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|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>1 / 21 |

|                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p align="center"><b>Titre / Title</b></p>                                                                                                                     |
| <p align="center"> <b>HIGH RELIABILITY</b><br/><br/> <b>RF COAXIAL ADAPTORS</b><br/><br/> <b>AND CONNECTING PIECES</b><br/><br/> <b>SMA TYPE, 50 OHMS</b> </p> |

| Rédigé par / Written by     | Responsabilité / Responsibility | Date     | Signature                                                                             |
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| A. BLANCHARD                | Space Quality Manager           | 27/04/07 |  |

|                                                                                   |                                             |                         |                        |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|------------------------|
|  | DETAIL SPECIFICATION                        |                         |                        |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                        |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>2/ 21 |

## DOCUMENTATION CHANGE NOTICE

| REVISION<br>OR<br>ISSUE | DATE     | CHANGE                                                                                                  |
|-------------------------|----------|---------------------------------------------------------------------------------------------------------|
| 1-                      | 28/02/03 | Creation – Replacement of specification RAD-C-2612/003 issue 3                                          |
| 1 A                     | 02/07/03 | Minor modifications of presentation                                                                     |
| 1 B                     | 15/11/04 | Symbols q and s updated regarding the values on table figure 2(a)<br>§ 4.4.2 Silicone → Silicone rubber |
| 1 C                     | 26/04/05 | Added 2 new references in table 7.                                                                      |
| 1 D                     | 17/11/05 | Added 1 new reference in table 7: R125705001X                                                           |
| 1 E                     | 25/09/06 | Added the reference R125780000X in table 7                                                              |
| 2 -                     | 27/04/07 | Table 7 replaced by the detail specification RAD-LIS-CONN-001                                           |

|                                                                                   |                                      |                  |                 |
|-----------------------------------------------------------------------------------|--------------------------------------|------------------|-----------------|
|  | DETAIL SPECIFICATION                 |                  |                 |
|                                                                                   | REF. : RAD-DET-CONN-004              |                  |                 |
|                                                                                   | Date:<br>April 27 <sup>th</sup> , 04 | ED/REV:<br>2 / - | PAGE :<br>3/ 21 |

## TABLE OF CONTENTS

|                                                                                  |    |
|----------------------------------------------------------------------------------|----|
| <b>1. GENERAL</b>                                                                | 5  |
| 1.1 SCOPE                                                                        | 5  |
| 1.2 TYPE VARIANTS                                                                | 5  |
| 1.3 MAXIMUM RATINGS                                                              | 5  |
| 1.4 POWER DERATING INFORMATION (FIGURE 1)                                        | 5  |
| 1.5 PHYSICAL DIMENSIONS                                                          | 5  |
| 1.6 STANDARD TEST CONNECTOR INTERFACE                                            | 5  |
| <b>2. APPLICABLE DOCUMENTS</b>                                                   | 13 |
| <b>3. TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS</b>                   | 13 |
| <b>4. REQUIREMENTS</b>                                                           | 13 |
| 4.1 GENERAL                                                                      | 13 |
| 4.2 DEVIATIONS FROM GENERIC SPECIFICATION                                        | 13 |
| 4.2.1 Deviations from Special In-Process Controls                                | 13 |
| 4.2.2 Deviations from Final production Tests (Chart II)                          | 13 |
| 4.2.3 Deviations from Qualification Tests (Chart IV)                             | 13 |
| 4.2.4 Deviations from Lot Acceptance Tests (Chart V)                             | 13 |
| 4.3 MECHANICAL REQUIREMENTS                                                      | 13 |
| 4.3.1 Dimension Check                                                            | 13 |
| 4.3.2 Weight                                                                     | 14 |
| 4.3.3 Coupling Proof Torque                                                      | 14 |
| 4.3.4 Cable Retention Force                                                      | 14 |
| 4.3.4 Mating and Unmating Forces                                                 | 14 |
| 4.3.5 Endurance                                                                  | 14 |
| 4.3.6 Residual Magnetism                                                         | 14 |
| 4.3.7 Contact Engagement and Separation Forces                                   | 14 |
| 4.3.8 Contact Retention                                                          | 15 |
| 4.4 MATERIALS AND FINISHES                                                       | 15 |
| 4.4.1 Gold-plated Versions                                                       | 15 |
| 4.4.2 Passivated Stainless Steel Versions                                        | 16 |
| 4.5 MARKING                                                                      | 17 |
| 4.5.1 General                                                                    | 17 |
| 4.5.2 The RADIAL Component Number                                                | 17 |
| 4.5.3 Traceability Information                                                   | 17 |
| 4.5.4 Marking of Small Components                                                | 17 |
| 4.6 ELECTRICAL MEASUREMENTS                                                      | 18 |
| 4.6.1 Electrical Measurements at Room Temperature                                | 18 |
| 4.6.2 Electrical Measurements at High and Low Temperatures (Table 3)             | 18 |
| 4.6.3 Circuits for Electrical Measurements                                       | 18 |
| 4.7 BURN-IN TEST (TABLES 4 AND 5)                                                | 18 |
| 4.8 ENVIRONMENTAL AND ENDURANCE TESTS                                            | 18 |
| 4.8.1 Measurements and Inspections on Completion of Environmental Tests          | 18 |
| 4.8.2 Measurements and Inspections at Intermediate Points during Endurance Tests | 18 |
| 4.8.3 Measurements and Inspections on Completion of Endurance Tests              | 18 |
| 4.8.4 Conditions for Operating Life Tests (Part of Endurance Testing)            | 18 |
| 4.8.5 Electrical Circuits for Operating Life Tests                               | 18 |
| 4.8.6 Conditions for High Temperature Storage Test (Part of Endurance Testing)   | 18 |

|                                                                                   |                                             |                         |                        |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|------------------------|
|  | DETAIL SPECIFICATION                        |                         |                        |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                        |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>4/ 21 |

