



Total Solution Provider in Saw Device

SF-153901-S20

Wireless, RF SAW Filter
Revision 0: February 2014



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

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□ Electrical Characteristics

Maximum Ratings

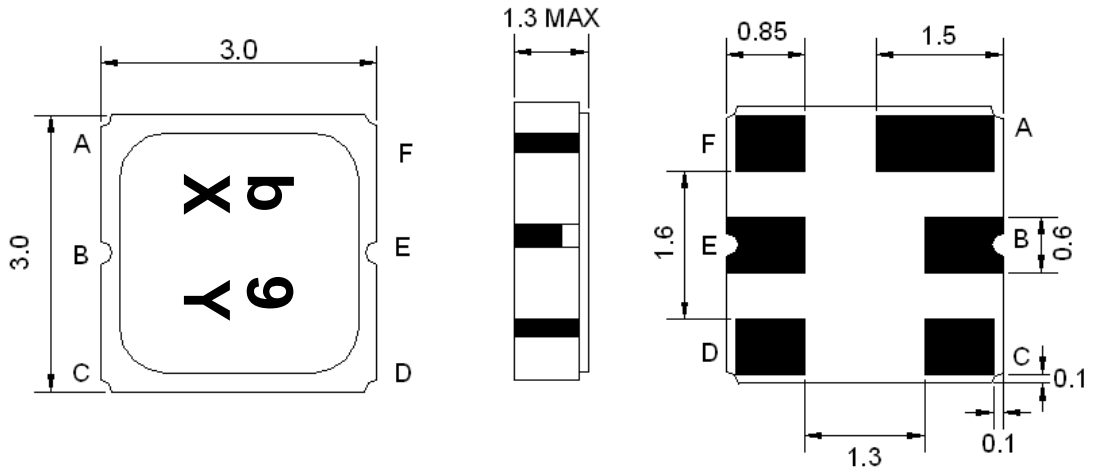
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range | °C | -40 | - | +85 |
| Storage Temperature Range | °C | -40 | - | +85 |
| Maximum DC Voltage | V | - | - | 0 |
| Maximum Input Power | dBm | - | - | 15 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | S20 | | | |
| Length x Width | mm ² | - | 3.0 x 3.0 | - |
| Height | mm | - | - | 1.3 |

Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 1539.0 | - |
| Insertion Loss within 1518.0~1560.0MHz | dB | - | 2.0 | 3.5 |
| Amplitude Ripple within 1518.0~1560.0MHz | dB _{p-p} | - | 0.9 | 2.0 |
| Return Loss within 1518.0~1560.0MHz | dB | 10 | 15 | - |
| Attenuation | | | | |
| D.C ~ 1000.0 MHz | dB | 28 | 30 | - |
| 1000.0 ~ 1480.0 MHz | dB | 28 | 30 | - |
| 1480.0 ~ 1490.0 MHz | dB | 20 | 28 | - |
| 1575.0 MHz | dB | 5 | 22 | - |
| 1600.0 ~ 1650.0 MHz | dB | 30 | 35 | - |
| 1650.0 ~ 1785.0 MHz | dB | 30 | 34 | - |
| 1785.0 ~ 2200.0 MHz | dB | 30 | 35 | - |
| 2200.0 ~ 2250.0 MHz | dB | 30 | 41 | - |
| 2250.0 ~ 4000.0 MHz | dB | 4 | 7 | - |

