



## Overview

Amphenol Micro Coaxial (AMC) connectors are low profile (2.5mm mating height) with an extremely small footprint (3mm x 3mm). Their space-saving design makes these connectors an optimal solution for portable and mobile devices. AMC connectors are fully compatible with the industry-standard Hirose U.FL and IPEX MHF1 series.

Standard AMC Jumper Cables are available and in stock at many of the most common distributors. These jumpers offer an AMC right angle plug to AMC right angle plug on industry standard black 0.81 mm, 1.13 mm, 1.32 mm and 1.37 mm Micro-Coaxial Cable. Custom solutions available upon request.

## Features and Benefits

- Supports high frequency transmission from DC to 6GHz
- Ideal for applications where space and weight are a concern
- Easy snap on/off mating
- Surface mount allows for higher PC board densities and automated PCB placement

## Applications

- Antennas
- Bluetooth
- GPS
- WLAN
- Cellular and Mobile Devices
- Tablets and Notebook Computers

## Amphenol RF

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or call 800.627.7100

## Ordering Information

### AMC PCB Connectors

|  | Part Number | Part Description  |
|--|-------------|---|
|  | A-1JB       | AMC Straight PCB Jack, Surface Mount, 3000 Piece Reel, 50 Ohm |

### AMC Adapters

| Part Number   | Part Description                                    |
|---------------|---|
| 031-6101      | AMC Jack to RP-TNC Jack, Panel Mount, 6 GHz, 50 Ohm |
| 031-6101-1    | AMC Jack to RP-TNC Jack, Panel Mount, 3 GHz, 50 Ohm |
| 031-6109      | AMC Jack to RP-BNC Jack, Bulkhead, 50 Ohm           |
| 031-6112      | AMC Jack to RP-TNC Jack, Bulkhead, 50 Ohm           |
| 031-6137      | AMC Jack to RP-TNC Jack, Panel Mount, 50 Ohm        |
| 031-6208      | AMC Jack to TNC Jack, Bulkhead, 50 Ohm              |
| 901-10097     | AMC Jack to RP-SMA Jack, Bulkhead, 50 Ohm           |
| 901-10175     | AMC Jack to SMA Jack, Bulkhead, 50 Ohm              |
| 901-10395     | AMC Jack to RP-SMA Jack, Bulkhead, 50 Ohm           |
| AD-BNCJAMCJ-1 | AMC Jack to BNC Jack, Bulkhead, 50 Ohm              |

### AMC Jumper Assemblies



|   |           |                            |     |   |   |
|---|-----------|----------------------------|-----|---|---|
| <b>Series:</b>                          | A-1PA-    | 113-                       | 100 | B | 2 |
| AMC Jumper                              |           |                            |     |   |   |
| <b>Cable Type</b>                       |           |                            |     |   |   |
| 081*= 0.81 mm                           |           |                            |     |   |   |
| 113*= 1.13 mm                           |           |                            |     |   |   |
| 132*= 1.32 mm                           |           |                            |     |   |   |
| 137*= 1.37 mm                           |           |                            |     |   |   |
| 178*= RG-178                            |           |                            |     |   |   |
| <b>Assembly Length in mm (Dim L)</b>    |           |                            |     |   |   |
| <b>Cable Color:</b>                     |           |                            |     |   |   |
| B* = Black                              | W = White | N* = Natural (RG-178 Only) |     |   |   |
| G = Gray                                | U = Blue  |                            |     |   |   |
| R = Red                                 | E = Green |                            |     |   |   |
| <b>No. of Terminated Ends (1 or 2*)</b> |           |                            |     |   |   |

\* standard configuration options

## Technical Specifications

### Electrical

|                       | AMC PCB Mount Connectors                           | AMC Jumpers                                       |
|-----------------------|--|---|
| Impedance             | 50Ω, nominal                                       |   |
| Frequency Range       | DC - 10 GHz  |   |
| Contact Resistance    | Center Contact: 20 mΩ Max.                         |   |
|                       | Outer Contact: 10 mΩ Max.                          |   |
| Insulation Resistance | 500 mΩ Min.  |   |
| Operating Voltage     | 500 VRMS   |   |
| DWV                   | No line or insulation breakdown: 200 VAC for 1 Min |   |
| VSWR                  | 1.3 Max. at DC - 3 GHz, 1.35 Max. at 3 - 6 GHz     | 1.300 Max. at DC - 3 GHz, 1.400 Max. at 3 - 6 GHz |

### Mechanical

|                   |                                      |
|-------------------|--------------------------------------|
| Durability        | 30 cycles                            |
| Temperature Range | -40° to +90°C                        |
| Mating            | Demating Force 10N Typical – 20N Max |

### Materials and Finishes

|                          |   |   |
|--------------------------|---|---|
| Connector Body           | Phosphor bronze, silver plated (0.76u Min.) over copper (1u Min.) |   |
| Connector Center Contact | Phosphor bronze, gold plated (0.2u min.) over nickel (2-3u)       | Phosphor bronze, gold plated (0.076u min.) over nickel (2u Min) |
| Connector Insulator      | PBT   |   |
| Cable Jacket             | FEP   |   |
| Cable Dielectric         | FEP   |   |
| Cable Center Conductor   | Annealed copper wire stranded, silver plated                      |   |
| Cable Outer Conductor    | Annealed copper wire braid, tin plated                            |   |