

## 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     |

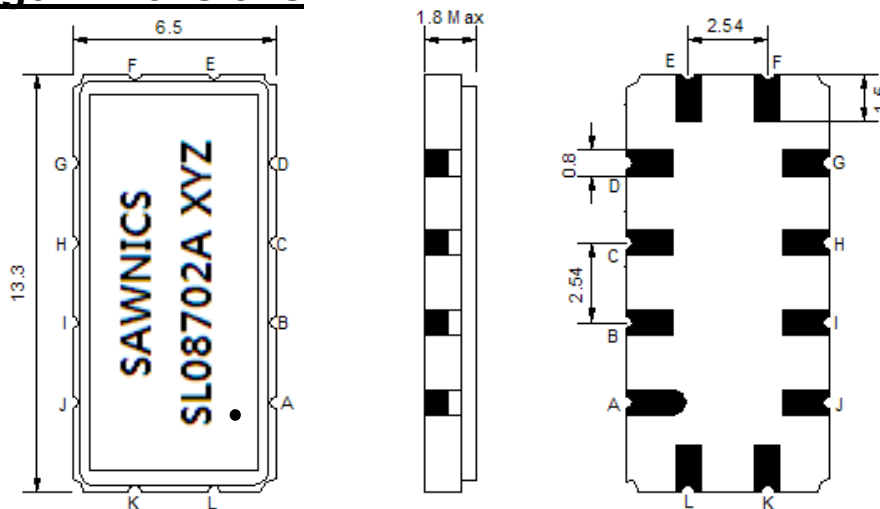
## Electrical Specification

| Parameters Description                | Unit               | Minimum | Typical | Maximum |
|---------------------------------------|--------------------|---------|---------|---------|
| Center Frequency (Fo)                 | MHz                | 87.38   | 87.50   | 87.62   |
| Insertion Loss at Fo                  | dB                 | -       | 10.5    | 13.0    |
| Group Delay Variation (Fo±500KHz)     | nsec               | -       | 15      | 50      |
| Absolute Delay at Fo                  | usec               | -       | 1.32    | -       |
| Passband Ripple Variation (Fo±500KHz) | dB                 | -       | 0.1     | 0.6     |
| Bandwidth at -1dB                     | MHz                | 2.0     | 2.4     | -       |
| Bandwidth at -3dB                     | MHz                | -       | 2.9     | -       |
| Bandwidth at -40dB                    | MHz                | -       | 4.9     | 5.5     |
| Ultimate Rejection                    | dB                 | 40      | 48      | -       |
| Phase Linearity(Fo±500KHz)            | deg <sub>p-p</sub> | -       | 1.0     | 5.0     |
| Temperature Coefficient               | ppm/°C             | -       | -18     | -       |

**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.

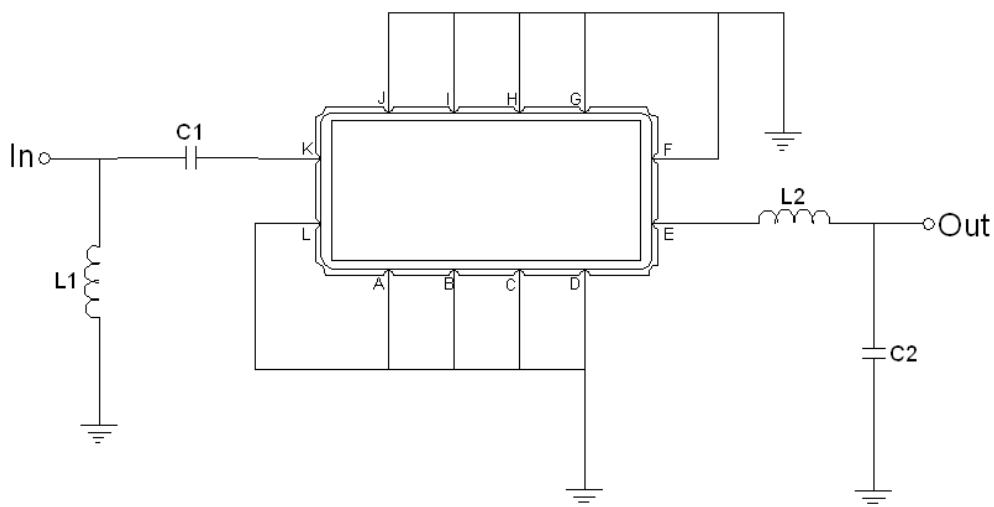
## Package Dimensions



- ① SAWNICs: Brand
- ② SL08702A: 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 |

