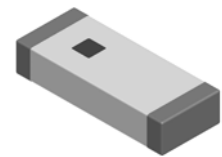


**Operating Temp. : -40℃~+85℃**



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

- Bluetooth, Wireless LAN, Mobile TV
- Home RF system, etc
- RFID

| <u>SLDA</u><br>①                                                                                       | <u>31</u><br>② | <u>-2R800G</u><br>③               | <u>-S1</u><br>④                                                                                                                                                                                                                                                                                                                                                      | <u>I</u><br>⑤                                                                                  | <u>F</u><br>⑥   |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
|--------------------------------------------------------------------------------------------------------|----------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------|--------------------|-----------------|-----------------------------------------------------------------------------------------------------|-----------------------------------|-----------------|---------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------|-----------------------|-----------------------|----------------------|---|--|--|
| ①                                                                                                      | ②              | ③                                 | ④                                                                                                                                                                                                                                                                                                                                                                    | ⑤                                                                                              | ⑥               |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| <table border="1"> <tr><th>Type</th></tr> <tr><td>SLDA      Multilayer Chip Antenna</td></tr> </table> | Type           | SLDA      Multilayer Chip Antenna | <table border="1"> <tr><th>External Dimensions (L×W) (mm)</th></tr> <tr><td>31      3.2×1.6</td></tr> <tr><td>52      5.2×2.1</td></tr> <tr><td>62      6.0×2.0</td></tr> <tr><td>72      7.0×2.0</td></tr> <tr><td>81      8.0×1.0</td></tr> <tr><td>92      9.0×2.0</td></tr> <tr><td>16030      16.0×3.0</td></tr> <tr><td>35050      35.0×5.0</td></tr> </table> | External Dimensions (L×W) (mm)                                                                 | 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 | 16030      16.0×3.0 | 35050      35.0×5.0 | <table border="1"> <tr><th>Center Frequency</th></tr> <tr><td>Example      Nominal Value</td></tr> <tr><td>2R800G      2800.0MHz</td></tr> <tr><td>2R470G      2470.0MHz</td></tr> <tr><td>0R650G      650.0MHz</td></tr> </table> | Center Frequency | Example      Nominal Value | 2R800G      2800.0MHz | 2R470G      2470.0MHz | 0R650G      650.0MHz | ③ |  |  |
| Type                                                                                                   |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| SLDA      Multilayer Chip Antenna                                                                      |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| External Dimensions (L×W) (mm)                                                                         |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 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                                                                                        |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 16030      16.0×3.0                                                                                    |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 35050      35.0×5.0                                                                                    |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| Center Frequency                                                                                       |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| Example      Nominal Value                                                                             |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 2R800G      2800.0MHz                                                                                  |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 2R470G      2470.0MHz                                                                                  |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| 0R650G      650.0MHz                                                                                   |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| ④                                                                                                      |                | ⑤                                 |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                | ⑥               |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| <table border="1"> <tr><th>Series Code</th></tr> <tr><td>S1, 01, etc.</td></tr> </table>               | Series Code    | S1, 01, etc.                      |                                                                                                                                                                                                                                                                                                                                                                      | <table border="1"> <tr><th>Packing</th></tr> <tr><td>T      Tape &amp; Reel</td></tr> </table> | Packing         | T      Tape & Reel |                 | <table border="1"> <tr><th>Hazardous Substance Free Products</th></tr> <tr><td>F</td></tr> </table> | Hazardous Substance Free Products | F               |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| Series Code                                                                                            |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| S1, 01, etc.                                                                                           |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| Packing                                                                                                |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| T      Tape & Reel                                                                                     |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| Hazardous Substance Free Products                                                                      |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |
| F                                                                                                      |                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                 |                    |                 |                                                                                                     |                                   |                 |                     |                     |                                                                                                                                                                                                                                    |                  |                            |                       |                       |                      |   |  |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                             | Dimensions (mm)                                                                      |
|                                                                                                                                                                                                                                                                                                                                                |  |
| Land Pattern (mm)                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                      |
|  <div style="display: flex; justify-content: flex-end; align-items: center; margin-top: 10px;"> <div style="width: 15px; height: 15px; background-color: #666; margin-right: 5px;"></div> Land         <div style="width: 15px; height: 15px; background-color: #ccc; margin-left: 20px; margin-right: 5px;"></div> Solder-resist       </div> |                                                                                      |

