



Total Solution Provider in Saw Device

SA1030EM

Wireless, RF SAW Filter
Revision 0: August 2011



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

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□ Electrical Characteristics

Maximum Ratings

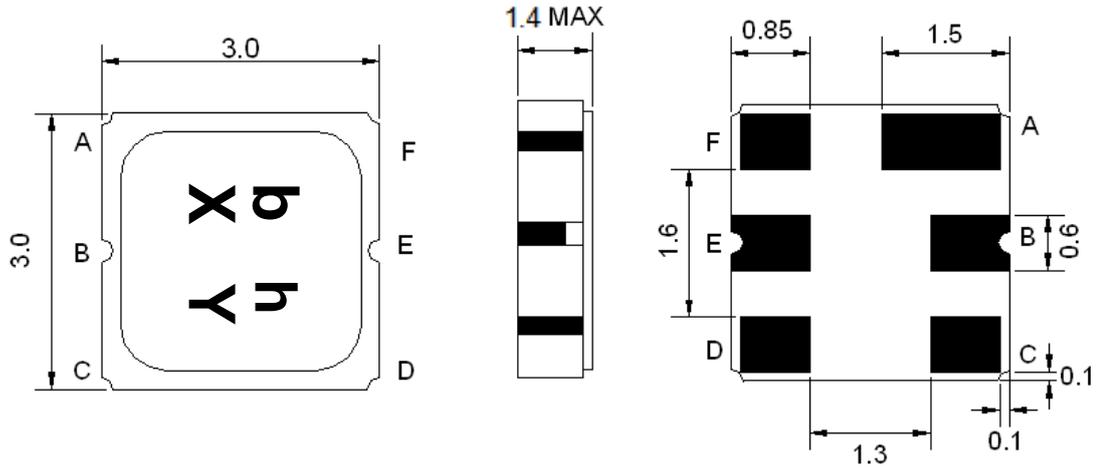
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range | °C | -40 | - | +85 |
| Storage Temperature Range | °C | -40 | - | +85 |
| Maximum DC Voltage | V | - | - | 0 |
| Maximum Input Power | dBm | - | - | 20 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | M | | | |
| 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 | - | 1030.0 | - |
| Insertion Loss within 1026.0 ~ 1034.0 MHz | dB | - | 2.6 | 3.8 |
| Amplitude Ripple within 1026.0 ~ 1034.0 MHz | dB _{p-p} | - | 0.4 | 2.0 |
| Group Delay Ripple within 1026.0 ~ 1034.0 MHz | ns _{p-p} | - | 26 | 80 |
| Attenuation: | | | | |
| DC ~ 950.0 MHz | dB | 35 | 42 | - |
| 950.0 ~ 1005.0 MHz | dB | 33 | 42 | - |
| 1005.0 ~ 1020.0 MHz | dB | 1 | 5 | - |
| 1040.0 ~ 1055.0 MHz | dB | 3 | 15 | - |
| 1055.0 ~ 1150.0 MHz | dB | 40 | 52 | - |
| 1150.0 ~ 1300.0 MHz | dB | 35 | 47 | - |
| VSWR within 1026.0 ~ 1034.0 MHz | - | - | 1.5 | 2.1 |

Notes : (1) No Matching Network .

