

## Maximum Ratings

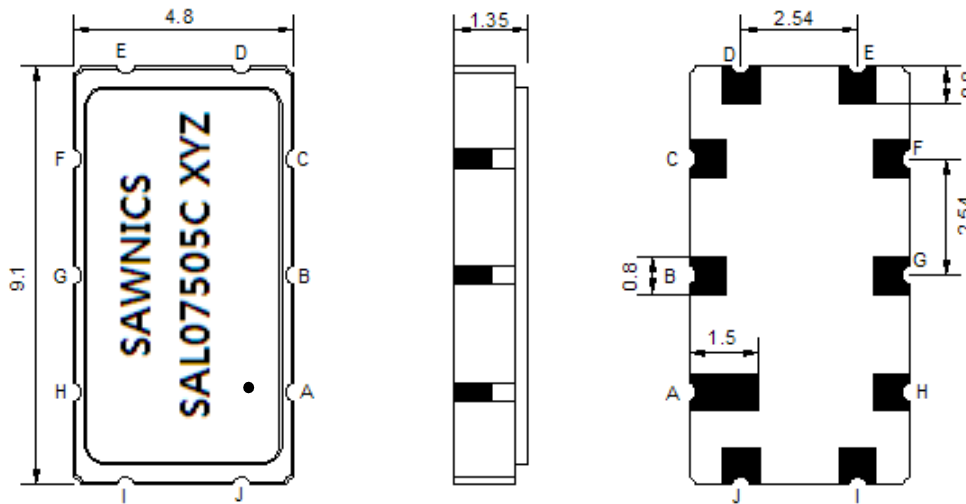
| Parameters Description                         | Unit            | Minimum | Typical   | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range                    | °C              | -30     | -         | 80      |
| Storage Temperature Range                      | °C              | -40     | -         | 85      |
| Maximum DC Voltage                             | V               | -       | -         | 10      |
| Maximum Input Power                            | dBm             | -       | -         | 10      |
| Source Impedance (single ended) <sup>(1)</sup> | Ω               | -       | 50        | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 50        | -       |
| Package type & size                            | T               |         |           |         |
| Length x Width                                 | mm <sup>2</sup> |         | 9.1 x 4.8 |         |
| Height   | mm              |         |           | 1.5     |

## Electrical Specification

| Parameters Description                  | Unit              | Minimum | Typical | Maximum |
|---|-------------------|---------|---------|---------|
| Center Frequency (Fo)                   | MHz               | -       | 75.0    | -       |
| Insertion Loss at Fo                    | dB                | -       | 13.50   | 16.00   |
| Temperature Coefficient                 | ppm/°C            | -       | -18     | -       |
| Amplitude Ripple Variation(Fo+/-2.2MHz) | dB <sub>p-p</sub> | -       | 0.30    | 0.70    |
| Group Delay Variation(Fo+/-2.2MHz)      | nsec              | -       | 35      | 80      |
| Absolute Delay at Fo                    | µsec              | -       | 1.07    | -       |
| Bandwidth at -1.0 dB                    | MHz               | -       | 5.42    | -       |
| Bandwidth at -3.0 dB                    | MHz               | -       | 6.09    | -       |
| Bandwidth at -40.0 dB                   | MHz               | -       | 8.70    | -       |
| Input VSWR at Fo                        | dB                | -       | 2.1     | -       |
| Output VSWR at Fo                       | dB                | -       | 1.2     | -       |
| Relative Attenuation                    |                   |         |         |         |
| Lower Sidelobe                          | dB                | 40      | 45      |         |
| 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.