## SHAPE AND DIMENSIONS

| Series                 | A        | B       | C         | D       | E       | F       | G       | H        | I   | J       |
|------------------------|----------|---------|-----------|---------|---------|---------|---------|----------|-----|---------|
| 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 | 2.6±0.2  | 1.4 | 1.6±0.2 |
| SLDA31-3R40<br>0G-S1TF | 3.2±0.2  | 1.6±0.2 | 0.77±0.03 | 0.5±0.2 | 1.6±0.2 | 0.8±0.2 | 0.8±0.2 | 2.6±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 |
| SDLA62                 | 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 |
| SLDA16030              | 16.9±0.4 | 3.0±0.3 | 2.0±0.3   | 1.0±0.2 | 3.0±0.3 | 1.5±0.3 | 1.0±0.3 | 16.0±0.3 | 1.4 | 3.2±0.2 |
| SLDA35050              | 35.0±0.2 | 5.0±0.2 | 1.0±0.2   | 1.0±0.2 | 5.2±0.2 | 1.5±0.2 | 1.0±0.2 | 33.0±0.2 | 1.4 | 5.2±0.2 |

## TERINAL-CONFIGURATION

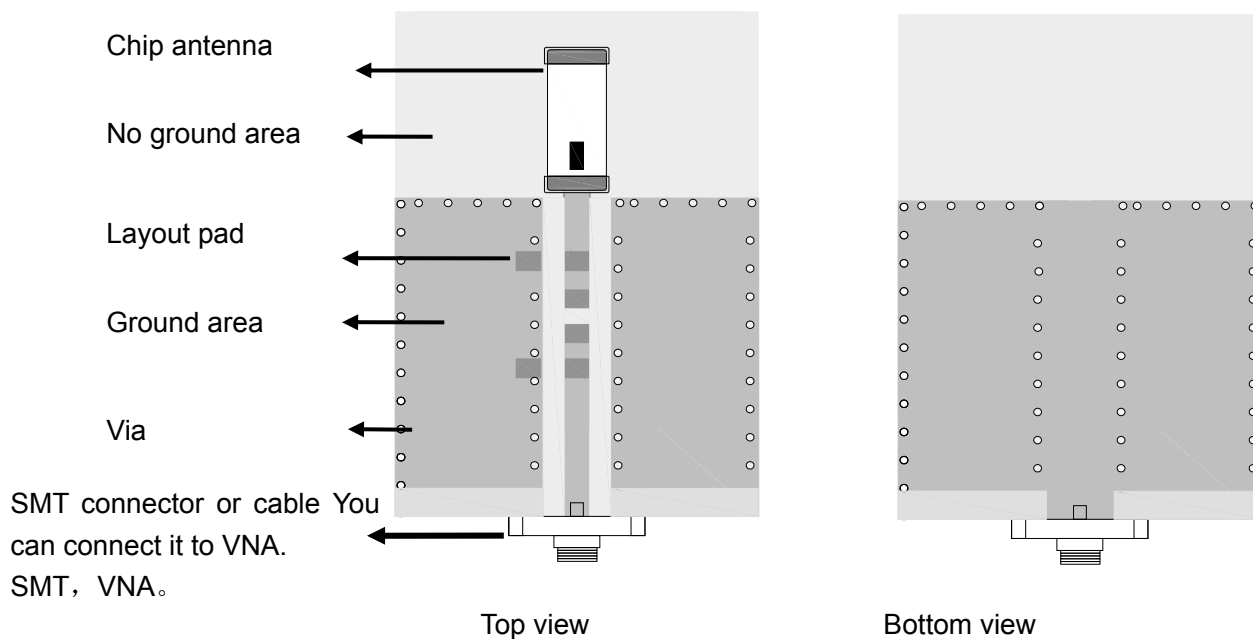
( 1 )