### ***LIST OF TABLES***

|                                                                                                         |    |
|---------------------------------------------------------------------------------------------------------|----|
| <b><u>Table 1 (a) – TYPE VARIANTS</u></b>                                                               | 6  |
| <b><u>Table 1 (b)- MAXIMUM RATINGS</u></b>                                                              | 6  |
| <b><u>Table 2 – ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE</u></b>                                     | 18 |
| <b><u>Table 3 - ELECTRICAL MEASUREMENTS AT HIGH AND LOW TEMPERATURES</u></b> (Not applicable)           | 18 |
| <b><u>Tables 4 and 5 – BURN-IN TEST</u></b> (Not applicable)                                            | 18 |
| <b><u>Table 6 – MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL AND ENDURANCE TESTS</u></b> | 19 |
| <b><u>Table 7 - LIST OF PART NUMBERS WITH APPLICABLE POWER HANDLING CATEGORY</u></b>                    | 21 |

### ***LIST OF FIGURES***

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| <b>FIGURE 1 – POWER DERATING INFORMATION</b>                             | 7  |
| <b>Figure 1 (a) – Power Versus Frequency</b>                             | 7  |
| <b>Figure 1 (b) – Power Versus Temperature</b>                           | 7  |
| <b>FIGURE 2 – PHYSICAL DIMENSIONS</b>                                    | 8  |
| <b>Figure 2 (a) – Connector Interface – Male contact</b>                 | 8  |
| <b>Figure 2 (b) – Connector Interface – Female contact</b>               | 8  |
| <b>FIGURE 3 – STANDARD TEST CONNECTOR INTERFACE</b>                      | 11 |
| <b>Figure 3 (a) – Standard Test Connector Interface – Female contact</b> | 11 |
| <b>Figure 3 (b) – Standard Test Connector Interface – Male contact</b>   | 12 |
| <b>FIGURE 4 – TEST PIN CONFIGURATION</b>                                 | 15 |

|                                                                                   |                                             |                         |                        |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|------------------------|
|  | DETAIL SPECIFICATION                        |                         |                        |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                        |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>5/ 21 |

## **1. GENERAL**

### **1.1 SCOPE**

This specification details the ratings, physical and electrical characteristics, test and inspection data for RF Coaxial connectors, Type SMA, 50 Ohms (Male contact). It shall be read in conjunction with RADIALL Generic Specification RAD-GEN-CONN-001, the requirements of which are supplemented herein.

### **1.2 TYPE VARIANTS**

For each type variant, the full electrical and physical characteristics are given in individual technical data sheet.

### **1.3 MAXIMUM RATINGS**

The maximum ratings, which shall not be exceeded at any time during use or storage, applicable to the connectors specified herein, are as scheduled in Table 1(b).

### **1.4 POWER DERATING INFORMATION (FIGURE 1)**

The power derating information applicable to the connectors specified herein is shown in Figure 1.

### **1.5 PHYSICAL DIMENSIONS**

The physical dimensions of the connectors specified herein are shown in Figure 2(a) and technical data sheet.

### **1.6 STANDARD TEST CONNECTOR INTERFACE**

Whenever gauges are required for mating with the connectors under test, their physical dimensions shall be in accordance with those specified in Figure 3.

|                                                                                   |                                             |                         |                        |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|------------------------|
|  | DETAIL SPECIFICATION                        |                         |                        |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                        |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>6/ 21 |

