



# 100 MHz Saw Filter

## Part Number: AM100S246

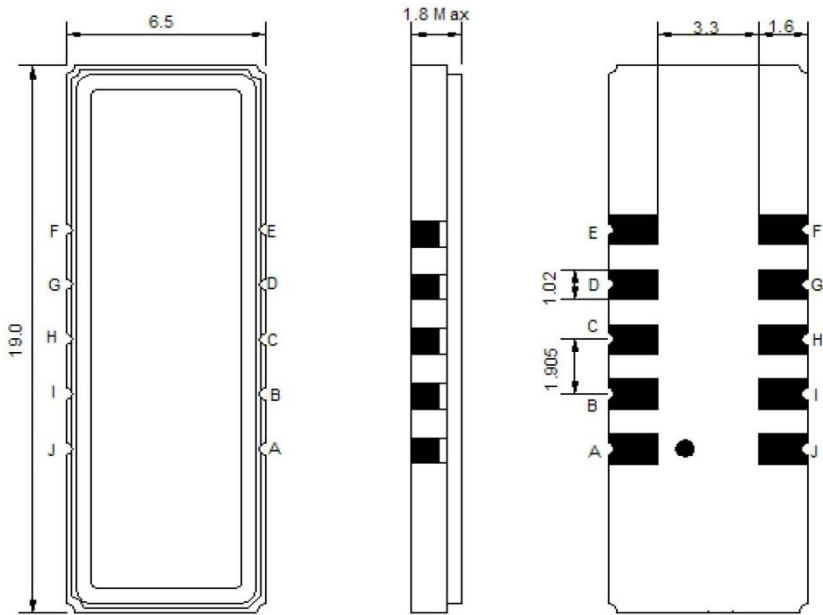


| Parameters Description    | Unit | Minimum | Typical | Maximum |
|---------------------------|------|---------|---------|---------|
| Center Frequency (Fo)     | MHz  | 99.91   | 100.00  | 100.09  |
| Insertion Loss at Fo      | dB   | -       | 13.7    | 15.0    |
| Passband Ripple Variation | dB   | -       | 0.80    | 1.5     |
| Group Delay Ripple        | nsec | -       | 250     | 500     |
| Absolute Delay at Fo      | usec | -       | 2.4     | -       |
| Phase Linearity           | Deg  | -       | 3.0     | 6.0     |
| Bandwidth at -1.0 dB      | MHz  | 0.30    | 0.34    | -       |
| Bandwidth at -3.0 dB      | MHz  | 0.47    | 0.55    | -       |
| Bandwidth at -40.0 dB     | MHz  | -       | 1.38    | 1.45    |
| Ultimate Rejection        | dB   | 45      | 55      | -       |
| Substrate Material        | Qz   |         |         |         |

| Parameters Description                       | Unit                | Minimum | Typical | Maximum |
|--|---------------------|---------|---------|---------|
| Ambient Temperature                          | °C                  | -       | +25     | -       |
| Operation Temperature Range                  | °C                  | -30     | -       | +80     |
| Storage Temperature Range                    | °C                  | -40     | -       | +85     |
| Maximum DC Voltage                           | V                   | -       | -       | 10      |
| Maximum Input Power                          | dBm                 | -       | -       | 10      |
| Source Impedance (Single Ended) <sub>1</sub> | Ω                   | -       | 50      | -       |
| Load Impedance (Single Ended) <sub>1</sub>   | Ω                   | -       | 50      | -       |
| Package Size and Type                        | 19.0 x 6.5 x 1.8 mm |         | X       |         |