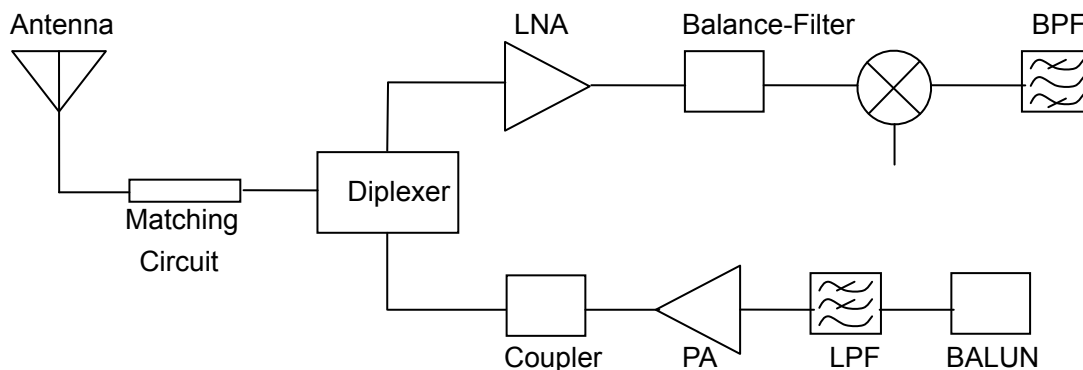
( 2 )

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

## EVALUATION BOARD



## APPLICATION GUIDE



**Sunlord**

Specifications subject to change without notice. Please check our website for latest information. Revised 2016/04/15

Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 Tel: 0086-755-29832660 Fax: 0086-755-82269029 E-Mail: sunlord@sunlordinc.com

## SPECIFICATIONS

### 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 | $\geq 100$ | 0dBi Typ. | -1dBi Typ.   | <2    | 50        | 3              |
| SLDA31-3R400G-S1TF | $\geq 100$ | 0dBi Typ. | -1dBi Typ.   | <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              |
| SLDA52-2R350G-S1TF | $\geq 150$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        | 3              |
| SLDA52-2R510G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        |                |
| SLDA52-2R540G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        |                |
| SLDA52-2R710G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        |                |
| SLDA52-2R780G-S1TF | $\geq 200$ | 2.5dBi Typ. | 0.5dBi Typ.  | <2    | 50        |                |

### 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              |
| SLDA72-2R470G-S1TF | $\geq 200$ | 2.7dBi Typ. | 1.0dBi Typ.  | <2    | 50        | 3              |
| SLDA72-2R860G-02TF | $\geq 200$ | 2.7dBi Typ. | 1.0dBi Typ.  | <2    | 50        |                |

### 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              |

### SLDA16030 TYPE

| Part Number           | Band Width | Peak Gain   |             | VSWR  | Impedance | Power Capacity |
|-----------------------|------------|-------------|-------------|-------|-----------|----------------|
|                       | MHz        | V-XZ        |             | In BW | $\Omega$  | W              |
| SLDA16030-0R433G-S1TF | $\geq 20$  | 3.0dBi Typ. | 1.0dBi Typ. | <2    | 50        | 3              |

