



Total Solution Provider in Saw Device

SF-046002-S31

Wireless, RF SAW Filter
Revision 0: June 2013



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

SAWNICS Inc.

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / www.sawnics.com

□ Electrical Characteristics

Maximum Ratings

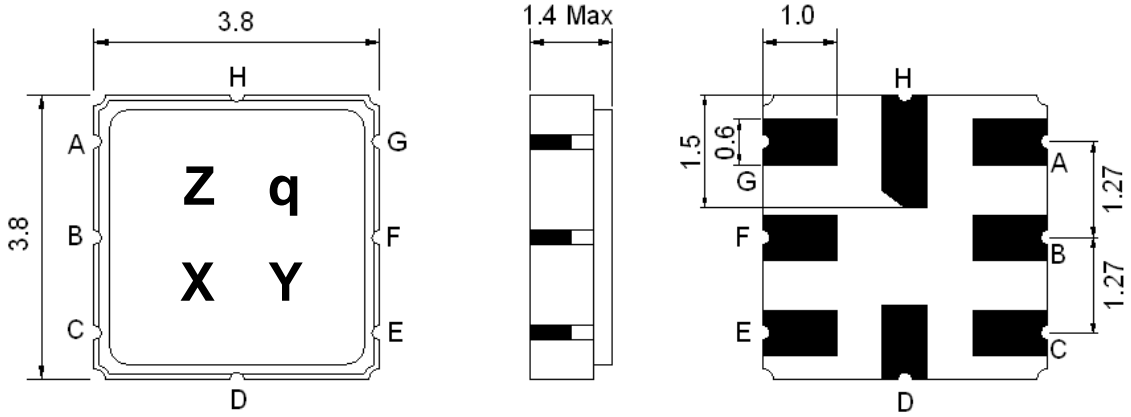
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|----------|---------|
| Operating Temperature Range | °C | -40 | - | +60 |
| Storage Temperature Range | °C | -40 | - | +85 |
| Maximum DC Voltage | V | - | - | 5 |
| Maximum Input Power | dBm | - | - | 10 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | S31 | | | |
| Length x Width | mm ² | - | 3.8 x3.8 | - |
| Height | mm | - | - | 1.4 |

Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|---|-------------------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 460.0 | - |
| Insertion Loss within 450.0 ~ 470.0 MHz | dB | - | 2.3 | 3.2 |
| Amplitude Ripple within 450.0 ~ 470.0 MHz | dB _{p-p} | - | 0.5 | 1.5 |
| Attenuation: | | | | |
| 0.1 ~ 300.0 MHz | dB | 40 | 50 | - |
| 300.0 ~ 380.0 MHz | dB | 40 | 52 | - |
| 380.0 ~ 430.0 MHz | dB | 15 | 25 | - |
| 504.825 ~ 524.825 MHz | dB | 20 | 28 | - |
| 559.65 ~ 579.65 MHz | dB | 40 | 55 | - |
| 669.3 ~ 689.3 MHz | dB | 35 | 46 | - |
| 689.3 ~ 1000.0 MHz | dB | 35 | 48 | - |
| Input Return Loss within 450.0 ~ 470.0 MHz | dB | 10 | 17 | - |
| Output Return Loss within 450.0 ~ 470.0 MHz | dB | 10 | 17 | - |

Notes : (1) No Matching Network .

