



## SMB/SMB-LOCK/SMC

R114/R117/R112

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### SMB-LOCK

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### SMB LIMITED DETENT (SMB-A)

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### SMB SLIDE-ON (SUBGLIS)

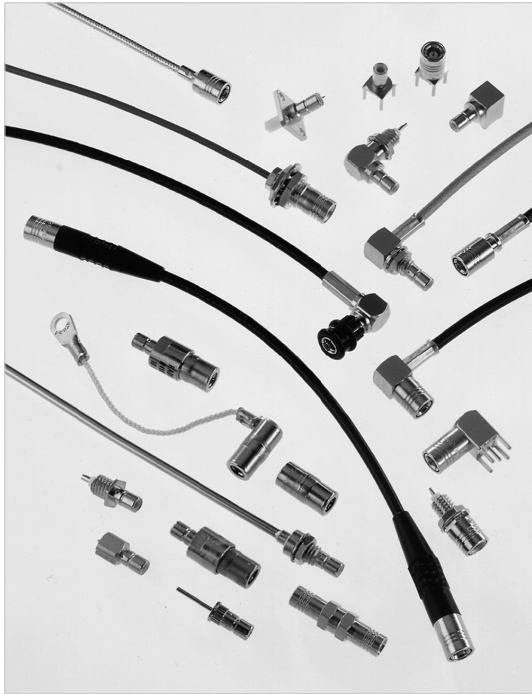
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### SMC

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# SECTION 6 TABLE OF CONTENTS

## Introduction



50Ω

DC - 4 GHz

**GENERAL**

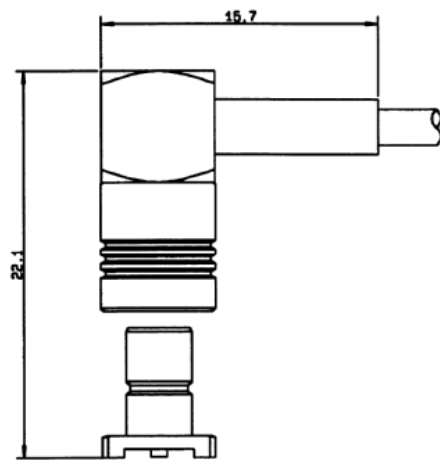
- Subminiature coaxial connectors
- Snap-on coupling
- Plugs have female contacts
- Jacks have male contacts
- Low weight and reduced outline dimensions
- Captive contact (except contrary specification)

**APPLICABLE STANDARDS**

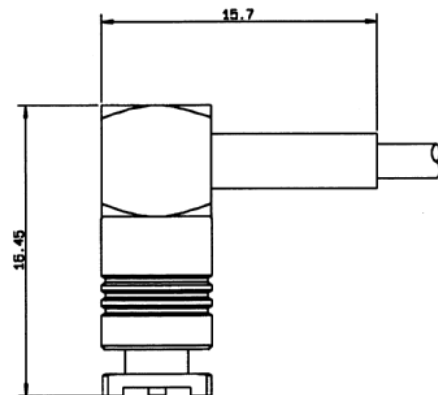
- SMB series MIL-C-39012  
MIL-C-39012/67-72
- IEC 169-10
- CECC 22130
- BS 9210 N0007

**APPLICATIONS**

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



Unmated

**PROFILE**

Mated

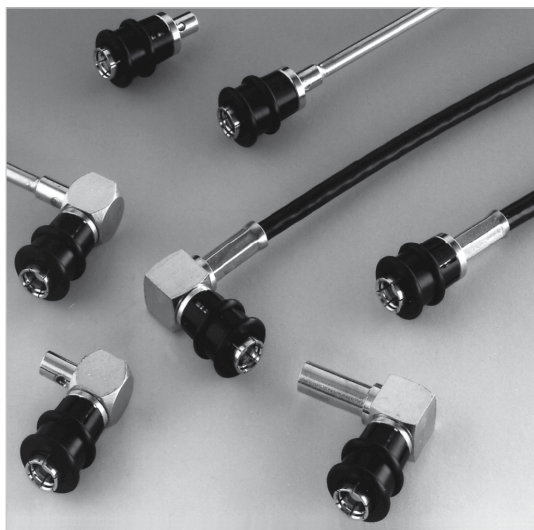
## Introduction

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

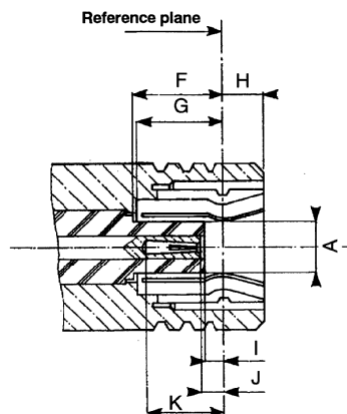
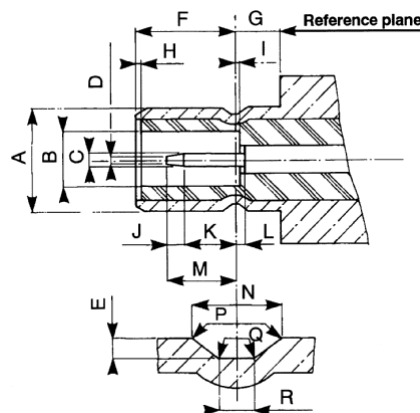
Radiall offers a very large range of SMB connectors, including cable plugs and jacks with bulkhead and panel mount configurations, bulkhead and panel mount receptacles; through hole, SMT and edge card receptacles and in-series and between series adapters.

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 performance.