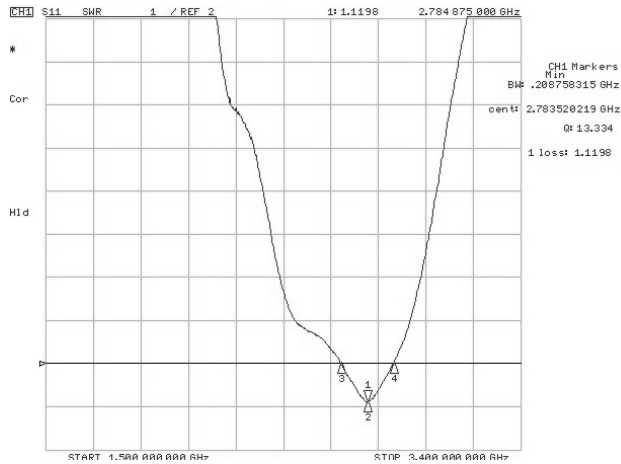
### SLDA35050 TYPE

| Part Number           | Band Width | Peak Gain                |                          | VSWR  | Impedance | Power Capacity |
|-----------------------|------------|--------------------------|--------------------------|-------|-----------|----------------|
|                       | MHz        | V-XZ                     |                          | In BW | $\Omega$  | W              |
| SLDA35050-0R650G-S1TF | $\geq 50$  | -2.0dBi Typ.<br>(710MHz) | -7.0dBi Typ.<br>(474MHz) | <3    | 50        | 3              |

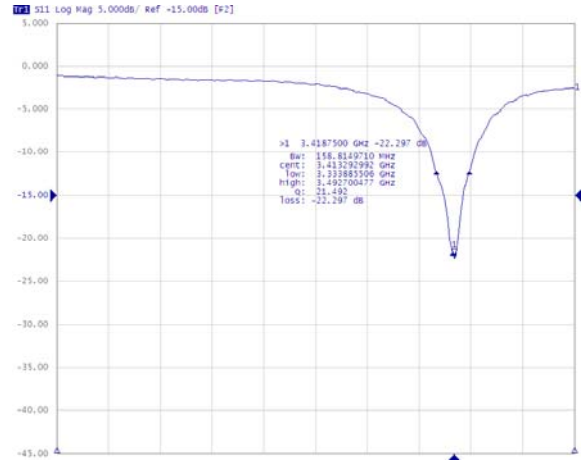
※Frequency will be changed with layout of PCB. Please contact us for appropriate design.

