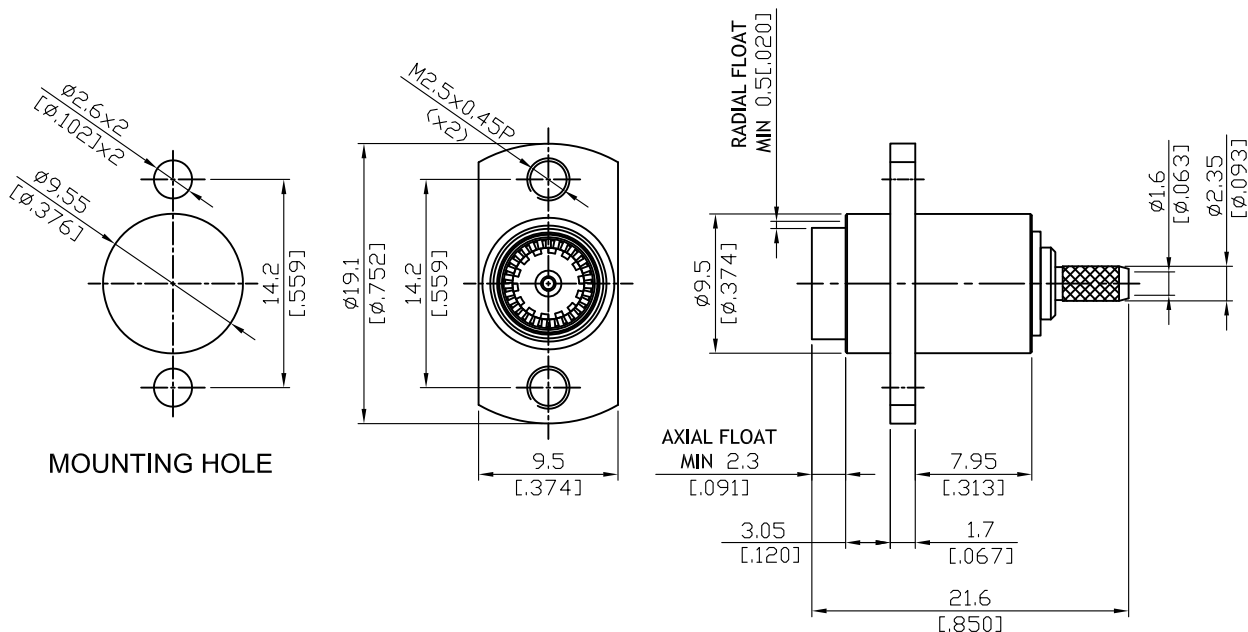


BMA8162A-0316/W

BMA Jack Crimp  $\phi 19.1\text{mm}$  2 Hole Flange  
For RG174, RG188, RG316; 3.5GHz VSWR 1.2

50 $\Omega$



| Parts         | Material         | Plating ( Micro-inch )                                |
|---------------|------------------|-------------------------------------------------------|
| Ferrule       | Copper           | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |
| C-Ring        | Stainless Steel  | Passivated                                            |
| Disk Spring   | Stainless Steel  |                                                       |
| Washer        | Stainless Steel  |                                                       |
| Spring        | Stainless Steel  |                                                       |
| Solder Pin    | Brass            | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Contact Body  | Brass            | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Spring Washer | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Spring-Ring   | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Contact Pin   | Beryllium Copper | Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20 |
| Insulator     | Teflon           |                                                       |
| Body          | Brass            | Tin-Zinc-Copper-Alloy 100 Over Copper 50              |

Suitable Cables: RG174, RG188, RG316, RG316-FEP

This part number complies with RoHS.