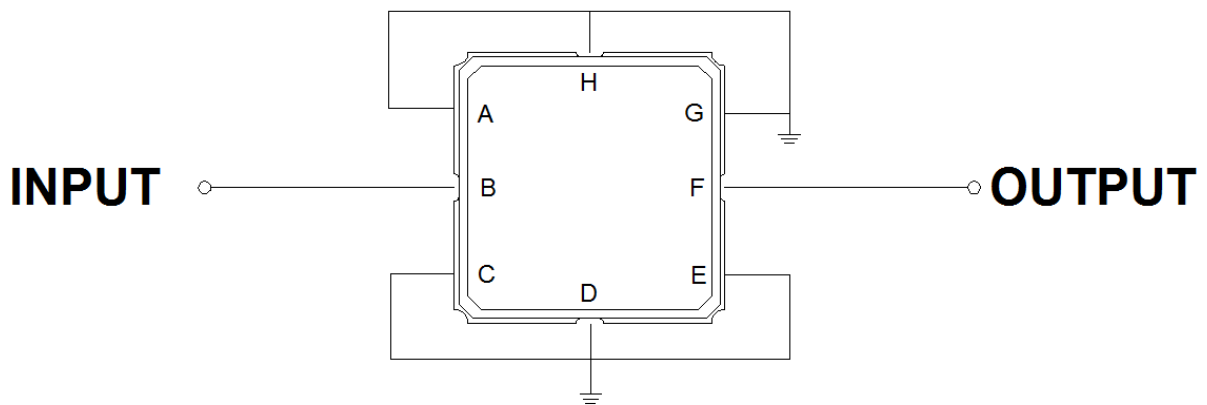
Package Dimensions



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

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

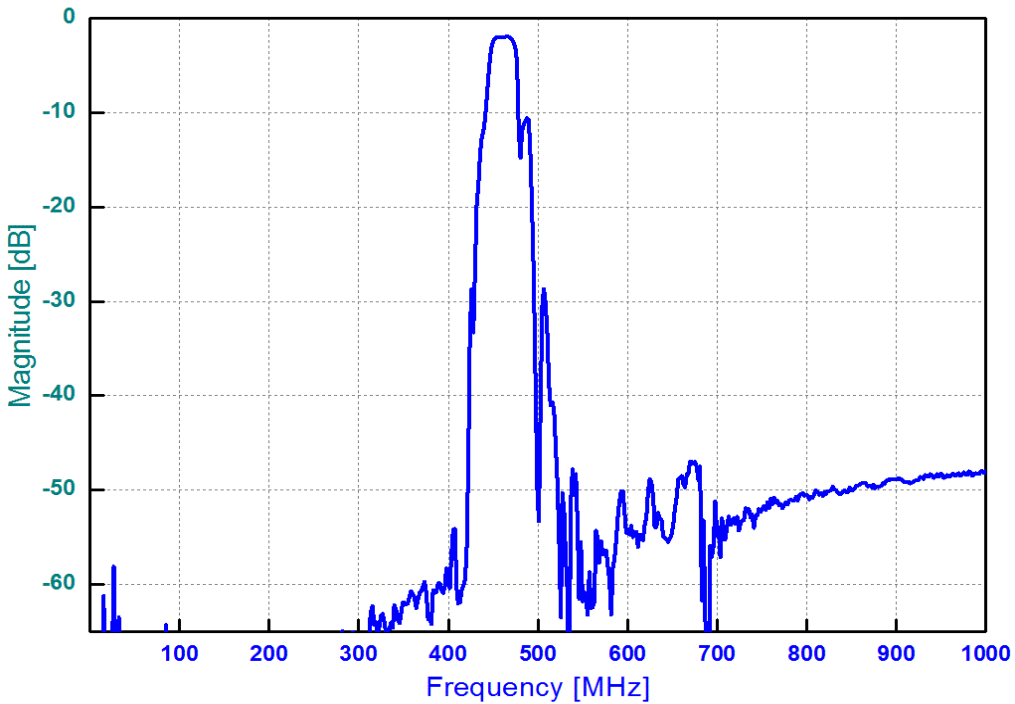
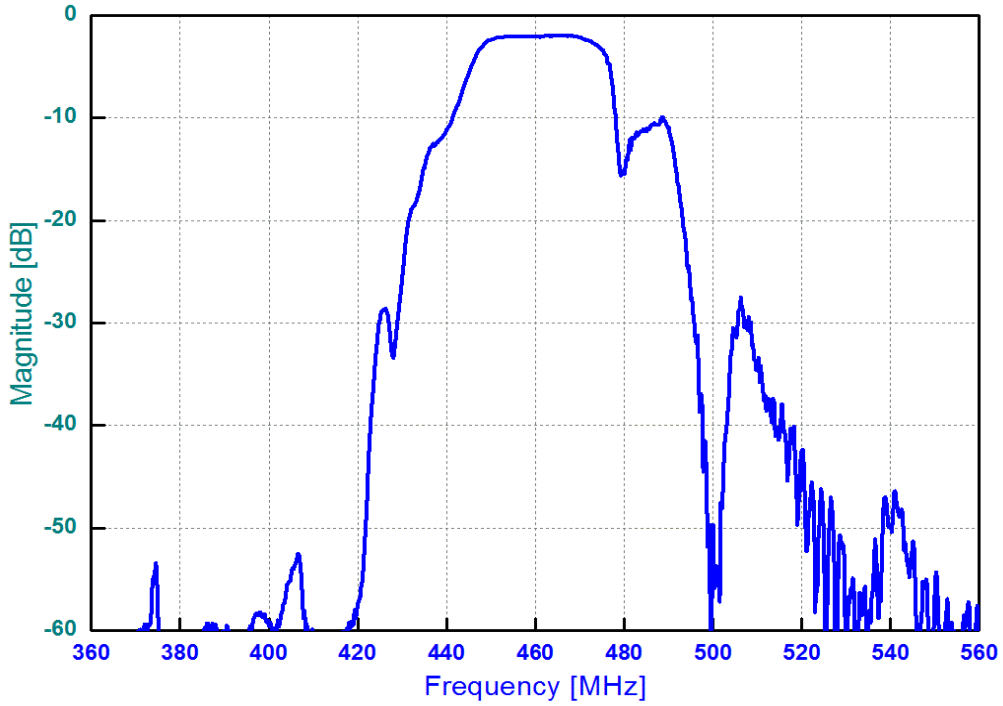
Testing Environment