### **Table 1 (a) – TYPE VARIANTS**

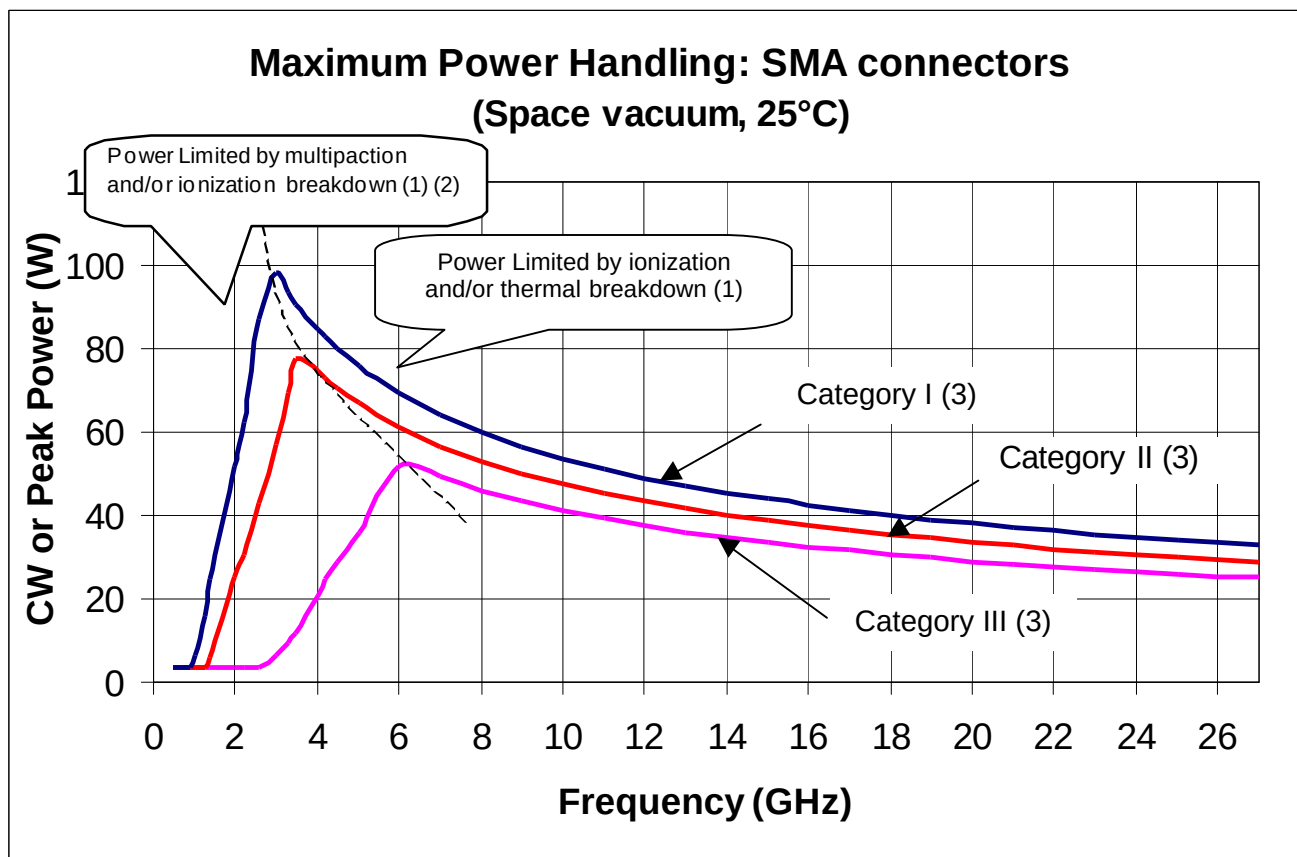
(See RADIALL technical data sheets)

### **Table 1 (b)- MAXIMUM RATINGS**

| N° | CHARACTERISTICS                                     | SYMBOL           | MAXIMUM RATINGS                    | UNIT             | REMARKS         |
|----|-----------------------------------------------------|------------------|------------------------------------|------------------|-----------------|
| 1  | Power                                               | P                | See figures 1 (a) and 1 (b)        | W                | For information |
| 2  | Nominal impedance                                   | Z                | 50                                 | $\Omega$         | -               |
| 3  | Frequency Range                                     | f                | See technical data sheet           | GHz              | -               |
| 4  | Dielectric Withstanding Voltage at ambient pressure | V <sub>dw</sub>  | See technical data sheet           | V <sub>rms</sub> | At sea level    |
| 5  | Dielectric Withstanding Voltage at low pressure     | V <sub>lp</sub>  | 10% of V <sub>dw</sub>             | V <sub>rms</sub> | At 44 mb        |
| 6  | Rated Operating Voltage                             | V <sub>op</sub>  | 50% of V <sub>dw</sub>             | V <sub>rms</sub> |                 |
| 7  | Corona Level                                        | V <sub>co</sub>  | 8,5% of V <sub>dw</sub>            | V <sub>rms</sub> | -               |
| 8  | Operating Temperature Range                         | T <sub>op</sub>  | See technical data sheet           | °C               | -               |
| 9  | Storage Temperature Range                           | T <sub>stg</sub> | As per Operating Temperature Range | °C               | -               |