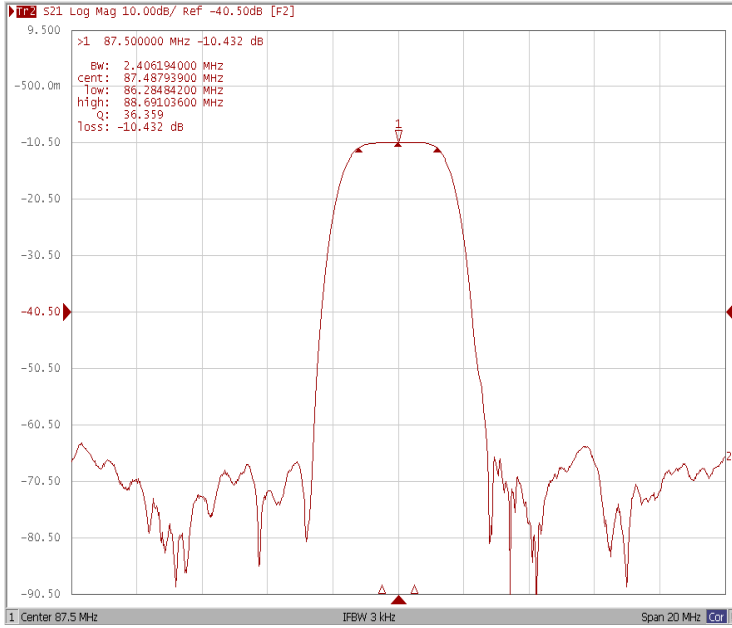
## Testing Environment



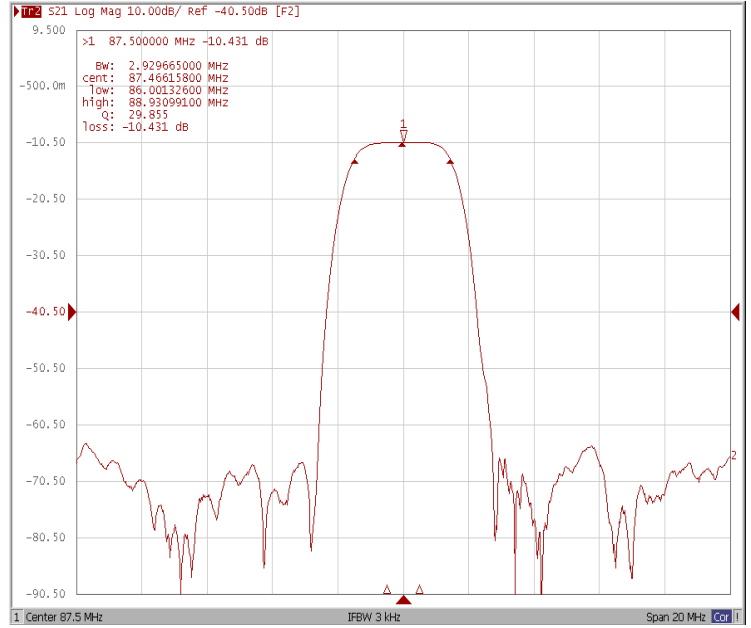
| Test Fixture & Values |                         |
|-----------------------|-------------------------|
| Input                 | L1 = 56 nH, C1 = 160 pF |
| Output                | L2 = 47 nH, C2 = 100 pF |
| Source/Load Impedance | 50 Ω                    |