**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.)                           | Frequency          | 3-14 | 1 GHz                      | 2.5 GHz    | 4 GHz |
| • Straight models                         | cable group: .085" | -    | 1.12                       | 1.22       | 1.33  |
|                                           | 2                  | -    | 1.10                       | 1.22       | 1.33  |
|                                           | 2.6                | -    | 1.12                       | 1.22       | 1.35  |
| • Right angle models                      | .085"              | -    | 1.10                       | 1.18       | 1.26  |
|                                           | 2                  | -    | 1.10                       | 1.20       | 1.25  |
| Insertion loss (typ.) dB                  |                    | 3-27 |                            |            |       |
| • Straight models                         | cable group: .085" | -    | 0.05                       | 0.07       | 0.15  |
|                                           | 2                  | -    | 0.05                       | 0.10       | 0.25  |
|                                           | 2.6                | -    | 0.05                       | 0.05       | 0.05  |
| • Right angle models                      | .085"              | -    | 0.05                       | 0.07       | 0.12  |
| 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 | 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

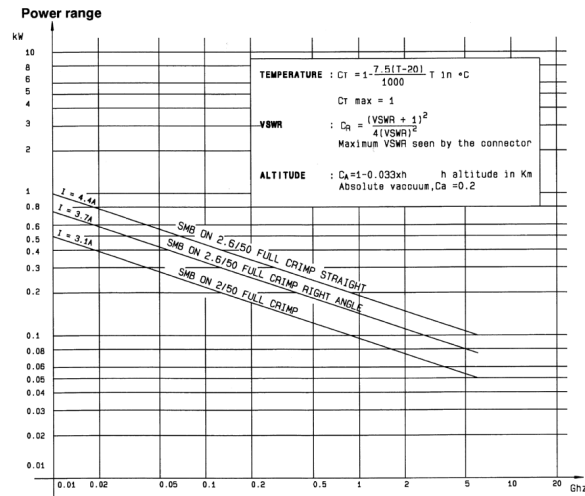
|                             | Material                         | Plating               |
|-----------------------------|----------------------------------|-----------------------|
| Body and center pin contact | Half hard brass as per QQ-B-626  | Gold or nickel (Body) |
| Center socket contact       | 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

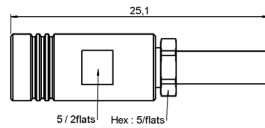


Fig. 1

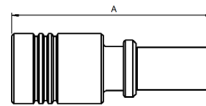


Fig. 2

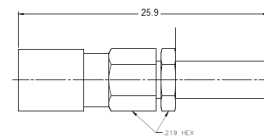


Fig. 3

| 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   | -          |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 075 000  |      | -                 |                        |        | -          |
|                       |                  | R114 082 000  | 2    | 19.8              |                        |        | Full crimp |
| RD316                 | 2.6/50/D         | R114 083 000  |      | 18.4              |                        | Nickel | -          |
| RG178 / RG196         | 2/50S            | 2002-1571-002 | 3    | -                 |                        |        | -          |
|                       |                  | 2002-7571-002 |      | -                 |                        |        | -          |
| RD178                 | 2/50D            | 2002-1571-005 |      | -                 |                        |        | -          |
|                       |                  | 2002-7571-005 |      | -                 |                        |        | -          |
| RG174 / RG316         | 2.6/50S          | 2002-1571-003 |      | -                 |                        |        | -          |
|                       |                  | 2002-7571-003 |      | -                 |                        |        | -          |
| RD316                 | 2.6/50D          | 2002-1571-019 |      | -                 |                        |        | -          |
|                       |                  | 2002-7571-019 |      | -                 |                        |        | -          |

# Plugs and Jacks

## STRAIGHT PLUGS CLAMP TYPE FOR FLEXIBLE CABLES

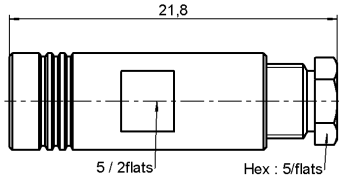
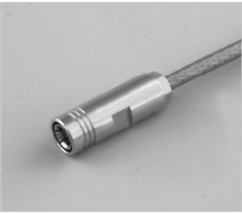


Fig. 1

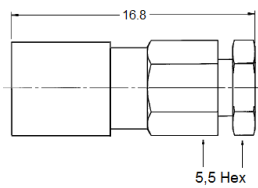


Fig. 2

| 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

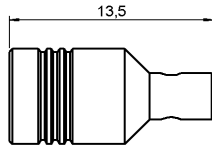


Fig. 1

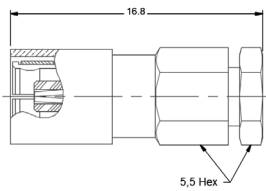


Fig. 2

| 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        | 2    | Yes                    | Solder clamp |
| RG402       | .141"            | 2002-1541-003      | 2002-7541-009        |      |                        |              |

## Plugs and Jacks

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

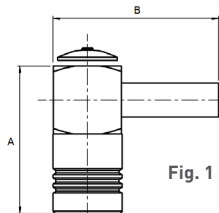


Fig. 1

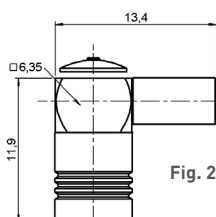


Fig. 2

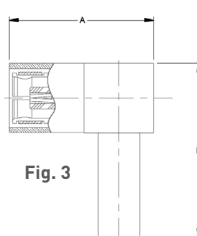


Fig. 3

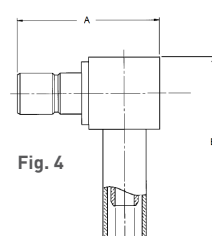


Fig. 4

| 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       | N/A                  | 1    | 13.7          | 15.3 | Yes                    | -             |
| RG174 / RG316 / RG179 | 2.6/50+75/S      | R114 185 000       |                      | 2    | -             | -    |                        | Short version |
|                       |                  | R114 186 000       |                      | 1    | 13.7          | 15.3 |                        | -             |
|                       |                  | R114 186 100       |                      |      | 15.4          | -    |                        |               |
|                       |                  | R114 187 000       |                      |      |               | 15.1 |                        | Full crimp    |
| RD316                 | 2.6/50/D         | R114 182 000       |                      |      | 13.7          |      |                        | -             |
| RG178 / RG196         | 2/50S            | 2105-1521-002      | 2105-7521-002        | 3    | 13.2          | 16   |                        | -             |
|                       |                  | 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

