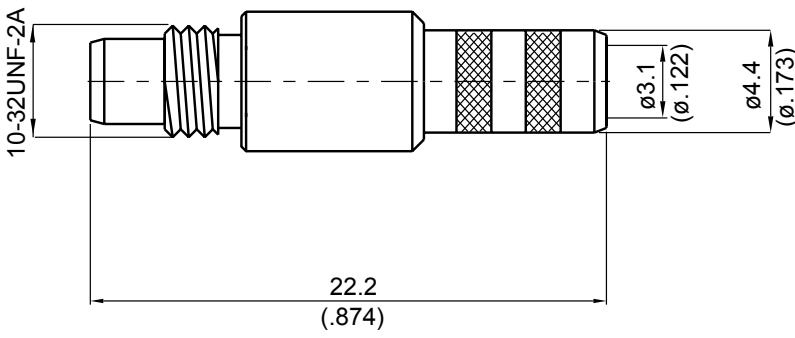


| SMC8100-0223                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SMC jack crimp for RG223;<br>4GHz VSWR 1.2 | 50Ω                                                   |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------|----------------------|---------|-------|-------------------------------------------------------|-------------|-------|-------------------------------------------------------|-----------|--------|--|------|-------|-------------------------------------------------------|--------|-------|-------------------------------------------------------|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                            |                                                       |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| <table border="1"> <thead> <tr> <th>Parts</th><th>Material</th><th>Plating (Micro-inch)</th></tr> </thead> <tbody> <tr> <td>Ferrule</td><td>Brass</td><td>Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20</td></tr> <tr> <td>Contact Pin</td><td>Brass</td><td>Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20</td></tr> <tr> <td>Insulator</td><td>Teflon</td><td></td></tr> <tr> <td>Body</td><td>Brass</td><td>Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20</td></tr> <tr> <td>Barrel</td><td>Brass</td><td>Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20</td></tr> </tbody> </table> | Parts                                      | Material                                              | Plating (Micro-inch) | Ferrule | Brass | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Contact Pin | Brass | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Insulator | Teflon |  | Body | Brass | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Barrel | Brass | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |  |  |
| Parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Material                                   | Plating (Micro-inch)                                  |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Ferrule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Brass                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Contact Pin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Brass                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Insulator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Teflon                                     |                                                       |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Body                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Brass                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Barrel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Brass                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |
| Weight:<br>Suitable Cables: RG223                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                            |                                                       |                      |         |       |                                                       |             |       |                                                       |           |        |  |      |       |                                                       |        |       |                                                       |  |  |

This part number complies with RoHS.

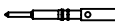
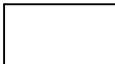
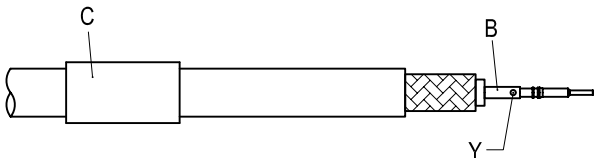
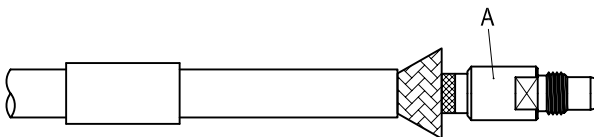
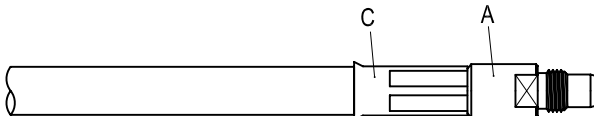
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

