

## Maximum Ratings

| Parameters Description                         | Unit            | Minimum | Typical    | Maximum |
|--|-----------------|---------|------------|---------|
| Operation Temperature Range                    | °C              | -20     | -          | 70      |
| Storage Temperature Range                      | °C              | -40     | -          | 85      |
| Maximum DC Voltage                             | V               | -       | -          | 10      |
| Maximum Input Power                            | dBm             | -       | -          | 10      |
| Source Impedance (single ended) <sup>(1)</sup> | Ω               | -       | 50         | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 50         | -       |
| Package type & size                            | V               |         |            |         |
| Length x Width                                 | mm <sup>2</sup> | -       | 13.3 x 6.5 | -       |
| Height   | mm              | -       | -          | 1.8     |

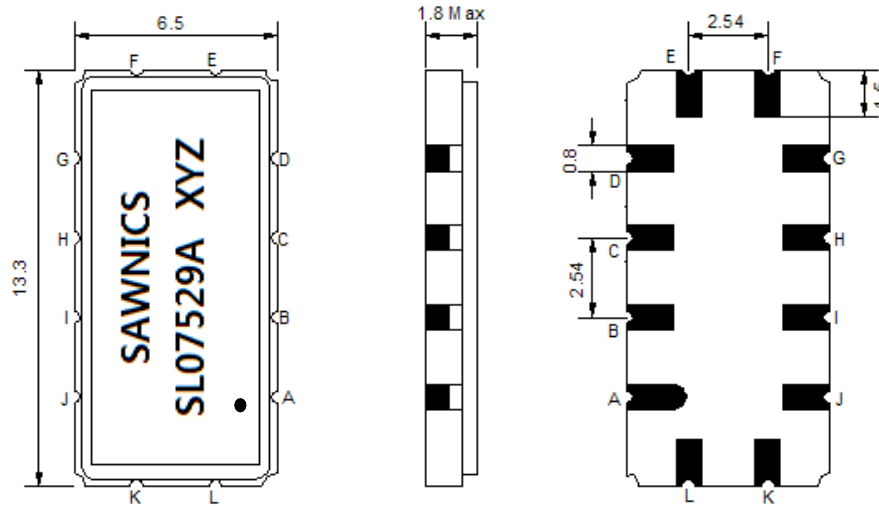
## Electrical Specification

| Parameters Description                    | Unit              | Minimum | Typical | Maximum |
|---|-------------------|---------|---------|---------|
| Center Frequency (Fo)                     | MHz               | 74.85   | 75.0    | 75.15   |
| Insertion Loss at Fo                      | dB                | -       | 17.0    | 18.5    |
| Amplitude Ripple within fo ±13.5 MHz      | dB <sub>p-p</sub> | -       | 0.35    | 0.80    |
| Group Delay Variation within fo ±13.5 MHz | nsec              | -       | 20      | 50      |
| Absolute Delay at Fo                      | μsec              | -       | 0.84    | -       |
| Temperature Coefficient                   | ppm/°C            | -       | -86     | -       |
| Bandwidth at -1.0 dB                      | MHz               | 29.0    | 29.6    | -       |
| Bandwidth at -3.0 dB                      | MHz               | 30.0    | 30.8    | -       |
| Bandwidth at -40.0 dB                     | MHz               | -       | 36.2    | 37.0    |
| <b>Relative Attenuation:</b>              |                   |         |         |         |
| Lower sidelobe                            | dB                | 40      | 48      | -       |
| Upper sidelobe                            | dB                | 40      | 45      | -       |

**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

Those impedances could be modified with different impedance values and/or structures, if necessary.

