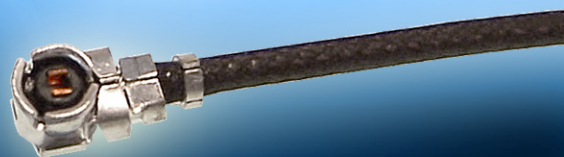
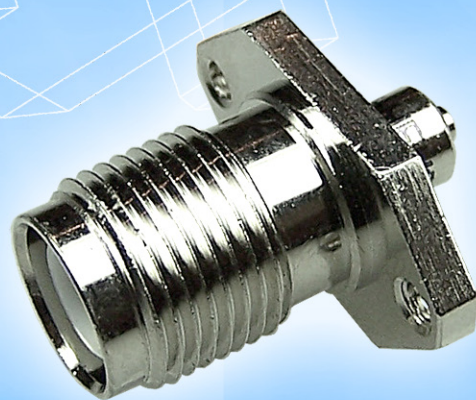
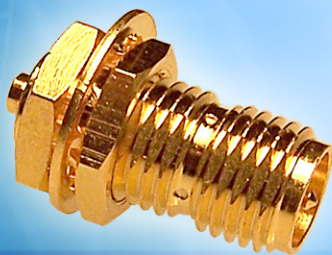
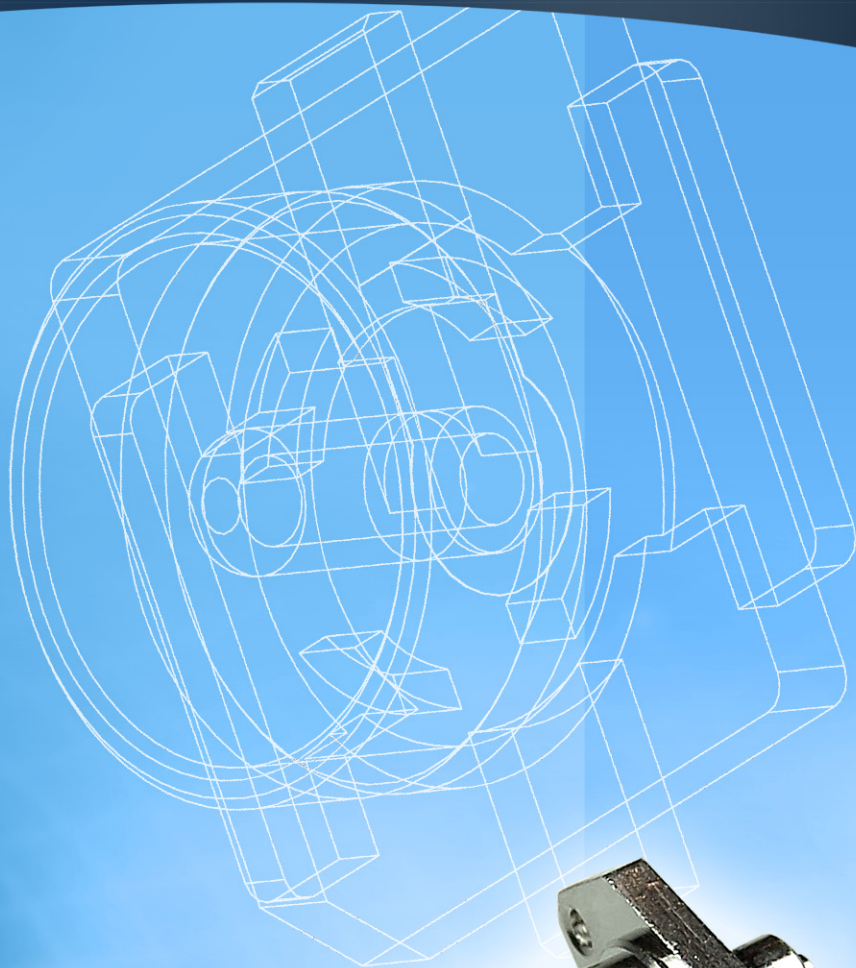


AMC



**AMC Connectors**

## ***AMC Solutions***

### **Description**

Amphenol RF manufactures a family of Amphenol Micro Coaxial (AMC) connectors and cable assemblies for use in applications with 50  $\Omega$  impedance requirements. AMC connectors are low profile (2.5 mm off the board) and offer an extremely small board footprint (3mm x 3mm).

### **Features/Benefits**

- Easy snap-on/off mating
- Ultra low-profile (2.5mm mating height)
- Small foot print (3mm x 3mm)
- 100% Compatible with Hirose U.FI series
- Right angle plugs are pre-installed on 1.13mm, 1.32 mm or 1.37 mm coaxial cable and tested prior to shipment.

