

SECTION 6



**SMB / SMB-LOCK / SMC**  
R114 / R117 / R112

**ROJONE**  
PTY. LTD.

**Australian Representatives**  
**ROJONE, PTY LTD.**  
Tel: 02 9829 1555  
E: [sales@rojone.com.au](mailto:sales@rojone.com.au)  
[www.rojone.com.au](http://www.rojone.com.au)



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**SMB LIMITED DETENT (SMB-A)**

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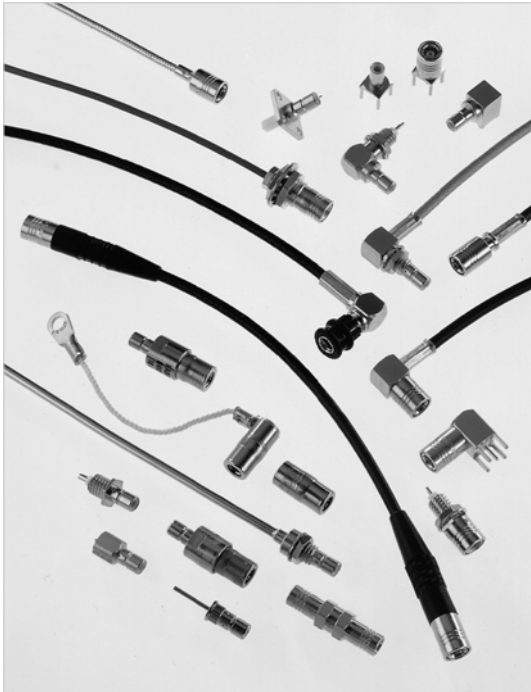
**SMB SLIDE-ON (SUBGLIS)**

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Introduction



|     |            |
|-----|------------|
| 50Ω | DC - 4 GHz |
|-----|------------|

**GENERAL**

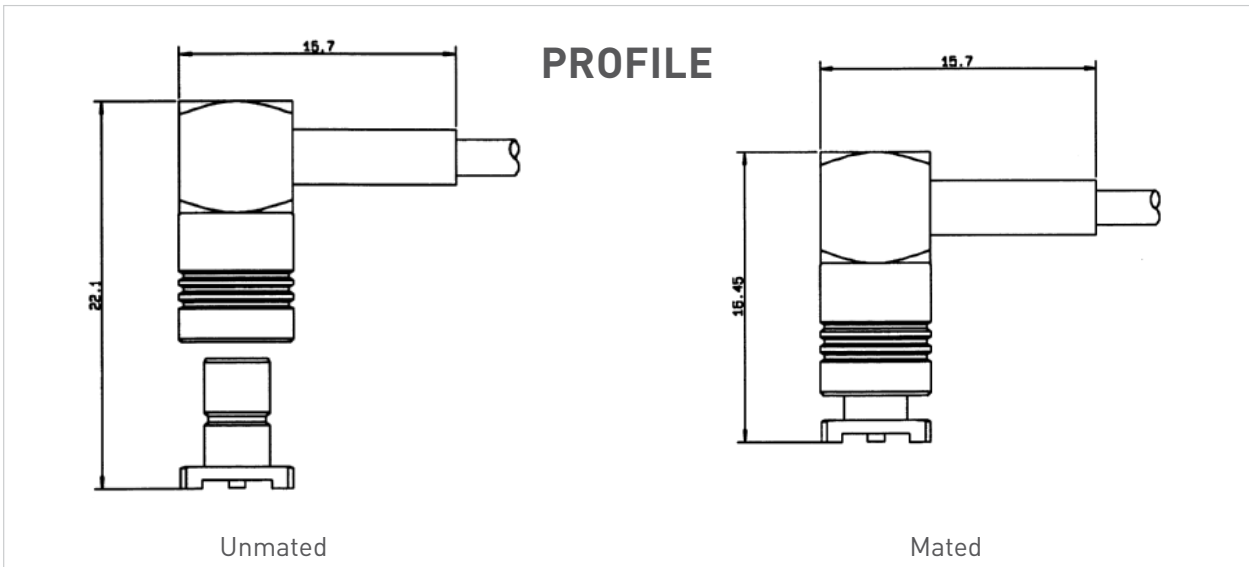
- Subminiature coaxial connectors
- Snap-on coupling
- Plugs have female contacts
- Jacks have male contacts
- Low weight and reduced outline dimensions
- Captive contact (except contrary specification)

**APPLICABLE STANDARDS**

- SMB series MIL-C-39012  
MIL-C-39012/67-72
- IEC 169-10
- CECC 22130
- BS 9210 N0007

**APPLICATIONS**

- Mobile communication systems
- Civil and military telecommunications
- Aeronautics
- Automotive



## Introduction

SMB snap-on subminiature coaxial connectors provide a fast and reliable connection for high density packaging for applications up to 4 GHz.

Radiall offers a very large range of SMB connectors, including cable plugs and jacks with bulkhead and panel mount configurations, bulkhead and panel mount receptacles; through hole, SMT and edge card receptacles and in-series and between series adapters.

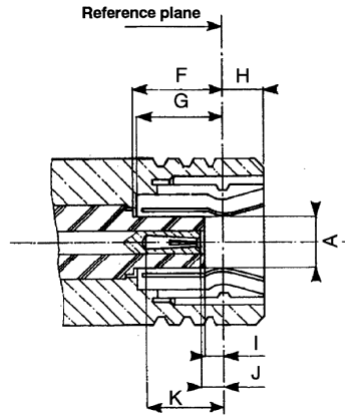
SMB series also features versions with lower mating forces than standard. Four types of interconnection mechanisms are available:

- **SMB: Standard** snap-on connection  
The design permits quick engagement and disengagement.
- **SMB limited detent (SMB-A):** Snap-on connection with **low mating force**  
The design permits quick engagement and disengagement, and is suitable for printed circuit boards. Radiall offers a range of PCB and bulkhead receptacles with female center contact. The SMB-A receptacles are completely intermateable with standard SMB jacks.
- **SMB slide-on (SUBGLIS):** Slide-on connection  
The design is suitable for back plane and blind mate applications. In this case, we recommend the association of a mobile connector (floating jack / receptacle) with a fixed connector (panel plug / jack, receptacle). The SUBGLIS connectors are completely intermateable with standard SMB and SMB-A connectors and for that, they can be used for test applications.
- **SMB Lock:**  
Plugs (with female center contact) have a coupling nut allowing a reliable lock-on connection (50 N min). This range allows a visual control of the locking system.

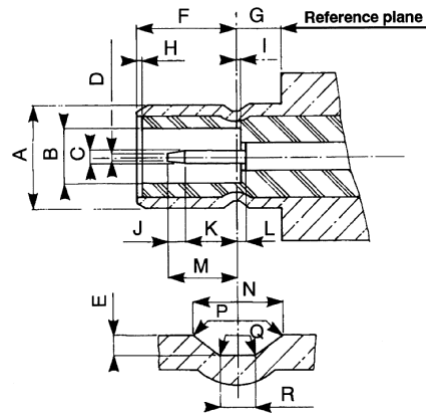


These four types of SMB connectors have the same electrical performances.

**PLUG** (with female contact)



**JACK** (with male contact)



| Letter | mm   |      | inch |      |
|--------|------|------|------|------|
|        | min. | max. | min. | max. |
| A DIA  |      | 2.06 |      | .081 |
| F      | 3.58 |      | .141 |      |
| G      | 3.58 |      | .141 |      |
| H      |      | 1.63 |      | .064 |
| I      | 0.18 |      | .007 |      |
| J      | 0.18 | 0.94 | .007 | .037 |
| K      | 2.97 |      | .117 |      |

| Letter | mm   |      | inch |      |
|--------|------|------|------|------|
|        | min. | max. | min. | max. |
| A DIA  |      | 3.71 |      | .146 |
| B DIA  | 2.08 |      | .082 |      |
| C DIA  | 0.48 | 0.53 | .019 | .021 |
| D DIA  |      | 0.25 |      | .010 |
| E      | 0.15 | 0.25 | .006 | .010 |
| F      | 3.33 | 3.58 | .131 | .141 |
| G      | 1.65 |      | .065 |      |
| I      |      | 0.18 |      | .007 |
| J      | 0.25 |      | .010 |      |
| K      | 1.32 |      | .052 |      |
| L      |      | 0.18 |      | .007 |
| M      |      | 2.97 |      | .117 |
| N      | 0.69 | 0.94 | .027 | .037 |
| P      | 0.05 | 0.15 | .002 | .006 |
| Q      |      | 0.13 |      | .005 |
| R      | 0.28 | 0.38 | .011 | .015 |

CLAMP TYPE CONNECTORS: R 114 xxx 000 = braid retention with cylindrical gasket  
 R 114 xxx 133 = braid retention with V groove gasket

Characteristics

| Test / Characteristics | MIL-C-39012 A | Values / Remarks |
|------------------------|---------------|------------------|
|------------------------|---------------|------------------|

**ELECTRICAL CHARACTERISTICS**

| Impedance   |                       | 50Ω        |                            |            |         |       |
|---|-----------------------|------------|----------------------------|------------|---------|-------|
| Frequency range   |                       | DC - 4 GHz |                            |            |         |       |
| V.S.W.R. (typ.)<br>• Straight models<br>• Right angle models          | cable group:<br>.085" | Frequency  | 3-14                       | 1 GHz      | 2.5 GHz | 4 GHz |
|   |                       | 2          |                            | 1.12       | 1.22    | 1.33  |
|   | 2.6                   |            | 1.10                       | 1.22       | 1.33    |       |
|   | 2                     |            | 1.12                       | 1.22       | 1.35    |       |
|   | .085"                 |            | 1.10                       | 1.18       | 1.26    |       |
|   | 2                     |            | 1.10                       | 1.20       | 1.25    |       |
| Insertion loss (typ.) dB<br>• Straight models<br>• Right angle models | cable group:<br>.085" | 3-27       |                            | 0.05       | 0.07    | 0.15  |
|   |                       | 2          |                            | 0.05       | 0.10    | 0.25  |
|   | 2.6                   |            | 0.05                       | 0.05       | 0.05    |       |
|   | 2                     |            | 0.05                       | 0.07       | 0.12    |       |
|   | .085"                 |            |                            |            |         |       |
|   | 2                     |            |                            |            |         |       |
| RF leakage  |                       | 3-26       | -55 dB min from 2 to 3 GHz |            |         |       |
| Insulation resistance   |                       | 3-11       | 1000 MΩ min                |            |         |       |
| Contact resistance  |                       | 3-16       | Initial                    | After test |         |       |
| • Center contact (mΩ)   |                       |            | 6                          | 8          |         |       |
| • Outer contact (mΩ)  |                       |            | 1                          | 1.5        |         |       |
| Working voltage   |                       |            |                            |            |         |       |
| • Cable group   |                       |            | 2/50                       | 2.6/50     |         |       |
| • At sea level  |                       |            | 250 V rms                  | 335 V rms  |         |       |
| • At 70000 ft (21000 m)   |                       |            | 60 V rms                   | 85 V rms   |         |       |
| Dielectric withstanding voltage                                       |                       |            |                            |            |         |       |
| • Cable group   |                       | 3-17       | 2/50                       | 2.6/50     |         |       |
| • At sea level  |                       |            | 750 V rms                  | 1000 V rms |         |       |
| • At 70000 ft (21000 m)   |                       |            | 185 V rms                  | 250 V rms  |         |       |
| RF withstanding voltage (5 MHz sine wave)                             |                       |            |                            |            |         |       |
| • Cable group   |                       | 3-23       | 2/50                       | 2.6/50     |         |       |
| • At sea level  |                       |            | 500 V rms                  | 700 V rms  |         |       |

