

# Multilayer Chip Antenna – SLDA Series



Operating temp. : -40°C ~+85°C

- FEATURES**
- ◆ Light weight, compact
  - ◆ Wide bandwidth, low cost
  - ◆ Built-in antenna with high gain

- APPLICATIONS**
- ◆ Bluetooth, Wi-Fi
  - ◆ Home RF system, etc.

**PRODUCT IDENTIFICATION**

|             |           |                |            |          |          |
|-------------|-----------|----------------|------------|----------|----------|
| <b>1</b>    | <b>2</b>  | <b>3</b>       | <b>4</b>   | <b>5</b> | <b>6</b> |
| <b>SLDA</b> | <b>31</b> | <b>-2R800G</b> | <b>-S1</b> | <b>T</b> | <b>F</b> |

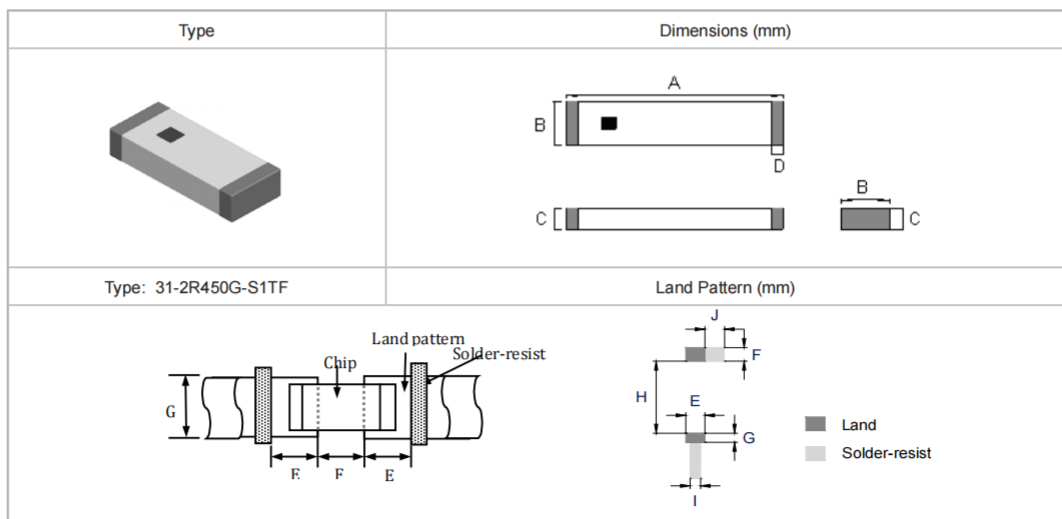
  

|          |                                |                            |
|----------|--------------------------------|----------------------------|
| <b>1</b> | <b>2</b>                       | <b>3</b>                   |
| Type     | External Dimensions (L×W) (mm) | Center Frequency           |
| SLDA     | Multilayer Chip Antenna        | Example      Nominal Value |
|          | 15      1.0×0.5                | 2R800G      2800.0MHz      |
|          | 18      1.6×0.8                | 2R450G      2450.0MHz      |
|          | 31      3.2×1.6                |                            |
|          | 52      5.2×2.1                |                            |
|          | 62      6.0×2.0                |                            |
|          | 72      7.0×2.0                |                            |
|          | 81      8.0×1.0                |                            |
|          | 92      9.0×2.0                |                            |
|          | 106      10.0×6.0              |                            |
|          | 154      15.0×4.0              |                            |

|              |                    |                                   |
|--------------|--------------------|-----------------------------------|
| <b>4</b>     | <b>5</b>           | <b>6</b>                          |
| Series Code  | Packing            | Hazardous Substance Free Products |
| S1, 01, etc. | T      Tape & Reel | F                                 |