**FIGURE 1- POWER DERATING INFORMATION**

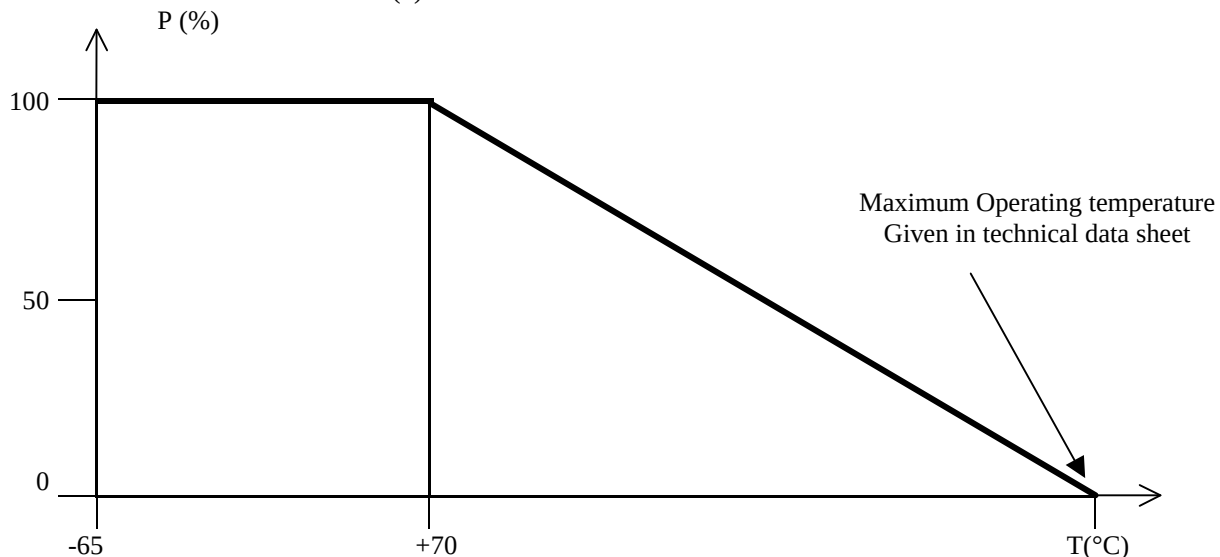
FIGURE 1(a) POWER VERSUS FREQUENCY



**Notes:**

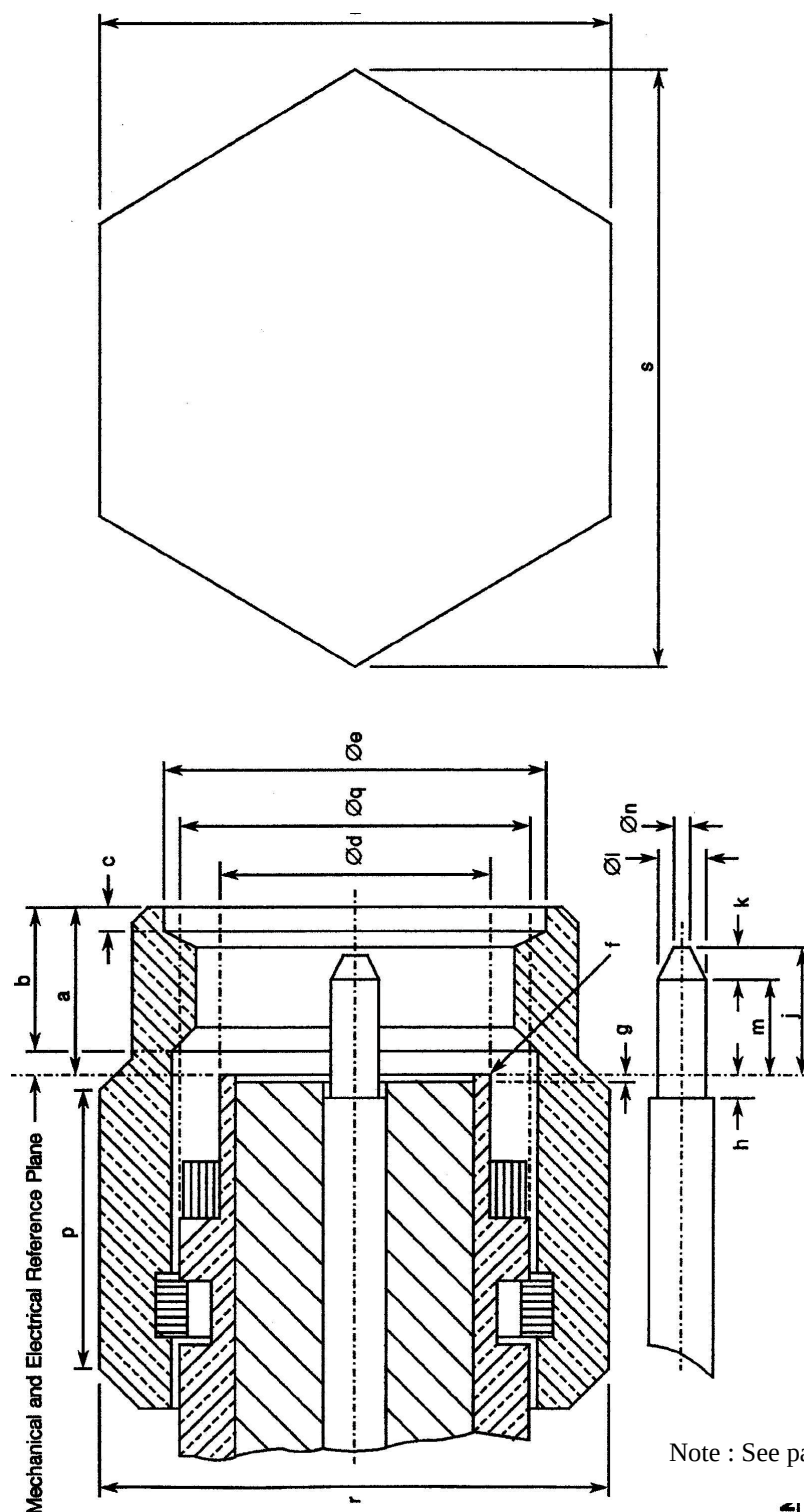
- 1: Load VSWR is better than 1.30:1
- 2: The part of the curve limited by multiplication takes into account a 6 dB margin as recommended by ESA
- 3: See Table 7 to know applicability of power handling categories to the different part numbers