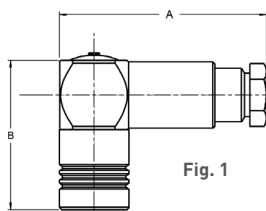


Fig. 1

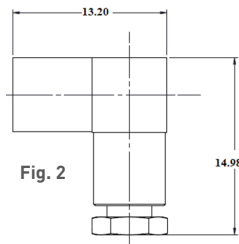


Fig. 2

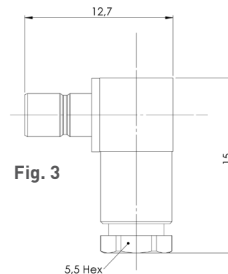


Fig. 3

| 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

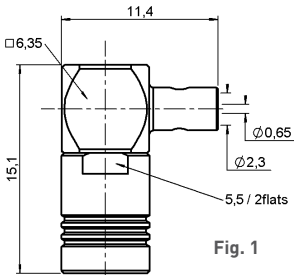


Fig. 1

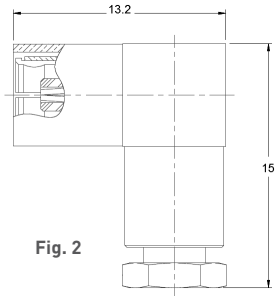


Fig. 2

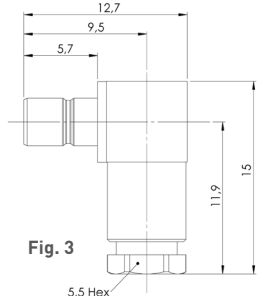


Fig. 3

| 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    |                        | Solder clamp                                               |
|             |                  | 2041-1541-010      | 2041-7541-010        | 3    |                        |                                                            |
| RG402       | .141"            | 2005-1541-009      | 2005-7541-009        | 2    | Yes                    | Solder clamp                                               |
|             |                  | 2041-1541-009      | -                    | 3    |                        |                                                            |

## Jacks and Bulkhead Jacks

## STRAIGHT JACKS CRIMP TYPE FOR FLEXIBLE CABLES

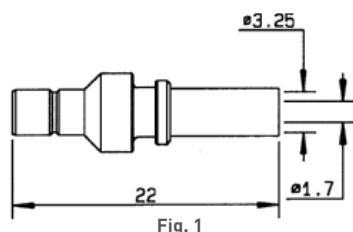


Fig. 1

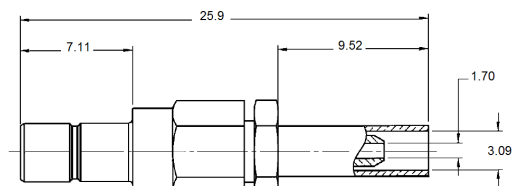


Fig. 2

| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Fig. | Captive center contact | 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

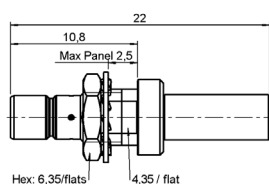


Fig. 1

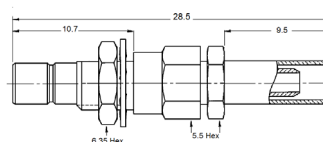


Fig. 2

| 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

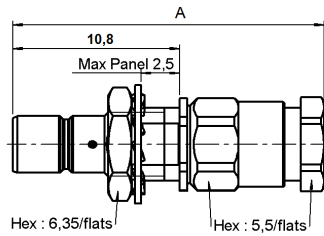


Fig. 1

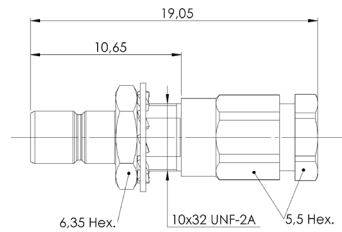


Fig. 2

| 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

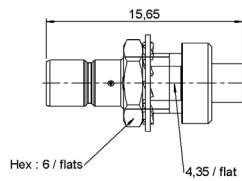


Fig. 1

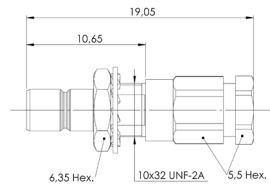
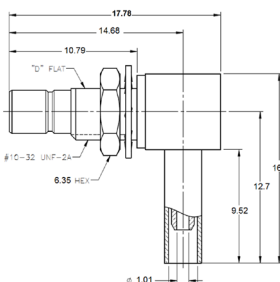


Fig. 2

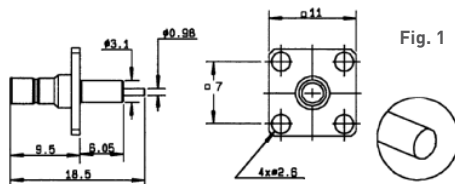
| Cable group | Cable group dia. | Part number<br>(Gold) | Part number<br>(Nickel) | Fig. | Captive center contact | Panel drilling | Note                 |
|-------------|------------------|-----------------------|-------------------------|------|------------------------|----------------|----------------------|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

## RIGHT ANGLE BULKHEAD CRIMP TYPE FOR FLEXIBLE CABLES

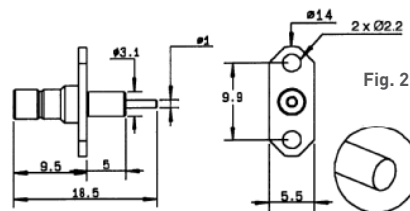


| Cable group           | Cable group dia. | Part number (Gold) | Part number (Nickel) | Captive center contact | Panel drilling |
|-----------------------|------------------|--------------------|----------------------|------------------------|----------------|
| RG178 / RG197         | 2/50S            | 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        |                        |                |

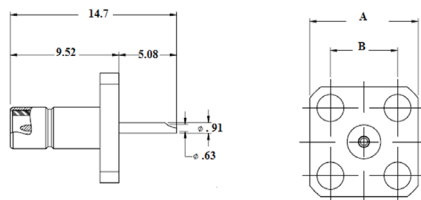
### STRAIGHT FLANGE RECEPTACLES (male center contact)



