



*Total Solution Provider in Saw Device*

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# SA412BM

CDMA 450 L-Band, RF-Tx SAW Filter  
Revision 0: November 2006



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

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## □ Electrical Characteristics

### Maximum Ratings

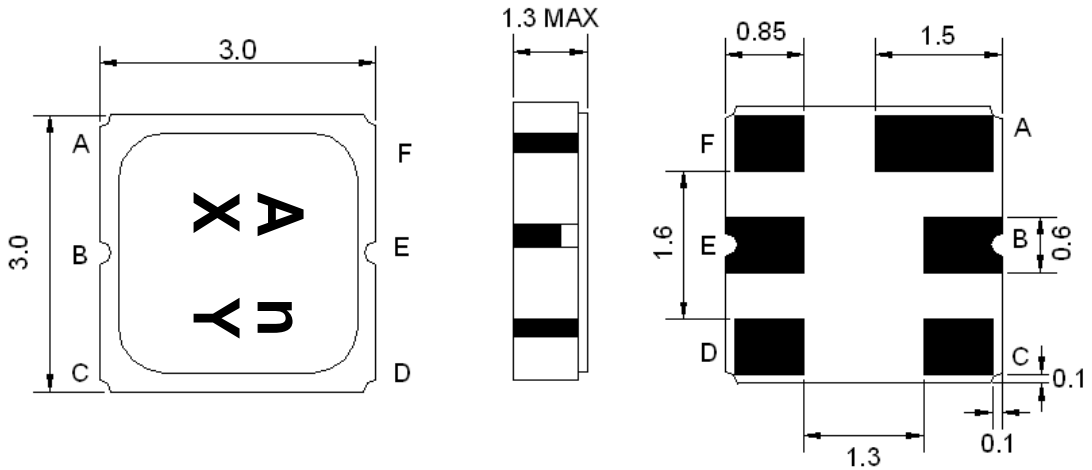
| Parameters Description                         | Unit            | Minimum | Typical   | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range                    | °C              | -30     | -         | +80     |
| Storage Temperature Range                      | °C              | -40     | -         | +85     |
| Maximum DC Voltage                             | V               | -       | -         | 0       |
| Maximum Input Power                            | dBm             | -       | -         | 30      |
| Source Impedance (single ended) <sup>(1)</sup> | Ω               | -       | 50        | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 50        | -       |
| Package type & size                            | M               |         |           |         |
| Length x Width                                 | mm <sup>2</sup> | -       | 3.0 x 3.0 | -       |
| Height   | mm              | -       | -         | 1.3     |

### Electrical Specification

| Parameters Description             | Unit | Minimum | Typical | Maximum |
|------------------------------------|------|---------|---------|---------|
| Center Frequency (Fo)              | MHz  | -       | 412.75  | -       |
| Insertion Loss in 410.5 ~415.0 MHz | dB   | -       | 2.5     | 2.8     |
| <b>Stop Band Attenuation:</b>      |      |         |         |         |
| 0.3 ~ 400.0 MHz                    | dB   | 23      | 26      | -       |
| 420.5 ~ 425.0 MHz                  | dB   | 30      | 48      | -       |
| 425.0 ~ 1700.0 MHz                 | dB   | 20      | 27      | -       |
| 1700.0 ~ 2000.0 MHz                | dB   | 15      | 22      | -       |
| VSWR in 410.5 ~ 415.0 MHz          | -    | -       | 1.3     | 2.0     |