| SMC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SMC8100-0223                              |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------|---------------------|-----------------------|--------------------------------------|---------------------------|-------------------------|---------------------|-------------------------------------------|-----------------------|----------------------------|------------------------------------|------------------------|------------------------------------|--------------------------|------------------------------------------------|-----------|--------------------------------|-----------|------------|----------------------------|
| <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 4GHz</td></tr> <tr> <td>VSWR</td><td><math>\leq 1.2</math> (DC to 4GHz)</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 10000\text{M}\Omega</math></td></tr> <tr> <td>Contact resistance inner conductor</td><td><math>\leq 5\text{m}\Omega</math></td></tr> <tr> <td>Contact resistance outer conductor</td><td><math>\leq 2.5\text{m}\Omega</math></td></tr> <tr> <td>Dielectric withstanding voltage (at sea level)</td><td>750 V rms</td></tr> <tr> <td>Working voltage (at sea level)</td><td>250 V rms</td></tr> <tr> <td>RF leakage</td><td><math>\geq 90\text{dB}</math> to 1GHz</td></tr> </table> |                                           | Impedance                       | 50Ω                 | Frequency range       | DC to 4GHz                           | VSWR                      | $\leq 1.2$ (DC to 4GHz) | Insertion loss      | $\leq 0.1 \times \sqrt{f(\text{GHz})}$ dB | Insulation resistance | $\geq 10000\text{M}\Omega$ | Contact resistance inner conductor | $\leq 5\text{m}\Omega$ | Contact resistance outer conductor | $\leq 2.5\text{m}\Omega$ | Dielectric withstanding voltage (at sea level) | 750 V rms | Working voltage (at sea level) | 250 V rms | RF leakage | $\geq 90\text{dB}$ to 1GHz |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 50Ω                                       |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC to 4GHz                                |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | $\leq 1.2$ (DC to 4GHz)                   |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | $\leq 0.1 \times \sqrt{f(\text{GHz})}$ dB |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | $\geq 10000\text{M}\Omega$                |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Contact resistance inner conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | $\leq 5\text{m}\Omega$                    |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Contact resistance outer conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | $\leq 2.5\text{m}\Omega$                  |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Dielectric withstanding voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 750 V rms                                 |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 250 V rms                                 |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| RF leakage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | $\geq 90\text{dB}$ to 1GHz                |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| <div>Mechanical Data</div> <table> <tr> <td>Recommended coupling nut torque</td><td>2.2 to 3.1 inch lbs</td></tr> <tr> <td>Coupling proof torque</td><td>6.2 inch lbs</td></tr> <tr> <td>Contact captivation-axial</td><td><math>\geq 2.25</math> lbs</td></tr> <tr> <td>Durability (mating)</td><td><math>\geq 500</math></td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                           | Recommended coupling nut torque | 2.2 to 3.1 inch lbs | Coupling proof torque | 6.2 inch lbs                         | Contact captivation-axial | $\geq 2.25$ lbs         | Durability (mating) | $\geq 500$                                |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Recommended coupling nut torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2.2 to 3.1 inch lbs                       |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Coupling proof torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.2 inch lbs                              |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Contact captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | $\geq 2.25$ lbs                           |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Durability (mating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | $\geq 500$                                |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| <div>Environmental Data</div> <table> <tr> <td>Temperature range</td><td>-65°C to +165°C</td></tr> <tr> <td>Thermal shock</td><td>MIL-STD-202, Method 107, Condition B</td></tr> <tr> <td>Moisture resistance</td><td>MIL-STD-202, Method 106</td></tr> <tr> <td>Corrosion</td><td>MIL-STD-202, Method 101, Condition B</td></tr> <tr> <td>RoHS</td><td>Compliant</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                           | Temperature range               | -65°C to +165°C     | Thermal shock         | MIL-STD-202, Method 107, Condition B | Moisture resistance       | MIL-STD-202, Method 106 | Corrosion           | MIL-STD-202, Method 101, Condition B      | RoHS                  | Compliant                  |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Temperature range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -65°C to +165°C                           |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Thermal shock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MIL-STD-202, Method 107, Condition B      |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Moisture resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MIL-STD-202, Method 106                   |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Corrosion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MIL-STD-202, Method 101, Condition B      |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| RoHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Compliant                                 |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| <div>Tooling</div> <table> <tr> <td>Crimping tool</td><td>CRT-1 or CRT-2</td></tr> <tr> <td>Crimp insert</td><td>INSERT-B</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           | Crimping tool                   | CRT-1 or CRT-2      | Crimp insert          | INSERT-B                             |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CRT-1 or CRT-2                            |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |
| Crimp insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | INSERT-B                                  |                                 |                     |                       |                                      |                           |                         |                     |                                           |                       |                            |                                    |                        |                                    |                          |                                                |           |                                |           |            |                            |

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

# JYE BAO CO., LTD.

## CABLE ASSEMBLY INSTRUCTION

|                                                                                                                     |  |                                                                                   |                                                                                                                                                                                    |                                                                                     |   |
|---------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---|
| SMC8100-0223                                                                                                        |  | DATE                                                                              | 2017/03/27                                                                                                                                                                         | REV                                                                                 | — |
| A                                                                                                                   |  | B                                                                                 |                                                                                                                                                                                    | C                                                                                   |   |
|                                    |  |  |                                                                                                                                                                                    |  |   |
| BODY                                                                                                                |  | CONTACT 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 SOLDER OR CRIMP IN " Y ".<br>(USE SQUARE 0.98mm/0.039inch 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 5.9mm/0.232inch 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                                                                              |   |

# SMC8100-0223

S11