**MECHANICAL CHARACTERISTICS**

|                          |                                    |                                |
|--------------------------|------------------------------------|--------------------------------|
| Durability               | 3-15                               | 500 matings                    |
| Mating / Unmating        | 3-5-1                              | Axial force: 62 N max (14 Lbf) |
| Cabling retention force  | cable group:<br>• 2/50<br>• 2.6/50 | 3-24                           |
|                          |                                    | 58 N (13Lbf)<br>110 N (25Lbf)  |
| Center contact retention |                                    | Axial: 10 N (2.25 Lbf)         |

**ENVIRONMENTAL CHARACTERISTICS**

|                                |      |  |
|--------------------------------|------|--|
| Temperature range              |      | -65°C / + 165°C  |
| • Standard models              |      | -65°C / +165°C   |
| • Hermetic sealed models       |      | -65°C / +105°C   |
| • Models for semi-rigid cables |      |  |
| Combined climate tests         |      | MIL-STD-202, method 102, condition C   |
| Thermal shock                  | 3-20 | MIL-STD-202, method 107, condition B   |
| High temperature endurance     |      | MIL-STD-202, method 108  |
| Corrosion (salt spray)         | 3-13 | MIL-STD-202, method 101, condition B, 5%   |
| Vibrations                     | 3-18 | MIL-STD-202, method 204, condition B, 15g  |
| Shocks                         | 3-19 | MIL-STD-202, method 213, condition B, 75g  |
| Low pressure                   | 3-22 | MIL-STD-202, method 105, condition C   |
| Hermetic seal                  |      | Applied vacuum 10 <sup>-6</sup> mm of Hg (Torrs)<br>Leakage rate < 10 <sup>-6</sup> atm/cm <sup>3</sup> /s |

**MATERIALS AND PLATING**

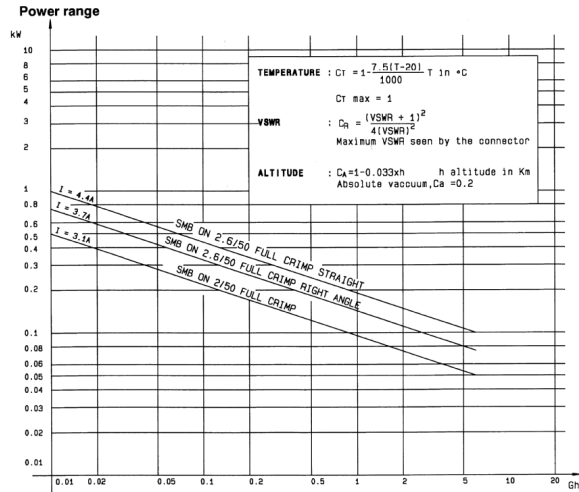
|                             | Material                         | Plating               |
|-----------------------------|----------------------------------|-----------------------|
| Body and center pin contact | Half hard brass as per QQ-B-626  | Gold or nickel (Body) |
| Center socket contact       | Beryllium copper as per QQ-C-530 | Gold (Center contact) |
| Ferrules                    | Brass                            |                       |
| Insulators                  | PTFE teflon                      |                       |
| Gaskets                     | Silicone elastomer               |                       |

Standard packaging: 100 pieces

All dimensions are given in mm.

Characteristics

POWER RATING



Plugs

STRAIGHT PLUGS CRIMP TYPE FOR FLEXIBLE CABLES

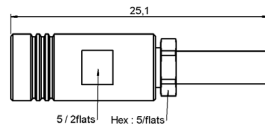


Fig. 1

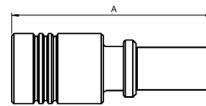


Fig. 2

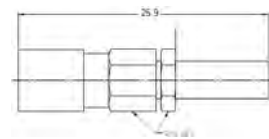


Fig. 3

| Cable group           | Cable group dia. | Part number   | Fig. | Dimensions A (mm) | Captive center contact | Finish | Note       |
|-----------------------|------------------|---------------|------|-------------------|------------------------|--------|------------|
| RG178 / RG196         | 2/50/S           | R114 073 000  | 1    |                   | yes                    | Gold   | Full crimp |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 075 000  |      |                   |                        |        |            |
|                       |                  | R114 082 000  | 19.8 |                   |                        |        |            |
| RD316                 | 2.6/50/D         | R114 083 000  | 2    | 18.4              |                        |        |            |
| RG178 / RG196         | 2/50S            | 2002-1571-002 | 3    |                   |                        | Nickel |            |
|                       |                  | 2002-7571-002 |      |                   |                        | Gold   |            |
| RD178                 | 2/50D            | 2002-1571-005 |      |                   |                        | Nickel |            |
|                       |                  | 2002-7571-005 |      |                   |                        | Gold   |            |
| RG174 / RG316         | 2.6/50S          | 2002-1571-003 |      |                   |                        | Nickel |            |
|                       |                  | 2002-7571-003 |      |                   |                        | Gold   |            |
| RD316                 | 2.6/50D          | 2002-1571-019 |      | Gold              |                        |        |            |
|                       |                  | 2002-7571-019 |      | Nickel            |                        |        |            |

Plugs and jacks

**STRAIGHT PLUGS CLAMP TYPE FOR FLEXIBLE CABLES**

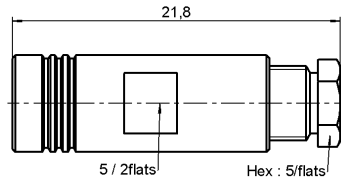


Fig. 1

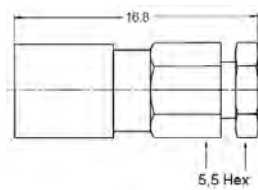


Fig. 2

| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact |
|-----------------------|------------------|--------------------|----------------------|------|------------------------|
| RG178 / RG196         | 2/50/S           | R114 003 000       | n/a                  | 1    | yes                    |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 005 000       |                      |      |                        |
| RG178 / RG196         | 2/50S            | 2002-1551-002      | 2002-7551-002        | 2    |                        |
| RD178                 | 2/50D            | 2002-1551-005      |                      |      |                        |
| RG174 / RG316         | 2.6/50S          | 2002-7551-003      | 2002-7551-003        |      |                        |
| RD316                 | 2.6/50D          | 2002-7551-019      | 2002-7551-019        |      |                        |

**STRAIGHT PLUG FOR SEMI RIGID CABLES**

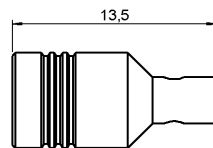


Fig. 1

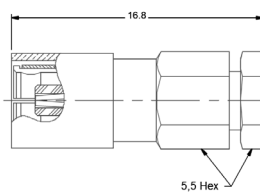


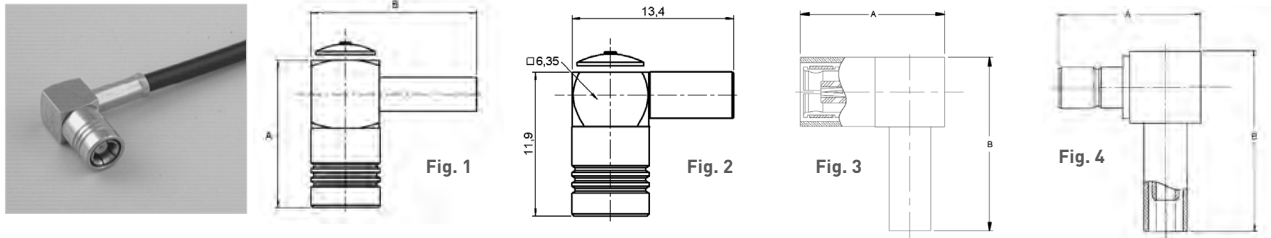
Fig. 2

| Cable group | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Note         |
|-------------|------------------|--------------------|----------------------|------|------------------------|--------------|
| RG405       | .085"            | R114 053 000       |                      | 1    | no                     | Solder type  |
|             |                  | 2002-1541-010      | 2002-7541-010        |      |                        |              |
| RG402       | .141"            | 2002-1541-003      | 2002-7541-009        | 2    | yes                    | Solder clamp |



Plugs and jacks

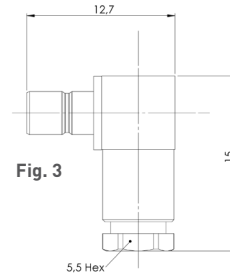
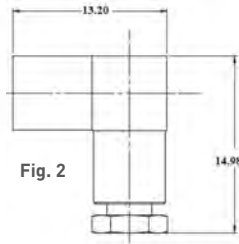
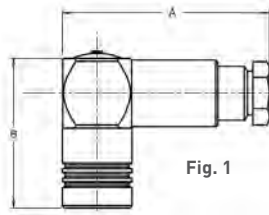
**RIGHT ANGLE PLUGS AND JACKS CRIMP TYPE FOR FLEXIBLE CABLES**



| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |      | Captive center contact | Note          |  |
|-----------------------|------------------|--------------------|----------------------|------|---------------|------|------------------------|---------------|--|
|                       |                  |                    |                      |      | A             | B    |                        |               |  |
| RG178 / RG196         | 2/50/S           | R114 183 000       |                      | 1    | 13.7          | 15.3 |                        |               |  |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 185 000       |                      | 2    |               |      |                        | Short version |  |
|                       |                  | R114 186 000       | n/a                  | 1    | 13.7          | 15.3 |                        |               |  |
|                       |                  | R114 186 100       |                      |      | 15.1          | 15.4 |                        | Full crimp    |  |
|                       |                  | R114 187 000       |                      |      | 13.7          |      |                        |               |  |
| RD316                 | 2.6/50/D         | R114 182 000       |                      |      |               |      |                        |               |  |
| RG178 / RG196         | 2/50S            | 2105-1521-002      | 2105-7521-002        | 3    | 13.2          | 16   | yes                    |               |  |
|                       |                  | 2141-1521-002      |                      | 4    | 12.7          |      |                        |               |  |
| RD178                 | 2/50D            | 2105-1521-005      | 2105-7521-005        | 3    | 13.2          |      |                        |               |  |
| RG174 / RG316 / RG179 | 2.6/50S          | 2105-1521-003      | 2105-7521-003        | 3    | 13.2          |      |                        |               |  |
|                       |                  | 2141-1521-003      | 2141-7521-003        | 4    | 12.7          |      |                        |               |  |
| RD316                 | 2.6/50D          | 2105-1521-019      | 2105-7521-019        | 3    | 13.2          |      |                        |               |  |
|                       |                  | 2141-1521-019      | 2141-7521-019        | 4    | 12.7          |      |                        |               |  |