## Frequency Response

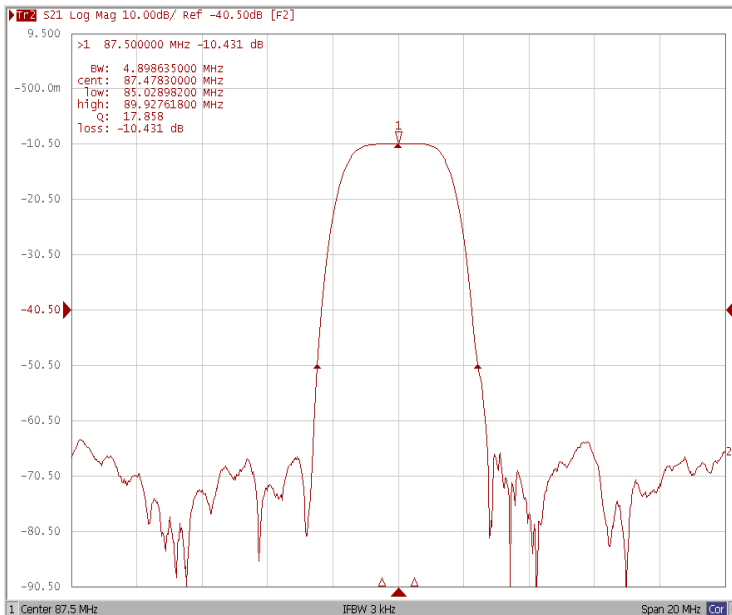
### Bandwidth at -1.0 dB



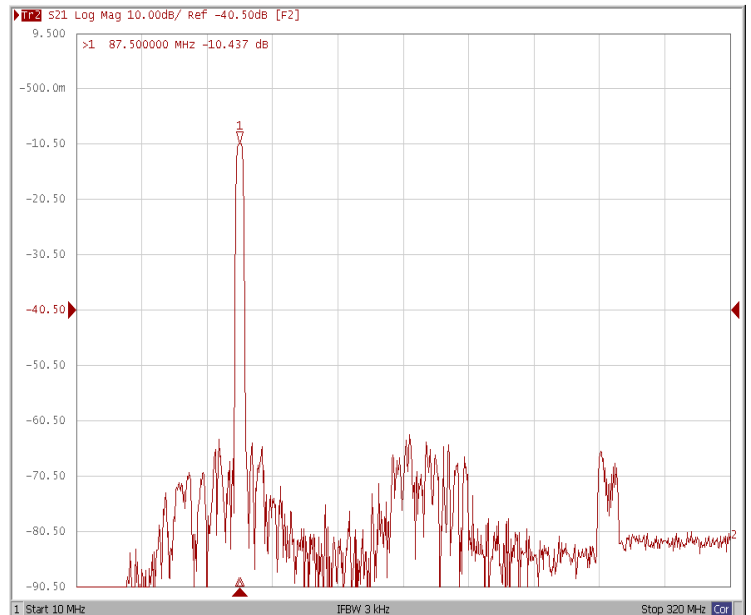
### Bandwidth at -3.0 dB



### Bandwidth at -40 dB

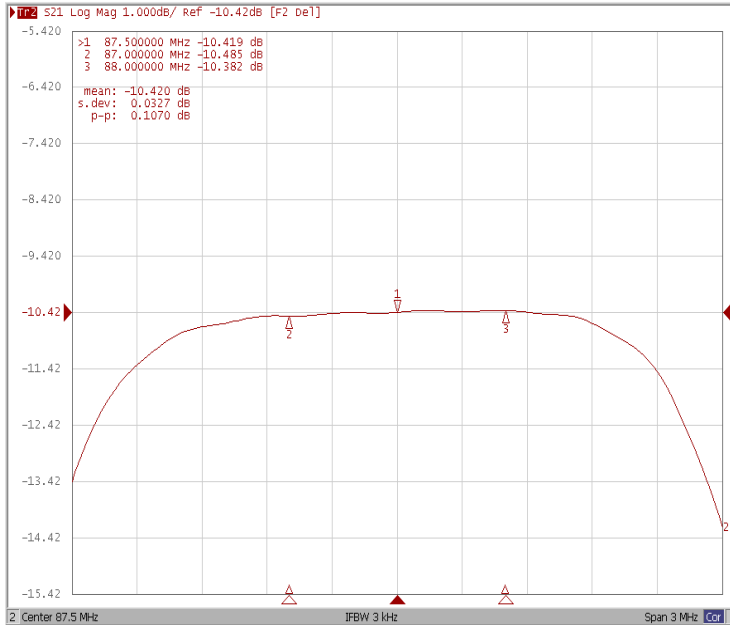