**Notes :** (1) No Matching Network .

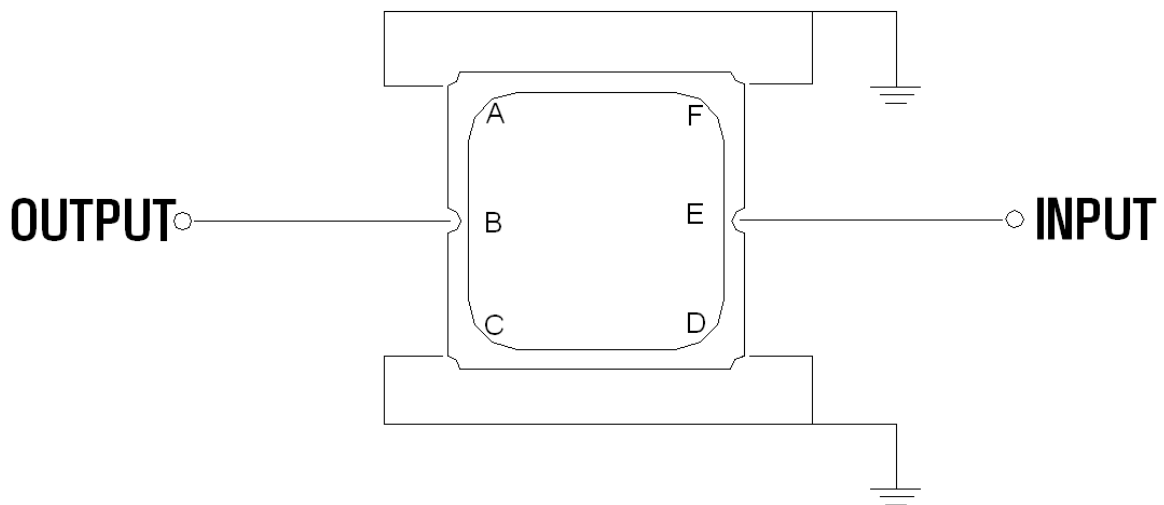
**Package Dimensions**



| Marking Descriptions |                     |
|----------------------|---------------------|
| A                    | CDMA450 Application |
| n                    | Series Number       |
| X                    | Date Code(Year)     |
| Y                    | Date Code(Month)    |

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

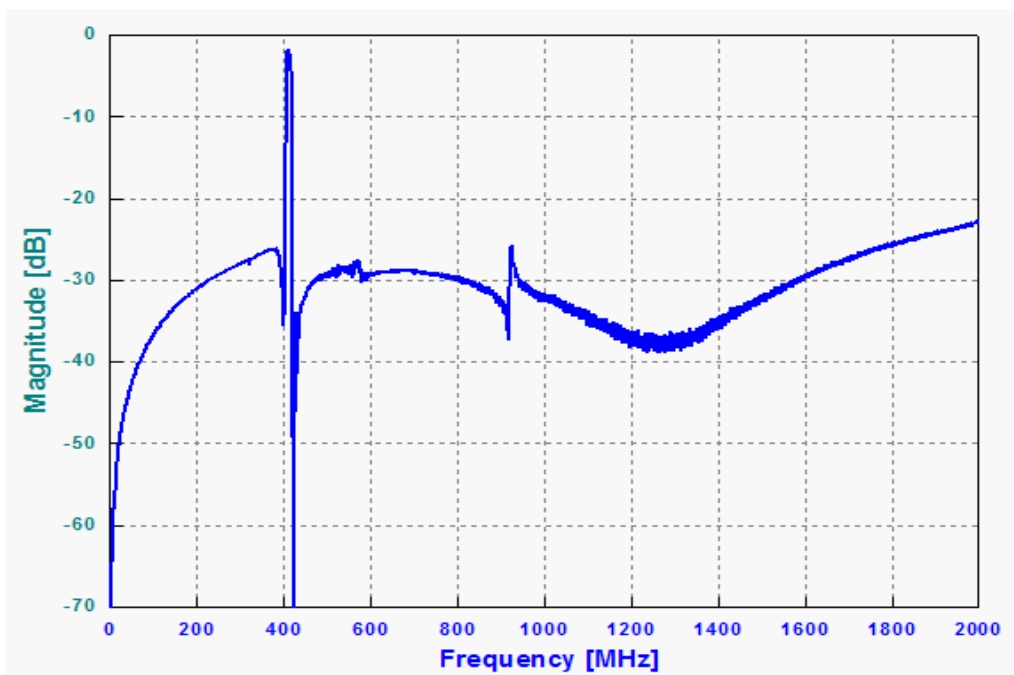
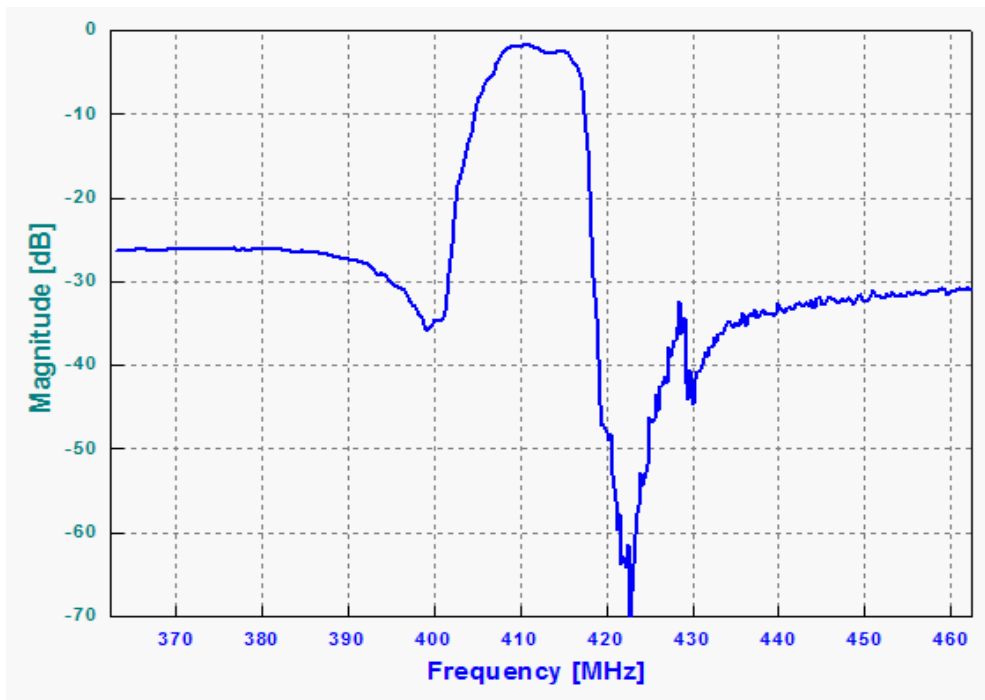
**Testing Environment**