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

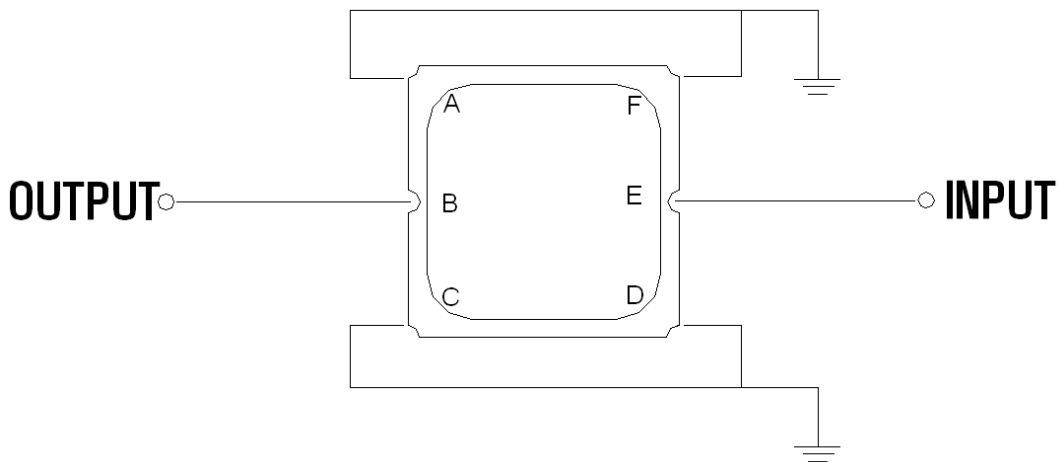
Package Dimensions



| Marking Descriptions | |
|----------------------|----------------------|
| b | Wireless Application |
| 9 | Series Number |
| X | Date Code(Year) |
| Y | Date Code(Month) |

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

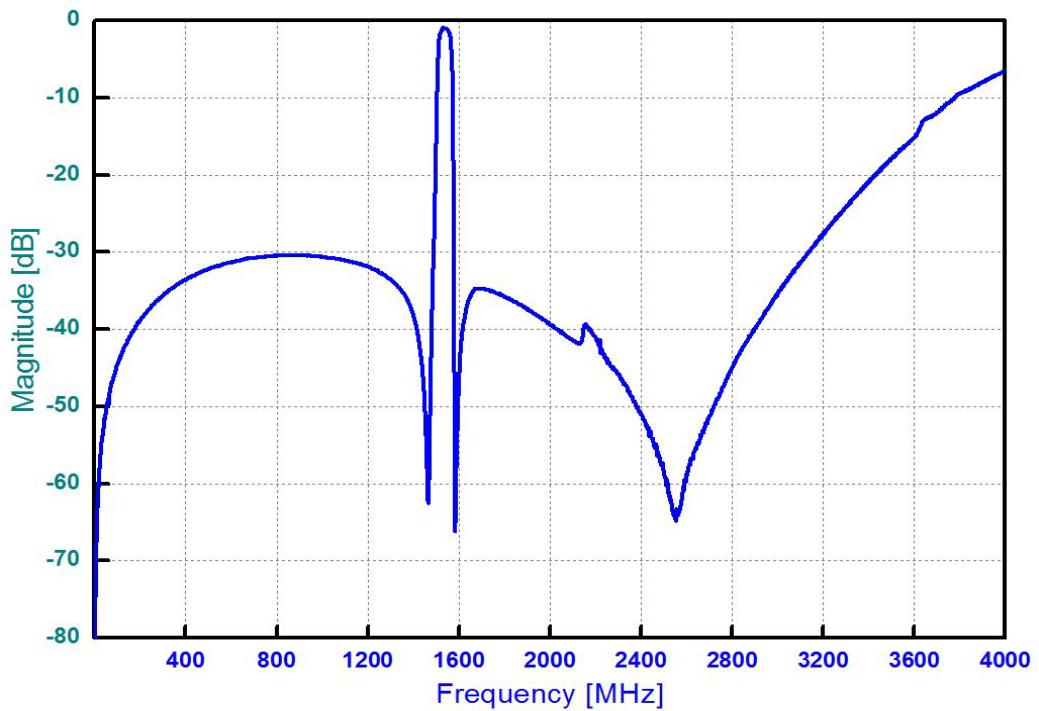
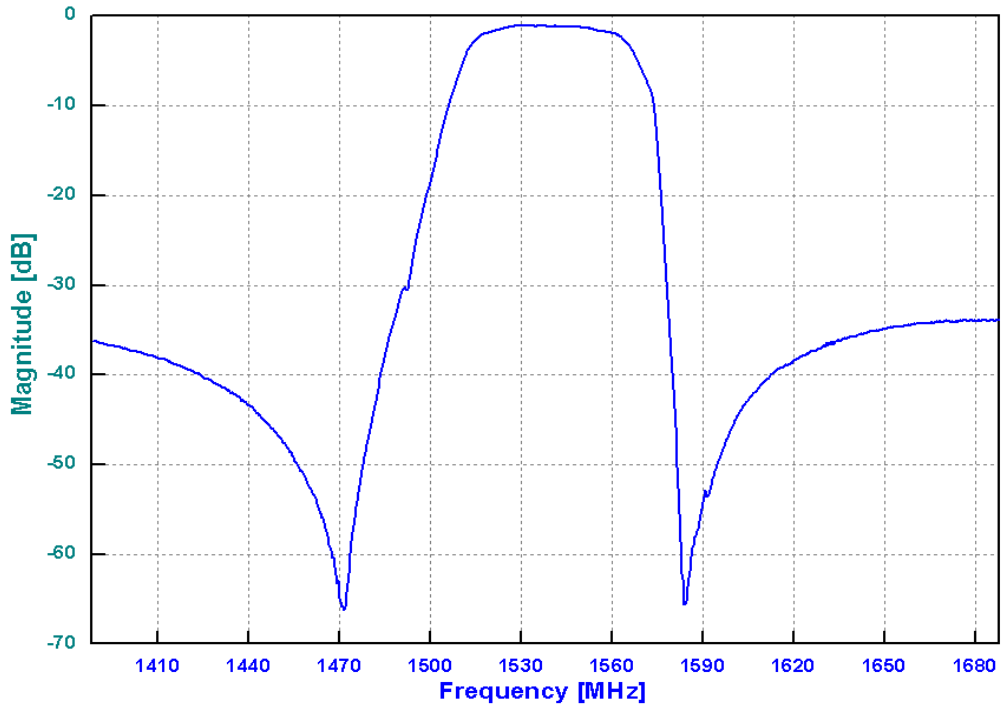
Testing Environment



