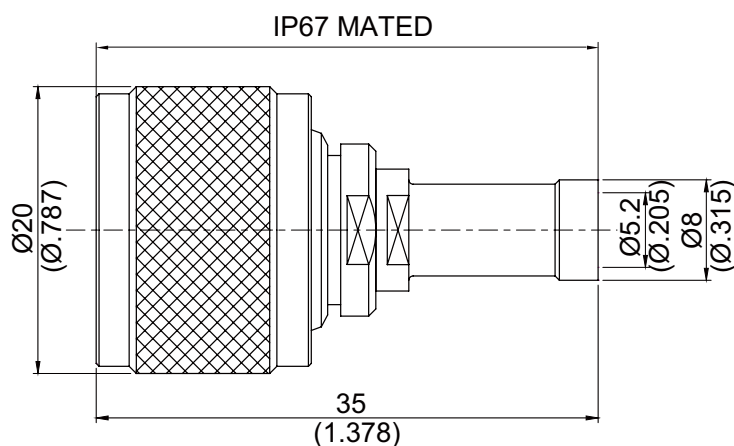


N3100B-0223/HS

N Plug Crimp, IP67 Mated,  
For RG223; 6GHz VSWR1.2

50Ω



| Parts        | Material | Plating (Micro-inch)                                   |
|--------------|----------|--------------------------------------------------------|
| Gasket       | Silicon  |                                                        |
| Ferrule      | Copper   | Tin-Zinc-Copper-Alloy 100 Over Copper 50               |
| Contact Pin  | Brass    | Gold 4 Over Nickel Phosphorous 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               |

Weight:  
Suitable Cables:RG223

This part number complies with RoHS.

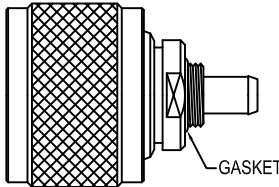
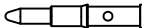
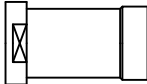
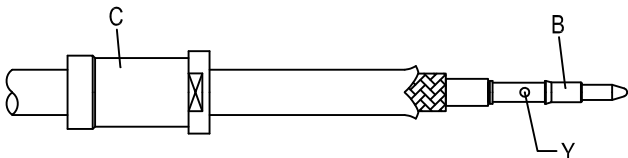
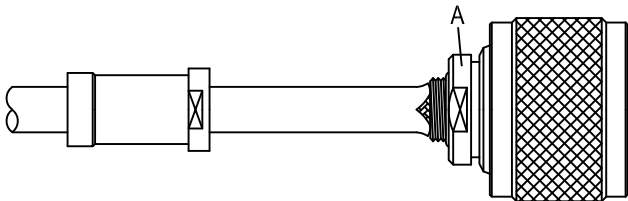
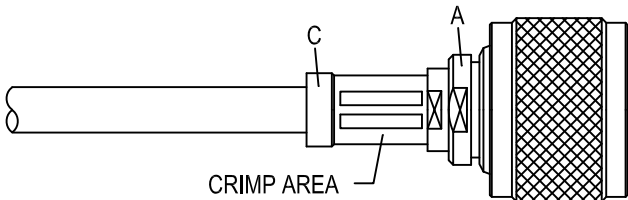
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N3100B-0223/HS                             |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------|------------------|-----------------------|--------------------------------------|------------------------------|-------------------------|---------------------------|--------------------------------------------|-----------------------|---------------------------|------------------------------------|--------------------------|------------------------------------|------------------------|------------------------------------------------|------------|--------------------------------|------------|
| <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 6GHz</td></tr> <tr> <td>VSWR</td><td><math>\leq 1.2</math> (DC to 6GHz)</td></tr> <tr> <td>Insertion loss</td><td><math>\leq 0.05 \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>2500 V rms</td></tr> <tr> <td>Working voltage (at sea level)</td><td>1000 V rms</td></tr> </table> |                                            | Impedance                       | 50Ω              | Frequency range       | DC to 6GHz                           | VSWR                         | $\leq 1.2$ (DC to 6GHz) | Insertion loss            | $\leq 0.05 \times \sqrt{f(\text{GHz})}$ 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) | 2500 V rms | Working voltage (at sea level) | 1000 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 50Ω                                        |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC to 6GHz                                 |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | $\leq 1.2$ (DC to 6GHz)                    |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | $\leq 0.05 \times \sqrt{f(\text{GHz})}$ 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2500 V rms                                 |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1000 V rms                                 |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| <div>Mechanical Data</div> <table> <tr> <td>Recommended coupling nut torque</td><td>6 to 10 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 6.3</math> lbs</td></tr> <tr> <td>Durability (mating)</td><td><math>\geq 500</math></td></tr> </table>                                                                                                                                                                                                                                                                                                                                    |                                            | Recommended coupling nut torque | 6 to 10 inch lbs | Coupling proof torque | 15 inch lbs                          | Coupling nut retention force | $\geq 101.2$ lbs        | Contact captivation-axial | $\geq 6.3$ lbs                             | Durability (mating)   | $\geq 500$                |                                    |                          |                                    |                        |                                                |            |                                |            |
| Recommended coupling nut torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6 to 10 inch lbs                           |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Coupling proof torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 15 inch lbs                                |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Coupling nut retention force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | $\geq 101.2$ lbs                           |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Contact captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | $\geq 6.3$ 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-E</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                            | Crimping tool                   | CRT-1 or CRT-2   | Crimp insert          | INSERT-E                             |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CRT-1 or CRT-2                             |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |
| Crimp insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | INSERT-E                                   |                                 |                  |                       |                                      |                              |                         |                           |                                            |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |            |

