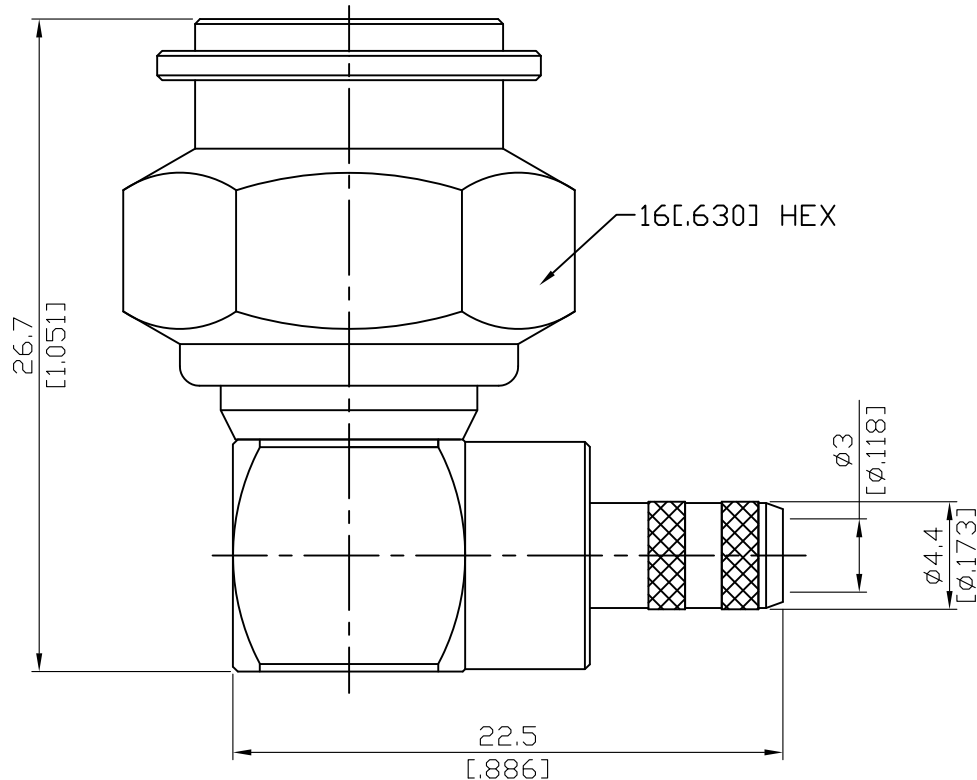


TNC3100A-9223

TNC Plug Crimp Right Angle  
For RG223; 4.5GHz VSWR 1.2

50Ω



| Parts        | Material | Plating ( Micro-inch )                                |
|--------------|----------|-------------------------------------------------------|
| Nut          | Brass    | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Ferrule      | Copper   | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Barrel       | Brass    | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Gasket       | Silicone |                                                       |
| Washer       | Brass    | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Spring       | Delrin   |                                                       |
| Contact Pin  | Brass    | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Insulator    | Teflon   |                                                       |
| Body         | Brass    | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Coupling Nut | Brass    | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |

Suitable Cables: RG223

This part number complies with RoHS.

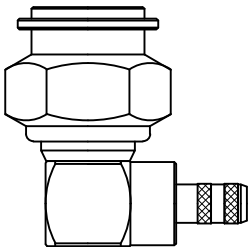
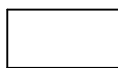
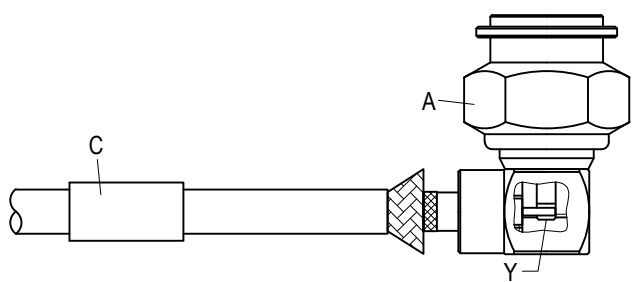
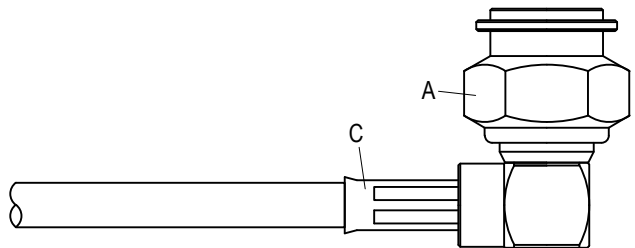
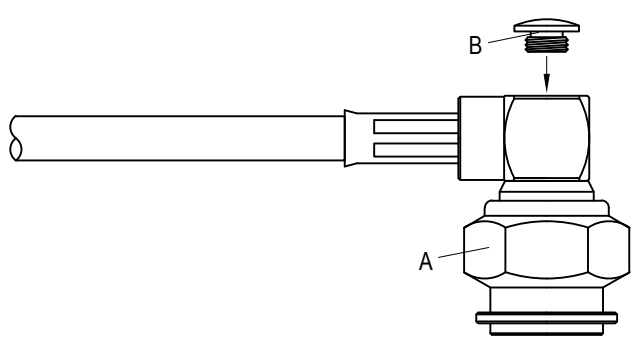
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