**SHAPE AND LAND PATTERN**



**SHAPE AND DIMENSIONS**

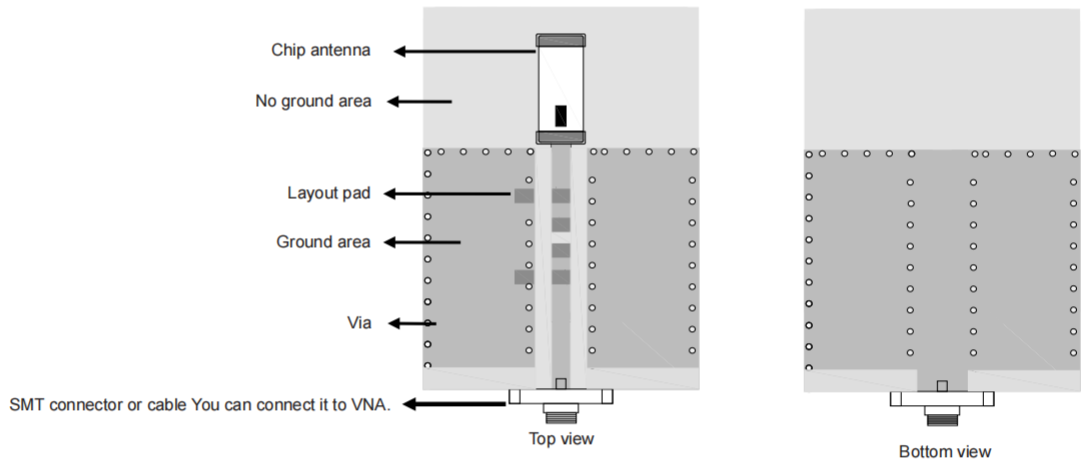
| Series  | A        | B       | C        | D              | E       | F       | G       | H       | I   | J       |
|---------|----------|---------|----------|----------------|---------|---------|---------|---------|-----|---------|
| SLDA15  | 1.00±0.1 | 0.5±0.1 | 0.4±0.05 | 0.25+0.1/-0.05 | -       | -       | -       | -       | -   | -       |
| SLDA18  | 1.6±0.1  | 0.8±0.1 | 0.45±0.1 | 0.25±0.1       | -       | -       | -       | -       | -   | -       |
| SLDA31  | 3.2±0.2  | 1.6±0.2 | 1.2±0.2  | 0.5±0.2        | 1.6±0.2 | 0.8±0.2 | 0.8±0.2 | 2.2±0.2 | 1.4 | 1.6±0.2 |
| SLDA52  | 5.2±0.2  | 2.1±0.2 | 1.0±0.2  | 0.5±0.2        | 2.3±0.2 | 1.5±0.2 | 1.0±0.2 | 4.0±0.2 | 1.4 | 2.3±0.2 |
| SLDA62  | 6.0±0.2  | 2.0±0.2 | 1.0±0.2  | 0.5±0.2        | 2.2±0.2 | 1.5±0.2 | 1.0±0.2 | 5.0±0.2 | 1.4 | 2.2±0.2 |
| SLDA72  | 7.0±0.2  | 2.0±0.2 | 1.0±0.2  | 0.5±0.2        | 2.2±0.2 | 1.5±0.2 | 1.0±0.2 | 6.0±0.2 | 1.4 | 2.2±0.2 |
| SLDA81  | 8.0±0.2  | 1.0±0.2 | 1.0±0.2  | 0.5±0.2        | 1.5±0.2 | 1.5±0.2 | 1.0±0.2 | 7.0±0.2 | 1.4 | 1.5±0.2 |
| SLDA92  | 9.0±0.2  | 2.0±0.2 | 1.0±0.2  | 0.5±0.2        | 2.2±0.2 | 1.5±0.2 | 1.0±0.2 | 8.0±0.2 | 1.4 | 2.2±0.2 |
| SLDA106 | 10.0±0.3 | 6.0±0.3 | 1.0±0.2  | 0.5±0.3        | -       | -       | -       | -       | -   | -       |
| SLDA154 | 15.0±0.2 | 4.0±0.2 | 1.5±0.2  | 1.0±0.3        | -       | -       | -       | -       | -   | -       |

