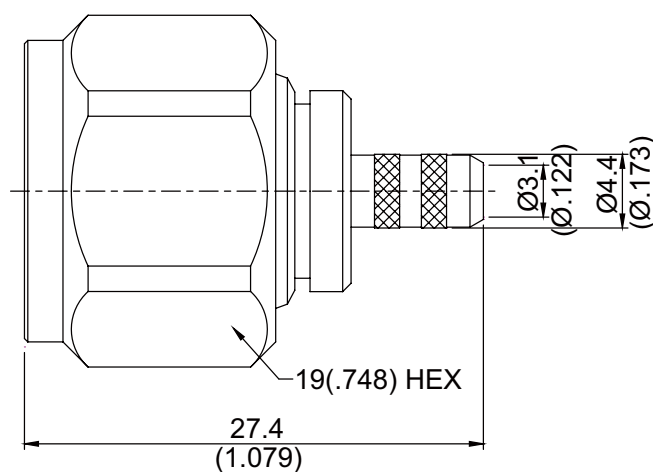


N3100BA-0142

**N Plug Crimp For RG142,RG400;  
12.4GHz VSWR 1.3**

**50Ω**



| Parts        | Material | Plating (Micro-inch)                                   |
|--------------|----------|--------------------------------------------------------|
| Ferrule      | Copper   | Tin-Zinc-Copper-Alloy 100 Over Copper 50               |
| Gasket       | Silicon  |                                                        |
| 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               |

Suitable Cables:RG55,RG142,RG142-LSFH,RG400,RG400-LSFH

**This part number complies with RoHS.**

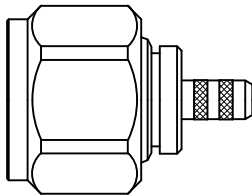
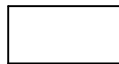
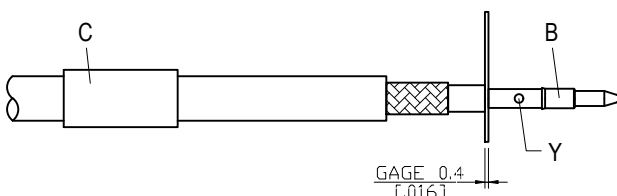
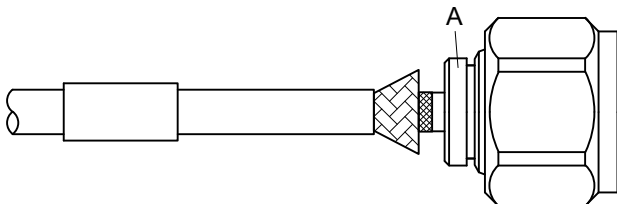
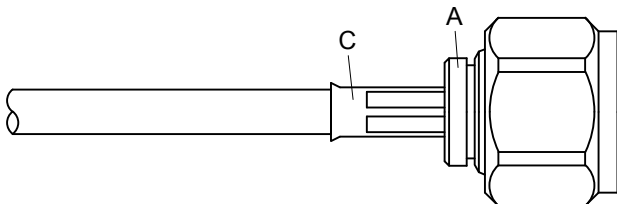
**Notice: JYEBAO reserves the right to make modifications deemed appropriate.**

| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N3100BA-0142                         |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------|------------------|-----------------------|--------------------------------------|------------------------------|-------------------------|---------------------------|--------------------------------------|-----------------------|-----------|------------------------------------|---------|------------------------------------|-------|------------------------------------------------|------------|--------------------------------|------------|
| <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 12.4GHz</td></tr> <tr> <td>VSWR</td><td>≤ 1.3 (DC to 12.4GHz)</td></tr> <tr> <td>Insertion loss</td><td>≤ 0.05 x √f(GHz) dB</td></tr> <tr> <td>Insulation resistance</td><td>≥ 5000MΩ</td></tr> <tr> <td>Contact resistance inner conductor</td><td>≤ 1.5mΩ</td></tr> <tr> <td>Contact resistance outer conductor</td><td>≤ 1mΩ</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 12.4GHz                        | VSWR                         | ≤ 1.3 (DC to 12.4GHz)   | Insertion loss            | ≤ 0.05 x √f(GHz) dB                  | Insulation resistance | ≥ 5000MΩ  | Contact resistance inner conductor | ≤ 1.5mΩ | Contact resistance outer conductor | ≤ 1mΩ | Dielectric withstanding voltage (at sea level) | 2500 V rms | Working voltage (at sea level) | 1000 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 50Ω                                  |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC to 12.4GHz                        |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ≤ 1.3 (DC to 12.4GHz)                |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ≤ 0.05 x √f(GHz) dB                  |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ≥ 5000MΩ                             |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Contact resistance inner conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ≤ 1.5mΩ                              |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Contact resistance outer conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ≤ 1mΩ                                |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| 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>≥ 101.2 lbs</td></tr> <tr> <td>Contact captivation-axial</td><td>≥ 6.3 lbs</td></tr> <tr> <td>Durability (mating)</td><td>≥ 500</td></tr> </table>                                                                                                                                                                                                                                                    |                                      | Recommended coupling nut torque | 6 to 10 inch lbs | Coupling proof torque | 15 inch lbs                          | Coupling nut retention force | ≥ 101.2 lbs             | Contact captivation-axial | ≥ 6.3 lbs                            | Durability (mating)   | ≥ 500     |                                    |         |                                    |       |                                                |            |                                |            |
| Recommended coupling nut torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6 to 10 inch lbs                     |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Coupling proof torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 15 inch lbs                          |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Coupling nut retention force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ≥ 101.2 lbs                          |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Contact captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≥ 6.3 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> <tr> <td>Soldering gauge</td><td>ST-0.4</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      | Crimping tool                   | CRT-1 or CRT-2   | Crimp insert          | INSERT-B                             | Soldering gauge              | ST-0.4                  |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CRT-1 or CRT-2                       |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Crimp insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | INSERT-B                             |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |
| Soldering gauge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ST-0.4                               |                                 |                  |                       |                                      |                              |                         |                           |                                      |                       |           |                                    |         |                                    |       |                                                |            |                                |            |

