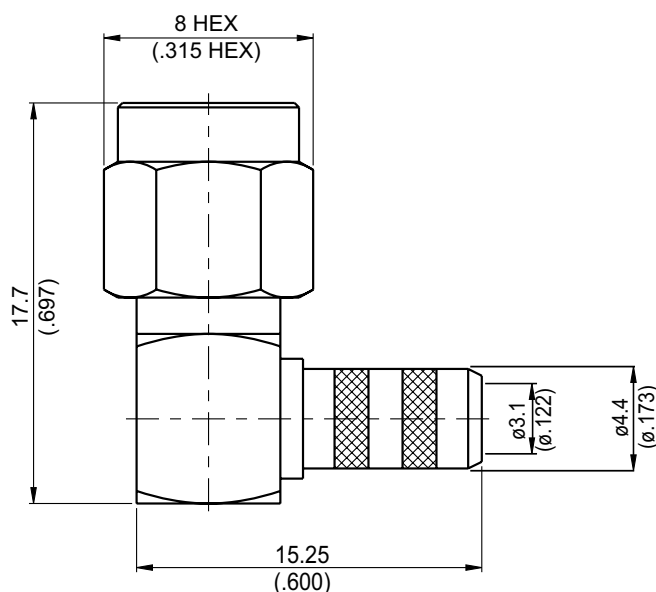


SMA61NP-9223

**SMA Reverse Polarity Plug Crimp Right Angle**  
For RG223; 6GHz VSWR 1.2

**50Ω**



| Parts         | Material         | Plating (Micro-inch)                                   |
|---------------|------------------|--------------------------------------------------------|
| Ferrule       | Brass            | Gold 4 Over Nickel Phosphorous Alloy 80 Over Copper 20 |
| Cover         | Brass            | Gold 4 Over Nickel Phosphorous Alloy 80 Over Copper 20 |
| Renbrock Ring | Beryllium Copper | Tin-Zinc-Copper-Alloy 100 Over Copper 50               |
| Gasket        | Silicon          |                                                        |
| Contact Pin   | Beryllium Copper | Gold 4 Over Nickel Phosphorous Alloy 80 Over Copper 20 |
| Insulator     | Teflon           |                                                        |
| Barrel        | Brass            | Gold 4 Over Nickel Phosphorous Alloy 80 Over Copper 20 |
| Body          | Brass            | Gold 4 Over Nickel Phosphorous Alloy 80 Over Copper 20 |
| Coupling Nut  | Stainless        | Passivated                                             |

Suitable Cables:RG223

**This part number complies with RoHS.**

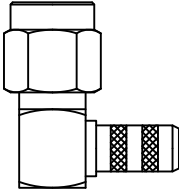
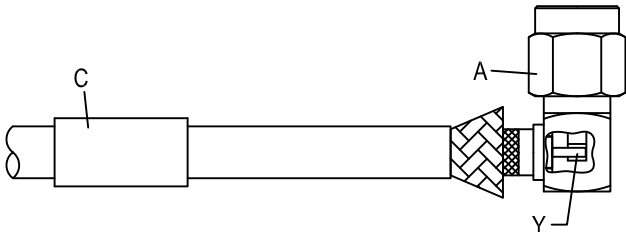
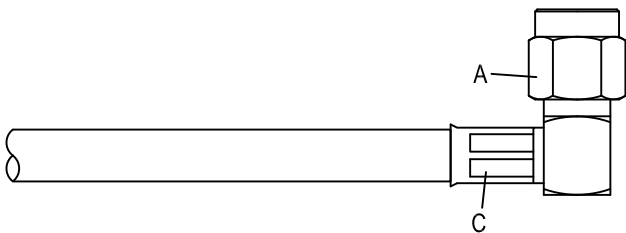
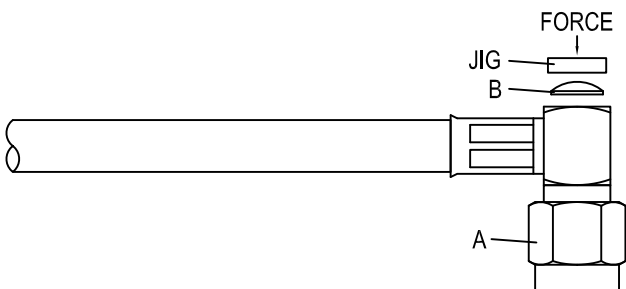
**Notice: JYEBAO reserves the right to make modifications deemed appropriate.**

| SMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SMA61NP-9223                         |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------|-------------------|-----------------------|--------------------------------------|------------------------------|-------------------------|---------------------------|--------------------------------------|-----------------------|-----------|------------------------------------|-------|------------------------------------|-------|------------------------------------------------|------------|--------------------------------|-----------|
| <div>Interface</div> <p>Per JYEBAO SMA Reverse Polarity derived from MIL-STD-348B</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| <div>Electrical Data</div> <table> <tr> <td>Impedance</td><td>50Ω</td></tr> <tr> <td>Frequency range</td><td>DC to 6GHz</td></tr> <tr> <td>VSWR</td><td>≤ 1.2 (DC to 6GHz)</td></tr> <tr> <td>Insertion loss</td><td>≤ 0.04 x √f(GHz) dB</td></tr> <tr> <td>Insulation resistance</td><td>≥ 5000MΩ</td></tr> <tr> <td>Contact resistance inner conductor</td><td>≤ 3mΩ</td></tr> <tr> <td>Contact resistance outer conductor</td><td>≤ 2mΩ</td></tr> <tr> <td>Dielectric withstanding voltage (at sea level)</td><td>1000 V rms</td></tr> <tr> <td>Working voltage (at sea level)</td><td>335 V rms</td></tr> </table> |                                      | Impedance                       | 50Ω               | Frequency range       | DC to 6GHz                           | VSWR                         | ≤ 1.2 (DC to 6GHz)      | Insertion loss            | ≤ 0.04 x √f(GHz) dB                  | Insulation resistance | ≥ 5000MΩ  | Contact resistance inner conductor | ≤ 3mΩ | Contact resistance outer conductor | ≤ 2mΩ | Dielectric withstanding voltage (at sea level) | 1000 V rms | Working voltage (at sea level) | 335 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 50Ω                                  |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC to 6GHz                           |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ≤ 1.2 (DC to 6GHz)                   |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ≤ 0.04 x √f(GHz) dB                  |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ≥ 5000MΩ                             |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Contact resistance inner conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ≤ 3mΩ                                |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Contact resistance outer conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ≤ 2mΩ                                |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Dielectric withstanding voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1000 V rms                           |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 335 V rms                            |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| <div>Mechanical Data</div> <table> <tr> <td>Recommended coupling nut torque</td><td>7 to 9.5 inch lbs</td></tr> <tr> <td>Coupling proof torque</td><td>15 inch lbs</td></tr> <tr> <td>Coupling nut retention force</td><td>≥ 60.7 lbs</td></tr> <tr> <td>Contact Captivation-axial</td><td>≥ 6.1 lbs</td></tr> <tr> <td>Durability (mating)</td><td>≥ 500</td></tr> </table>                                                                                                                                                                                                                                           |                                      | Recommended coupling nut torque | 7 to 9.5 inch lbs | Coupling proof torque | 15 inch lbs                          | Coupling nut retention force | ≥ 60.7 lbs              | Contact Captivation-axial | ≥ 6.1 lbs                            | Durability (mating)   | ≥ 500     |                                    |       |                                    |       |                                                |            |                                |           |
| Recommended coupling nut torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 7 to 9.5 inch lbs                    |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Coupling proof torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 15 inch lbs                          |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Coupling nut retention force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ≥ 60.7 lbs                           |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Contact Captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ≥ 6.1 lbs                            |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Durability (mating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ≥ 500                                |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| <div>Environmental Data</div> <table> <tr> <td>Temperature range</td><td>-65°C to +165°C</td></tr> <tr> <td>Thermal shock</td><td>MIL-STD-202, Method 107, Condition B</td></tr> <tr> <td>Moisture resistance</td><td>MIL-STD-202, Method 106</td></tr> <tr> <td>Corrosion</td><td>MIL-STD-202, Method 101, Condition B</td></tr> <tr> <td>RoHS</td><td>Compliant</td></tr> </table>                                                                                                                                                                                                                                   |                                      | Temperature range               | -65°C to +165°C   | Thermal shock         | MIL-STD-202, Method 107, Condition B | Moisture resistance          | MIL-STD-202, Method 106 | Corrosion                 | MIL-STD-202, Method 101, Condition B | RoHS                  | Compliant |                                    |       |                                    |       |                                                |            |                                |           |
| Temperature range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -65°C to +165°C                      |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Thermal shock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | MIL-STD-202, Method 107, Condition B |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Moisture resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MIL-STD-202, Method 106              |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Corrosion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MIL-STD-202, Method 101, Condition B |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| RoHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliant                            |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| <div>Tooling</div> <table> <tr> <td>Crimping tool</td><td>CRT-1 or CRT-2</td></tr> <tr> <td>Crimp insert</td><td>INSERT-B</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      | Crimping tool                   | CRT-1 or CRT-2    | Crimp insert          | INSERT-B                             |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CRT-1 or CRT-2                       |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Crimp insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | INSERT-B                             |                                 |                   |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |

Notice: JYEBAO reserves the right to make modifications deemed appropriate.

# JYE BAO CO., LTD.

## CABLE ASSEMBLY RECOMMENDATION

|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |         |                                                                                                                                                                            |         |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|
| SMA61NP-9223                                                                                                                                                                                                                                                                                                                                                                                                            |  | DATE    | 2014/04/29                                                                                                                                                                 | REV     | — |
| <div><div><div>A</div><div></div><div>BODY</div></div><div><div>B</div><div></div><div>COVER</div></div><div><div>C</div><div></div><div>FERRULE</div></div></div> |  |         |                                                                                                                                                                            |         |   |
| DIAGRAM                                                                                                                                                                                                                                                                                                                                                                                                                 |  |         | ASSEMBLY INSTRUCTION                                                                                                                                                       |         |   |
|                                                                                                                                                                                                                                                                                                                                       |  |         | Step 1: STRIP AS SHOWN.                                                                                                                                                    |         |   |
|                                                                                                                                                                                                                                                                                                                                      |  |         | Step 2: SLIDE FERRULE " C " OVER CABLE.<br>Step 3: WRAP THE BRAIDING UPWARDS.<br>Step 4: SLIDE CENTER CONDUCTOR ON THE CONTACT PIN OF CONNECTOR " A " AND SOLDER IN " Y ". |         |   |
|                                                                                                                                                                                                                                                                                                                                      |  |         | Step 5: SLIDE FERRULE " C " TOWARDS THE CONNECTOR " A " AND CRIMP.<br>(USE 5.9mm/0.232inch HEX SECTION OF INSERT-B)                                                        |         |   |
|                                                                                                                                                                                                                                                                                                                                      |  |         | Step 6: PRESS ON THE TOP OF " B " WITH JIGS.                                                                                                                               |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate.                                                                                                                                                                                                                                                                                                     |  |         |                                                                                                                                                                            |         |   |
| APPROVED                                                                                                                                                                                                                                                                                                                                                                                                                |  | CHECKED |                                                                                                                                                                            | DRAWING |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |  |         |                                                                                                                                                                            | Albert  |   |

# SMA61NP-9223

S11

