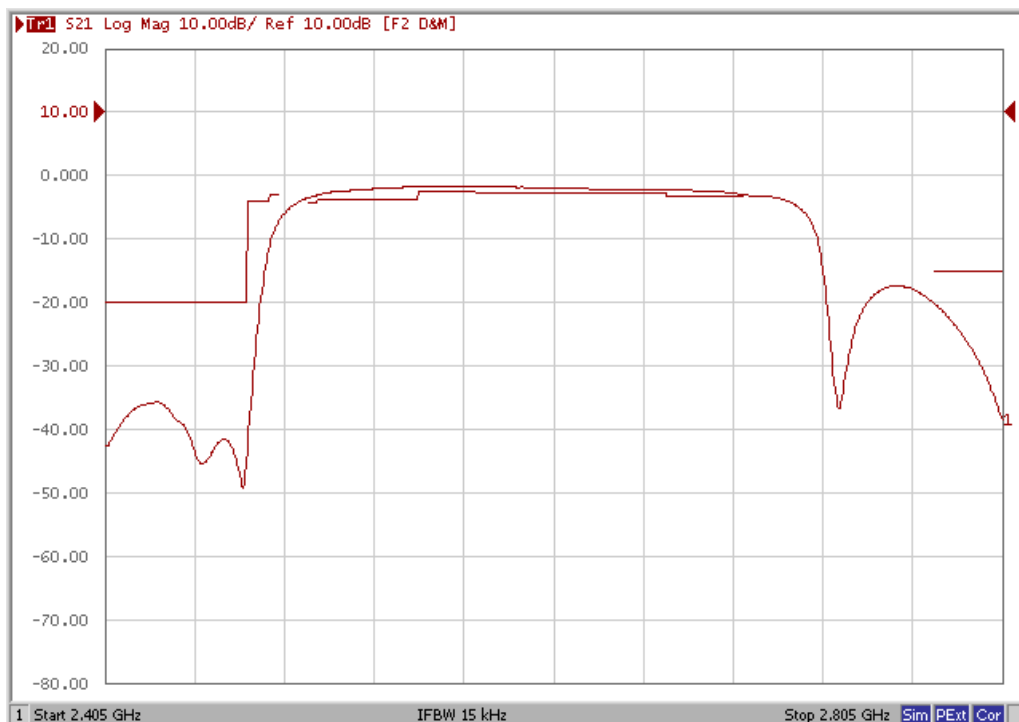
## Testing Environment



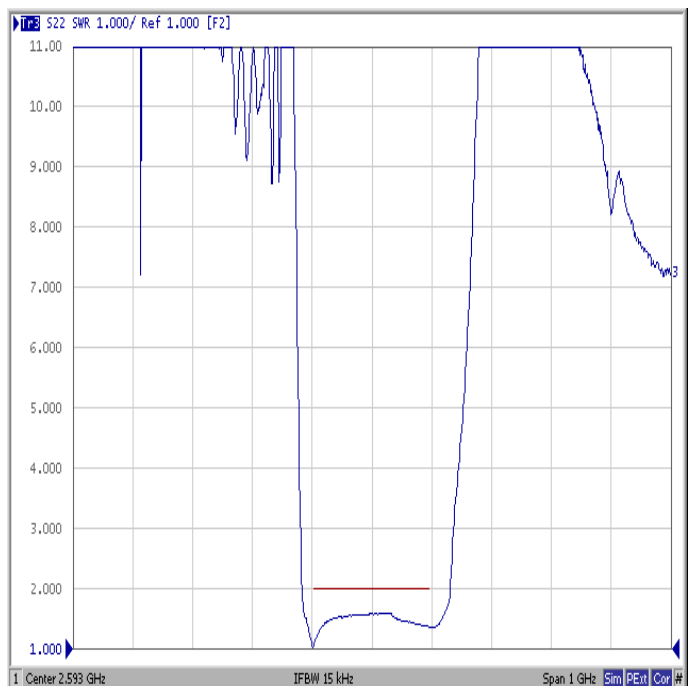
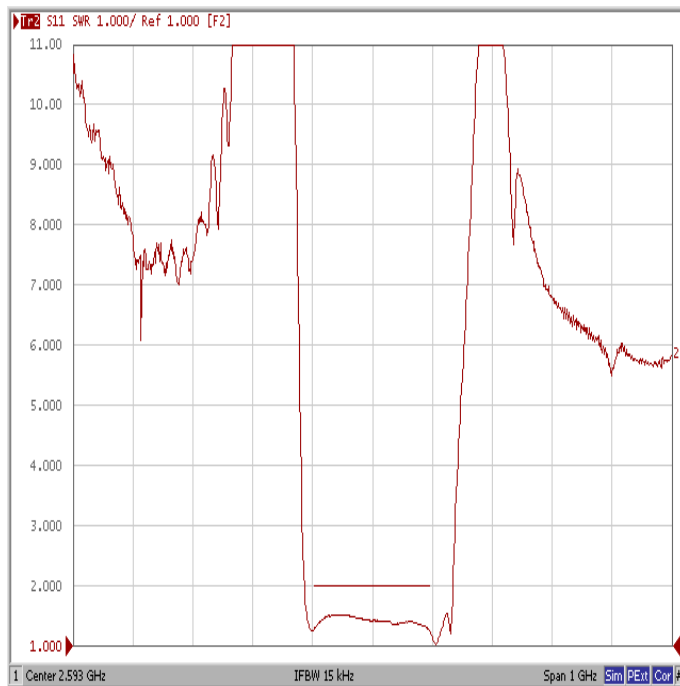
Source & Load Impedance: 50 Ω

### □ Frequency Characteristics

#### Frequency Response



### VSWR



### Smith Chart