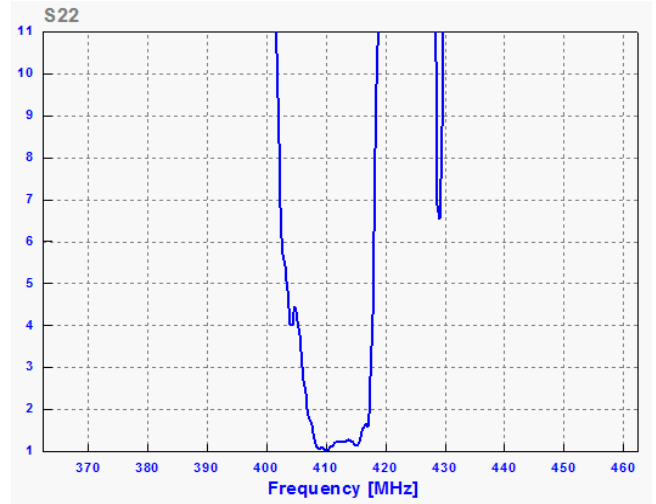
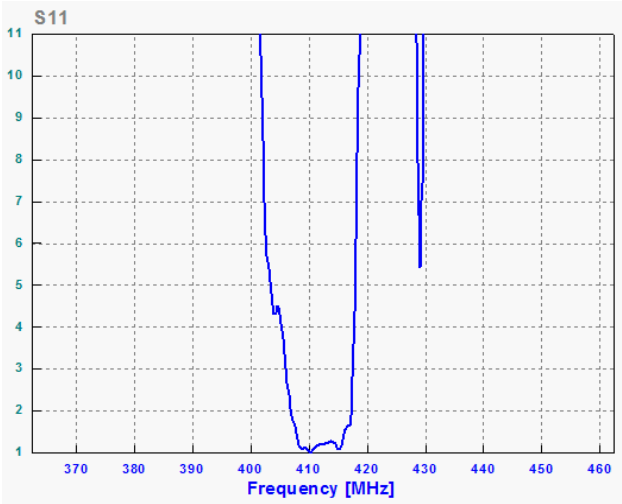
Source & Load Impedance: 50 Ω

## □ Frequency Characteristics

Frequency Response



VSWR



Smith Chart