**TERINAL-CONFIGURATION**

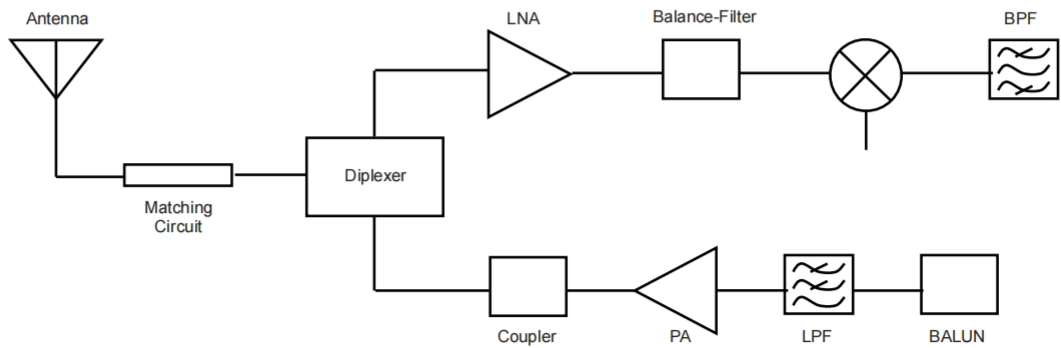


| No. | Terminal Name | No. | Terminal Name |
|-----|---------------|-----|---------------|
| (1) | Feeding Point | (2) | NC            |

**EVALUATION BOARD**



**APPLICATION GUIDE**



**SPECIFICATIONS** SLDA15 TYPE

| Part Number        | Band Width | Peak Gain    | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|--------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ         | V-XZ         | In BW | $\Omega$  | W              |
| SLDA15-2R450G-36TF | 2400~2500  | 0.85dBi Typ. | -1.5dBi Typ. | <2    | 50        | 2              |

## SLDA18 TYPE

| Part Number        | Band Width | Peak Gain | Average Gain | VSWR                          | Impedance | Power Capacity |
|--------------------|------------|-----------|--------------|-------------------------------|-----------|----------------|
|                    | MHz        | V-XZ      | V-XZ         | In BW                         | $\Omega$  | W              |
| SLDA18-5R500G-36TF | 2400~2484  | -         | -            | 6.5 max.<br>@2400-2484<br>MHz | 50        | 3              |
|                    | 5150~5850  |           |              | 4.0 max.<br>@5150-5850<br>MHz |           |                |
| SLDA18-2R450G-31TF | 2400~2480  | 0.9dBi    | -2.0dBi      | -                             | 50        | 3              |

## SLDA31 TYPE

| Part Number        | Band Width | Peak Gain              | Average Gain            | VSWR  | Impedance | Power Capacity |
|--------------------|------------|------------------------|-------------------------|-------|-----------|----------------|
|                    | MHz        | V-XZ                   | V-XZ                    | In BW | $\Omega$  | W              |
| SLDA31-2R800G-S1TF | $\geq 100$ | 0.5dBi Typ.            | -1dBi Typ.              | <2    | 50        | 3              |
| SLDA31-2R450G-S1TF | $\geq 100$ | 0.5dBi Typ.            | -1dBi Typ.              | <2    | 50        | 3              |
| SLDA31-2R400G-S1TF | $\geq 100$ | 2.5dBi<br>@( XZ-total) | -1.5dBi<br>@( XZ-total) | <2    | 50        | 3              |
| SLDA31-2R450G-S2TF | $\geq 100$ | 2.5dBi<br>@( XZ-total) | 0.5dBi<br>@( XZ-total)  | <2    | 50        | 3              |
| SLDA31-2R450G-36TF | 2400~2500  | 1.7dBi                 | -1.0dBi                 | <2    | 50        | 3              |
| SLDA31-6R050G-31TF | 2400~2500  | 2.5dBi                 | -2.9dBi                 | <2    | 50        | 3              |
|                    | 4900~5850  | 1.5dBi                 | -2.1dBi                 |       |           |                |
|                    | 5850~7200  | 2.2dBi                 | -1.7dBi                 |       |           |                |
| SLDA31-7R000G-31TF | 5500~8500  | 3.5dBi                 | -1.3dBi                 | <2    | 50        | 3              |

## SLDA52 TYPE

| Part Number        | Band Width | Peak Gain   | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|-------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ        | V-XZ         | In BW | $\Omega$  | W              |
| SLDA52-2R510G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        | 3              |
| SLDA52-2R540G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        |                |
| SLDA52-2R450G-31TF | 2400~2500  | 0dBi        | -1.5dBi      | <2    | 50        | 3              |

## SLDA62 TYPE

| Part Number        | Band Width | Peak Gain   | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|-------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ        | V-XZ         | In BW | $\Omega$  | W              |
| SLDA62-2R640G-01TF | $\geq 200$ | 2.6dBi Typ. | 0.7dBi Typ.  | <2    | 50        | 3              |

