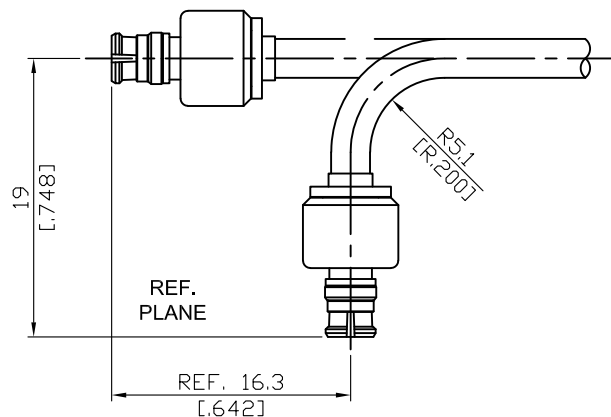
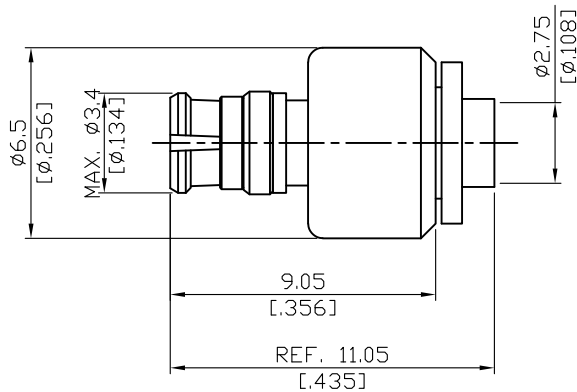


SMP82MR-5002A

SMP Jack With Small Bending Radius For 5002A;  
27GHz VSWR 1.2

50Ω



**Note:**

1. Precision connector up to 27GHz.
2. Small bending radius; 30 matings guaranteed
3. Manufacturing low loss high frequency RF assemblies requires expertise.

| Parts          | Material         | Plating ( Micro-inch )                                |
|----------------|------------------|-------------------------------------------------------|
| Body           | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Insulator      | Teflon           |                                                       |
| Contact Pin    | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Retainer Ring  | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Solder Ferrule | Brass            | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Braid Clamp    | Stainless Steel  | Passivated                                            |

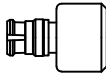
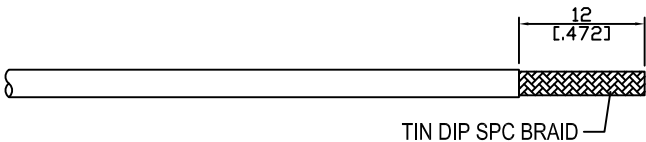
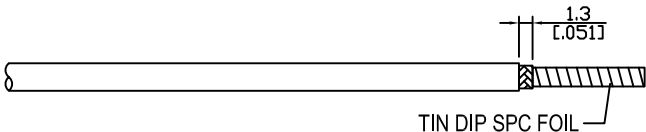
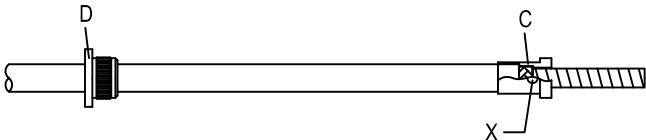
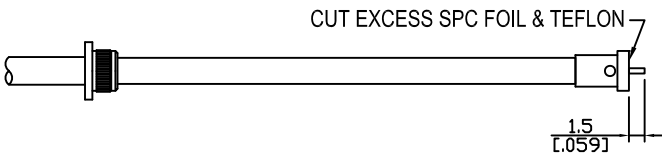
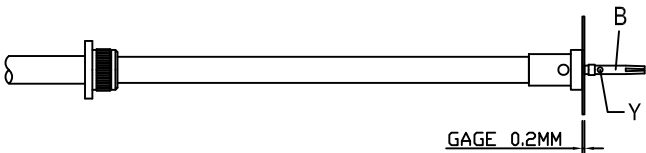
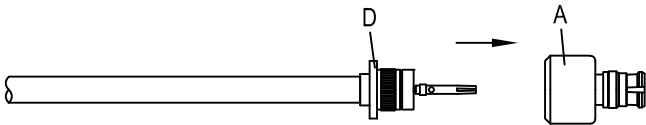
This part number complies with RoHS.