### **Applications**

- Wireless Internet (WiFi, WiMax, EvDO/EvDV Solutions)
- Wireless Infrastructure (Cellular Base Stations)
- RFID
- Bluetooth
- Inventory/Barcode Scanners
- Handheld Devices

## AMC Specifications

### Electrical

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Impedance          | 50 $\Omega$                                                                 |
| Frequency range    | DC - 6 GHz                                                                  |
| VSWR               | 1.3 max. @ DC - 3 GHz<br>1.4 max. @ 3 - 6 GHz                               |
| Contact resistance | center contact: $\leq 20$ m $\Omega$<br>outer contact: $\leq 10$ m $\Omega$ |

### Mechanical

|                                   |                   |
|-----------------------------------|-------------------|
| Mating                            | Snap-on coupling  |
| Attachment method (inner / outer) | n/a               |
| Center conductor cable affixment  | n/a               |
| Center contact retention force    | 0.15 N            |
| Durability (matings)              | 30 cycles minimum |

### Environmental

|                   |                |
|-------------------|----------------|
| Temperature range | -40°C to +90°C |
|-------------------|----------------|

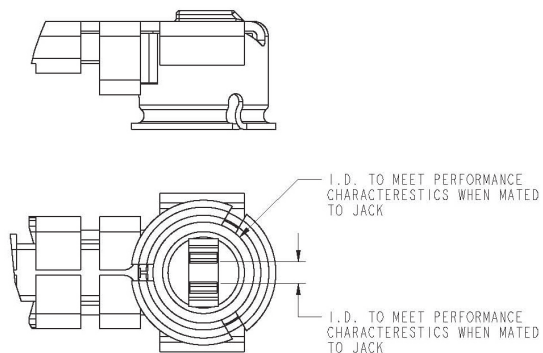
### Material

|                             |                                           |
|-----------------------------|-------------------------------------------|
| Body and outer contacts     | Phosphor bronze, silver plated 0.08u min. |
| Male contact                | Brass, gold plated 0.2u min.              |
| Female contact              | Phosphor bronze, gold plated 0.2u min.    |
| Insulator                   | PBT or LCP                                |
| Cable jacket and dielectric | FEP                                       |

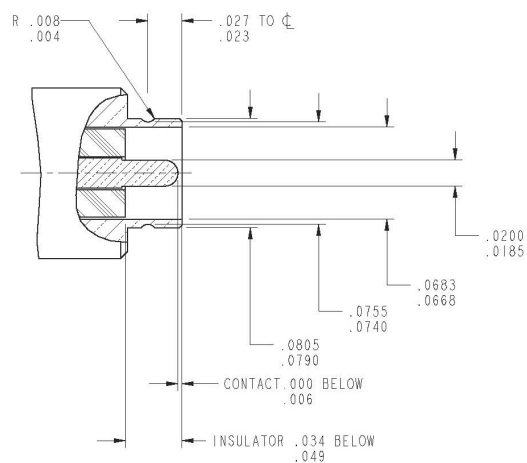
Custom Right Angle Plug Jumpers also available! For your convenience, please use the numbering system below to create your own part number:

|                                    |                               |
|------------------------------------|-------------------------------|
| A-1PAVWWW-XXXYZ                    | XXX: Cable length in mm       |
| A: Series Name (A=AMC)             | Y: Cable color:               |
| 1PA: Plug                          | • G – gray                    |
| V: Connector Orientation           | • B – black                   |
| • (dash) – Both the Same Direction | • W – white                   |
| • C – 90 deg. Clockwise Offset     | Z: Number of terminated ends: |
| • F – 180 deg. Offset              | • 1                           |
| • R – 270 deg. Offset              | • 2                           |
| WWW: Cable diameter (OD)           |                               |
| • 113 – 1.13mm                     |                               |
| • 132 – 1.32mm (double shielded)   |                               |
| • 137 – 1.37mm                     |                               |

## Plug



## Jack



## Cable Plugs

| Cable Group | Part Number     | Plating |         | Insulator | Cable Length (mm) | Color |
|-------------|-----------------|---------|---------|-----------|-------------------|-------|
|             |                 | Body    | Contact |           |                   |       |
| P2          | A-1PA-113-300B2 | Silver  | Gold    | PBT       | 300               | Black |
| P2          | A-1PA-113-100G2 | Silver  | Gold    | PBT       | 100               | Gray  |
| P2          | A-1PA-113-125W2 | Silver  | Gold    | PBT       | 125               | White |
| P2          | A-1PA-113-150B2 | Silver  | Gold    | PBT       | 150               | Black |
| P2          | A-1PA-113-180B2 | Silver  | Gold    | PBT       | 180               | Black |
| P3          | A-1PA-132-100B2 | Silver  | Gold    | PBT       | 100               | Black |
| P3          | A-1PA-132-125G2 | Silver  | Gold    | PBT       | 125               | Gray  |
| P3          | A-1PA-132-150W2 | Silver  | Gold    | PBT       | 150               | White |
| P3          | A-1PA-132-180B2 | Silver  | Gold    | PBT       | 180               | Black |
| P3          | A-1PA-132-300G2 | Silver  | Gold    | PBT       | 300               | Gray  |
| P4          | A-1PA-137-100W2 | Silver  | Gold    | PBT       | 100               | White |
| P4          | A-1PA-137-125B2 | Silver  | Gold    | PBT       | 125               | Black |
| P4          | A-1PA-137-150G2 | Silver  | Gold    | PBT       | 150               | Gray  |
| P4          | A-1PA-137-180W2 | Silver  | Gold    | PBT       | 180               | White |
| P4          | A-1PA-137-300B2 | Silver  | Gold    | PBT       | 300               | Black |