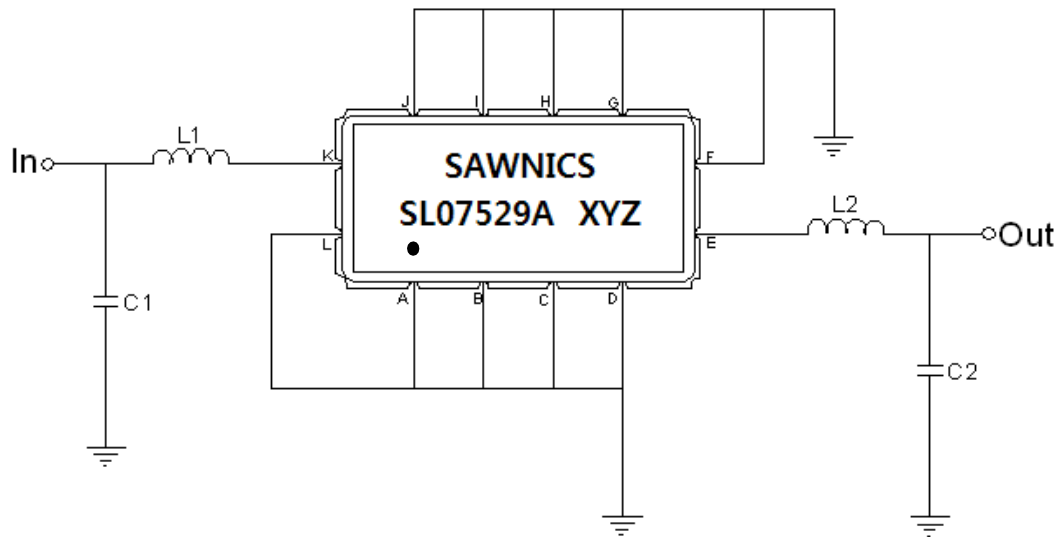
# D Package Dimensions



- ① SAWNICS: Brand
- ② SL07529A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

# D Testing Environment

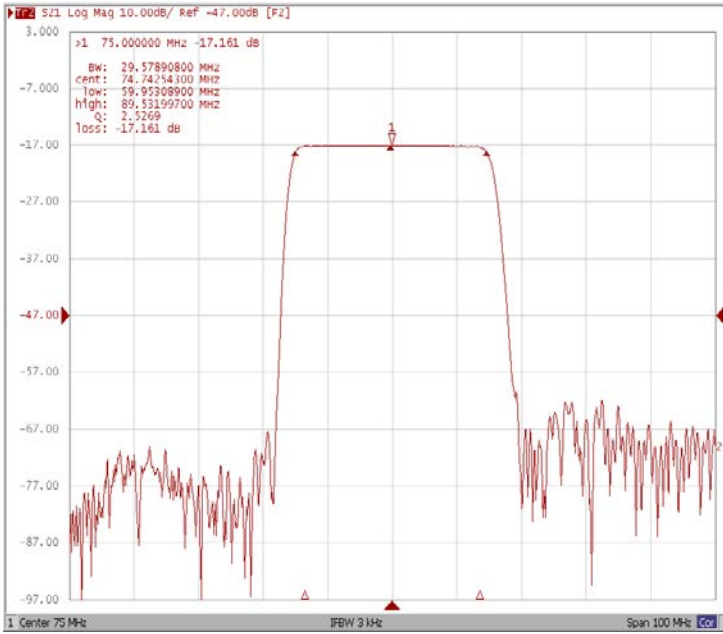


| Test Fixture & Values |                   |
|-----------------------|-------------------|
| Input                 | L1=120nH, C1=15pF |
| Output                | L2=120nH, C2=15pF |
| Source/Load Impedance | 50 Ω              |