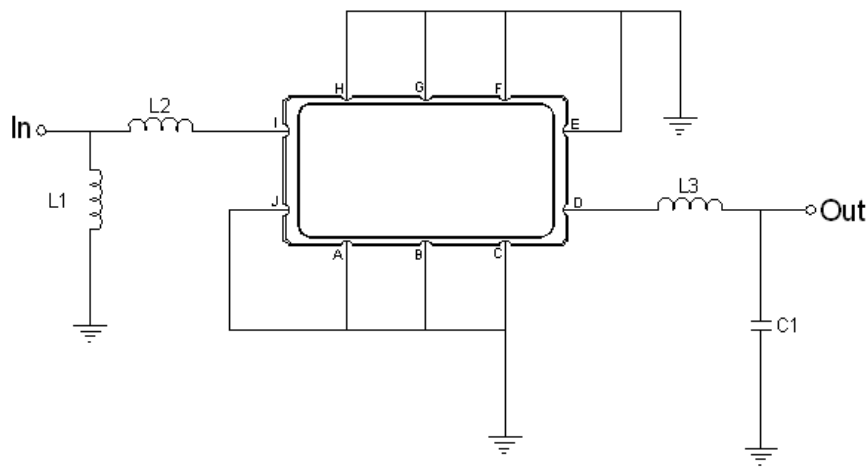
# D Package Dimensions



- ① SAWNICS: Brand
- ② SL07505C: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

# D Testing Environment

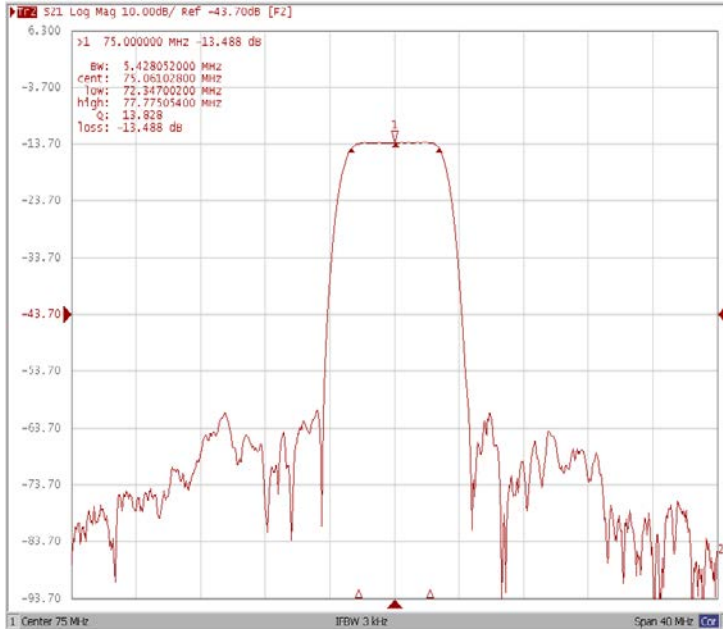


| Test Fixture & Values |                          |
|-----------------------|--------------------------|
| Input                 | L1 = 47 nH ,L2 = 18 pF   |
| Output                | L3 = 100 nH ,C1 = 110 pF |
| Source/Load Impedance | 50 Ω                     |