## RETURN LOSS

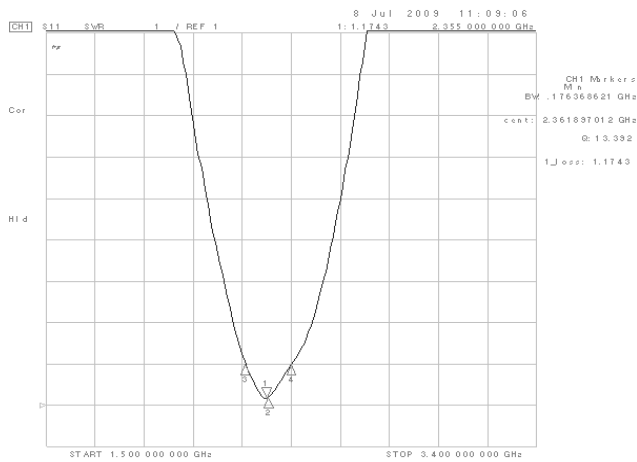
SLDA31-2R800G-S1TF



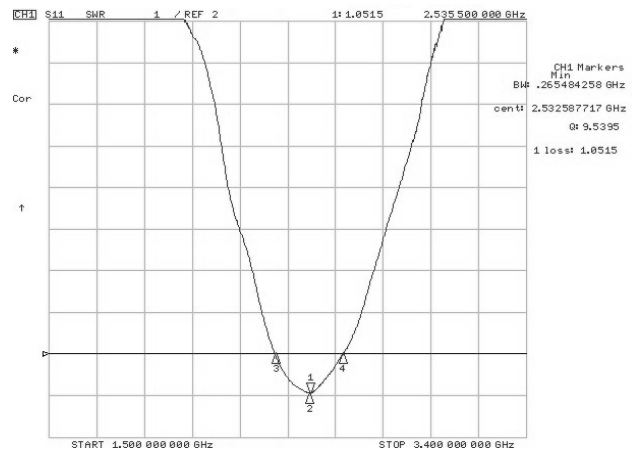
SLDA31-3R400G-S1TF



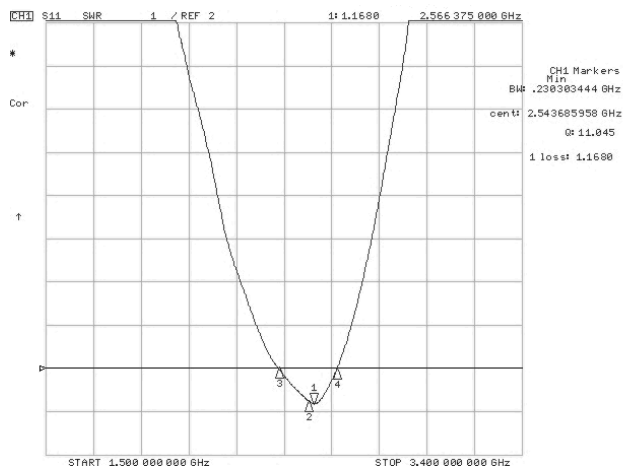
SLDA52-2R350G-S1TF



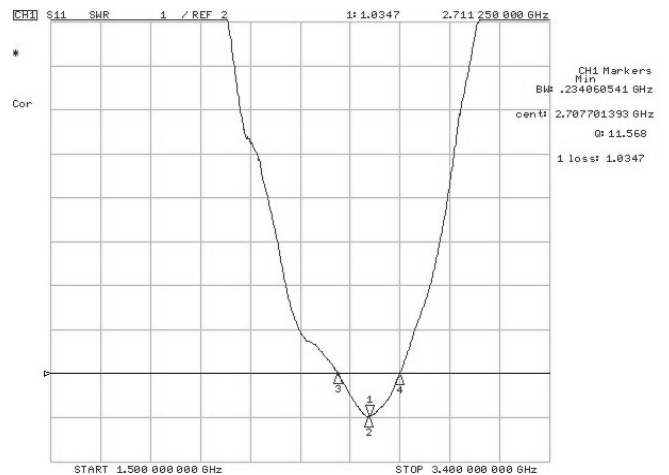
SLDA52-2R510G-S1TF



SLDA52-2R540G-S1TF

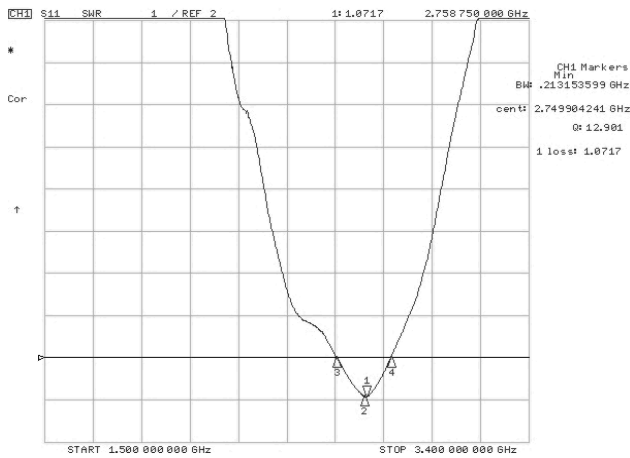


SLDA52-2R710G-S1TF



## RETURN LOSS

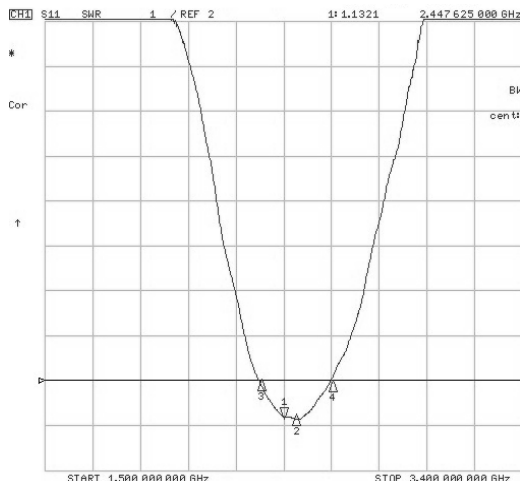