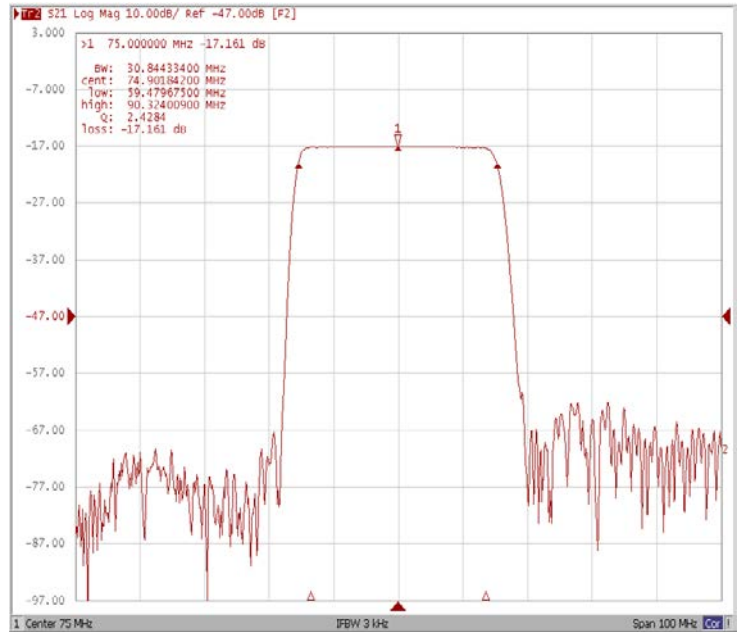
# D Frequency Characteristics

## Frequency Response

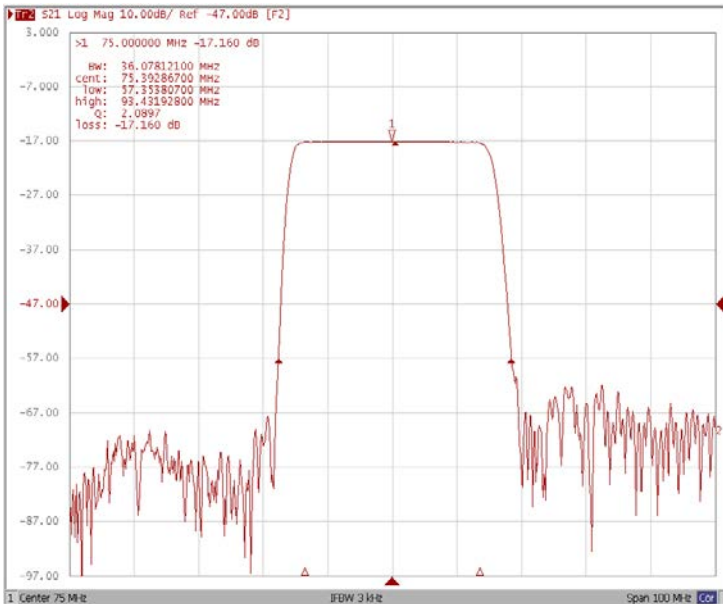
### Bandwidth at -1.0 dB



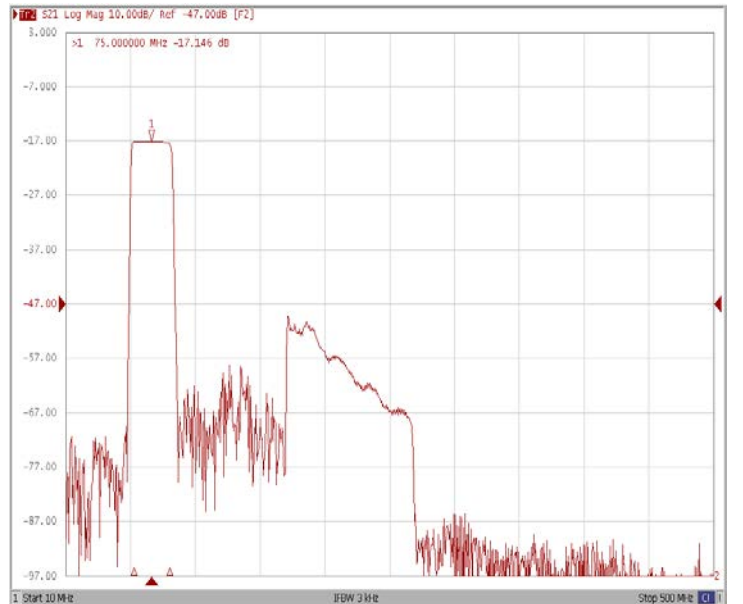
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