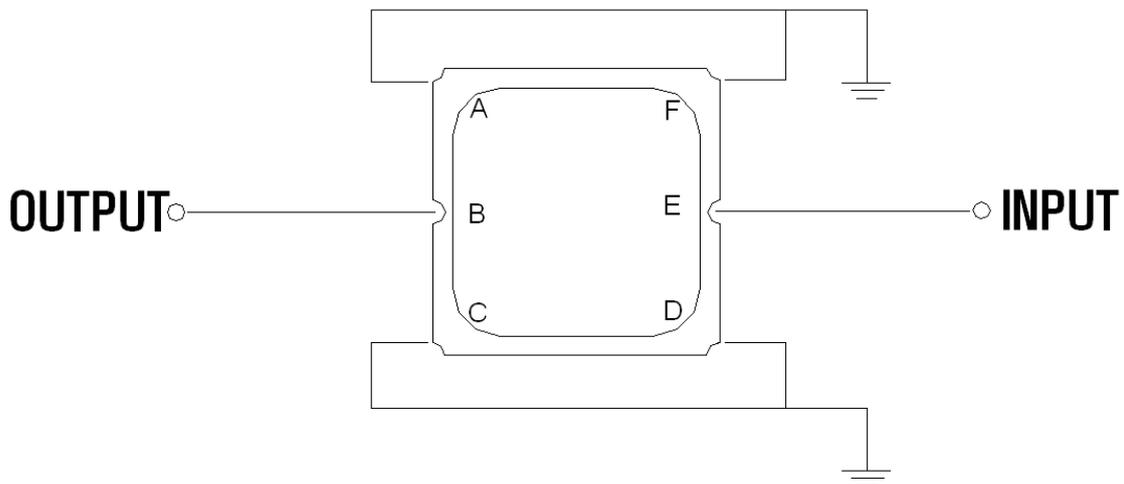
Package Dimensions



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

| Pin Description | |
|-----------------|-----------|
| A, C, D, F | Ground |
| E | In or Out |
| B | Out or In |

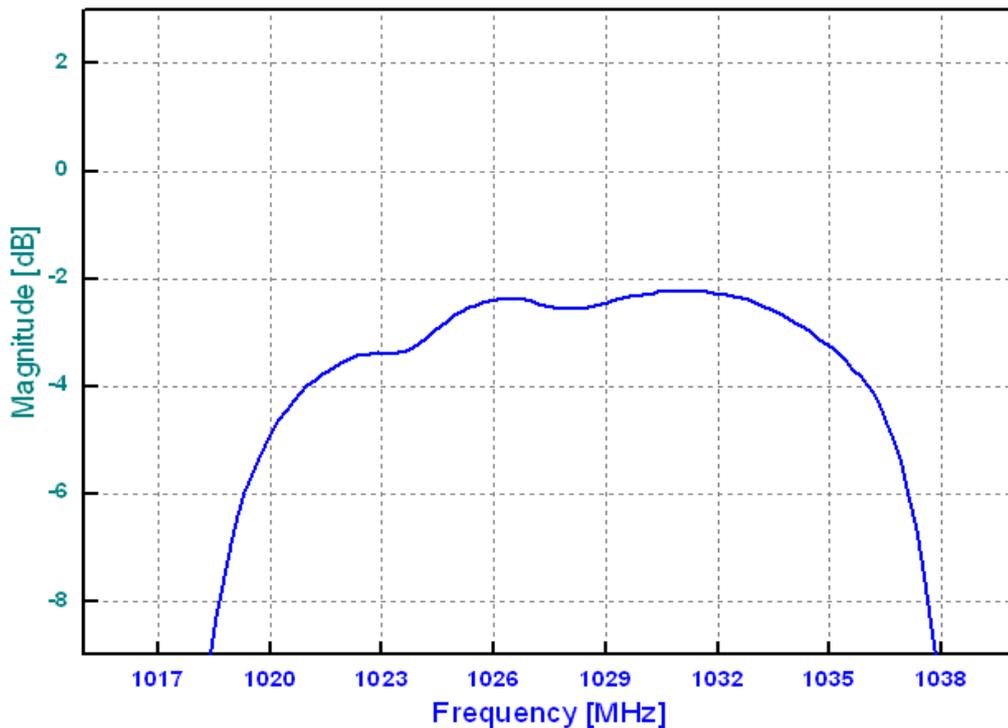
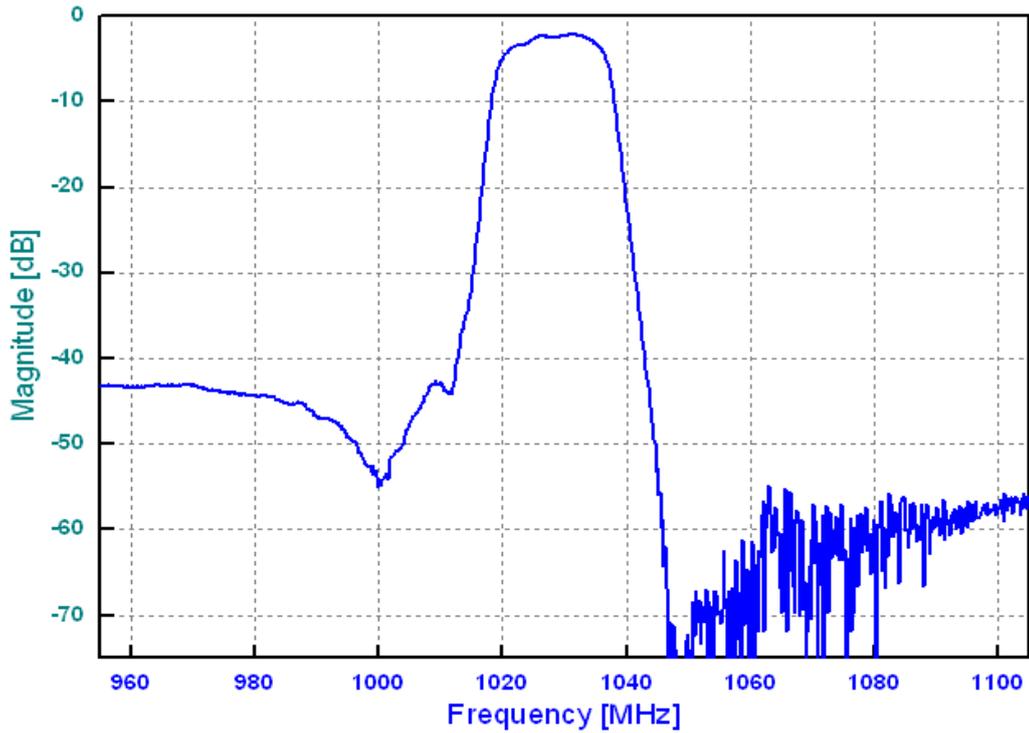
Testing Environment