**Fig. 1**

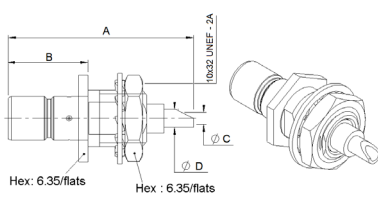


**Fig. 2**

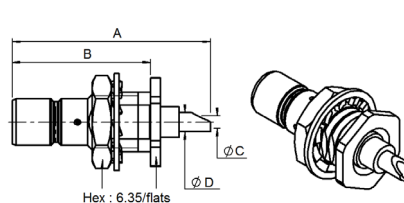


**Fig. 3**

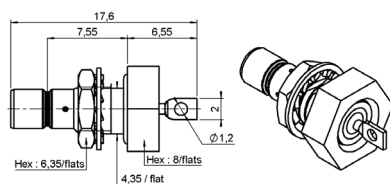
| Part number<br>(Gold) | Part number<br>(Nickel) | Fig. | Dimensions mm |     | Captive center<br>contact | Panel drilling | Note                                                 |
|-----------------------|-------------------------|------|---------------|-----|---------------------------|----------------|------------------------------------------------------|
|                       |                         |      | 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         |                         | 3    | 9.5           | 5.9 | Yes                       | -              | 2.36mm hole dia.                                     |
| 2486-1511-000         | 12.7                    |      | 8.6           | -   |                           |                |                                                      |



**Fig. 1**



**Fig. 2**



**Fig. 3**

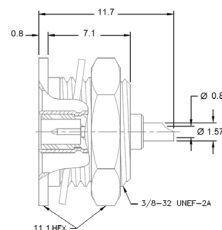
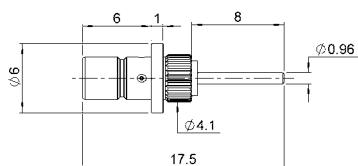


Fig. 4

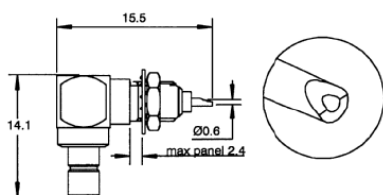
| Part number<br>(Gold) | Part number<br>(Nickel) | Fig. | Dimensions mm |      |     |                     | Captive center<br>contact | Panel drilling | Note                                         |
|-----------------------|-------------------------|------|---------------|------|-----|---------------------|---------------------------|----------------|----------------------------------------------|
|                       |                         |      | 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 /<br>Solder pot contact |
| 2019-1511-000         | 2019-7511-000           | 1    | 15.5          | 5.9  | 0.9 | 1.6                 |                           |                | Front mount / Solder pot contact             |

### 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 |                        |                |        |                    |
| 2012-7511-000 |                        |                | Nickel |                    |

### STRAIGHT PCB RECEPTACLES (male and female)

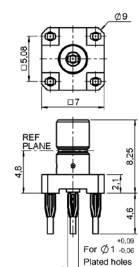


Fig. 1

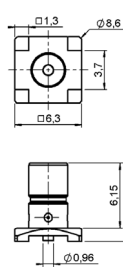


Fig. 2

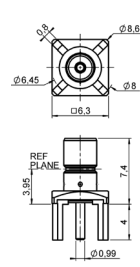


Fig. 3

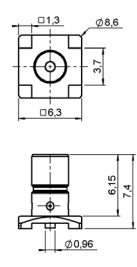


Fig. 4

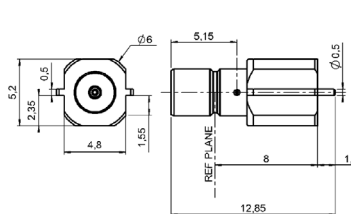
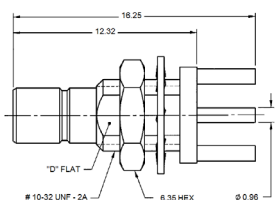
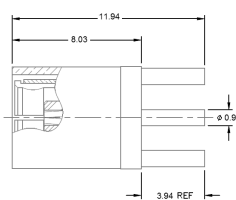
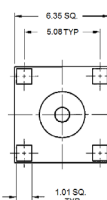


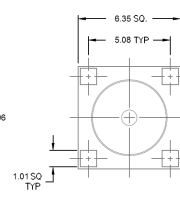
Fig. 5



**Fig. 6**



**Fig. 7**



| Part number<br>(Gold) | Part number<br>(Nickel) | Fig. | Captive center<br>contact | Assembly<br>instructions | Panel<br>drilling | Note                         |               |
|-----------------------|-------------------------|------|---------------------------|--------------------------|-------------------|------------------------------|---------------|
| R114 416 020          | N/A                     | 1    | Yes                       | -                        | P02               | Press fit pins               |               |
| R114 423 000          |                         | 5    |                           | M01                      | -                 | SMT edge card                |               |
| R114 424 000          |                         | 2    |                           |                          |                   | SMT                          |               |
| R114 424 100          |                         |      |                           |                          |                   | SMT / Tape & Reel 100 pieces |               |
| R114 425 000          |                         | 4    |                           |                          |                   | -                            | P05           |
| R114 426 000          |                         | 3    |                           | -                        | P03               | -                            |               |
| 2009-1511-000         |                         |      |                           | 2009-7511-000            | -                 | 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           | -    |                           |                          |                   |                              |               |