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

| SMP                                            |  | SMP82MR-5002A                        |                   |                               |     |
|------------------------------------------------|--|--------------------------------------|-------------------|-------------------------------|-----|
| Interface                                      |  |                                      |                   |                               |     |
| MIL-STD-348B                                   |  |                                      |                   |                               |     |
| Electrical Data                                |  |                                      |                   |                               |     |
| Impedance                                      |  | 50Ω                                  |                   |                               |     |
| Frequency range                                |  | DC to 27GHz                          |                   |                               |     |
| VSWR                                           |  | ≤ 1.2 (27GHz)                        |                   |                               |     |
| Insertion loss                                 |  | ≤ .06 x √f(GHz) dB                   |                   |                               |     |
| Insulation resistance                          |  | ≥ 5000 MΩ                            |                   |                               |     |
| Contact resistance inner conductor             |  | ≤ 6mΩ                                |                   |                               |     |
| Contact resistance outer conductor             |  | ≤ 2mΩ                                |                   |                               |     |
| Dielectric withstanding voltage (at sea level) |  | 500                                  |                   |                               |     |
| Working Voltage (at sea level)                 |  | 335                                  |                   |                               |     |
| RF-Leakage                                     |  | ≥ 80dB (3GHz); ≥ 65dB (3~26.5GHz)    |                   |                               |     |
| Mechanical Data                                |  | Full<br>Detent                       | Limited<br>Detent | Smooth bore<br>& catchers mit |     |
| Engagement force                               |  | ≤ 15                                 | ≤ 10              | ≤ 2                           | lbs |
| Disengagement force                            |  | ≥ 5                                  | ≥ 2               | ≥ 0.5                         | lbs |
| Durability (mating)                            |  | ≥ 100                                | ≥ 500             | ≥ 1000                        |     |
| Axial misalignment                             |  | + 0.00 / -0.25 (+.000 / -.010)       |                   |                               |     |
| Radial misalignment                            |  | ±0.25 (0.010)                        |                   |                               |     |
| Environmental Data                             |  |                                      |                   |                               |     |
| 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                            |                   |                               |     |
| Tooling                                        |  |                                      |                   |                               |     |
| Soldering gauge                                |  | ST-0.2                               |                   |                               |     |

# JYE BAO CO., LTD.

## CABLE ASSEMBLY RECOMMENDATION

|                                                                                                                             |  |                                                                                   |                                                                                                                                |                                                                                   |   |
|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---|
| SMP82MR-5002A                                                                                                               |  | DATE                                                                              | 2020/01/21                                                                                                                     | REV                                                                               | — |
| A                                                                                                                           |  | B                                                                                 | C                                                                                                                              | D                                                                                 |   |
|                                            |  |  |                                                                                                                                |  |   |
| BODY                                                                                                                        |  | CONTACT PIN                                                                       |                                                                                                                                | SOLDER FERRULE                                                                    |   |
|                                                                                                                             |  |                                                                                   |                                                                                                                                | BRAID CLAMP                                                                       |   |
| DIAGRAM                                                                                                                     |  |                                                                                   | ASSEMBLY INSTRUCTION                                                                                                           |                                                                                   |   |
|  <p>TIN DIP SPC BRAID</p>                  |  |                                                                                   | Step 1: STRIP AS SHOWN AND TIN DIP SPC BRAID.                                                                                  |                                                                                   |   |
|  <p>TIN DIP SPC FOIL</p>                 |  |                                                                                   | Step 2: STRIP AS SHOWN AND TIN DIP SPC FOIL.                                                                                   |                                                                                   |   |
|                                          |  |                                                                                   | Step 3: SLIDE BRAID CLAMP " D " AND SOLDER FERRULE " C " OVER THE CABLE.<br>Step 4: SOLDER IN " X ".                           |                                                                                   |   |
|  <p>CUT EXCESS SPC FOIL &amp; TEFLON</p> |  |                                                                                   | Step 5: CUT AWAY ANY EXCESS SPC FOIL AND TEFLON STICKING OUT OF THE SOLDER FERRULE.<br>Step 6: CUT CENTER CONDUCTOR TO LENGTH. |                                                                                   |   |
|  <p>GAGE 0.2MM</p>                       |  |                                                                                   | Step 7: PUT 0.2 MM GAGE IN PLACE, INSERT CABLE'S CENTER CONDUCTOR INTO CONTACT PIN " B " AND SOLDER IN " Y ".                  |                                                                                   |   |
|                                          |  |                                                                                   | Step 8: FINALLY PRESS FIT " D " ON THE CONNECTOR BODY " A ".                                                                   |                                                                                   |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate.         |  |                                                                                   |                                                                                                                                |                                                                                   |   |
| APPROVED                                                                                                                    |  | CHECKED                                                                           |                                                                                                                                | DRAWING                                                                           |   |
|                                                                                                                             |  |                                                                                   |                                                                                                                                | Albert                                                                            |   |