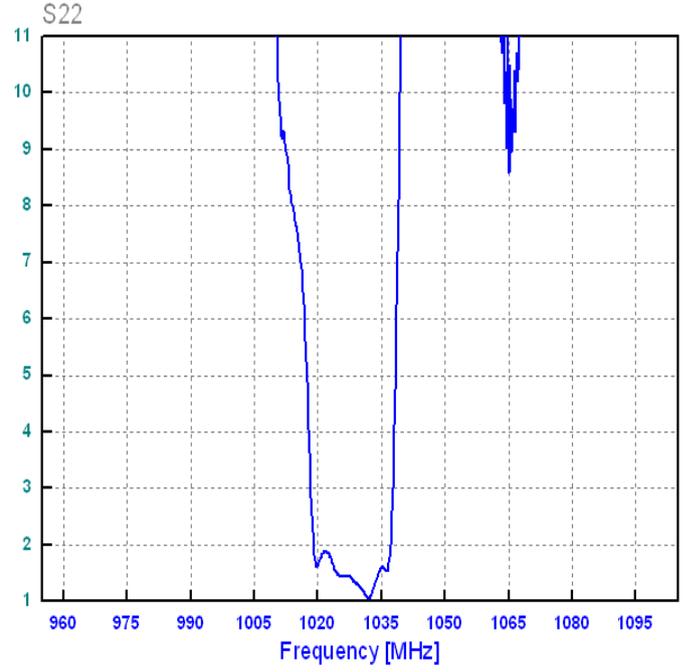
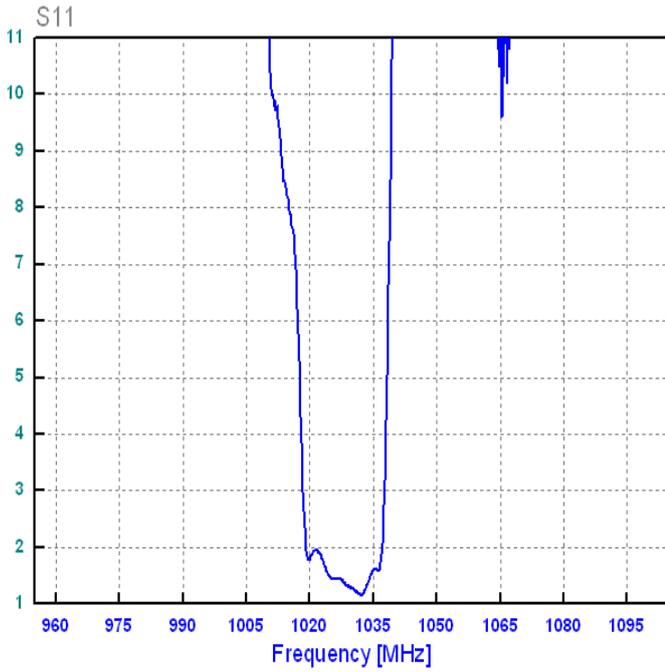
Source & Load Impedance: 50 Ω

□ Frequency Characteristics

Frequency Response



VSWR



Smith Chart