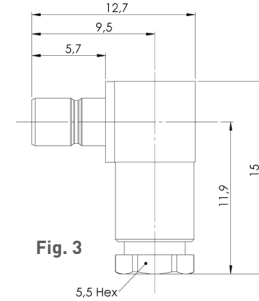
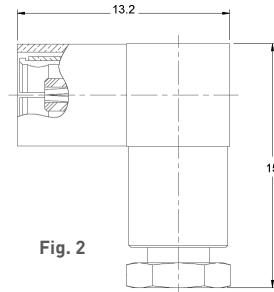
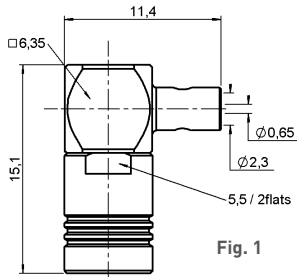
Plugs and jacks

**RIGHT ANGLE PLUGS AND JACKS CLAMP TYPE FOR FLEXIBLE CABLES**



| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |      | Captive center contact |
|-----------------------|------------------|--------------------|----------------------|------|---------------|------|------------------------|
|                       |                  |                    |                      |      | A             | B    |                        |
| RG178 / RG196         | 2/50/S           | R114 163 000       | n/a                  | 1    | 19            | 13.7 | yes                    |
|                       | 2.2/50/D         | R114 163 420       |                      |      | 16.7          |      |                        |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 165 000       |                      |      | 19            |      |                        |
| RG178 / RG197         | 2/50S            | 2005-1551-002      | 2005-7551-002        | 2    |               |      |                        |
|                       |                  | 2041-1551-002      |                      | 3    |               |      |                        |
| RG174 / RG316 / RG179 | 2.6/50S          | 2005-1551-003      | 2005-7551-003        | 2    |               |      |                        |
|                       |                  | 2041-1551-003      | 2041-7551-003        | 3    |               |      |                        |
| RD316                 | 2.6/50D          | 2005-1551-019      |                      | 2    |               |      |                        |

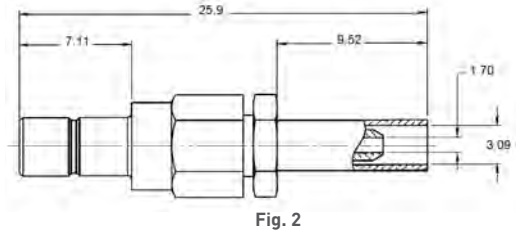
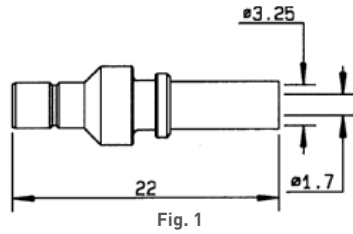
**RIGHT ANGLE PLUGS AND JACKS FOR SEMI RIGID CABLES**



| Cable group | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Note   |
|-------------|------------------|--------------------|----------------------|------|------------------------|--|
| RG405       | .085"            | R114 169 000       | n/a                  | 1    | yes                    | Cable bending required<br>Solder type for semi rigid cable |
|             |                  | 2005-1541-010      | 2005-7541-010        | 2    |                        |  |
|             |                  | 2041-1541-010      | 2041-7541-010        | 3    |                        |  |
| RG402       | .141"            | 2005-1541-009      | 2005-7541-009        | 2    |                        | Solder clamp   |
|             |                  | 2041-1541-009      |                      | 3    |                        |  |

Jacks and bulkhead jacks

**STRAIGHT JACKS CRIMP TYPE FOR FLEXIBLE CABLES**



| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Note       |
|-----------------------|------------------|--------------------|----------------------|------|------------------------|------------|
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 238 000       |                      | 1    | yes                    | Full crimp |
| RG178 / RG197         | 2/50S            | 2001-1571-002      | 2001-7571-002        | 2    |                        | Crimp type |
| RD178                 | 2/50D            | 2001-1571-005      |                      |      |                        |            |
| RG174 / RG316 / RG179 | 2.6/50S          | 2001-1571-003      | 2001-7571-003        |      |                        |            |
| RD316                 | 2.6/50D          | 2001-1571-019      | 2001-7571-019        |      |                        |            |

**STRAIGHT BULKHEAD JACKS CRIMP TYPE FOR FLEXIBLE CABLES**

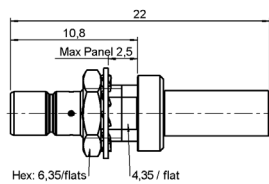


Fig. 1

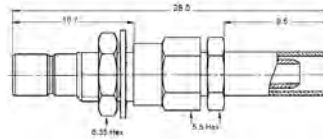


Fig. 2

| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Panel drilling | Note                    |
|-----------------------|------------------|--------------------|----------------------|------|------------------------|----------------|-------------------------|
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 313 000       | n/a                  | 1    | yes                    | P08            | Rear mount / Fill crimp |
| RG178 / RG197         | 2/50S            | 2003-1571-002      | 2003-7571-002        | 2    |                        |                |                         |
| RD178                 | 2/50D            | 2003-1571-005      | 2003-7571-005        |      |                        |                |                         |
| RG174 / RG316 / RG179 | 2.6/50S          | 2003-1571-003      | 2003-7571-003        |      |                        |                |                         |
| RD316                 | 2.6/50D          | 2003-1571-019      | 2003-7571-019        |      |                        |                |                         |

Bulkhead jacks

SMB

**STRAIGHT BULKHEAD JACKS CLAMP TYPE FOR FLEXIBLE CABLES**

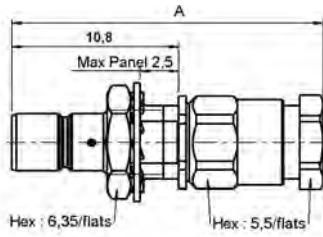


Fig. 1

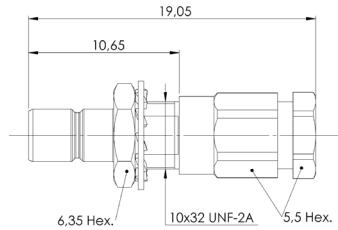


Fig. 2

| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Dimensions A (mm) | Captive center contact | Panel drilling | Note       |
|-----------------------|------------------|--------------------|----------------------|------|-------------------|------------------------|----------------|------------|
| RG178 / RG196         | 2/50/S           | R114 303 000       | n/a                  | 1    | 25.3              | yes                    | P08            | Rear mount |
|                       |                  | R114 303 133       |                      |      | 20.1              |                        |                |            |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 305 000       | 25.3                 |      |                   |                        |                |            |
| RG178 / RG197         | 2/50/S           | 2003-1551-002      | 2003-7551-002        | 2    |                   |                        |                |            |
| RD178                 | 2/50/D           | 2003-1551-005      |                      |      |                   |                        |                |            |
| RG174 / RG316 / RG179 | 2.6/50/S         | 2003-1551-003      | 2003-7551-003        |      |                   |                        |                |            |
| RD316                 | 2.6/50/D         | 2003-1551-019      |                      |      |                   |                        |                |            |

**STRAIGHT BULKHEAD JACK SOLDER TYPE FOR SEMI-RIGID CABLE**

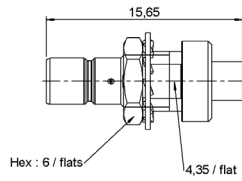


Fig. 1

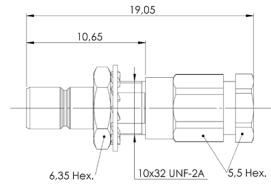
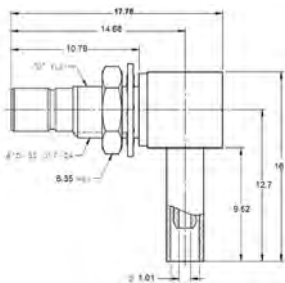


Fig. 2

| Cable group | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Panel drilling | Note              |
|-------------|------------------|--------------------|----------------------|------|------------------------|----------------|-------------------|
| RG405       | .085"            | R114 222 000       | 2003-7541-010        | 1    | yes                    | P08            | Solder clamp type |
|             |                  | 2003-1541-010      |                      |      |                        |                |                   |
| RG402       | .141"            | 2003-1541-009      | 2                    |      |                        |                |                   |

**RIGHT ANGLE BULKHEAD CRIMP TYPE FOR FLEXIBLE CABLES**



| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Captive center contact | Panel drilling |
|-----------------------|------------------|--------------------|----------------------|------------------------|----------------|
| RG178 / RG197         | 2/50S            | 2106-1521-002      | 2106-7521-002        | yes                    | P08            |
| RD178                 | 2/50D            | 2106-1521-005      |                      |                        |                |
| RG174 / RG316 / RG179 | 2.6/50/S         | 2106-1521-003      | 2106-7521-003        |                        |                |
| RD316                 | 2.6/50/D         | 2106-1521-019      | 2106-7521-019        |                        |                |