| TNC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TNC3100A-9223                             |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------|---------------------|-----------------------|--------------------------------------|------------------------------|---------------------------|---------------------------|-------------------------------------------|-----------------------|---------------------------|------------------------------------|--------------------------|------------------------------------|------------------------|------------------------------------------------|------------|--------------------------------|-----------|
| <div>Interface</div> MIL-STD-348B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                           |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| <div>Electrical Data</div> <table> <tr> <td>Impedance</td><td>50Ω</td></tr> <tr> <td>Frequency range</td><td>DC to 4.5GHz</td></tr> <tr> <td>VSWR</td><td><math>\leq 1.2</math> (DC to 4.5GHz)</td></tr> <tr> <td>Insertion loss</td><td><math>\leq 0.1 \times \sqrt{f(\text{GHz})}</math> dB</td></tr> <tr> <td>Insulation resistance</td><td><math>\geq 5000\text{M}\Omega</math></td></tr> <tr> <td>Contact resistance inner conductor</td><td><math>\leq 1.5\text{m}\Omega</math></td></tr> <tr> <td>Contact resistance outer conductor</td><td><math>\leq 1\text{m}\Omega</math></td></tr> <tr> <td>Dielectric withstanding voltage (at sea level)</td><td>1500 V rms</td></tr> <tr> <td>Working voltage (at sea level)</td><td>500 V rms</td></tr> </table> |                                           | Impedance                       | 50Ω                 | Frequency range       | DC to 4.5GHz                         | VSWR                         | $\leq 1.2$ (DC to 4.5GHz) | Insertion loss            | $\leq 0.1 \times \sqrt{f(\text{GHz})}$ dB | Insulation resistance | $\geq 5000\text{M}\Omega$ | Contact resistance inner conductor | $\leq 1.5\text{m}\Omega$ | Contact resistance outer conductor | $\leq 1\text{m}\Omega$ | Dielectric withstanding voltage (at sea level) | 1500 V rms | Working voltage (at sea level) | 500 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50Ω                                       |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DC to 4.5GHz                              |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | $\leq 1.2$ (DC to 4.5GHz)                 |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | $\leq 0.1 \times \sqrt{f(\text{GHz})}$ dB |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | $\geq 5000\text{M}\Omega$                 |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Contact resistance inner conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | $\leq 1.5\text{m}\Omega$                  |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Contact resistance outer conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | $\leq 1\text{m}\Omega$                    |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Dielectric withstanding voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1500 V rms                                |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 500 V rms                                 |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| <div>Mechanical Data</div> <table> <tr> <td>Recommended coupling nut torque</td><td>4.1 to 6.1 inch lbs</td></tr> <tr> <td>Coupling proof torque</td><td>15 inch lbs</td></tr> <tr> <td>Coupling nut retention force</td><td><math>\geq 101.2</math> lbs</td></tr> <tr> <td>Contact captivation-axial</td><td><math>\geq 6.1</math> lbs</td></tr> <tr> <td>Durability (mating)</td><td><math>\geq 500</math></td></tr> </table>                                                                                                                                                                                                                                                                                                                                   |                                           | Recommended coupling nut torque | 4.1 to 6.1 inch lbs | Coupling proof torque | 15 inch lbs                          | Coupling nut retention force | $\geq 101.2$ lbs          | Contact captivation-axial | $\geq 6.1$ lbs                            | Durability (mating)   | $\geq 500$                |                                    |                          |                                    |                        |                                                |            |                                |           |
| Recommended coupling nut torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.1 to 6.1 inch lbs                       |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Coupling proof torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 15 inch lbs                               |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Coupling nut retention force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | $\geq 101.2$ lbs                          |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Contact captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | $\geq 6.1$ lbs                            |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Durability (mating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | $\geq 500$                                |                                 |                     |                       |                                      |                              |                           |                           |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| <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 INSTRUCTION

|                                                                                                                     |  |                                                                                                                                                                            |            |                                                                                                                     |   |
|---------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------|---|
| TNC3100A-9223                                                                                                       |  | DATE                                                                                                                                                                       | 2017/04/18 | REV                                                                                                                 | — |
| <div>A</div>  <div>BODY</div>      |  | <div>B</div>  <div>NUT</div>                                                              |            | <div>C</div>  <div>FERRULE</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: FINALLY SCREW " B " ON THE CONNECTOR BODY " A ".                                                                                                                   |            |                                                                                                                     |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate. |  |                                                                                                                                                                            |            |                                                                                                                     |   |
| APPROVED                                                                                                            |  | CHECKED                                                                                                                                                                    |            | DRAWING                                                                                                             |   |
|                                                                                                                     |  |                                                                                                                                                                            |            | Albert                                                                                                              |   |

# TNC3100A-9223

S11