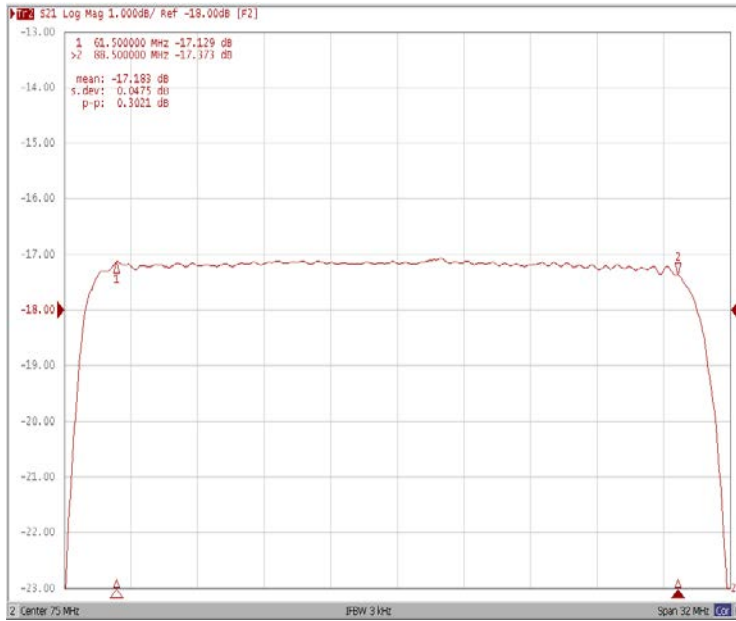


### Wide-Band

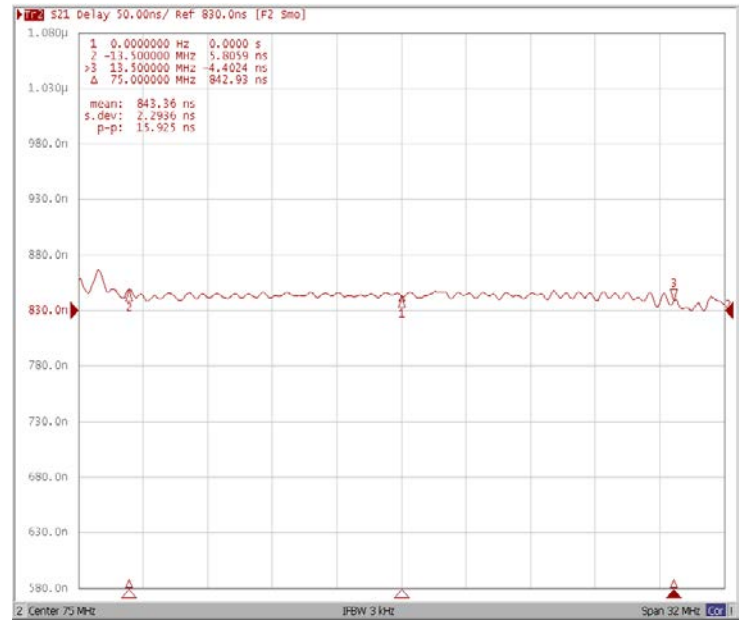


## Frequency Response

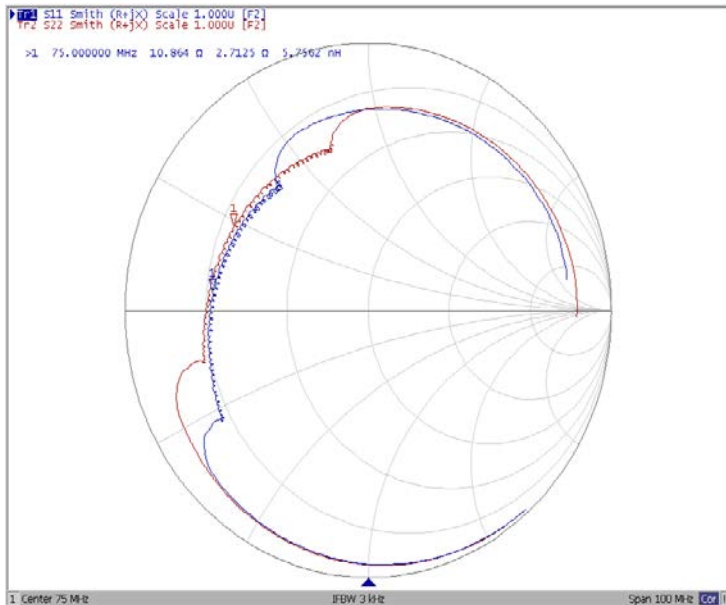
### Ripple Variation $Fo \pm 13.5\text{MHz}$



### Group Delay Variation $Fo \pm 13.5\text{MHz}$



### Smith Chart



### SWR