Receptacles

**STRAIGHT FLANGE RECEPTACLES (male center contact)**

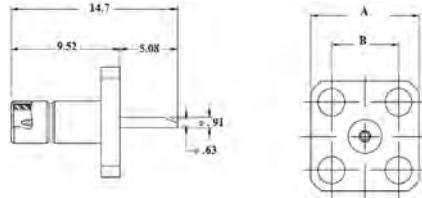
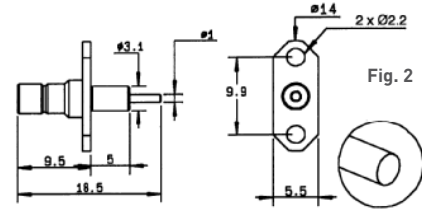
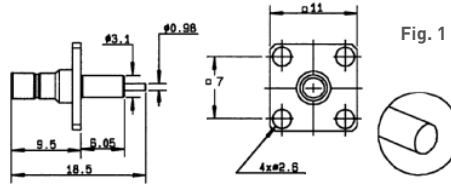


Fig. 3

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |     | Captive center contact | Panel drilling | Note   |
|--------------------|----------------------|------|---------------|-----|------------------------|----------------|--|
|                    |                      |      | A             | B   |                        |                |  |
| R114 413 000       | n/a                  | 1    |               |     | no                     | P01            | Square flange / Extended dielectric                  |
| R114 450 000       |                      | 2    |               |     |                        | P06            | 2 hole glange / Extended dielectric / Unit packaging |
| 2484-1511-000      | 2486-7511-000        | 3    | 9.5           | 5.9 | yes                    |                | 2.36mm hole dia.                                     |
| 2486-1511-000      |                      |      | 12.7          | 8.6 |                        |                |  |

**STRAIGHT BULKHEAD RECEPTACLES (male center contact)**

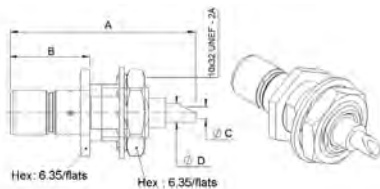


Fig. 1

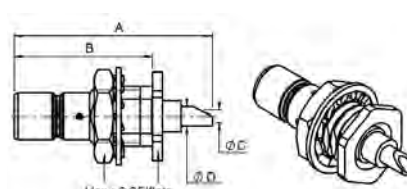


Fig. 2

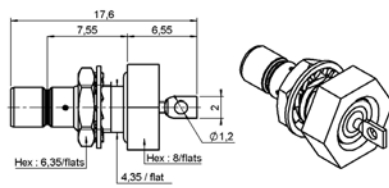


Fig. 3

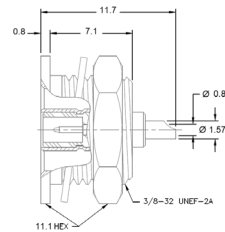
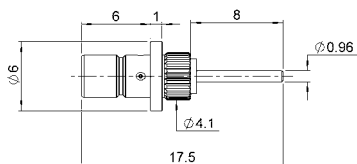


Fig. 4

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |      |     |     | Captive center contact | Panel drilling | Note                                      |
|--------------------|----------------------|------|---------------|------|-----|-----|------------------------|----------------|---|
|                    |                      |      | A             | B    | C   | D   |                        |                |   |
| R114 553 000       | n/a                  | 1    | 15.7          | 6.7  | 1   | 1.5 | yes                    | P08            | Front mount                               |
| R114 554 000       |                      | 2    |               | 10.9 |     |     |                        |                | Rear mount                                |
| R114 603 000       |                      | 3    |               |      |     |     |                        |                | Hermetically sealed                       |
| 2004-1511-000      | 2004-7511-000        | 2    | 15.5          | 10.8 | 0.9 | 1.6 |                        |                | Rear mount / Solder pot contact           |
| 2014-1511-000      | 2014-7511-000        | 4    |               |      |     |     |                        |                | Recessed front mount / Solder pot contact |
| 2019-1511-000      | 2019-7511-000        | 1    | 15.5          | 5.9  | 0.9 | 1.6 |                        |                | Front mount / Solder pot contact          |

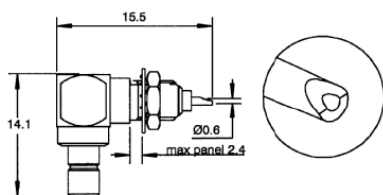
Receptacles

**STRAIGHT PRESS IN RECEPTACLE (male)**



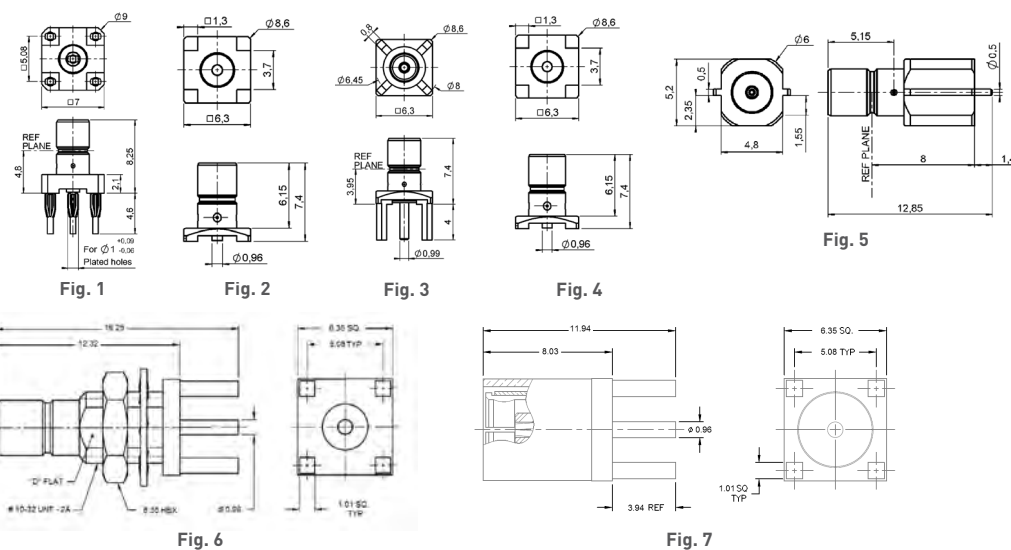
| Part number  | Captive center contact | Panel drilling | Finish |
|--------------|------------------------|----------------|--------|
| R114 504 225 | yes                    | P10            | Nickel |

**RIGHT ANGLE BULKHEAD RECEPTACLES (male center contact)**



| Part number   | Captive center contact | Panel drilling | Finish | Note               |
|---------------|------------------------|----------------|--------|--------------------|
| R114 670 000  | yes                    | P08            | Gold   | Solder pot contact |
| 2012-1511-000 |                        |                | Nickel |                    |
| 2012-7511-000 |                        |                |        |                    |

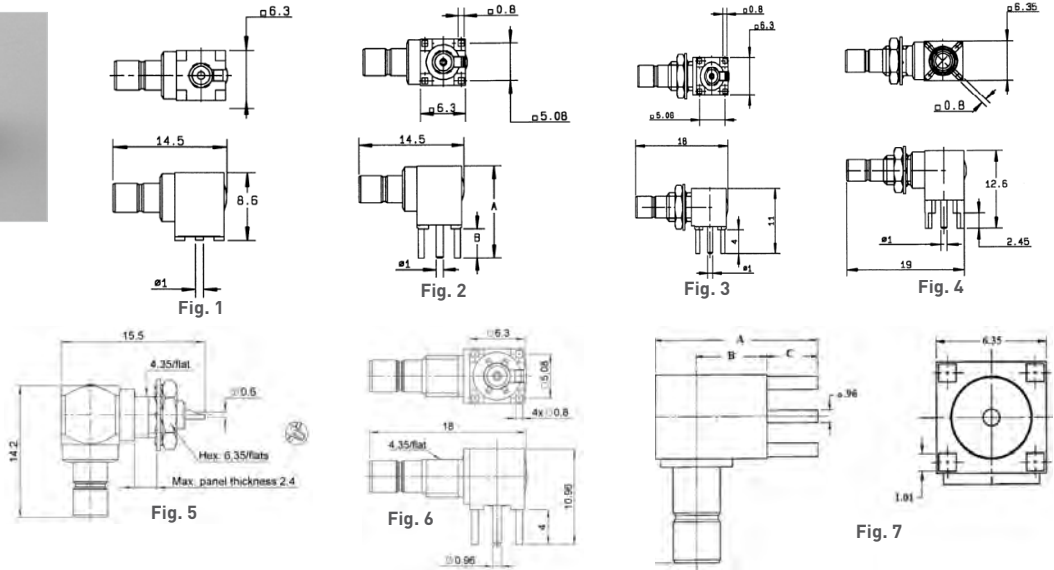
**STRAIGHT PCB RECEPTACLES (male and female)**



| Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | Assembly instructions | Panel drilling               | Note           |
|--------------------|----------------------|------|------------------------|-----------------------|------------------------------|----------------|
| R114 416 020       | n/a                  | 1    | yes                    | M01                   | P02                          | Press fit pins |
| R114 423 000       |                      | 5    |                        |                       | SMT edge card                |                |
| R114 424 000       |                      | 2    |                        |                       | SMT                          |                |
| R114 424 100       |                      |      |                        |                       | SMT / Tape & Reel 100 pieces |                |
| R114 425 000       |                      | 4    |                        |                       | P05                          | Female plug    |
| R114 426 000       |                      | 3    |                        |                       | P03                          |                |
| 2009-1511-000      | 2009-7511-000        | 3    |                        |                       | P04                          | No standoff    |
| 2009-1511-050      | 2009-7511-050        |      |                        |                       |                              | Standoff legs  |
| 2025-1511-000      | 2025-7511-000        |      |                        |                       |                              | No standoff    |
| 2109-1511-000      | 2109-7511-000        | 6    |                        |                       |                              |                |

Receptacles

RIGHT ANGLE PCB RECEPTACLES (male center contact)



| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |     |     |      | Captive center contact | Assembly instructions | Panel drilling            | Note                      |
|--------------------|----------------------|------|---------------|-----|-----|------|------------------------|-----------------------|---------------------------|---------------------------|
|                    |                      |      | A             | B   | C   | D    |                        |                       |                           |                           |
| R114 664 000       | n/a                  | 1    |               |     |     |      | yes                    | M01                   | Packaging 100p reel       |                           |
| R114 664 120       |                      |      |               |     |     |      |                        |                       | SMT / Packaging 500p reel |                           |
| R114 665 000       |                      | P03  |               |     |     |      |                        |                       |                           | Packaging unit Rear mount |
| R114 665 020       |                      |      |               |     |     |      |                        |                       |                           |                           |
| R114 673 020       |                      |      |               |     |     |      |                        |                       |                           |                           |
| R114 673 120       |                      |      |               |     |     |      |                        |                       |                           |                           |
| R114 670 000       | P08                  |      |               |     |     |      |                        | Packaging 100 pieces  |                           |                           |
| R114 673 823       | P09                  |      |               |     |     |      |                        | Packaging 200 pieces  |                           |                           |
| 2010-1511-000      | 2010-7511-000        | 7    | 10.9          | 3.8 | 3.9 | 12.7 |                        | P04                   |                           |                           |
| 2010-1511-002      | 2010-7511-002        |      | 12.7          | 5.5 |     | 14.2 |                        |                       |                           |                           |