FIGURE 1(b) POWER VERSUS TEMPERATURE



### FIGURE 2 PHYSICAL DIMENSIONS

Figure 2(a) Connector Interface Male Contact



Note : See page 9 for dimension



|                                                                                   |                                             |                         |                        |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|------------------------|
|  | DETAIL SPECIFICATION                        |                         |                        |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                        |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>9/ 21 |

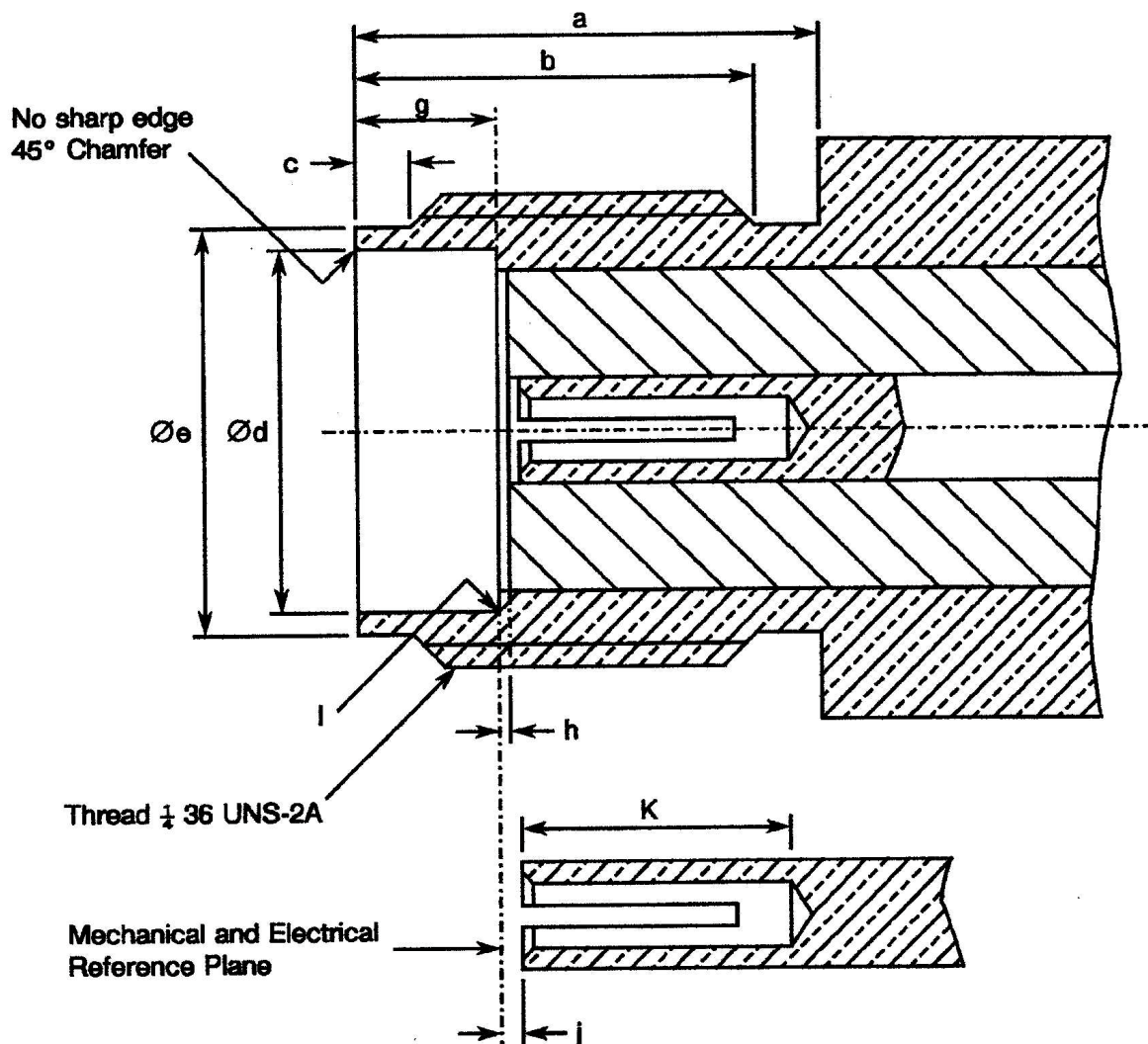
**FIGURE 2 – PHYSICAL DIMENSIONS (CONTINUED)**

FIGURE 2 (a) – CONNECTOR INTERFACE, MALE CONTACT (CONTINUED)

| SYMBOL | MILLIMETRES  |       | NOTES                 |
|--------|--------------|-------|-----------------------|
|        | MIN.         | MAX.  |                       |
| a      | -            | 3.43  | Radius or 45° chamfer |
| b      | 2.54         | -     |                       |
| c      | 0.38         | 1.14  |                       |
| Φd     | -            | 4.592 |                       |
| Φe     | 6.35         | -     |                       |
| f      | -            | 0.08  |                       |
| g      | 0.00         | 0.20  |                       |
| h      | 0.00         | 0.25  |                       |
| j      | -            | 2.54  |                       |
| k      | 0.38         | -     |                       |
| Φl     | 0.90         | 0.94  |                       |
| m      | 1.27         | -     |                       |
| Φn     | -            | 0.38  |                       |
| p      | 3.17         | -     |                       |
| Φq     | ¼ 36 UNS 2 B |       |                       |
| r      | 7.84         | 8.00  | Hexagonal on flat     |
| s      | -            | 9.20  |                       |