## SLDA72 TYPE

| Part Number        | Band Width | Peak Gain   | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|-------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ        | V-XZ         | In BW | $\Omega$  | W              |
| SLDA72-0R900G-31TF | 858~928    | -1.1dBi     | -2.5dBi      | <2    | 50        | 3              |
| SLDA72-2R470G-S1TF | $\geq 200$ | 2.7dBi Typ. | 1.0dBi Typ.  | <2    | 50        | 3              |
| SLDA72-2R450G-31TF | 2400~2500  | 1.5dBi      | -0.5dBi      | <2    | 50        | 3              |

**SPECIFICATIONS SLDA81 TYPE**

| Part Number        | Band Width | Peak Gain   | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|-------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ        | V-XZ         | In BW | $\Omega$  | W              |
| SLDA81-3R010G-S1TF | $\geq 200$ | 2.0dBi Typ. | 0.5dBi Typ.  | <2    | 50        | 3              |

**SLDA92 TYPE**

| Part Number        | Band Width | Peak Gain   | Average Gain | VSWR  | Impedance | Power Capacity |
|--------------------|------------|-------------|--------------|-------|-----------|----------------|
|                    | MHz        | V-XZ        | V-XZ         | In BW | $\Omega$  | W              |
| SLDA92-2R660G-S1TF | $\geq 200$ | 3.0dBi Typ. | 1.0dBi Typ.  | <2    | 50        | 3              |

**SLDA106 TYPE**

| Part Number         | Band Width | Peak Gain | Average Gain | VSWR  | Impedance | Power Capacity |
|---------------------|------------|-----------|--------------|-------|-----------|----------------|
|                     | MHz        | V-XZ      | V-XZ         | In BW | $\Omega$  | W              |
| SLDA106-7R000G-31TF | 3100~10300 | 2.2dBi    | -3.5dBi.     | <2    | 50        | 3              |

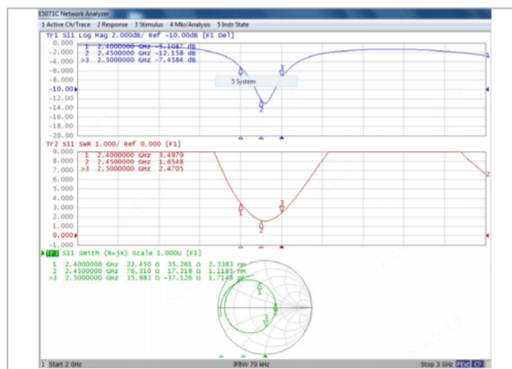
**SLDA154 TYPE**

| Part Number         | Band Width                   | Peak Gain | Average Gain | VSWR  | Impedance | Power Capacity |
|---------------------|------------------------------|-----------|--------------|-------|-----------|----------------|
|                     | MHz                          | V-XZ      | V-XZ         | In BW | $\Omega$  | W              |
| SLDA154-2R200G-31TF | 700~800 MHz<br>1700~2100 MHz | 2.0dBi.   | -1.6dBi      | <2    | 50        | 3              |
|                     | 824~960 MHz<br>1710~2690 MHz | 2.0dBi    | -1.0dBi      |       |           |                |

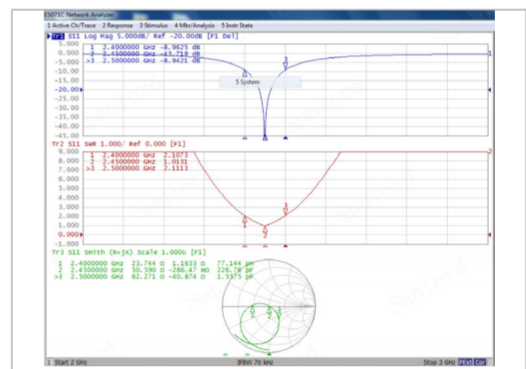
※Frequency will be changed with layout of PCB. Please contact us for appropriate design.