Adapters

IN SERIES ADAPTERS

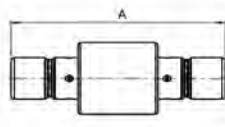


Fig. 1

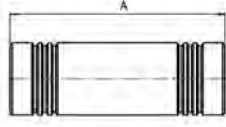


Fig. 2

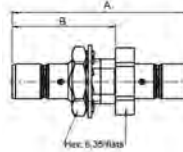


Fig. 3

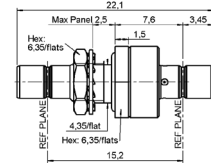


Fig. 4

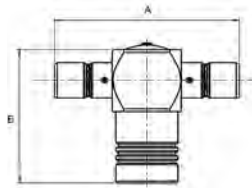


Fig. 5

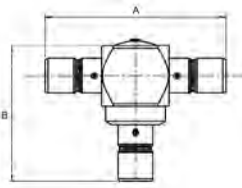


Fig. 6

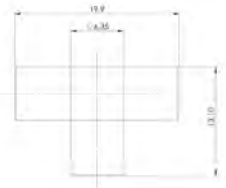


Fig. 7

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions |      | Captive center contact | Panel drilling | Note                            |                              |
|--------------------|----------------------|------|------------|------|------------------------|----------------|---------------------------------|------------------------------|
|                    |                      |      | A          | B    |                        |                |                                 |                              |
| R114 703 000       | n/a                  | 1    | 19         | 11   | yes                    | P08            | male - male                     |                              |
| R114 704 000       |                      | 2    |            |      |                        |                | female - female                 |                              |
| R114 720 000       |                      | 3    |            |      |                        |                | bulkhead male - male            |                              |
| R114 753 000       |                      | 4    |            |      |                        |                | hermetically sealed male - male |                              |
| R114 780 000       |                      | 5    |            |      |                        |                | tee female / male - male        |                              |
| R114 781 000       |                      | 6    |            |      |                        |                | tee male / male - male          |                              |
| 5207-1501-000      | 5207-7501-000        | 6    | 12.7       |      |                        |                |                                 | tee male / male - male       |
| 5222-1501-000      | 5222-7501-000        | 3    | 17.5       | 10.7 |                        |                |                                 | bulkhead male - male         |
| 5213-1501-000      | 5213-7501-000        | 1    |            |      |                        |                |                                 | male - male                  |
| 5215-1501-000      | 5215-7501-000        | 5    | 19         | 12.9 |                        |                |                                 | tee female / male - male     |
| 5216-1501-000      | 5216-7501-000        | 2    | 17.5       |      |                        |                |                                 | female - female              |
| 5208-1501-000      | 5208-7501-000        | 7    |            |      |                        |                |                                 | tee female / female - female |



# SMB LOCK

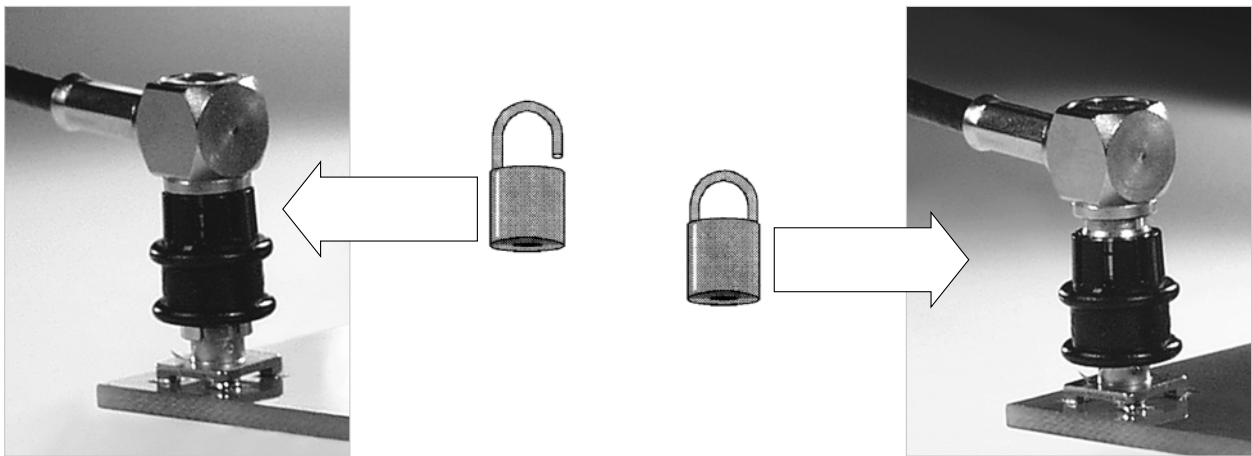
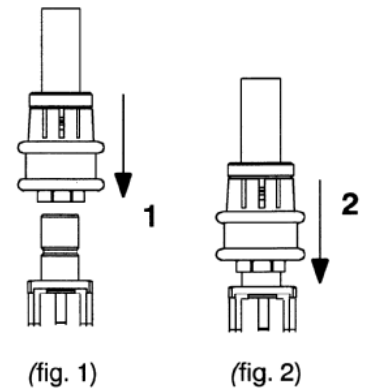
## Introduction

Radiall introduces new **SMB LOCK** plugs with a 2-step connection system:

- 1 **Snap** the plug on the male connector (fig. 1)
- 2 **Lock** the couple by pushing down the coupling nut (fig. 2)

This new range

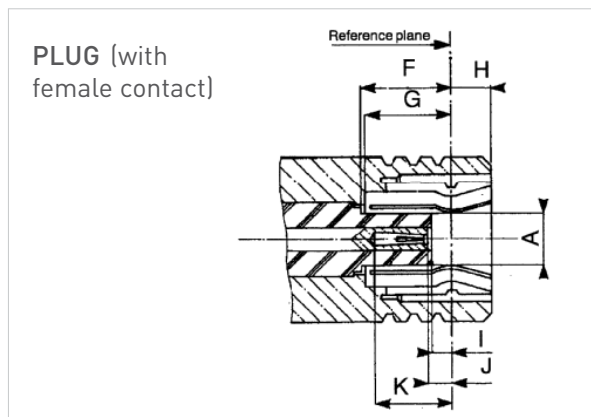
- Is **intermateable** with the standard **SMB** male connectors
- Benefits from a low intermodulation
- Replaces the standard **SMB** and screw-on connectors in all applications requiring:
  - A fast connection
  - A reliable lock-on connection
  - Long durability
- Possibility to visually control the locking system



- The connector allows a 360° cable rotation
- Coupling nut

The coupling nut is made with POM (halogen free). Its standard color is black.

## Interface



| Letter | mm   |      | inch |      |
|--------|------|------|------|------|
|        | min. | max. | min. | max. |
| A DIA  |      | 2.06 |      | .081 |
| F      | 3.58 |      | .141 |      |
| G      | 3.58 |      | .141 |      |
| H      |      | 1.63 |      | .064 |
| I      | 0.18 |      | .007 |      |
| J      | 0.18 | 0.94 | .007 | .037 |
| K      | 2.97 |      | .117 |      |

Characteristics

| Test / Characteristics | Values / Remarks |
|------------------------|------------------|
|------------------------|------------------|

**ELECTRICAL CHARACTERISTICS**

|                            |                   |                              |              |
|----------------------------|-------------------|------------------------------|--------------|
| Impedance                  | 50Ω               |                              |              |
| Operating frequency        | DC to 4 GHz       |                              |              |
| Typical V.S.W.R.           |                   | 2 GHz                        | 4 GHz        |
| • Straight models          | .085"<br>∅ 2.6/50 | 1.15<br>1.20                 | 1.20<br>1.25 |
| • Right angle models       | .085"<br>∅ 2.6/50 | 1.05<br>1.15                 | 1.15<br>1.25 |
| RF Insertion loss          |                   |                              |              |
| • Straight models          | .085"<br>∅ 2.6/50 | 0.20vF (GHz)<br>0.25vF (GHz) |              |
| • Right angle models       | .085"<br>∅ 2.6/50 | 0.25vF (GHz)<br>0.50vF (GHz) |              |
| Testing voltage (V RMS)    | .085"<br>∅ 2.6/50 | 750<br>1000                  |              |
| Working voltage (V RMS)    | .085"<br>∅ 2.6/50 | 335<br>335                   |              |
| Insulation resistance (MΩ) | 1000              |                              |              |

**MECHANICAL CHARACTERISTICS**

|                              |  |                         |  |
|------------------------------|--|-------------------------|--|
| Life                         | 500 matings min                        |                         |  |
| Cable retention force        | .085"<br>∅ 2.6/50<br>∅ 5/50/S          | 220 N<br>110 N<br>110 N |  |
| Coupling nut retention force | 50 N min                               |                         |  |
| Vibrations                   | MIL STD 202 F method 240D, condition B |                         |  |

**ENVIRONMENTAL CHARACTERISTICS**

|                   |                 |
|-------------------|-----------------|
| Temperature range | -35°C / + 125°C |
|-------------------|-----------------|

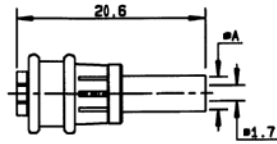
**MATERIALS AND PLATING**

|                | Material           | Plating |
|----------------|--------------------|---------|
| Bodies         | Brass              | BBR     |
| Center contact | Beryllium copper   | Gold    |
| Outer contact  | Bronze             |         |
| Insulator      | PTFE               |         |
| Coupling nut   | POM (halogen free) |         |

Standard packaging: 100 pieces (For unit packaging, add "W" after the P/N).