## Receptacles

## RIGHT ANGLE PCB RECEPTACLES (male center contact)

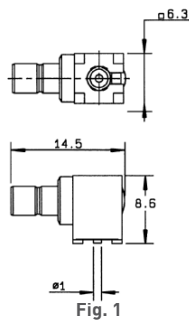


Fig. 1

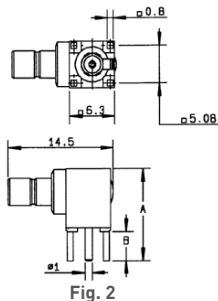


Fig. 2

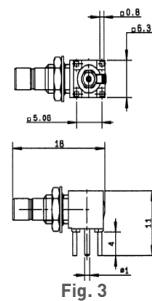


Fig. 3

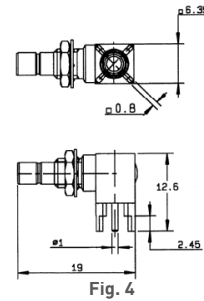


Fig. 4

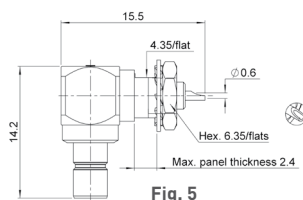


Fig. 5

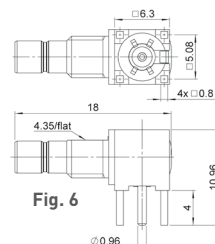


Fig. 6

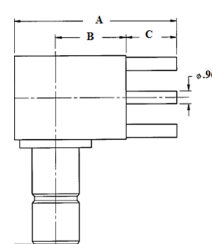


Fig. 7

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

## Adapters

## IN SERIES ADAPTERS

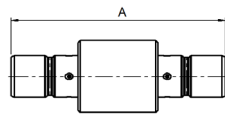


Fig. 1

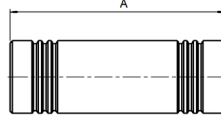


Fig. 2

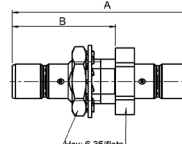


Fig. 3

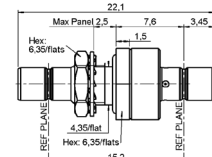


Fig. 4

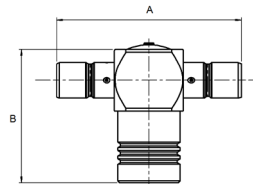


Fig. 5

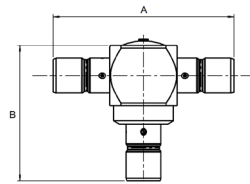


Fig. 6

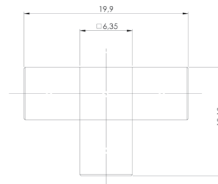


Fig. 7

| Part number<br>(Gold) | Part number<br>(Nickel) | Fig. | Dimensions |      | Captive center<br>contact | Panel drilling | Note                            |
|-----------------------|-------------------------|------|------------|------|---------------------------|----------------|---------------------------------|
|                       |                         |      | A          | B    |                           |                |                                 |
| R114 703 000          | N/A                     | 1    | 19         | -    | Yes                       | -              | Male - Male                     |
| R114 704 000          |                         | 2    |            | -    |                           | -              | Female - Female                 |
| R114 720 000          |                         | 3    |            | 11   |                           | P08            | Bulkhead male - Male            |
| R114 753 000          |                         | 4    | -          | -    |                           | -              | Hermetically sealed male - Male |
| R114 780 000          |                         | 5    | 19         | 14   |                           | -              | Tee female / Male - Male        |
| R114 781 000          |                         | 6    |            | 12.7 |                           | -              | Tee male / Male - Male          |
| 5207-1501-000         | 5207-7501-000           | 3    | 17.5       | 10.7 |                           | -              | Bulkhead male - Male            |
| 5222-1501-000         | 5222-7501-000           | 1    |            | -    |                           | -              | Male - Male                     |
| 5213-1501-000         | 5213-7501-000           | 5    | 19         | 12.9 |                           | -              | Tee female / Male - Male        |
| 5215-1501-000         | 5215-7501-000           | 2    | 17.5       | -    |                           | -              | Female - Female                 |
| 5216-1501-000         | 5216-7501-000           | 7    | -          | -    |                           | -              | Tee female / Female - Female    |
| 5208-1501-000         | 5208-7501-000           |      |            |      |                           |                |                                 |

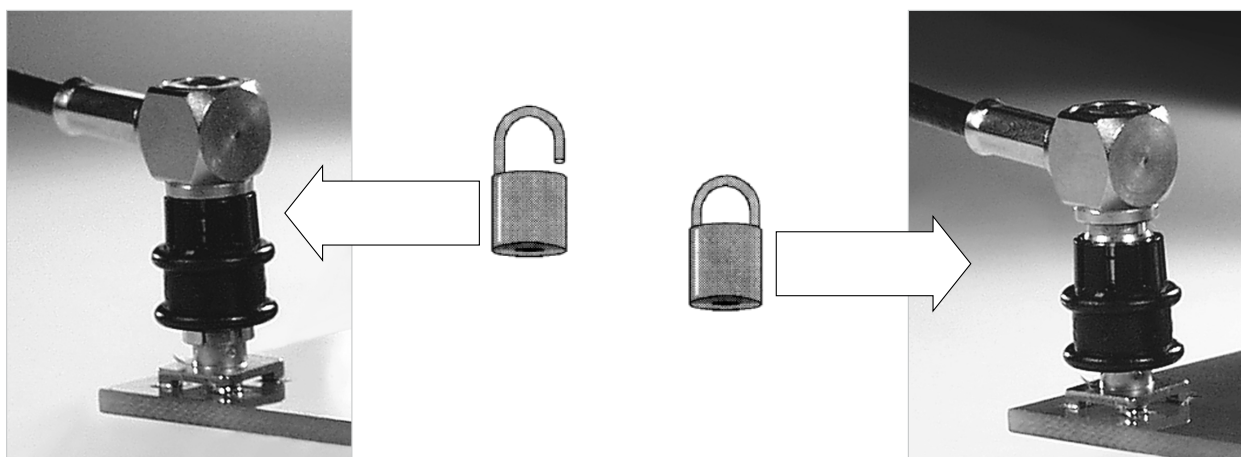
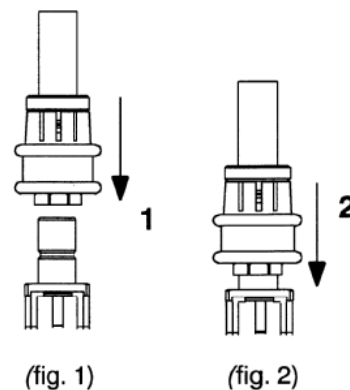
## Introduction

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

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

This 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

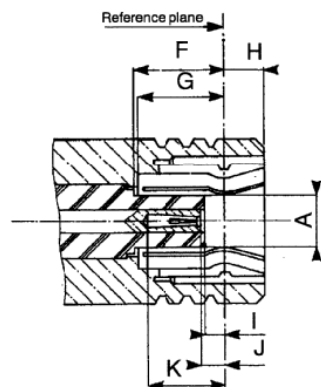


- The connector allows a 360° cable rotation
- Coupling nut

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

## Interface

**PLUG** (with female 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 | -    |

## Characteristics

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

## ELECTRICAL CHARACTERISTICS

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

## MECHANICAL CHARACTERISTICS

|                              |                                        |                         |  |
|------------------------------|----------------------------------------|-------------------------|--|
| Life                         | 500 matings min                        |                         |  |
| Cable retention force        | .085"<br>Ø 2.6/50<br>Ø 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 |
|-------------------|-----------------|

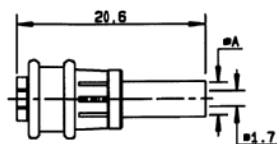
## MATERIALS AND PLATING

|                | 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).