## Printed Circuit Board Jacks

| Part Number | Plating |         | Insulator | Packaging                          |
|-------------|---------|---------|-----------|------------------------------------|
|             | Body    | Contact |           |                                    |
| A-1JB       | Silver  | Gold    | LCP       | Tape & Reel, 2500 pieces per reel  |
| A-1JB-100   | Silver  | Gold    | LCP       | Tape & Reel, 100 pieces on a strip |
| A-1JB-250   | Silver  | Gold    | LCP       | Tape & Reel, 250 pieces on a strip |
| A-1JB-500   | Silver  | Gold    | LCP       | Tape & Reel, 500 pieces on a strip |



## Cable Adapters

| Series | Cable Group | Part Number | Plating |         | Insulator | Description                              |
|--------|-------------|-------------|---------|---------|-----------|------------------------------------------|
|        |             |             | Body    | Contact |           |                                          |
| SMA    | P2          | 901-10107   | Gold    | Gold    | PTFE      | Straight Plug                            |
| MMCX   | P2          | 908-43001   | Gold    | Gold    | PTFE      | Right Angle Plug                         |
| MMCX   | P2          | 908-41000   | Gold    | Gold    | PTFE      | Straight Plug                            |
| SMA    | P2          | 901-10129   | Gold    | Gold    | PTFE      | Straight Bulkhead Jack, Reverse Polarity |
| SMA    | P2          | 901-10119   | Gold    | Gold    | PTFE      | Straight Bulkhead Jack                   |



# Cable Group Listing

| Cable Group | Cable Type                                                       |
|-------------|------------------------------------------------------------------|
| A           | RG-178, 196                                                      |
| B           | RG-174, 188A, 316, Belden 7805                                   |
| B1          | RG-179, 187, Belden 9221                                         |
| B2          | RD-188/U, RD-316/U                                               |
| B3          | RD-179/U, AT&T 19224L2                                           |
| C           | RG-58, 58A, 58C, 141, 303, LMR195, Belden 7806A, 9907            |
| C1          | RG-55, 142, 223, 400                                             |
| C2          | LMR200, Belden 7807A                                             |
| D           | RG-58/U Plenum, Thinnnet, RG-122/U, Belden 88240, 89907          |
| E           | RG-59, 62, 140, 210, Belden 8241, 8263, 8279, 9209               |
| E1          | RG-59/U 20 AWG center conductor, Belden 1426A, 1505A, 9100, 9278 |
| E2          | RD-59/U, Belden 8281, 9141, 9231                                 |
| E3          | RG-59/U Quad Shield, Belden 1152A                                |
| F           | RG-59/U Plenum, Belden 1560A, 9259, 82259, 89259, 88241          |
| F1          | RG-59/U Plenum 20 AWG center conductor, Belden 82108             |
| G1          | RG-6, 143, 212                                                   |
| G2          | 8X, LMR240, Belden 7808A, 9258                                   |
| G3          | LMR400, Belden 7810A, 8214, 9913                                 |
| G4          | RG-8, 8A, 9, 87A, 213, 214, 225, 393                             |
| G5          | RD-6/U                                                           |
| H           | RG-11                                                            |
| H1          | Belden 1694A, 9248                                               |
| H2          | Belden 1859A, 7731, 8213, 9292                                   |
| H3          | RG-54A/U                                                         |
| I           | AT&T 734A, Belden 1505A                                          |
| I2          | AT&T 735A, Belden 735A1                                          |
| J           | Quad 59 headend cable                                            |
| K           | LMR600                                                           |
| K2          | Belden 1695A                                                     |
| K3          | RG-122, 180, 195, Belden 1855, 1865A, 8218                       |
| L           | .141 semi-rigid, RG-402/U                                        |
| L2          | .085, .086, .087 semi-rigid, RG-405/U                            |
| L3          | .250 semi-rigid                                                  |
| L4          | .047 semi-rigid, Belden 1674                                     |
| M           | 1/2 inch annular corrugated                                      |
| M1          | 1 1/4 inch annular corrugated                                    |
| M2          | 1 5/8 inch annular corrugated                                    |
| M3          | 7/8 inch annular corrugated                                      |
| N           | 1/4 Helical                                                      |
| N1          | 3/8 Helical                                                      |
| N2          | 1/2 Helical                                                      |
| N3          | 7/8 inch SFC                                                     |
| P1          | .81 mm OD micro-cable                                            |
| P2          | 1.13 mm OD micro-cable, TCB-068                                  |
| P3          | 1.32 mm OD micro-cable                                           |
| P4          | 1.37 mm OD micro-cable                                           |