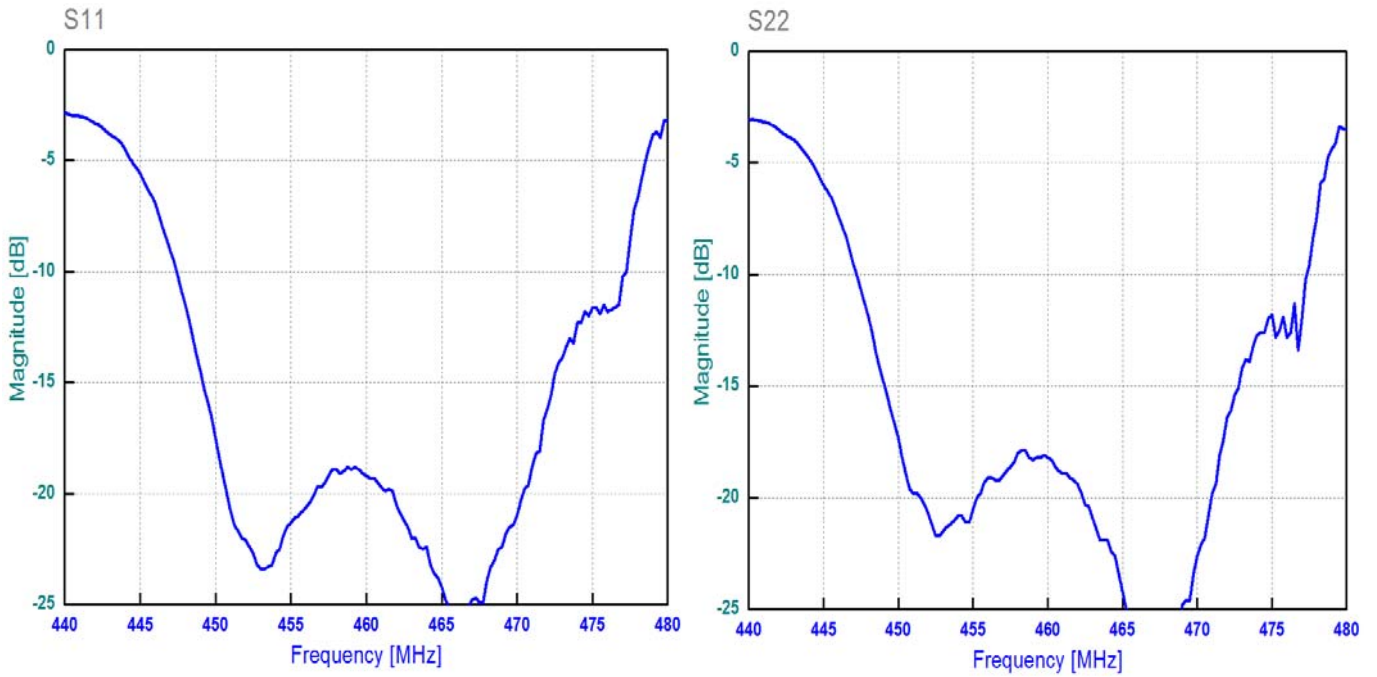
Source & Load Impedance: 50 Ω

□ Frequency Characteristics

Frequency Response



Return Loss



Smith Chart