**IMPEDANCE MATCHING**

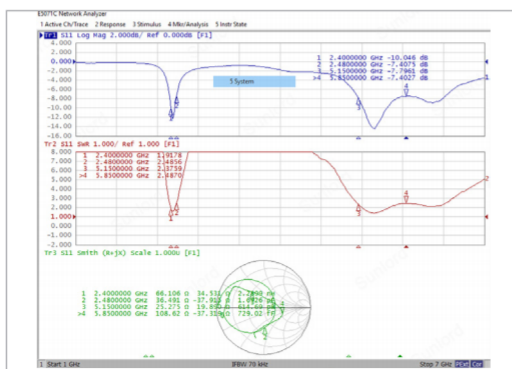
**SLDA15-2R450G-36TF**



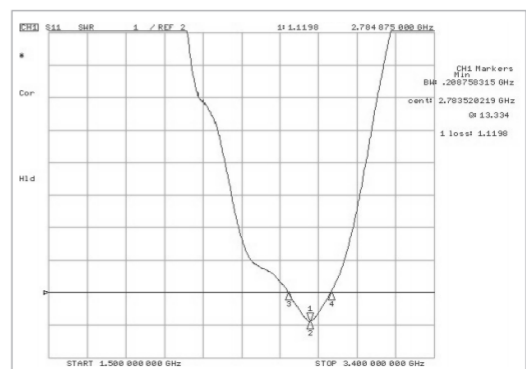
**SLDA18-5R500G-36TF**



**SLDA18-2R450G-31TF**

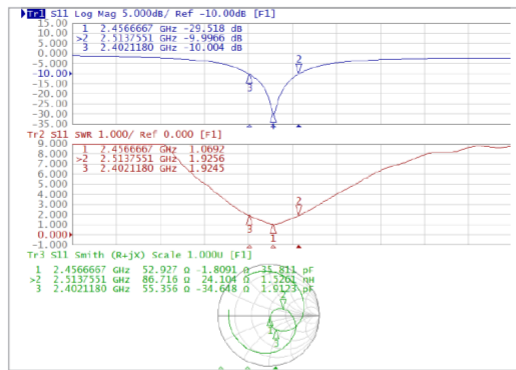


**SLDA31-2R800G-S1TF**

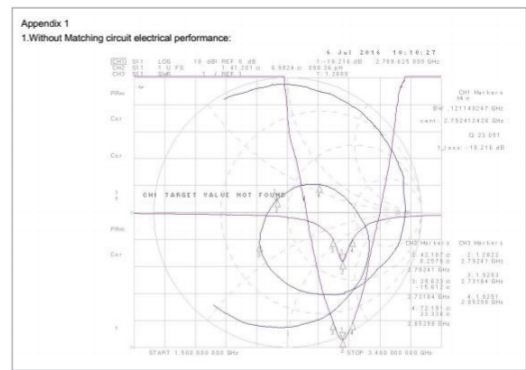


**IMPEDANCE MATCHING**

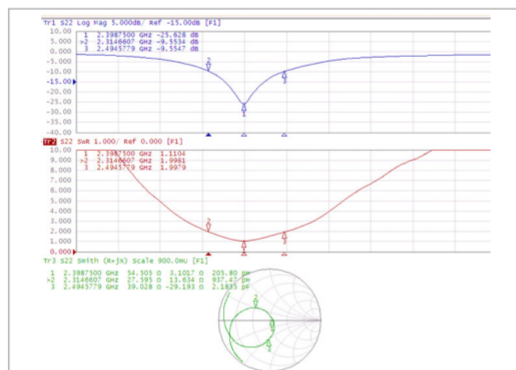
**SLDA31-2R400G-S1TF**



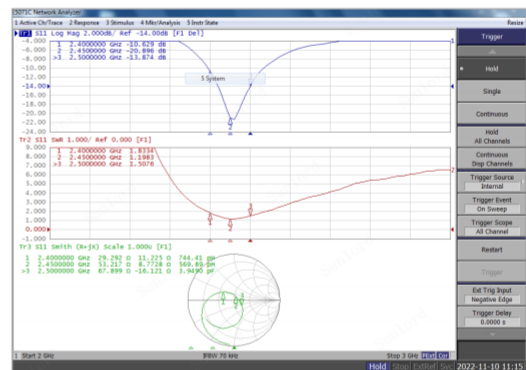
**SLDA31-2R450G-S1TF**



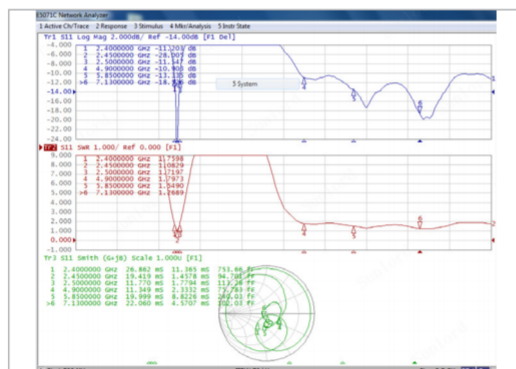
**SLDA31-2R450G-S2TF**



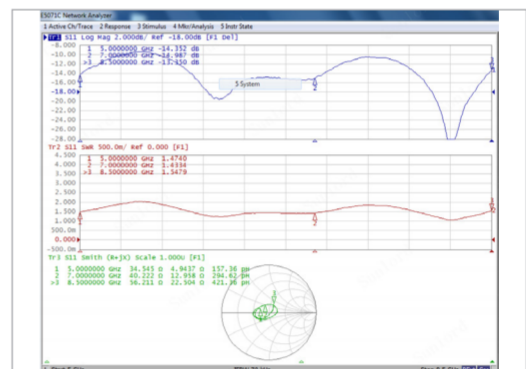