**FIGURE 2 – PHYSICAL DIMENSIONS (CONTINUED)**

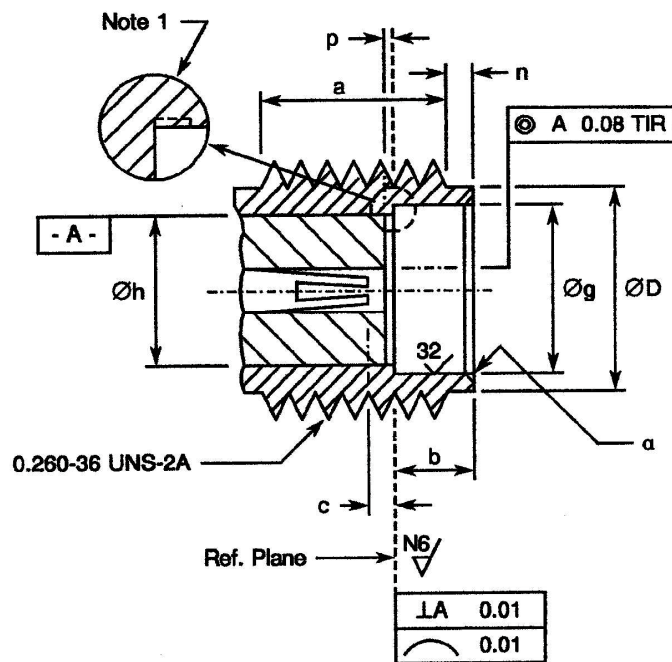
**FIGURE 2 (b) CONNECTOR INTERFACE: FEMALE CONTACT**



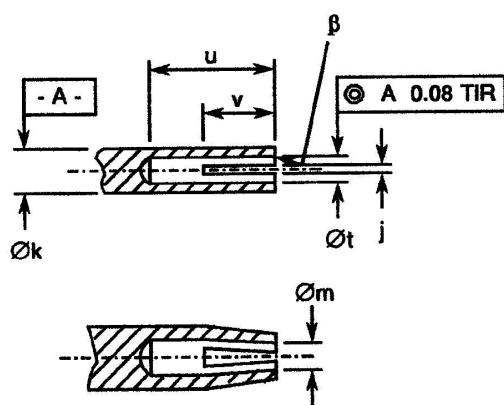
| SYMBOL | MILIMETERS |      | NOTES  |
|--------|------------|------|--------|
|        | MIN.       | MAX. |        |
| a      | 5.54       | -    |        |
| b      | 4.32       | -    |        |
| c      | 0.38       | 1.14 |        |
| Ød     | 4.597      | 4.67 |        |
| Øe     | 5.28       | 5.49 |        |
| g      | 1.88       | 1.98 |        |
| h      | 0.00       | 0.20 |        |
| j      | 0.00       | 0.25 |        |
| k      | 2.92       | -    |        |
| l      | -          | 0.04 |        |
|        |            |      | Radius |