SLDA52-2R780G-S1TF



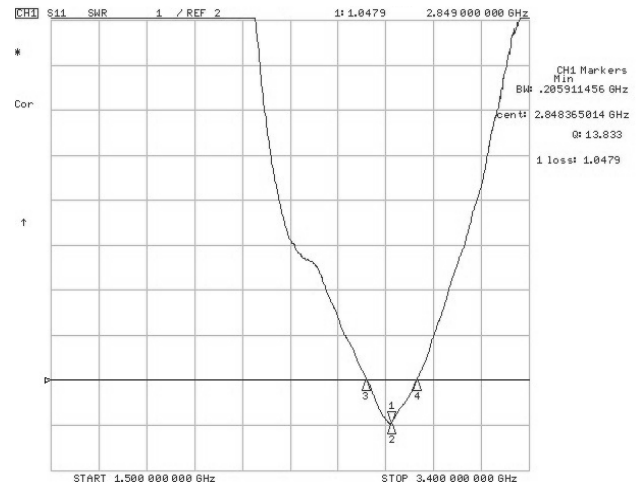
SLDA62-2R640G-01TF



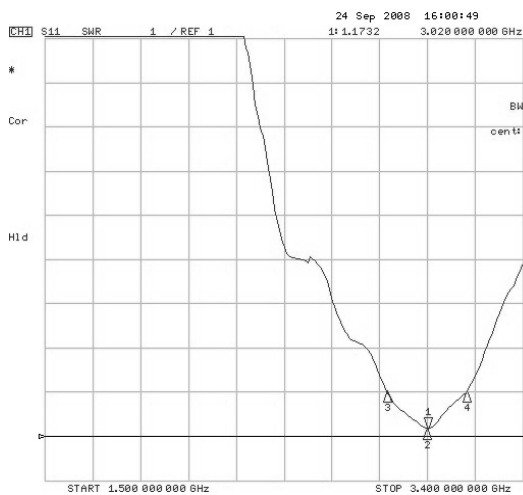
SLDA72-2R470G-S1TF



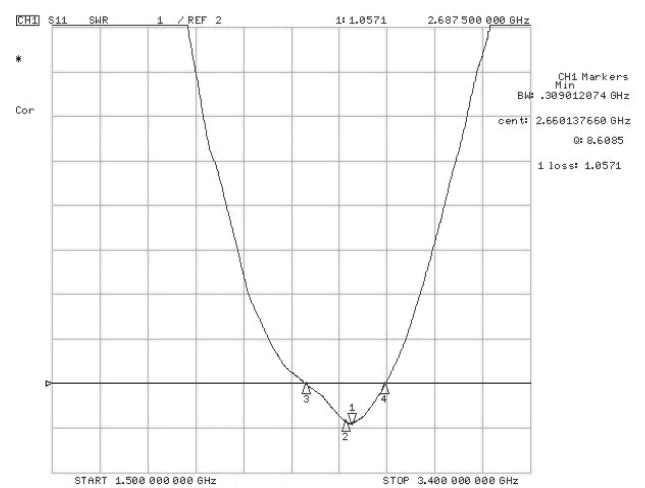
SLDA72-2R860G-02TF



SLDA81-3R010G-S1TF

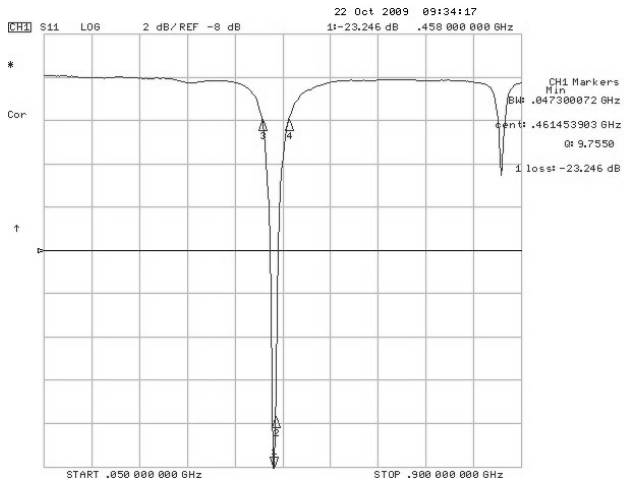


SLDA92-2R660G-S1TF



## RETURN LOSS

SLDA16030-0R433G-S1TF



SLDA35050-0R650G-S1TF