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

# JYE BAO CO., LTD.

## CABLE ASSEMBLY INSTRUCTION

|                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                          |            |         |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---|
| N3100B-0223/HS                                                                                                                                                                                                                                                                                                                                                                                                                              |  | DATE                                                                                                                                                                                     | 2014/05/06 | REV     | — |
| <div><div><div>A</div><div><div>BODY+GASKET</div></div></div><div><div>B</div><div><div>CONTACT PIN</div></div></div><div><div>C</div><div><div>FERRULE+GASKET</div></div></div></div> |  |                                                                                                                                                                                          |            |         |   |
| DIAGRAM                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | ASSEMBLY INSTRUCTION                                                                                                                                                                     |            |         |   |
|                                                                                                                                                                                                                                                                                                                                                           |  | Step 1: STRIP AS SHOWN.                                                                                                                                                                  |            |         |   |
|                                                                                                                                                                                                                                                                                                                                                          |  | Step 2: MAKE A 1.5MM LONG CUT IN THE JACKET WITHOUT DAMAGING THE BRAIDING.                                                                                                               |            |         |   |
|                                                                                                                                                                                                                                                                                                                                                          |  | Step 3: SLIDE FERRULE " C " OVER CABLE.<br>Step 4: PUT PIN " B " ON CENTER CONDUCTOR AND SOLDER OR CRIMP IN " Y ".<br>(USE SQUARE 1.6mm/0.063inch SECTION OF JYEBAO INSERT-E IF CRIMPED) |            |         |   |
|                                                                                                                                                                                                                                                                                                                                                          |  | Step 5: INSERT PREPARED CABLE INTO CONNECTOR BODY " A ".                                                                                                                                 |            |         |   |
|                                                                                                                                                                                                                                                                                                                                                          |  | Step 6: SCREW FERRULE " C " TOWARDS THE CONNECTOR " A " AND CRIMP.<br>(USE 6.5mm/0.256inch HEX SECTION OF JYEBAO INSERT-E)                                                               |            |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate.                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                          |            |         |   |
| APPROVED                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | CHECKED                                                                                                                                                                                  |            | DRAWING |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                          |            | Albert  |   |

# N3100B-0223/HS

S11