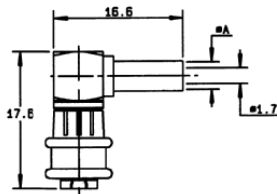
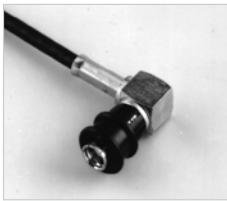
Plugs

**STRAIGHT PLUG FULL CRIMP TYPE FOR FLEXIBLE CABLES**



| Cable group           | Cable group dia | Part number  | Dimensions A (mm) | Captive center contact |
|-----------------------|-----------------|--------------|-------------------|------------------------|
| RG174 / RG188 / RG316 | 2.6/50/S        | R117 082 807 | 3.25              | yes                    |

**RIGHT ANGLE PLUG CRIMP TYPE FOR FLEXIBLE CABLES**



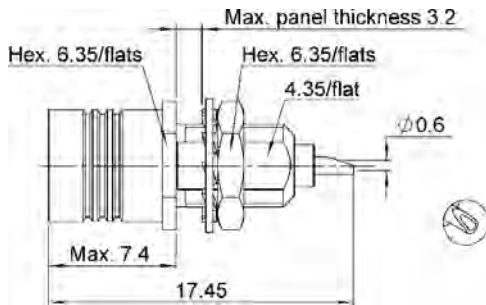
| Cable group           | Cable group dia | Part number  | Dimensions A (mm) | Captive center contact |
|-----------------------|-----------------|--------------|-------------------|------------------------|
| RG174 / RG188 / RG316 | 2.6/50/S        | R117 186 807 | 3.25              | yes                    |

Receptacles

- Lower mating/unmating force (from 2.5 N to 6N)
- Receptacles intermateable with SMB connectors
- Gold finish

The SMB limited detent connectors have the same electrical characteristics as standard SMB connectors

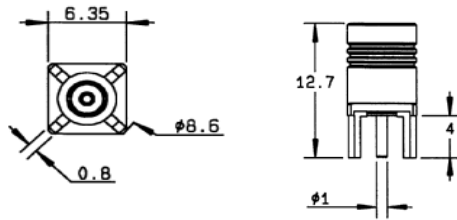
**BULKHEAD PLUG RECEPTACLE (rear fixing)**



| Part number  | Panel drilling | Finish |
|--------------|----------------|--------|
| R115 556 000 | P08            | Gold   |

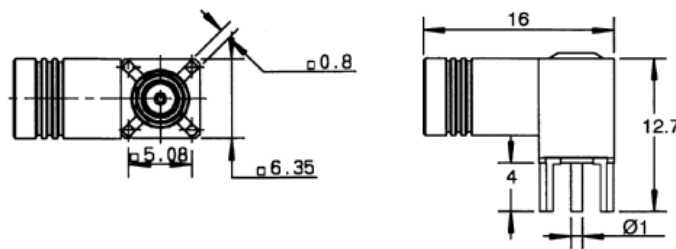
SMB limited detent (SMB-A)

STRAIGHT PCB RECEPTACLES (female center contact)



| Part number  | Captive center contact | Panel drilling | Finish | Packaging |
|--------------|------------------------|----------------|--------|-----------|
| R115 427 000 | yes                    | P05            | Gold   | Unit      |

RIGHT ANGLE PCB RECEPTACLE (female center contact)



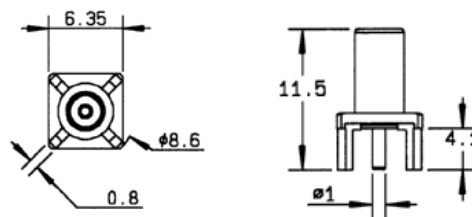
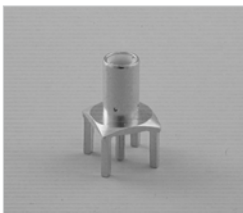
| Part number  | Captive center contact | Panel drilling | Finish | Packaging |
|--------------|------------------------|----------------|--------|-----------|
| R115 666 000 | yes                    | P04            | Gold   | Unit      |

SMB slide-on (SUBGLIS)

Slide on connectors (mating/unmating force: 2.2 N to 4.9 N)

The SMB slide-on connectors are completely intermateable with standard SMB and SMB limited detent connectors and in this regard, they can be used for **test applications**. The SMB slide-on connectors have the same electrical characteristics as standard SMB connectors.

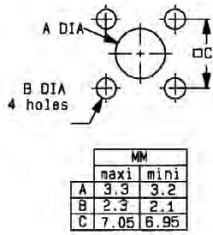
PCB RECEPTACLES



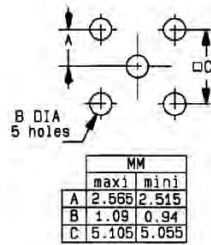
| Part number  | Captive center contact | Panel drilling | Finish | Packaging | Note                |
|--------------|------------------------|----------------|--------|-----------|---------------------|
| R116 426 000 | yes                    | P03            | Gold   | Unit      | Male center contact |

Panel drilling

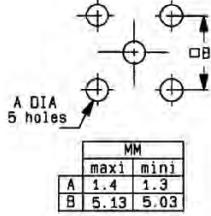
P01



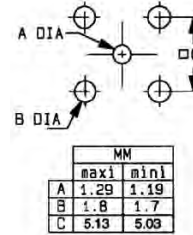
P02



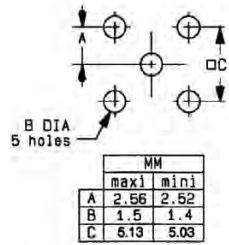
P03



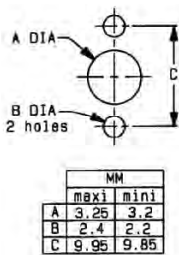
P04



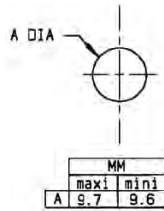
P05



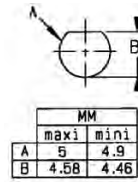
P06



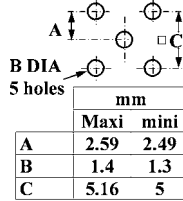
P07



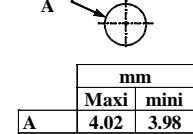
P08



P09



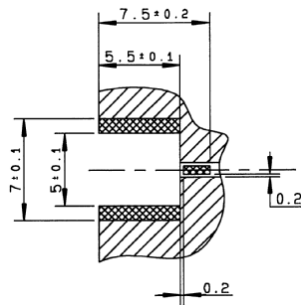
P10



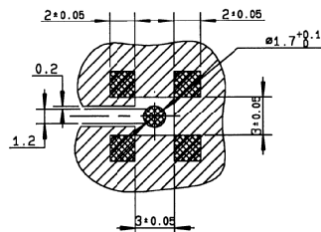
Assembly instructions

M01

Part number  
R114 423 000

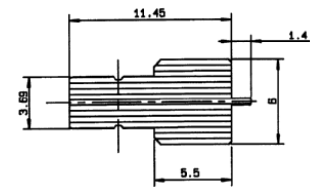


Part number  
R114 424 000  
R114 424 100  
R114 664 000  
R114 664 120

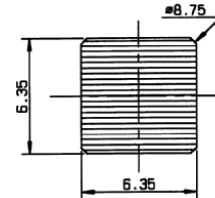


Video shadow:

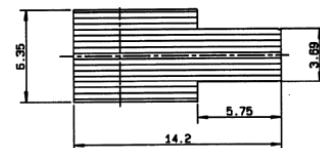
Part number  
R113 423 000



Part number  
R114 424 000  
R114 424 100

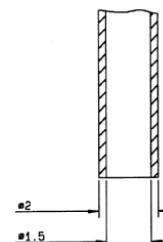


Part number  
R114 664 000  
R114 664 120



Vaccum nozzle dimensions:

Part number  
R114 424 000



Introduction



|     |             |
|-----|-------------|
| 50Ω | DC - 10 GHz |
|-----|-------------|

GENERAL

- Subminiature coaxial connectors
- Screw-on coupling
- Plugs have female contacts
- Jacks have male contacts
- Low weight
- Reduced outline dimensions

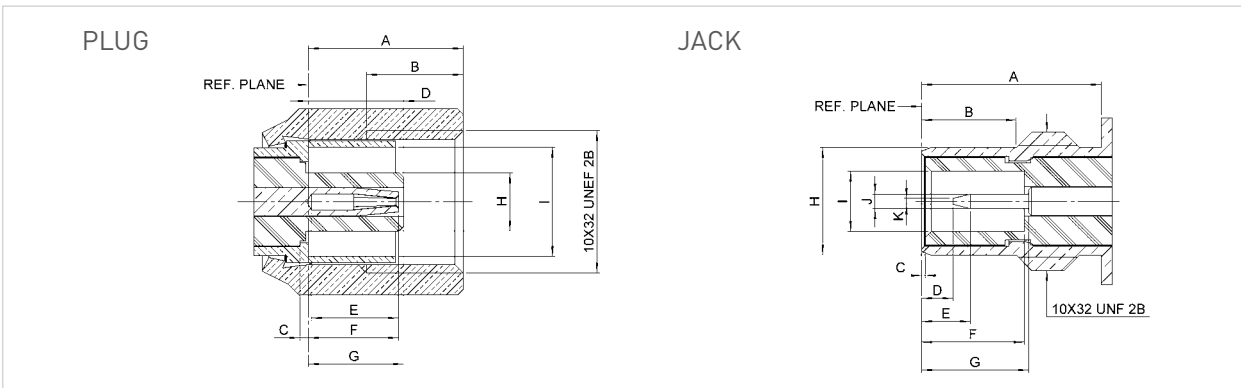
APPLICABLE STANDARDS

- MIL-C-39012

APPLICATIONS

- Civil and military telecommunications
- Aeronautics
- Missiles
- Edge mounting applications

Interface



| Letter | mm   |      | inch |      |
|--------|------|------|------|------|
|        | min. | max. | min. | max. |
| A      | 5.14 | 5.55 | .202 | .219 |
| B      | 3.20 | 4.20 | .126 | .165 |
| C      | 0.25 | 0.35 | .010 | .014 |
| D      | 2.95 | 3.00 | .116 | .118 |
| E      | 2.80 | 3.20 | .110 | .126 |
| F      | 2.80 | 3.40 | .110 | .134 |
| G      | 3.15 | 3.40 | .124 | .134 |
| H      | 2.00 | 2.05 | .079 | .081 |
| I      | 3.75 | 3.80 | .148 | .150 |

| Letter | mm   |      | inch |      |
|--------|------|------|------|------|
|        | min. | max. | min. | max. |
| A      | 6.00 | 6.20 | .236 | .244 |
| B      | 3.15 | 3.35 | .124 | .132 |
| C      | 0.05 | 0.20 | .002 | .008 |
| D      | 0.65 | 1.50 | .026 | .059 |
| E      | 1.30 | 2.05 | .051 | .081 |
| F      | 3.40 | 3.71 | .134 | .146 |
| G      | 3.40 | 3.95 | .134 | .156 |
| H      | 3.65 | 3.69 | .144 | .145 |
| I      | 2.08 | 2.13 | .082 | .084 |
| J      | 0.48 | 0.52 | .019 | .020 |
| K      | --   | 0.20 | --   | .008 |