### FIGURE 3 – STANDARD TEST CONNECTOR INTERFACE

FIGURE 3 (a) – STANDARD TEST CONNECTOR INTERFACE, FEMALE CONTACT



#### DETAIL OF INNER CONTACT



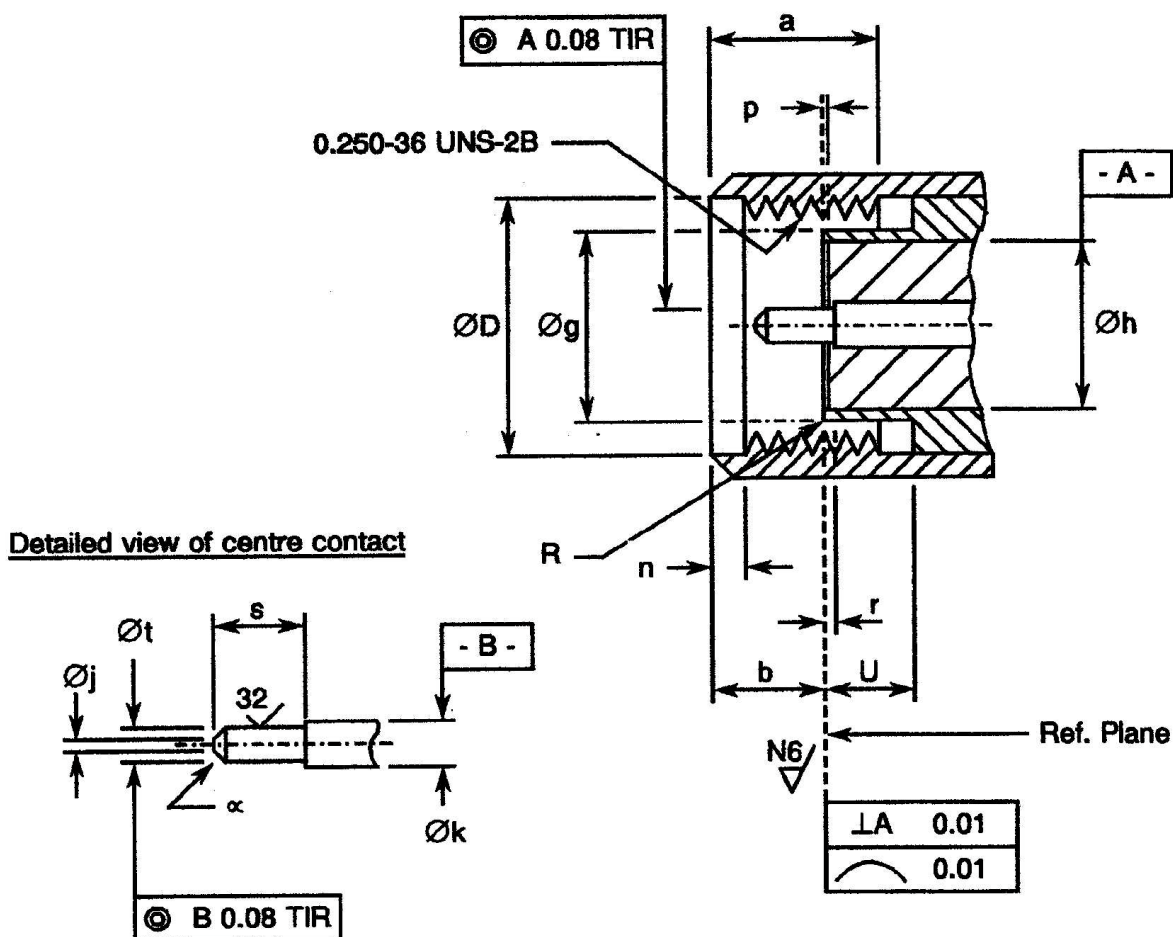
#### NOTES

- No fillet permitted. Radial undercut 0.20 (max.) deep x 0.89 (max.) long permitted

| SYMBOL | MILLIMETERS |      | NOTES           |
|--------|-------------|------|-----------------|
|        | MIN.        | MAX. |                 |
| a      | 3.81        | -    | Contact recess  |
| b      | 1.88        | 1.98 |                 |
| c      | 0.00        | 0.08 |                 |
| ΦD     | 5.28        | 5.49 |                 |
| Φg     | 4.60        | 4.67 | 2 or more slots |
| Φh     | 4.10        | 4.13 |                 |
| j      | 0.13        | 0.23 |                 |
| Φk     | 1.27        | 1.29 |                 |
| Φm     | 0.72        | 0.84 | After closing   |
| n      | 0.38        | 1.14 | Insert recess   |
| p      | 0.00        | 0.05 |                 |
| u      | 2.54        | -    |                 |
| Φt     | 0.94        | 0.99 |                 |
| v      | 1.91        | 2.41 | 45° Chamfer     |
| α      | -           | 0.25 |                 |
| β      | 0.99        | 1.19 | 45° Chamfer     |

**FIGURE 3 – STANDARD TEST CONNECTOR INTERFACE (CONTINUED)**

**FIGURE 3 (b) – STANDARD TEST CONNECTOR INTERFACE, MALE CONTACT**



| SYMBOL   | MIN. | MAX. | NOTES            |
|----------|------|------|------------------|
| a        | 3.71 | 4.32 |                  |
| b        | 2.59 | 3.35 |                  |
| $\Phi D$ | 6.48 | 6.73 |                  |
| $\Phi g$ | 4.34 | 4.59 |                  |
| $\Phi h$ | 4.10 | 4.13 |                  |
| $\Phi j$ | -    | 0.38 | Flat             |
| $\Phi k$ | 1.27 | 1.29 |                  |
| n        | 0.64 | 1.14 |                  |
| p        | 0.00 | 0.05 | Insert recess    |
| r        | 0.00 | 0.08 | Contact recessed |
| R        | -    | 0.08 |                  |
| S        | 2.03 | 2.29 |                  |
| $\Phi t$ | 0.90 | 0.93 |                  |
| U        | 2.03 | -    |                  |
| $\alpha$ | -    | -    |                  |

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>13/ 21 |

## **2. APPLICABLE DOCUMENTS**

The following documents form part of this specification and shall be read in conjunction with it :

- (a) RADIALL Generic Specification RAD-GEN-CONN-001 for RF Coaxial Connectors.
- (b) MIL G.45204 Gold plating Electrodeposited.
- (c) MIL PRF. 39012 Connectors Coaxial RF General Specification for.

## **3. TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS**

For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESA/SCC Basic specification N° 21300 shall apply.