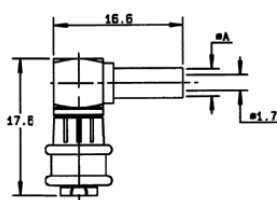
## Plugs

## 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



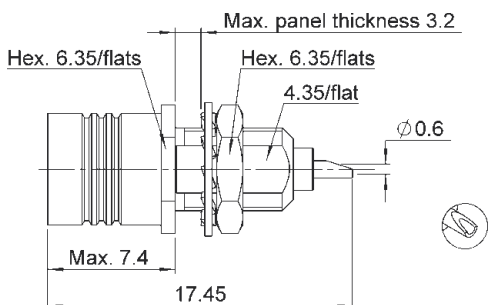
| Cable group           | Cable group dia | Part number  | Dimensions A (mm) | Captive center contact |
|-----------------------|-----------------|--------------|-------------------|------------------------|
| RG174 / RG188 / RG316 | 2.6/50/S        | R117 186 807 | 3.25              | Yes          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

## Receptacles

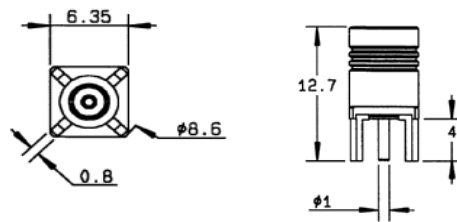
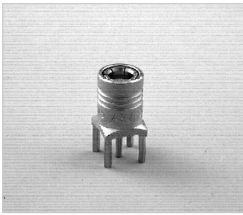
- Lower mating/unmating force (from 2.5 N to 6N)
- Receptacles intermateable with SMB connectors
- Gold finish

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

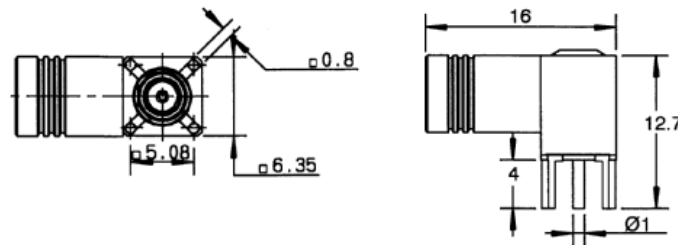
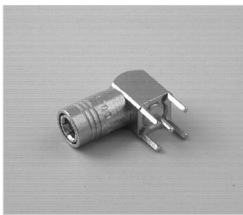
## BULKHEAD PLUG RECEPTACLE (rear fixing)



| 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      |

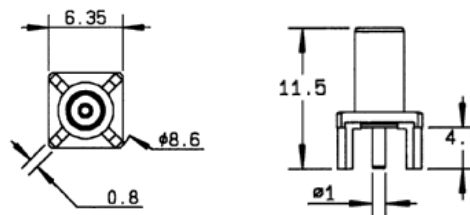
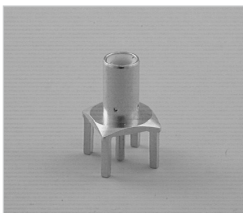
**RIGHT ANGLE PCB RECEPTACLE (female center contact)**

| 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)

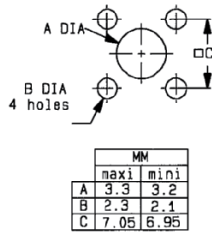
The SMB slide-on connectors are completely intermateable with standard SMB and SMB limited detent connectors and can be used for **test applications**. The SMB slide-on connectors have the same electrical characteristics as standard SMB connectors.

**PCB RECEPTACLES**

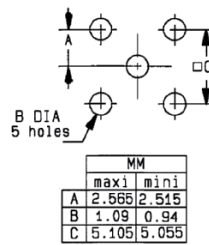
| Part number  | Captive center contact | Panel drilling | Finish | Packaging | Note                |
|--------------|------------------------|----------------|--------|-----------|---------------------|
| R116 426 000 | Yes                    | P03            | Gold   | Unit      | Male center contact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

## Panel Drilling

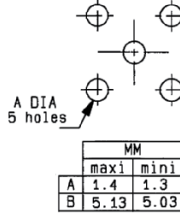
## PO1



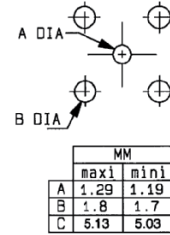
## PO2



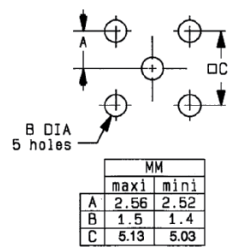
## PO3



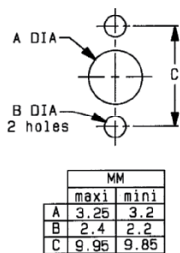
## PO4



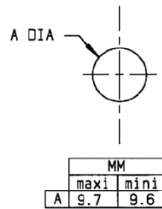
## PO5



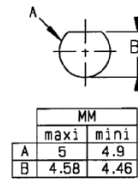
## PO6



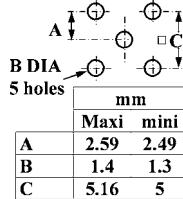
## PO7



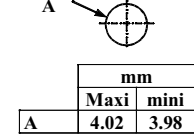
## PO8



## PO9



## P10

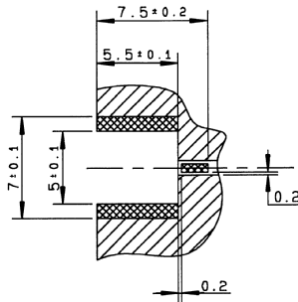


## Assembly Instructions

## M01

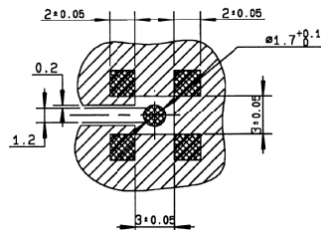
Part number

R114 423 000



Part number

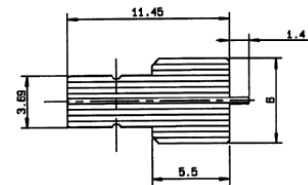
R114 424 000  
R114 424 100  
R114 664 000  
R114 664 120



