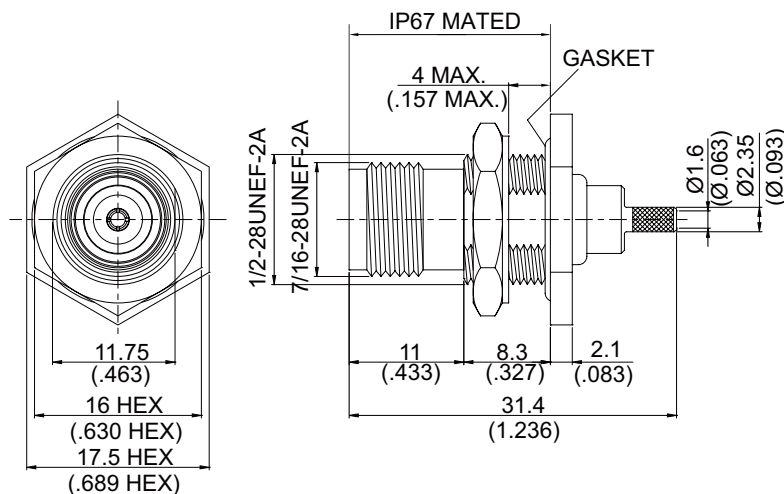
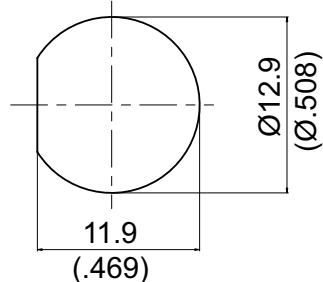


TNC8105FD-0316

**TNC Jack Crimp Bulkhead, IP67 Mated** 50Ω  
**For RD316,RD316-FEP; 6GHz VSWR 1.2**



**MOUNTING HOLE**



| Parts       | Material        | Plating (Micro-inch)                                  |
|-------------|-----------------|-------------------------------------------------------|
| Ferrule     | Copper          | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Small Pin   | Brass           | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Hex Nut     | Brass           | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Washer      | Brass           | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Gasket      | Silicon         |                                                       |
| Barrel      | Brass           | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| Insulator   | Teflon          |                                                       |
| Contact Pin | Phosphor Bronze | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Body        | Brass           | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |

Suitable Cables:RD316,RD316-FEP

**This part number complies with RoHS.**

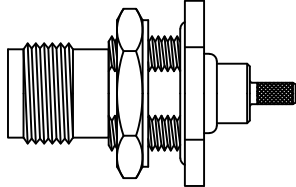
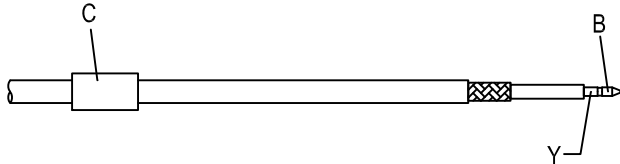
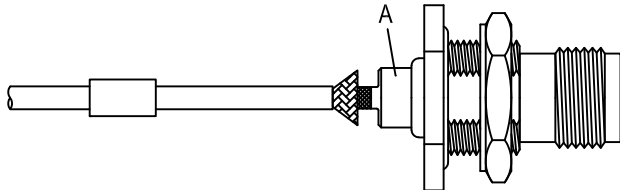
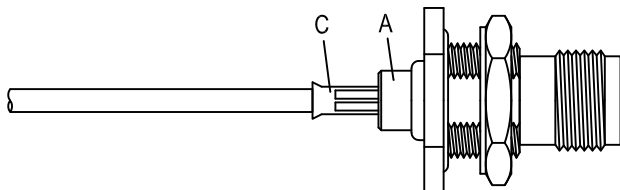
**Notice: JYEBAO reserves the right to make modifications deemed appropriate.**

| TNC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TNC8105FD-0316                            |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------|---------------------|-----------------------|--------------------------------------|---------------------------|-------------------------|---------------------|-------------------------------------------|-----------------------|---------------------------|------------------------------------|--------------------------|------------------------------------|------------------------|------------------------------------------------|------------|--------------------------------|-----------|
| <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 0.1 \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 6GHz                           | VSWR                      | $\leq 1.2$ (DC to 6GHz) | 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 6GHz                                |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | $\leq 1.2$ (DC to 6GHz)                   |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| 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>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                          | 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                               |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| 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-A</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                           | Crimping tool                   | CRT-1 or CRT-2      | Crimp insert          | INSERT-A                             |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CRT-1 or CRT-2                            |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |
| Crimp insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | INSERT-A                                  |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                           |                                    |                          |                                    |                        |                                                |            |                                |           |

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

# JYE BAO CO., LTD.

## CABLE ASSEMBLY INSTRUCTION

|                                                                                                                     |  |                                                                                                                                                                         |                                                                                     |         |   |
|---------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|---|
| TNC8105FD-0316                                                                                                      |  | DATE                                                                                                                                                                    | 2021/07/30                                                                          | REV     | — |
| A                                                                                                                   |  | B                                                                                                                                                                       | C                                                                                   |         |   |
|                                    |  |                                                                                        |  |         |   |
| BODY + GASKET +<br>WASHER + HEX NUT                                                                                 |  | SMALL PIN                                                                                                                                                               | FERRULE                                                                             |         |   |
| DIAGRAM                                                                                                             |  | ASSEMBLY INSTRUCTION                                                                                                                                                    |                                                                                     |         |   |
|                                   |  | Step 1: STRIP AS SHOWN.                                                                                                                                                 |                                                                                     |         |   |
|                                  |  | Step 2: SLIDE FERRULE " C " OVER CABLE.<br>Step 3: PUT PIN " B " ON CENTER CONDUCTOR AND CRIMP IN " Y ".<br>(USE SQUARE 0.7mm/0.028inch SECTION OF INSERT-A 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 3.3mm/0.130inch HEX SECTION OF INSERT-A)                                                     |                                                                                     |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate. |  |                                                                                                                                                                         |                                                                                     |         |   |
| APPROVED                                                                                                            |  | CHECKED                                                                                                                                                                 |                                                                                     | DRAWING |   |
|                                                                                                                     |  |                                                                                                                                                                         |                                                                                     | Albert  |   |

# TNC8105FD-0316