**SLDA31-2R450G-36TF**



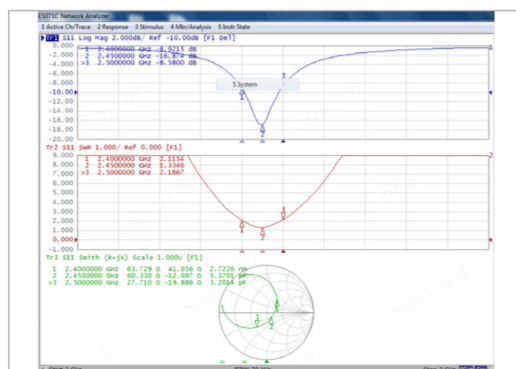
**SLDA31-6R050G-31TF**



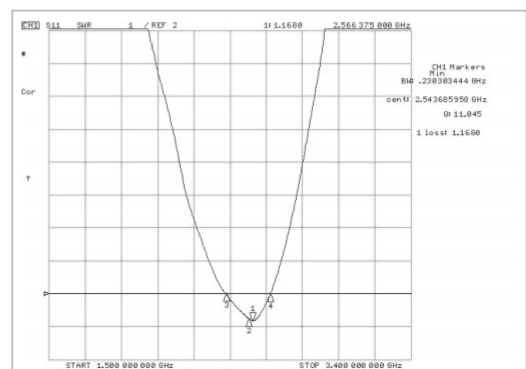
**SLDA31-7R000G-31TF**



**SLDA52-2R450G-31TF**

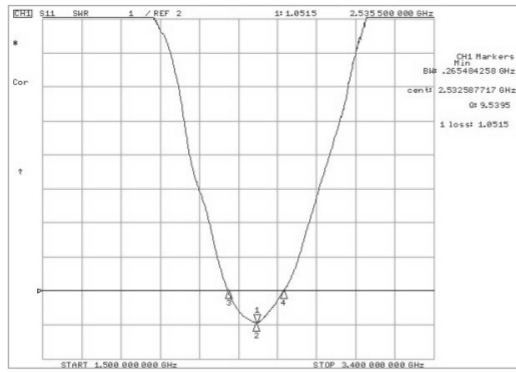


**SLDA52-2R510G-S1TF**

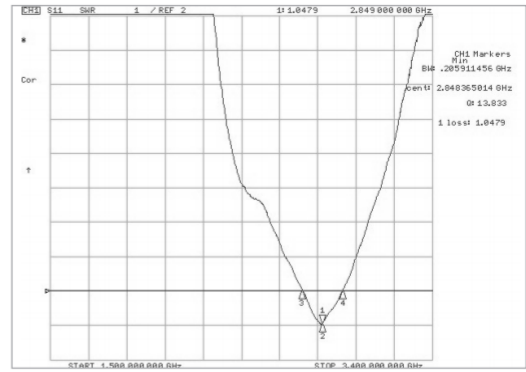


**IMPEDANCE MATCHING**

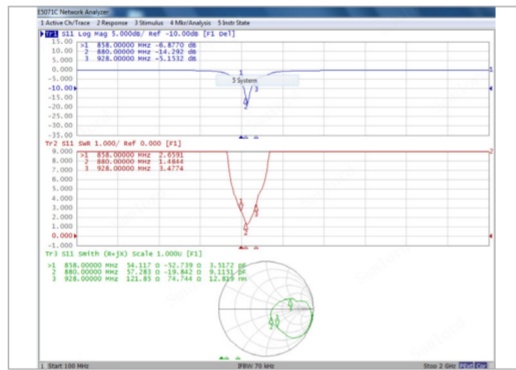
**SLDA52-2R540G-S1TF**



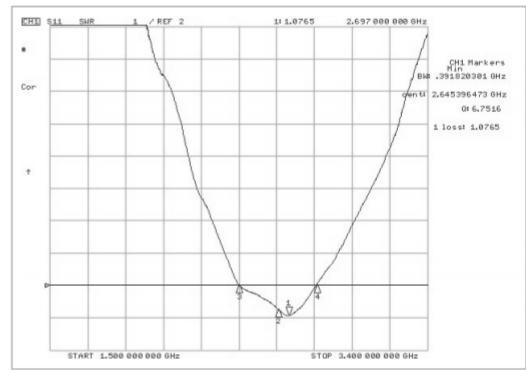
**SLDA62-2R640G-01TF**



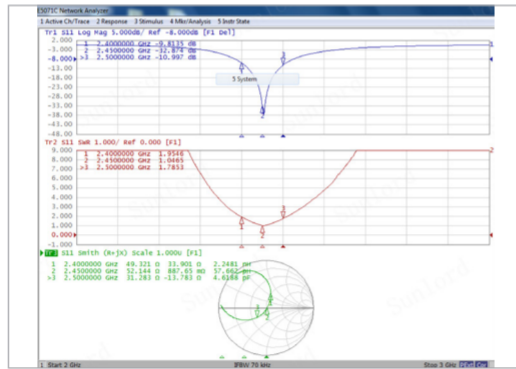