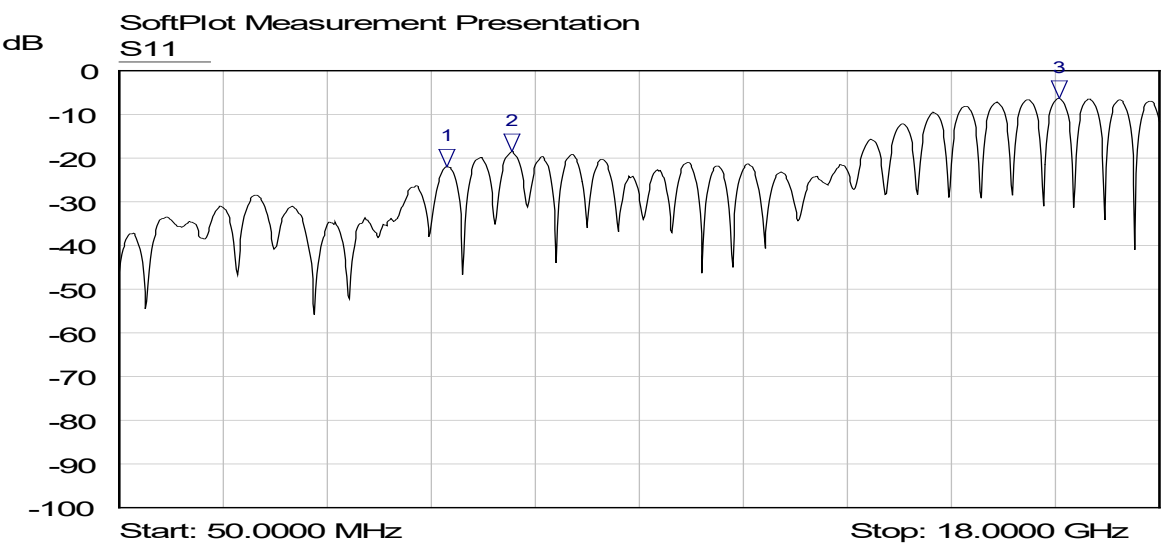
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

# JYE BAO CO., LTD.

## CABLE ASSEMBLY INSTRUCTION

|                                                                                                                                                                                                                                                                                                                                                                                              |  |         |                                                                                                                                                                                                                           |         |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|
| N3100BA-0142                                                                                                                                                                                                                                                                                                                                                                                 |  | DATE    | 2018/02/13                                                                                                                                                                                                                | REV     | A |
| <div><div>A</div><div>B</div><div>C</div><div></div><div>BODY</div><div></div><div>CONTACT PIN</div><div></div><div>FERRULE</div></div> |  |         |                                                                                                                                                                                                                           |         |   |
| DIAGRAM                                                                                                                                                                                                                                                                                                                                                                                      |  |         | ASSEMBLY INSTRUCTION                                                                                                                                                                                                      |         |   |
|                                                                                                                                                                                                                                                                                                            |  |         | Step 1: STRIP AS SHOWN.                                                                                                                                                                                                   |         |   |
|                                                                                                                                                                                                                                                                                                           |  |         | Step 2: SLIDE FERRULE "C" OVER CABLE.<br>Step 3: PUT 0.4 MM GAGE IN PLACE, INSERT CABLE'S CENTER CONDUCTOR INTO CENTER PIN "B" AND SOLDER OR CRIMP IN "Y".<br>(USE SQUARE 1.6mm/0.063inch SECTION OF INSERT-B IF CRIMPED) |         |   |
|                                                                                                                                                                                                                                                                                                           |  |         | Step 4: LOOSEN BRAIDING AND SLIDE CONNECTOR "A" IN PLACE.                                                                                                                                                                 |         |   |
|                                                                                                                                                                                                                                                                                                           |  |         | Step 5: SLIDE FERRULE "C" TOWARDS THE CONNECTOR "A" AND CRIMP.<br>(USE 5.5mm/0.217inch HEX SECTION OF INSERT-B)                                                                                                           |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate.                                                                                                                                                                                                                                                                          |  |         |                                                                                                                                                                                                                           |         |   |
| APPROVED                                                                                                                                                                                                                                                                                                                                                                                     |  | CHECKED |                                                                                                                                                                                                                           | DRAWING |   |
|                                                                                                                                                                                                                                                                                                                                                                                              |  |         |                                                                                                                                                                                                                           | Albert  |   |

N3100BA-0142



| Mkr | Trace | X-Axis      | Value     | Notes |
|-----|-------|-------------|-----------|-------|
| 1 ▾ | S11   | 5.7006 GHz  | -22.02 dB |       |
| 2 ▾ | S11   | 6.8187 GHz  | -18.42 dB |       |
| 3 ▾ | S11   | 16.2629 GHz | -6.36 dB  |       |