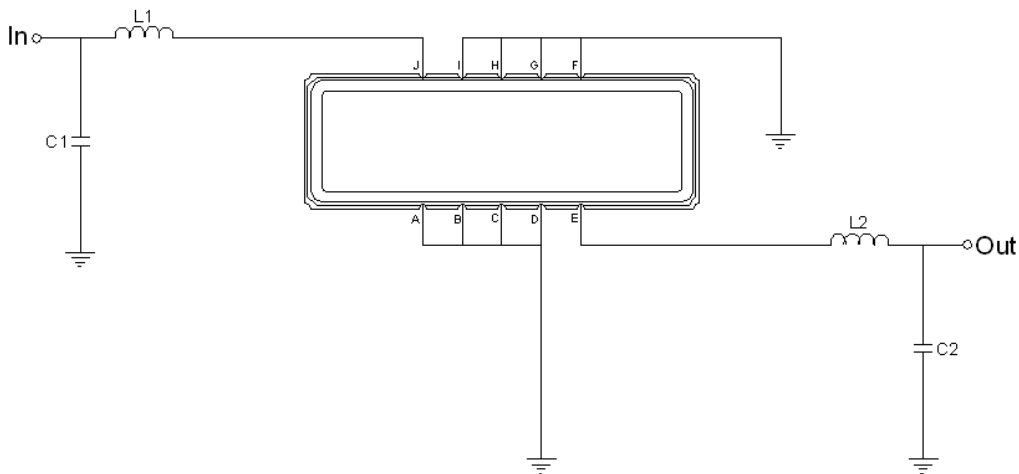


**Outline Drawing:**



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

**Testing Environment:**



| Pin Description       |                           |
|-----------------------|---------------------------|
| Ground                | L1 = 162 nH    C1 = 18 pF |
| Input                 | L2 = 132 nH    C2 = 39 pF |
| Source/Load Impedance | 50 Ω                      |

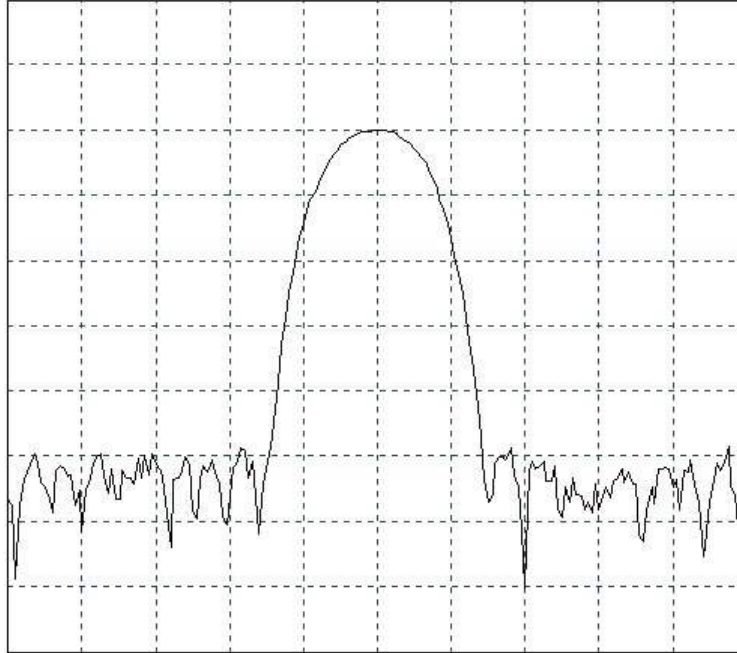


# 100 MHz Saw Filter

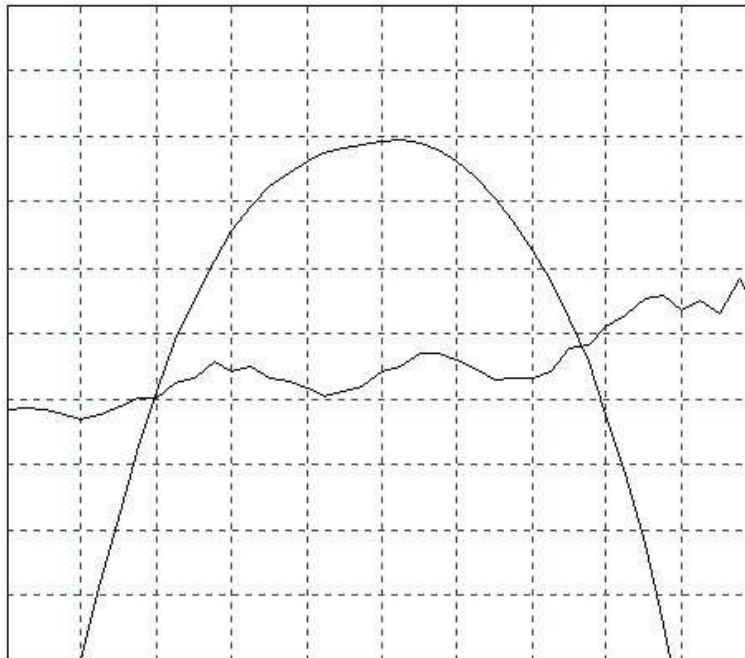
## Part Number: AM100S246



### Frequency Response:



Horizontal: 0.5 MHz/Div  
Vertical: 10 dB/Div



Horizontal: 0.1 MHz/Div  
Vertical: 1 dB/Div  
Vertical: 100ns/Div