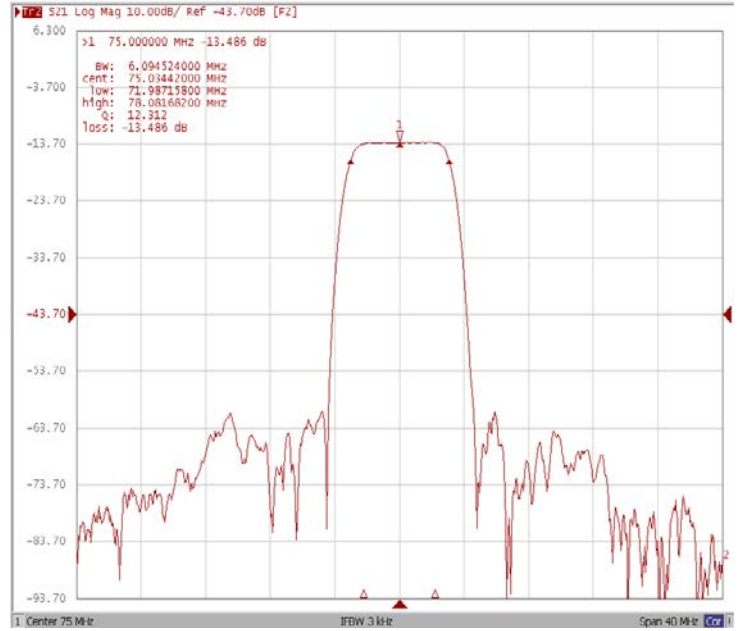
# D Frequency Characteristics

## Frequency Response

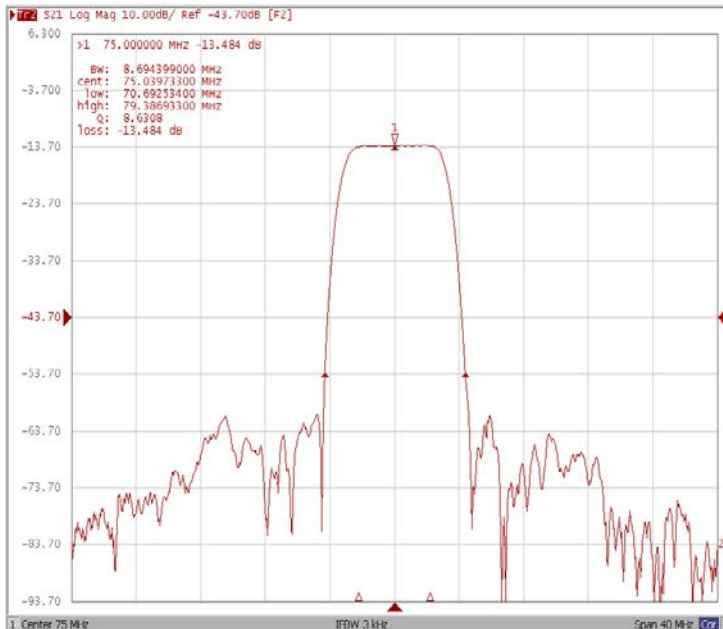
### Bandwidth at -1.0 dB



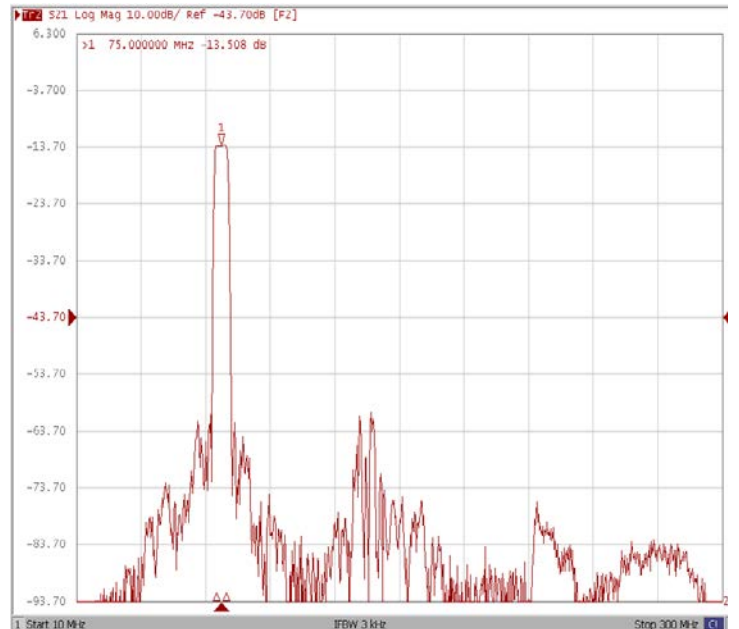
### Bandwidth at -3.0 dB



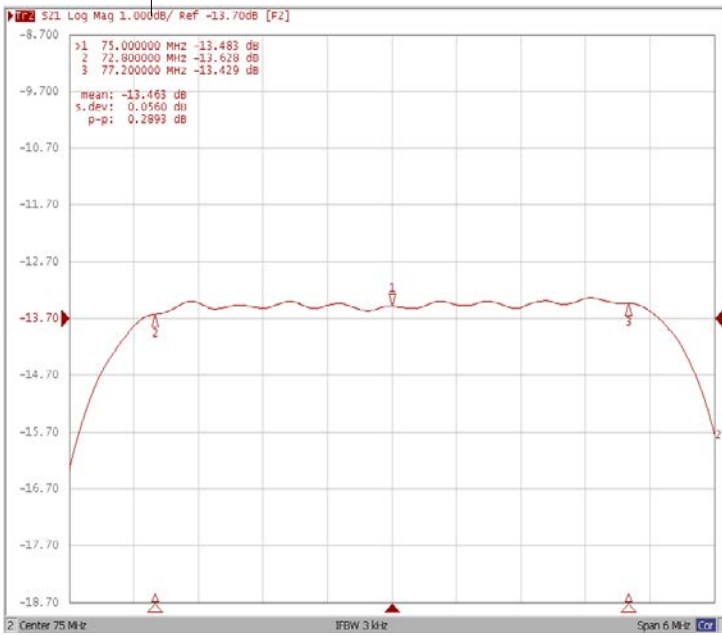