**SLDA72-0R900G-31TF**



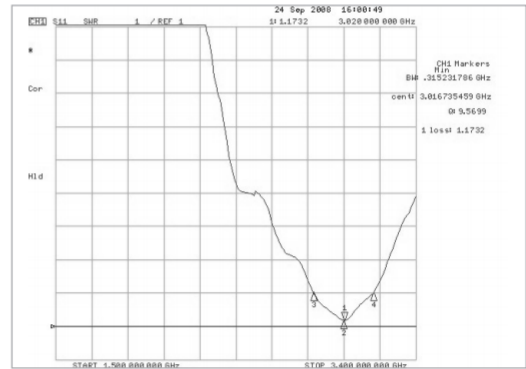
**SLDA72-2R470G-S1TF**



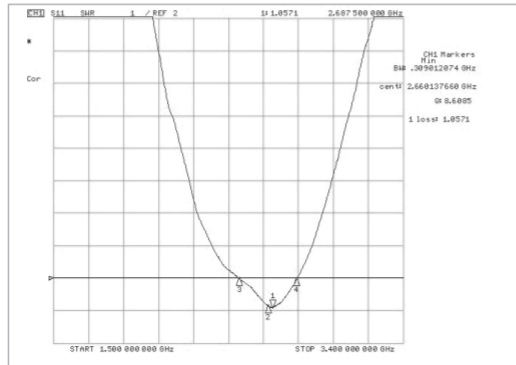
**SLDA72-2R450G-31TF**



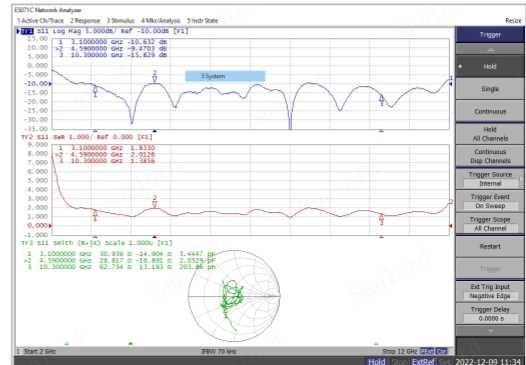
**SLDA81-3R010G-S1TF**



**SLDA92-2R660G-S1TF**



**SLDA106-7R000G-31TF**



Multilayer Chip LC Filter

Multilayer Chip Balun

Multilayer Chip Diplexer

Multilayer Chip Triplexer

Multilayer Chip LC Coupler

Multilayer Chip Antenna

Wire Wound Chip Balun Transformer

Ceramic Dielectric Filter

**IMPEDANCE MATCHING**

SLDA154-2R200G-31TF