Characteristics

| Test / Characteristics | MIL-C-39012 paragraph | Values / Remarks |
|------------------------|-----------------------|------------------|
|------------------------|-----------------------|------------------|

**ELECTRICAL CHARACTERISTICS**

|  |               |  |
|--|---------------|--|
| Impedance  |               | 50Ω  |
| Frequency range  |               | DC - 10 GHz  |
| V.S.W.R. (typ.)<br>• Straight<br>• Right angle                               | cable<br>3-14 | 2/50<br>1.25 + 0.04 F (GHz)<br>1.40 + 0.06 F (GHz)<br>2.6/50<br>1.20 + 0.04 F (GHz)<br>1.30 + 0.04 F (GHz) |
| Insertion loss<br>• Straight<br>• Right angle                                | 3-27          | 0.25 dB max. at 4 GHz<br>0.5 dB max. at 4 GHz  |
| RF leakage   | 3-26          | -60 dB min between 2 and 3 GHz   |
| Insulation resistance  | 3-11          | 1000 MΩ min  |
| Contact resistance<br>• Center contact (mΩ)<br>• Outer contact (mΩ)          | 3-16          | Initial<br>6<br>1<br>After environment<br>8<br>1.5   |
| Voltage rating (volts RMS)<br>• At sea level<br>• At 70000 ft (21000 m)      | cable         | 2/50<br>250 V rms<br>60 V rms<br>2.6/50<br>335 V rms<br>85 V rms   |
| Dielectric withstanding voltage<br>• At sea level<br>• At 70000 ft (21000 m) | cable<br>3-17 | 2/50<br>750 V rms<br>185 V rms<br>2.6/50<br>1000 V rms<br>250 V rms  |
| RF high potential withstanding voltage (Frequency 5 MHz)<br>• At sea level   | cable<br>3-23 | 2/50<br>500 V rms<br>2.6/50<br>700 V rms   |

**MECHANICAL CHARACTERISTICS**

|                               |               |   |
|-------------------------------|---------------|---|
| Durability                    | 3-15          | 500 matings                                       |
| Force to engage and disengage | 3-5-1         | torque: 16 inch-ounces max - 11.3 Ncm             |
| Mating torque                 |               | 35 to 50 inch-ounces - 25 to 35 Ncm               |
| Coupling nut proof torque     |               | 100 inch-ounces - 71 Ncm                          |
| Coupling nut retention force  | 3-25          | 35 lbs min - 156 N min                            |
| Cabling retention force       | cable<br>3-24 | 2/50<br>13 lbs - 58 N<br>2.6/50<br>25 lbs - 110 N |
| Contact captivation           |               | Axial force: 4 lbs - 18 N torque: not applicable  |

**ENVIRONMENTAL CHARACTERISTICS**

|   |      |   |
|---|------|---|
| Operating temperature range<br>• Standard models and hermetic<br>• Models for semi-rigid cables |      | -65°C / + 165°C<br>-65°C / +105°C   |
| Temperature cycling   |      | MIL-STD-202, method 102, condition C  |
| Thermal shock   | 3-20 | MIL-STD-202, method 107, condition B  |
| High temperature test   |      | MIL-STD-202, method 108   |
| Corrosion (salt spray)  | 3-13 | MIL-STD-202, method 101, condition B, 5%  |
| Vibration   | 3-18 | MIL-STD-202, method 204, condition D, 20g   |
| Shock   | 3-19 | MIL-STD-202, method 213, condition C, 100g  |
| Moisture resistance   | 3-21 | not applicable  |
| Barometric pressure   | 3-22 | MIL-STD-202, method 105, condition C  |
| Hermetic test   |      | Down to 10 <sup>-6</sup> mm Hg (Torr)<br>Leak rate <1 x 10 <sup>-6</sup> atm/cm <sup>3</sup> /sec |

**MATERIALS AND PLATING**

|                                | Material                      | Plating   |
|--------------------------------|-------------------------------|---|
| Bodies and male contacts       | Brass, half hard per QQ-B-626 | Gold to satisfy the corrosion requirements (bodies) |
| Female contacts and interfaces | Beryllium copper per QQ-C-530 | Gold (Center contact)                               |
| Ferrules                       | Brass                         |   |
| Insulators                     | PTFE teflon                   |   |
| Gaskets                        | Silicone rubber               |   |

All dimensions are given in mm.

Plugs and jack

**STRAIGHT PLUGS**

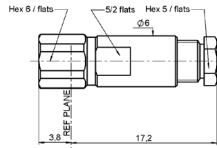


Fig. 1

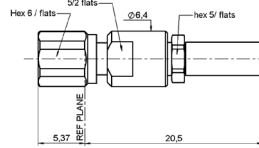


Fig. 2

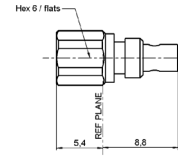


Fig. 3

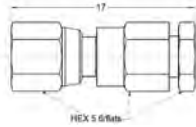


Fig. 4

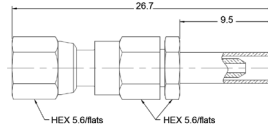


Fig. 5

| Cable group           | Cable group dia | Part number (Gold) | Part number (Nickel) | Fig. | Note         |
|-----------------------|-----------------|--------------------|----------------------|------|--------------|
| RG178 / RG196         | 2/50/S          | R112 003 000       | n/a                  | 1    | Clamp type   |
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 005 000       |                      |      |              |
|                       |                 | R112 075 000       |                      |      |              |
| RG405                 | .085"           | R112 053 000       |                      | 3    | Solder type  |
| RG178 / RG196         | 2/50/S          | 1002-1571-002      | 1002-7571-002        | 5    | Crimp type   |
|                       |                 | 1002-1551-002      | 1002-7551-002        | 4    | Clamp type   |
| RD178                 | 2/50/D          | 1002-1551-005      | 1002-7551-005        | 5    | Crimp type   |
|                       |                 | 1002-1571-005      | 1002-7571-005        | 5    | Crimp type   |
| RG174 / RG316 / RG179 | 2.6/50/S        | 1002-1551-003      | 1002-7551-003        | 4    | Clamp type   |
|                       |                 | 1002-1571-003      | 1002-7571-003        | 5    | Crimp type   |
| RD316                 | 2.6/50/D        | 1002-1551-019      | 1002-7551-019        | 4    | Clamp type   |
|                       |                 | 1002-1571-019      | 1002-7571-019        | 5    | Crimp type   |
| RG405                 | .085"           | 1002-1541-010      | 1002-7541-010        | 4    | Solder clamp |
| RG402                 | .141"           | 1002-1541-009      | 1002-7541-009        |      |              |

**RIGHT ANGLE PLUGS**

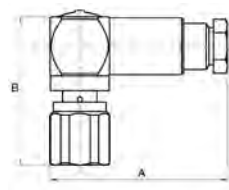


Fig. 1

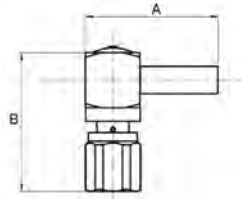


Fig. 2

| Cable group           | Cable group dia | Part number (Gold) | Part number (Nickel) | Fig. | Dimensions mm |       | Note         |
|-----------------------|-----------------|--------------------|----------------------|------|---------------|-------|--------------|
|                       |                 |                    |                      |      | A dia         | B dia |              |
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 165 000       | n/a                  | 1    | 19            | 15.9  | Crimp type   |
| RG178 / RG196         | 2/50            | R112 183 000       |                      |      | 16            | 15.5  |              |
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 186 000       |                      |      | 2             | 15.3  |              |
| RG178 / RG196         | 2/50/S          | 1005-1551-002      | 1005-7551-002        | 1    | 14.9          | 13.9  | Clamp type   |
|                       |                 | 1105-1521-002      | 1105-7521-002        | 2    | 16            |       | Crimp type   |
| RD178                 | 2/50/D          | 1005-1551-005      | 1005-7551-005        | 1    | 14.9          |       | Clamp type   |
|                       |                 | 1105-1521-005      | 1105-7521-005        | 2    | 16            |       | Crimp type   |
| RG174 / RG316 / RG179 | 2.6/50/S        | 1005-1551-003      | 1005-7551-003        | 1    | 14.9          |       | Clamp type   |
|                       |                 | 1105-1521-003      | 1105-7521-003        | 2    | 16            |       | Crimp type   |
| RD316                 | 2.6/50/D        | 1005-1551-019      | 1005-7551-019        | 1    | 14.9          |       | Clamp type   |
|                       |                 | 1105-1521-019      | 1105-7521-019        | 2    | 16            |       | Crimp type   |
| RG405                 | .085"           | 1005-1541-010      | 1005-7541-010        | 1    | 14.9          |       | Solder clamp |
| RG402                 | .141"           | 1005-1541-009      | 1005-7541-009        |      |               |       |              |



Jacks and receptacles

STRAIGHT JACK

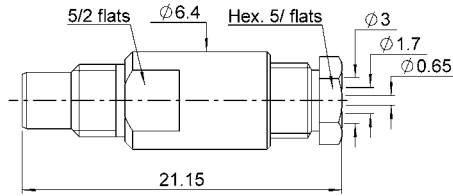


Fig. 1

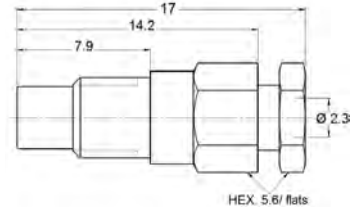


Fig. 2

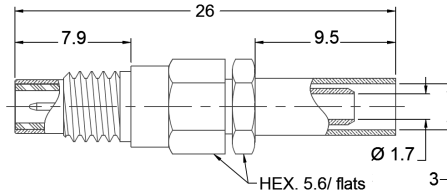


Fig. 3

| Cable group           | Cable group dia | Part number (Gold) | Part number (Nickel) | Note         |
|-----------------------|-----------------|--------------------|----------------------|--------------|
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 205 000       |                      | Clamp type   |
| RG178 / RG196         | 2/50/S          | 1001-1551-002      | 1001-7551-002        |              |
| RD178                 | 2/50/D          | 1001-1551-005      | 1001-7551-005        | Clamp type   |
|                       |                 | 1001-1571-005      | 1001-7571-005        | Crimp type   |
| RG174 / RG316 / RG179 | 2.6/50/S        | 1001-1551-003      | 1001-7551-003        | Clamp type   |
|                       |                 | 1001-1571-003      | 1001-7571-003        | Crimp type   |
| RD316                 | 2.6/50/D        | 1001-1551-019      | 1001-7551-019        | Clamp type   |
|                       |                 | 1001-1571-019      | 1001-7571-019        | Crimp type   |
| RG405                 | .085"           | 1001-1571-010      | 1001-7571-010        | Solder clamp |
| RG402                 | .141"           | 1001-1571-009      | 1001-7571-009        |              |