## Video shadow

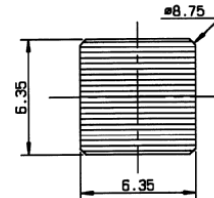
Part number

R113 423 000



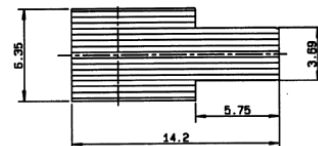
Part number

R114 424 000  
R114 424 100



Part number

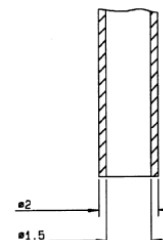
R114 664 000  
R114 664 120



## 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

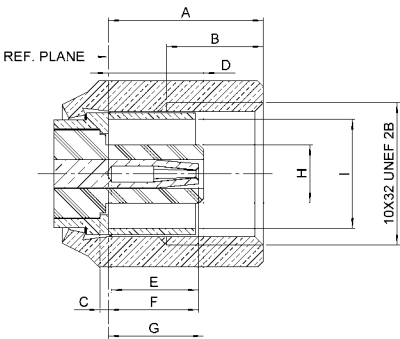
- MIL-C-39012

## APPLICATIONS

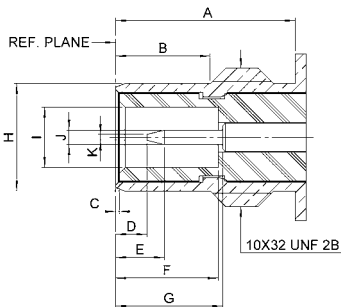
- Civil and military telecommunications
- Aeronautics
- Missiles
- Edge mounting applications

# Interface

## PLUG



## JACK



| 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                               | 3-14 | 2/50<br>1.25 + 0.04 F (GHz)<br>1.40 + 0.06 F (GHz)   |
| Insertion loss<br>• Straight<br>• Right angle                                | 3-27 | 2.6/50<br>1.20 + 0.04 F (GHz)<br>1.30 + 0.04 F (GHz) |
| RF leakage                                                                   | 3-26 | 0.25 dB max. at 4 GHz<br>0.5 dB max. at 4 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                                    |
| Voltage rating (volts RMS)<br>• At sea level<br>• At 70000 ft (21000 m)      | -    | After environment<br>8<br>1.5                        |
| Dielectric withstanding voltage<br>• At sea level<br>• At 70000 ft (21000 m) | 3-17 | 2/50<br>250 V rms<br>60 V rms                        |
| RF high potential withstanding voltage (Frequency 5 MHz)<br>• At sea level   | 3-23 | 2.6/50<br>335 V rms<br>85 V rms                      |
|                                                                              | -    | 2/50<br>750 V rms<br>185 V rms                       |
|                                                                              | -    | 2.6/50<br>1000 V rms<br>250 V rms                    |
|                                                                              | -    | 2/50<br>500 V rms                                    |
|                                                                              | -    | 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       | 3-24  | 2/50<br>13 lbs - 58 N                            |
| Contact captivation           | -     | 2.6/50<br>25 lbs - 110 N                         |
|                               | -     | 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

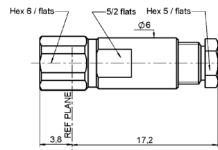


Fig. 1

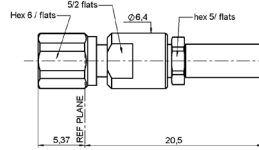


Fig. 2

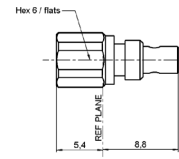


Fig. 3

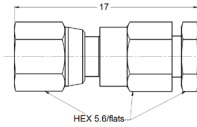


Fig. 4

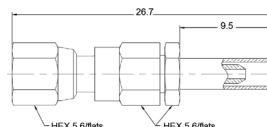


Fig. 5

| 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       |                      | 2    | Crimp type   |
| RG405                 | .085"           | R112 075 000       |                      | 3    | Solder type  |
| RG178 / RG196         | 2/50/S          | 1002-1571-002      | 1002-7571-002        | 5    | Crimp type   |
| RD178                 | 2/50/D          | 1002-1551-002      | 1002-7551-002        | 4    | Clamp type   |
|                       |                 | 1002-1551-005      | 1002-7551-005        |      |              |
| RG174 / RG316 / RG179 | 2.6/50/S        | 1002-1571-005      | 1002-7571-005        | 5    | Crimp type   |
|                       |                 | 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

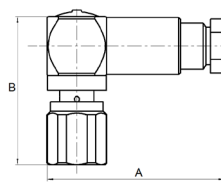


Fig. 1

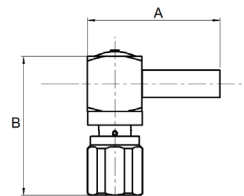


Fig. 2

| 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       |                      | 2    | 16            | 15.5  |              |
| RG174 / RG316 / RG179 | 2.6/50+75/S     | R112 186 000       |                      |      | 15.3          | 15.9  |              |
| 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

