

| BMA8300Q2-0141                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | M38999/BMA Size 8 Socket For RG402;<br>18GHz VSWR 1.3 | 50Ω                                                   |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|------------------------|---------------|------------------|------------------------------------------|-------------|------------------|-------------------------------------------------------|--------|-----------------|------------|---------|-----------------|------------|-------------|------------------|-------------------------------------------------------|-----------|--------|--|------|-------|-------------------------------------------------------|------|-----------------|------------|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                       |                                                       |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| <table border="1"> <thead> <tr> <th>Parts</th><th>Material</th><th>Plating ( Micro-inch )</th></tr> </thead> <tbody> <tr> <td>Retainer Ring</td><td>Beryllium Copper</td><td>Tin-Zinc-Copper-Alloy 100 Over Copper 50</td></tr> <tr> <td>Spring Ring</td><td>Beryllium Copper</td><td>Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20</td></tr> <tr> <td>Spring</td><td>Stainless Steel</td><td>Passivated</td></tr> <tr> <td>Ferrule</td><td>Stainless Steel</td><td>Passivated</td></tr> <tr> <td>Contact Pin</td><td>Beryllium Copper</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>Body</td><td>Stainless Steel</td><td>Passivated</td></tr> </tbody> </table> | Parts                                                 | Material                                              | Plating ( Micro-inch ) | Retainer Ring | Beryllium Copper | Tin-Zinc-Copper-Alloy 100 Over Copper 50 | Spring Ring | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Spring | Stainless Steel | Passivated | Ferrule | Stainless Steel | Passivated | Contact Pin | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Insulator | Teflon |  | Body | Brass | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 | Body | Stainless Steel | Passivated |  |  |
| Parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Material                                              | Plating ( Micro-inch )                                |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Retainer Ring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Beryllium Copper                                      | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Spring Ring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Beryllium Copper                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Stainless Steel                                       | Passivated                                            |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Ferrule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Stainless Steel                                       | Passivated                                            |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Contact Pin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Beryllium Copper                                      | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Insulator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Teflon                                                |                                                       |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Body                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Brass                                                 | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Body                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Stainless Steel                                       | Passivated                                            |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |
| Suitable Cables: SS402; 5003; T-Flex402; Multibend402; Semi-rigid .141; Multiflex141; Formable .141; RG402                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                       |                                                       |                        |               |                  |                                          |             |                  |                                                       |        |                 |            |         |                 |            |             |                  |                                                       |           |        |  |      |       |                                                       |      |                 |            |  |  |

This part number complies with RoHS.

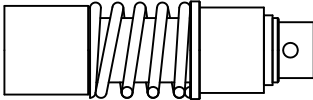
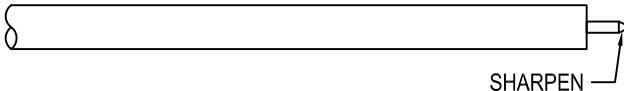
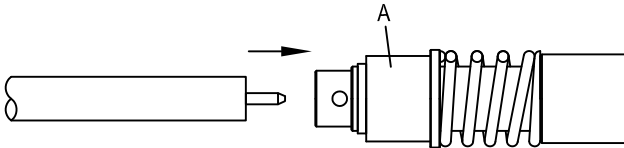
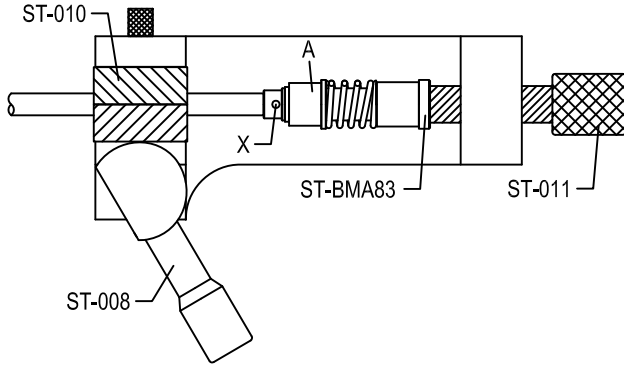
Notice: JYBAO reserves the right to make modifications deemed appropriate.

| BMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | BMA8300Q2-0141                       |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------|-----------------|----------------------------------|--------------------------------------|---------------------------|-------------------------|---------------------|--------------------------------------|-----------------------|-----------|------------------------------------|-------|------------------------------------|-------|------------------------------------------------|------------|--------------------------------|------------|
| <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 18GHz</td></tr> <tr> <td>VSWR</td><td>≤ 1.3 (DC to 18GHz)</td></tr> <tr> <td>Insertion loss</td><td>≤ 0.03 x √f(GHz) dB</td></tr> <tr> <td>Insulation resistance</td><td>≥ 5000MΩ</td></tr> <tr> <td>Contact resistance inner conductor</td><td>≤ 2mΩ</td></tr> <tr> <td>Contact resistance outer conductor</td><td>≤ 2mΩ</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>1000 V rms</td></tr> </table> |                                      | Impedance         | 50Ω             | Frequency range                  | DC to 18GHz                          | VSWR                      | ≤ 1.3 (DC to 18GHz)     | Insertion loss      | ≤ 0.03 x √f(GHz) dB                  | Insulation resistance | ≥ 5000MΩ  | Contact resistance inner conductor | ≤ 2mΩ | Contact resistance outer conductor | ≤ 2mΩ | Dielectric withstanding voltage (at sea level) | 1500 V rms | Working voltage (at sea level) | 1000 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 50Ω                                  |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC to 18GHz                          |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ≤ 1.3 (DC to 18GHz)                  |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Insertion loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ≤ 0.03 x √f(GHz) dB                  |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Insulation resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ≥ 5000MΩ                             |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Contact resistance inner conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ≤ 2mΩ                                |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Contact resistance outer conductor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ≤ 2mΩ                                |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Dielectric withstanding voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1500 V rms                           |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000 V rms                           |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| <div>Mechanical Data</div> <table> <tr> <td>Engagement force</td><td>≤ 3 lbs</td></tr> <tr> <td>Disengagement force</td><td>≤ 1.5 lbs</td></tr> <tr> <td>Contact captivation-axial</td><td>≥ 6.1 lbs</td></tr> <tr> <td>Durability (mating)</td><td>≥ 1000</td></tr> </table>                                                                                                                                                                                                                                                                                                                                             |                                      | Engagement force  | ≤ 3 lbs         | Disengagement force              | ≤ 1.5 lbs                            | Contact captivation-axial | ≥ 6.1 lbs               | Durability (mating) | ≥ 1000                               |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Engagement force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ≤ 3 lbs                              |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Disengagement force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 1.5 lbs                            |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Contact captivation-axial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ≥ 6.1 lbs                            |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Durability (mating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≥ 1000                               |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| <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>Soldering fixture</td><td>ST-008</td></tr> <tr> <td>Insert for .141 semi-rigid cable</td><td>ST-010</td></tr> <tr> <td>Locator tool</td><td>ST-011, ST-BMA83</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                       |                                      | Soldering fixture | ST-008          | Insert for .141 semi-rigid cable | ST-010                               | Locator tool              | ST-011, ST-BMA83        |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Soldering fixture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ST-008                               |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Insert for .141 semi-rigid cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ST-010                               |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |
| Locator tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ST-011, ST-BMA83                     |                   |                 |                                  |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |            |

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

# JYE BAO CO., LTD.

## CABLE ASSEMBLY INSTRUCTION

|                                                                                                                     |  |         |                                                                                                                                                      |         |   |
|---------------------------------------------------------------------------------------------------------------------|--|---------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|
| BMA8300Q2-0141                                                                                                      |  | DATE    | 2021/05/25                                                                                                                                           | REV     | — |
| A                                                                                                                   |  |         |                                                                                                                                                      |         |   |
|                                    |  |         |                                                                                                                                                      |         |   |
| BODY                                                                                                                |  |         |                                                                                                                                                      |         |   |
| DIAGRAM                                                                                                             |  |         | ASSEMBLY INSTRUCTION                                                                                                                                 |         |   |
|                                    |  |         | Step 1: STRIP AS SHOWN.                                                                                                                              |         |   |
|                                  |  |         | Step 2: SHARPEN CENTER CONDUCTOR TIP.                                                                                                                |         |   |
|                                  |  |         | Step 3: SLIDE CABLE INTO CONNECTOR BODY "A".                                                                                                         |         |   |
|                                  |  |         | Step 4: USE SOLDERING FIXTURE " ST-008 ", INSERT TOOL " ST-010 " AND LOCATOR TOOL " ST-011 " AND " ST-BMA83 " TO FIX THE CONNECTOR. SOLDER IN " X ". |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate. |  |         |                                                                                                                                                      |         |   |
| APPROVED                                                                                                            |  | CHECKED |                                                                                                                                                      | DRAWING |   |
|                                                                                                                     |  |         |                                                                                                                                                      | Albert  |   |

# BMA8300Q2-0141