BULKHEAD STRAIGHT AND RIGHT ANGLE JACKS

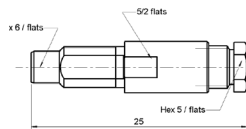


Fig. 1

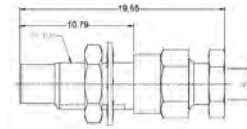


Fig. 2

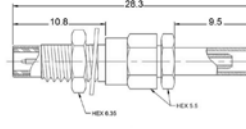


Fig. 3

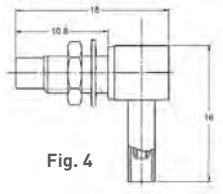


Fig. 4

| Cable group           | Cable group dia | Part number (Gold) | Part number (Nickel) | Fig. | Panel drilling | Note       |
|-----------------------|-----------------|--------------------|----------------------|------|----------------|------------|
| RG178 / RG196         | 2/50/S          | R112 303 000       |                      | 1    | P03            |            |
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 305 000       |                      |      |                |            |
| RG178 / RG196         | 2/50/S          | 1003-1551-002      | 1003-7551-002        | 2    |                | Clamp type |
|                       |                 | 1003-1571-002      | 1003-7571-002        | 3    |                | Crimp type |
|                       |                 | 1006-1551-002      | 1006-7551-002        | 4    |                | Clamp type |
|                       |                 | 1106-1521-002      | 1106-7521-002        |      |                | Crimp type |
| RD178                 | 2/50/D          | 1003-1551-005      | 1003-7551-005        | 2    |                | Clamp type |
|                       |                 | 1003-1571-005      | 1003-7571-005        | 3    |                | Crimp type |
|                       |                 | 1006-1551-005      | 1006-7551-005        | 4    |                | Clamp type |
|                       |                 | 1106-1521-005      | 1106-7521-005        |      |                | Crimp type |
| RG174 / RG316 / RG179 | 2.6/50/S        | 1003-1551-003      | 1003-7551-003        | 2    |                | Clamp type |
|                       |                 | 1003-1571-003      | 1003-7571-003        | 3    |                | Crimp type |
|                       |                 | 1006-1551-003      | 1006-7551-003        | 4    | Clamp type     |            |
|                       |                 | 1106-1521-003      | 1106-7521-003        |      | Crimp type     |            |

Jacks and receptacles

**BULKHEAD STRAIGHT AND RIGHT ANGLE JACKS (CONTINUED)**

| Cable group | Cable group dia | Part number (Gold) | Part number (Nickel) | Fig. | Panel drilling | Note         |
|-------------|-----------------|--------------------|----------------------|------|----------------|--------------|
| RD316       | 2.6/50/D        | 1003-1551-019      | 1003-7551-019        | 2    | P03            | Clamp type   |
|             |                 | 1003-1571-019      | 1003-7571-019        | 3    |                | Crimp type   |
|             |                 | 1006-1551-019      | 1006-7551-019        | 4    |                | Clamp type   |
|             |                 | 1106-1521-019      | 1106-7521-019        |      |                | Crimp type   |
| RG405       | .085"           | 1003-1541-010      | 1003-7541-010        | 2    |                | Solder clamp |
|             |                 | 1006-1541-010      | 1006-7541-010        | 4    |                |              |
| RG402       | .141"           | 1003-1541-009      | 1003-7541-009        | 2    |                |              |
|             |                 | 1006-1541-009      | 1006-7541-009        | 4    |                |              |

**SQUARE FLANGE RECEPTACLES**

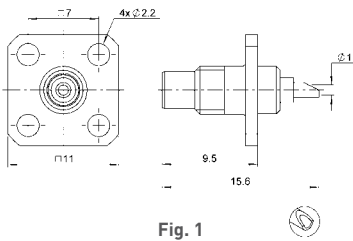


Fig. 1

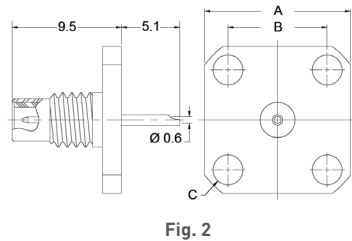


Fig. 2

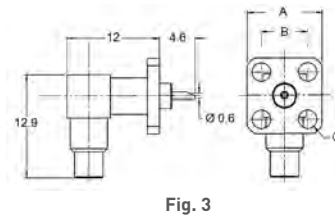


Fig. 3

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions (mm) |     |     | Panel drilling |
|--------------------|----------------------|------|-----------------|-----|-----|----------------|
|                    |                      |      | A               | B   | C   |                |
| R112 403 000       | n/a                  | 1    |                 |     |     | P01            |
| 1484-1511-000      | 1484-7511-000        | 2    | 9.5             | 5.9 | 2.4 |                |
| 1486-1511-000      | 1486-7511-000        |      | 12.7            | 8.6 | 2.6 |                |
| 1490-1511-000      | 1490-7511-000        | 3    |                 |     |     |                |
| 1488-1511-000      | 1488-7511-000        |      | 9.5             | 5.9 | 2.4 |                |

**BULKHEAD RECEPTACLES WITH SOLDER POT CONTACT**

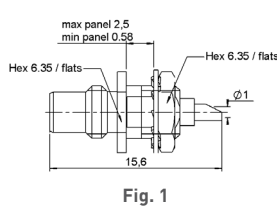


Fig. 1

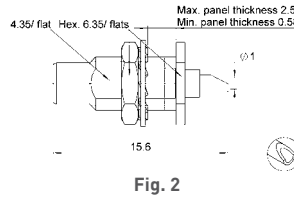


Fig. 2

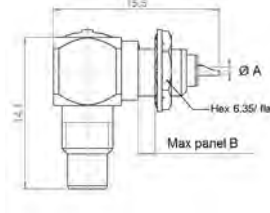


Fig. 3

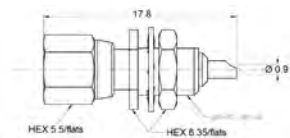


Fig. 4

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions (mm) |      | Panel drilling | Note        |
|--------------------|----------------------|------|-----------------|------|----------------|-------------|
|                    |                      |      | A               | B    |                |             |
| R112 553 000       | n/a                  | 1    |                 |      | P03            | Front mount |
| R112 554 000       |                      | 2    |                 |      |                | Rear mount  |
| R112 670 000       |                      | 3    | 0.6             | 1.55 |                | Front mount |
| 1004-1511-000      | 1004-7511-000        | 2    |                 |      |                | Rear mount  |
| 1019-1511-000      | 1019-7511-000        | 1    |                 |      |                | Front mount |
| 1012-1511-000      | 1012-7511-000        | 3    | 0.9             | 2.4  |                |             |
| 1017 1511-000      | 1017 7511-000        | 4    |                 |      |                |             |

Receptacles and adapters

PCB RECEPTACLES

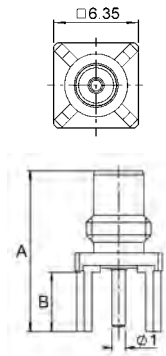


Fig. 1

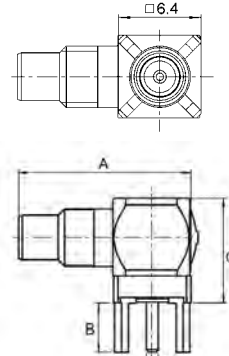


Fig. 2

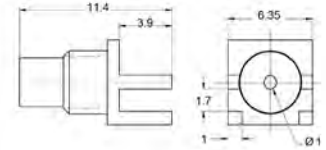


Fig. 3

| Part number (Gold) | Part number (Nickel) | Fig. | Dimensions (mm) |     |      | Panel drilling | Note            |
|--------------------|----------------------|------|-----------------|-----|------|----------------|-----------------|
|                    |                      |      | A               | B   | C    |                |                 |
| R112 426 000       | n/a                  | 1    | 11.8            | 4.4 |      | P02            | Standoff legs   |
| R112 665 000       |                      | 2    | 14.2            |     | 12.7 |                |                 |
| 1009-1511-000      | 1009-7511-000        | 1    | 11.4            | 4   |      | P04            | No standoff     |
| 1010-1511-000      | 1010-7511-000        | 2    | 14              |     | 7    |                |                 |
| 1010-1511-001      | 1010-7511-001        |      | 8.8             |     |      |                |                 |
| 1109-1511-000      | 1109-7511-000        | 1    | 16.3            |     |      | P04 + P03      |                 |
| 1110-1511-000      | 1110-7511-000        | 2    | 18              | 7   |      |                |                 |
| 1009-1511-005      | 1009-7511-005        | 3    |                 |     |      | P04            | End launch type |

IN SERIES ADAPTERS

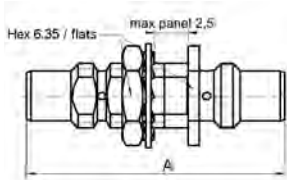


Fig. 1

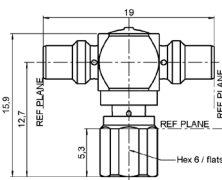
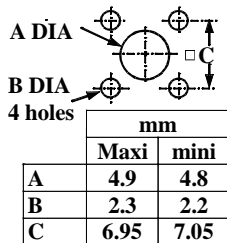


Fig. 2

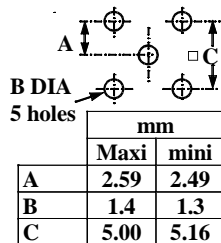
| Part number (Gold) | Fig. | Dimensions A (mm) | Panel drilling | Note                     |
|--------------------|------|-------------------|----------------|--------------------------|
| R112 720 000       | 1    | 19                | P03            | male - male bulkhead     |
| R112 780 000       | 2    |                   |                | tee male - male / female |
| 5822-1501-000      | 1    | 17.5              | P03            | female - female          |

Panel drilling

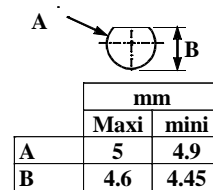
P01



P02



P03



P04