### Wide Band

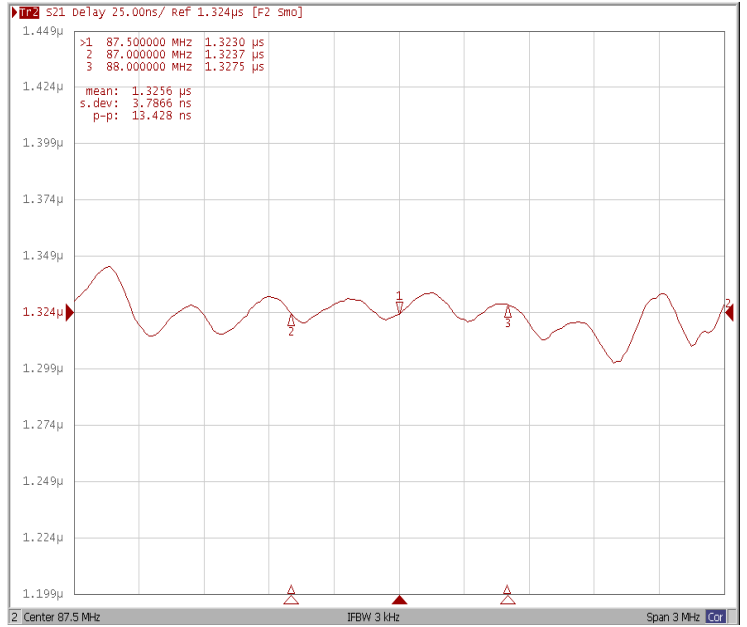


## Frequency Response

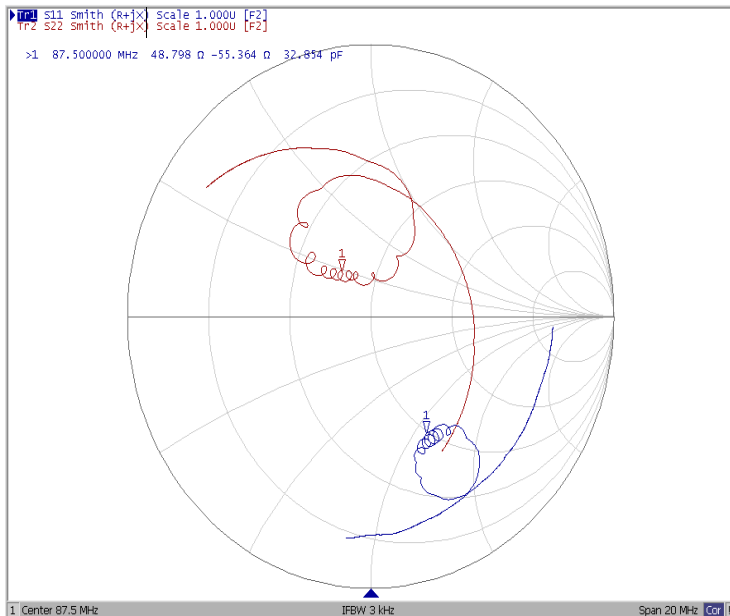
### Ripple Variation $F_o \pm 500\text{kHz}$



### Group Delay Variation $F_o \pm 500\text{kHz MHz}$



### Smith Chart



### SWR