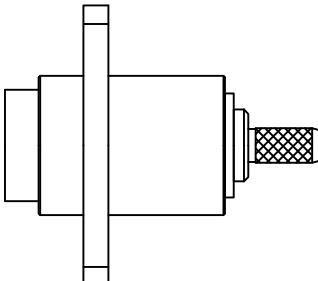
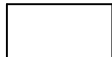
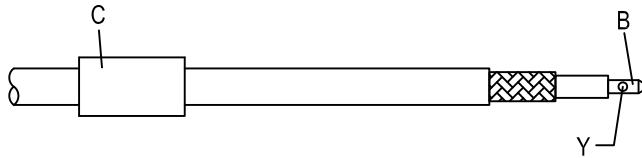
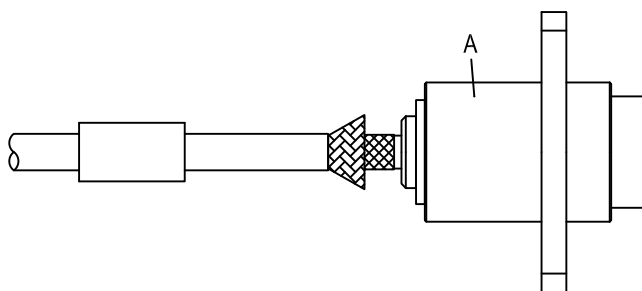
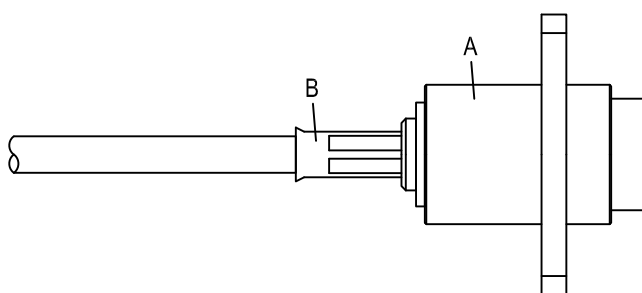
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

| BMA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | BMA8162A-0316/W                      |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------|-----------------|---------------------|--------------------------------------|---------------------------|-------------------------|---------------------|--------------------------------------|-----------------------|-----------|------------------------------------|-------|------------------------------------|-------|------------------------------------------------|------------|--------------------------------|-----------|
| <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 3.5GHz</td></tr> <tr> <td>VSWR</td><td>≤ 1.2 (DC to 3.5GHz)</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>1000 V rms</td></tr> <tr> <td>Working voltage (at sea level)</td><td>670 V rms</td></tr> </table> |                                      | Impedance         | 50Ω             | Frequency range     | DC to 3.5GHz                         | VSWR                      | ≤ 1.2 (DC to 3.5GHz)    | 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) | 1000 V rms | Working voltage (at sea level) | 670 V rms |
| Impedance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 50Ω                                  |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC to 3.5GHz                         |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| VSWR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 1.2 (DC to 3.5GHz)                 |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1000 V rms                           |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Working voltage (at sea level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 670 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>Crimping tool</td><td>CRT-1 or CRT-2</td></tr> <tr> <td>Crimp Insert</td><td>INSERT-A</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                      | Crimping tool     | CRT-1 or CRT-2  | Crimp Insert        | INSERT-A                             |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Crimping tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CRT-1 or CRT-2                       |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |
| Crimp Insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | INSERT-A                             |                   |                 |                     |                                      |                           |                         |                     |                                      |                       |           |                                    |       |                                    |       |                                                |            |                                |           |

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

# JYE BAO CO., LTD.

## CABLE ASSEMBLY RECOMMENDATION

|                                                                                                                                                                                                                                                                                                                                                                                                                              |  |         |                                                                                                                                                                                    |         |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|
| BMA8162A-0316/W                                                                                                                                                                                                                                                                                                                                                                                                              |  | DATE    | 2022/05/25                                                                                                                                                                         | REV     | - |
| <div><div><div>A</div><div></div><div>BODY</div></div><div><div>B</div><div></div><div>SOLDER PIN</div></div><div><div>C</div><div></div><div>FERRULE</div></div></div> |  |         |                                                                                                                                                                                    |         |   |
| 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 0.70mm/0.028inch SECTION OF INSERT-A IF CRIMPED) |         |   |
|                                                                                                                                                                                                                                                                                                                                           |  |         | Step 4: LOOSEN BRAIDING AND SLIDE CONNECTOR " A " IN PLACE.                                                                                                                        |         |   |
|                                                                                                                                                                                                                                                                                                                                           |  |         | Step 5: SLIDE FERRULE " B " TOWARDS THE CONNECTOR " A " AND CRIMP.<br>(USE 3.3mm/0.130inch HEX SECTION OF INSERT-A)                                                                |         |   |
| This part number complies with RoHS.<br>Notice: JYEBAO reserves the right to make modifications deemed appropriate.                                                                                                                                                                                                                                                                                                          |  |         |                                                                                                                                                                                    |         |   |
| APPROVED                                                                                                                                                                                                                                                                                                                                                                                                                     |  | CHECKED |                                                                                                                                                                                    | DRAWING |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |  |         |                                                                                                                                                                                    | Albert  |   |

# BMA8162A-0316/W