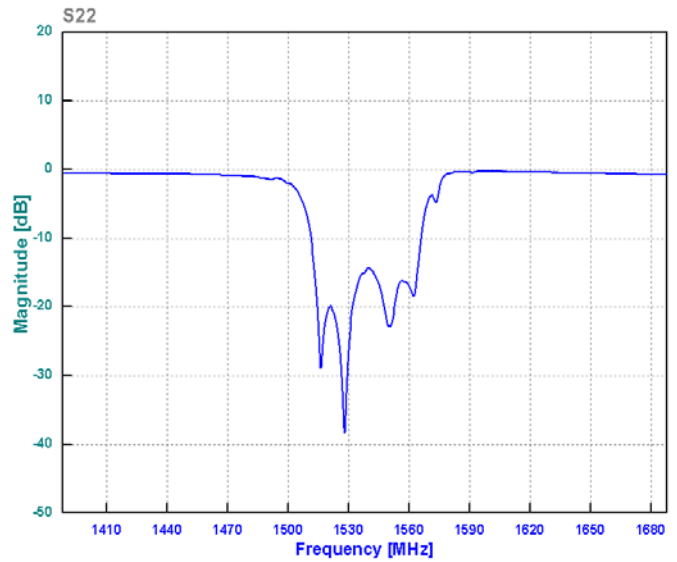
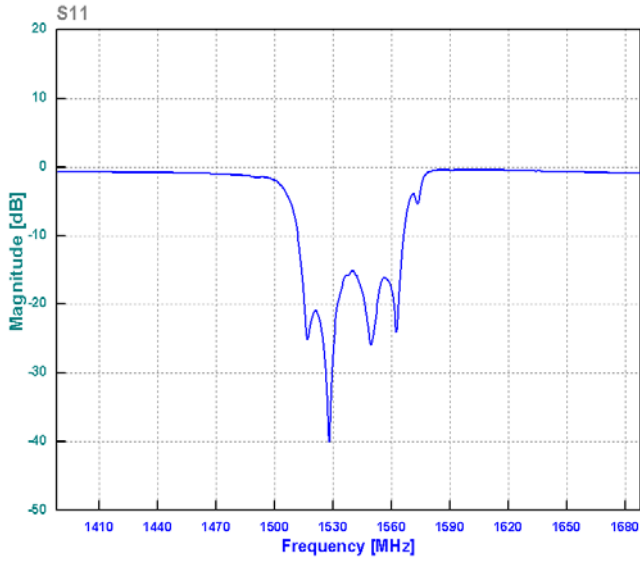
Source & Load Impedance: 50 Ω

□ Frequency Characteristics

Frequency Response



Return Loss



Smith Chart