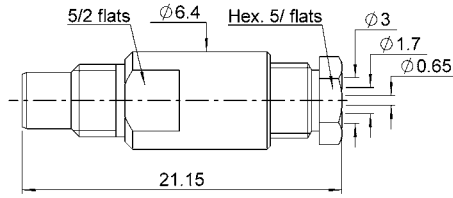


Fig. 1

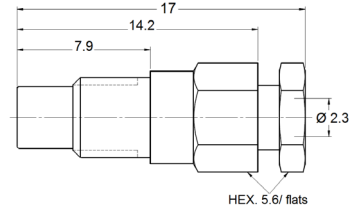


Fig. 2

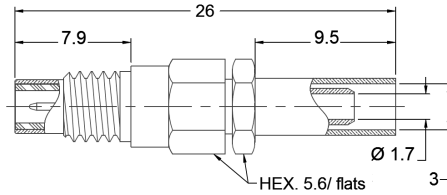


Fig. 3

| 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        |              |
|                       |                 | 1001-1571-002      | 1001-7571-002        | Crimp type   |
| 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

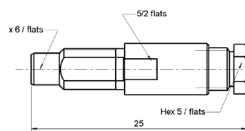


Fig. 1

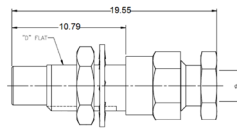


Fig. 2

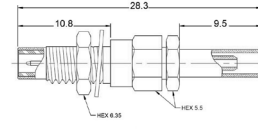


Fig. 3

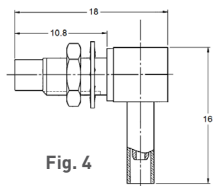


Fig. 4

| 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       | -                    | 1    |                | -          |
| 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        | 4    |                | 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        | 4    |                | 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        | 4    |                | 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

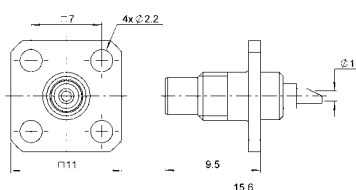


Fig. 1

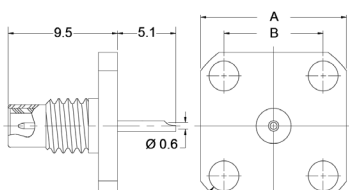


Fig. 2

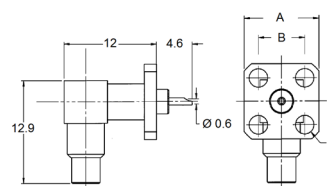


Fig. 3

| 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    | 9.5             | 5.9 | 2.4 | -              |
| 1488-1511-000      | 1488-7511-000        |      | 9.5             | 5.9 | 2.4 | -              |

## BULKHEAD RECEPTACLES WITH SOLDER POT CONTACT



Fig. 1

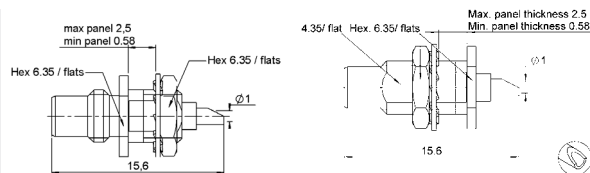


Fig. 2

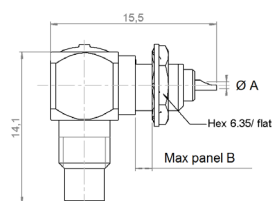


Fig. 3

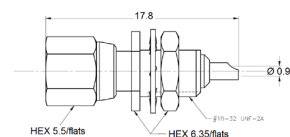


Fig. 4

| 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

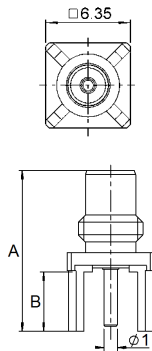
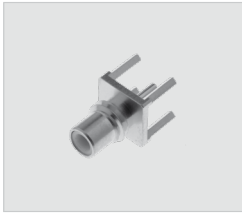


Fig. 1

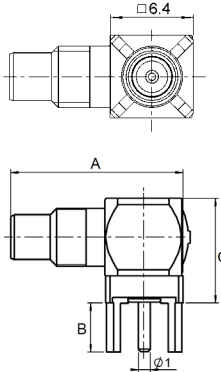


Fig. 2

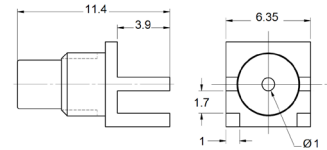


Fig. 3

| Part number<br>(Gold) | Part number<br>(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            | 4   | 12.7 |                |                            |
| 1009-1511-000         | 1009-7511-000           | 1    | 11.4            |     | -    | 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      | No standoff, bulkhead type |
| 1110-1511-000         | 1110-7511-000           | 2    | 18              | 7   |      |                |                            |
| 1009-1511-005         | 1009-7511-005           | 3    | -               | -   | -    | P04            | End launch type            |

## IN SERIES ADAPTERS

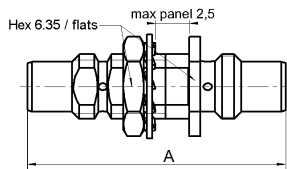


Fig. 1

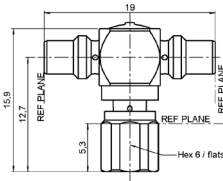
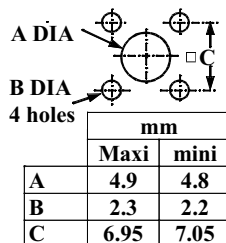


Fig. 2

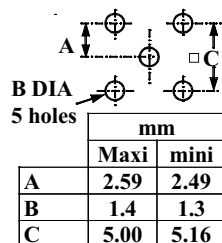
| Part number<br>(Gold) | Fig. | Dimensions<br>A (mm) | Panel<br>drilling | Note                     |
|-----------------------|------|----------------------|-------------------|--------------------------|
| R112 720 000          | 1    | 19                   | P03               | Male - Male bulkhead     |
| R112 780 000          | 2    | -                    | -                 | Tee male - Male / Female |
| 5822-1501-000         | 1    | 17.5                 | P03               | Female - Female          |

## Panel Drilling

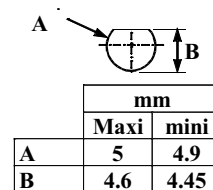
## P01



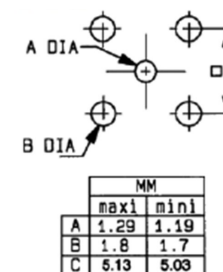
## P02



## P03



## P04





SIMPLIFICATION IS OUR INNOVATION

NOTE