### Bandwidth at -40 dB



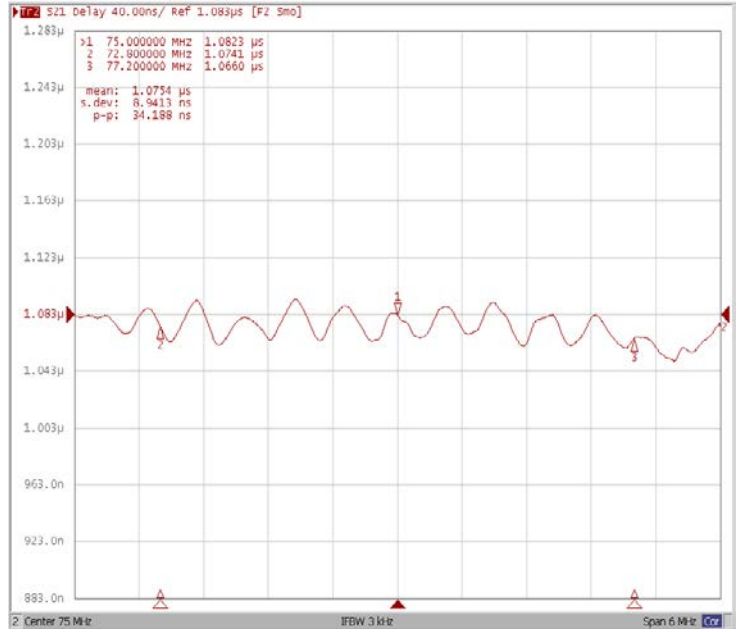
### WIDE



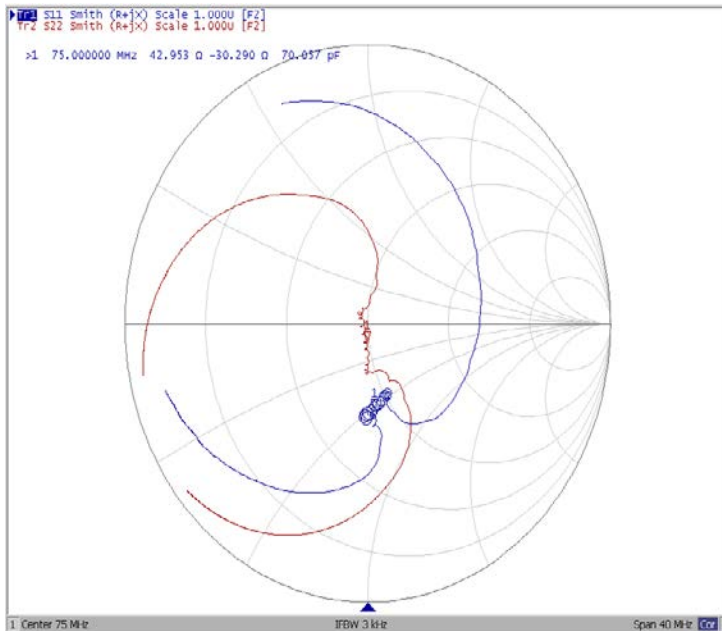
Ripple Variation( $F_o \pm 2.2\text{MHz}$ )



Group Delay Variation( $F_o \pm 2.2\text{MHz}$ )



Smith Chart



VSWR