In addition the following shall apply:

|                 |                                                                 |
|-----------------|-----------------------------------------------------------------|
| V <sub>dw</sub> | Dielectric Withstanding Voltage at ambient pressure (sea level) |
| V <sub>lp</sub> | Dielectric Withstanding Voltage at low pressure (44 mb)         |
| V <sub>co</sub> | Corona Level Voltage                                            |
| R <sub>i</sub>  | Insulation Resistance                                           |
| I <sub>L</sub>  | Leakage Current                                                 |

## **4. REQUIREMENTS**

### **4.1 GENERAL**

The complete requirement for procurement of the connectors specified herein are stated in this specification and RADIALL Generic Specification RAD-GEN-CONN-001. Deviations from the Generic Specification applicable to this specification only, are listed in Para.4.2.

Deviations from the applicable Generic Specification and this Detail Specification do not affect the components' reliability, are listed in the appendices attached to this specification.

### **4.2 DEVIATIONS FROM GENERIC SPECIFICATION**

#### **4.2.1 Deviations from Special In-Process Controls**

None.

#### **4.2.2 Deviations from Final production Tests (Chart II)**

The tests "Change of temperature", "Insulation Resistance", "Voltage proof" are not applicable for variants delivered with unmounted contact and insulator.

#### **4.2.3 Deviations from Qualification Tests (Chart IV)**

None.

#### **4.2.4 Deviations from Lot Acceptance Tests (Chart V)**

None.

### **4.3 MECHANICAL REQUIREMENTS**

#### **4.3.1 Dimension Check**

The dimensions of the connectors specified herein shall be verified in accordance with the requirements set out in Para.9.25 of RADIALL Generic Specification RAD-GEN-CONN-001 and shall conform to those shown in Figures 2(a) and in technical data sheet.

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>14/ 21 |

#### 4.3.2 Weight

The maximum weight of the connectors specified herein shall be as specified in technical data sheet.

#### 4.3.3 Coupling Proof Torque

The requirements for testing of the coupling proof torque are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001. The applied torque shall be 170N.cm.

#### 4.3.4 Cable Retention Force

Cable retention force is not applicable for adaptors.

#### 4.3.4 Mating and Unmating Forces

The applicable measurement requirements are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001. The maximum torque during mating and unmating shall not exceed 24N.cm.

Whenever a test is performed on mated pairs of connectors, the pairs shall be torqued at 80-120N.cm.

#### 4.3.5 Endurance

The applicable test requirements are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001. The test conditions shall be as follows :

- (a) Number of cycles : 500 for qualification ; 100 for lot acceptance
- (b) Rate : 12 cycles maximum/minute.

#### 4.3.6 Residual Magnetism

Not applicable.

Residual magnetism is not applicable to stainless steel versions, and Beryllium copper Nickel underplate version.

#### 4.3.7 Contact Engagement and Separation Forces

The requirements for these measurements are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001 and apply to female contacts only.

##### (a) Oversize Pin

Steel test pin diameter : 0.9525/0.955mm.  
Insertion depth : 0.76/1.14 mm.  
Number of insertions : 3.

##### (b) Engagement Force Test (Maximum diameter Test Pin)

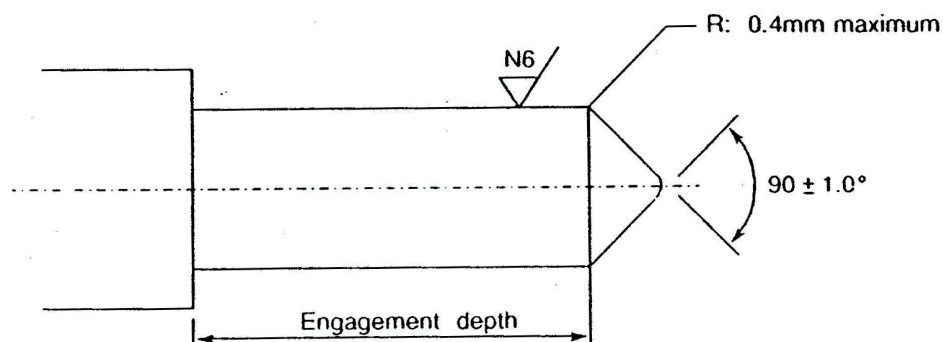
Steel test pin diameter : 0.940/0.942 mm.  
Engagement depth : 1.27/1.91 mm.  
Engagement force : 1360g max.

##### (c) Separation Force Test (Minimum Diameter Test Pin)

Steel test pin diameter : 0.902/0.904 mm.  
Separation depth : 1.27/1.91 mm.  
Separation force : 28.4g min.

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>15/ 21 |

**FIGURE 4 – TEST PIN CONFIGURATION**



#### 4.3.8 Contact Retention

The requirements for this test are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001. The test conditions are given in technical data sheet. After testing, the connector interface dimensions shall be within the limits of Figure 2(a).

## **4.4 MATERIALS AND FINISHES**

The material and finishes shall be as specified herein. Where a definite material is not specified, a material which will enable the connectors specified herein to meet the performance requirements of this specification shall be used. Acceptance or approval of any constituent material does not guarantee acceptance of the finished product.

### 4.4.1 Gold-plated Versions

#### 4.4.4.1 Standard types

##### (a) Shell, Coupling Nut

Material : Stainless steel  
 Underplate : Nickel, 2.0 µm minimum  
 Plating : Gold, 0.5 µm minimum, Type II of MIL-G-45204.

##### (b) Inserts

Material : PTFE

##### (c) Center contact

Material : Beryllium copper or brass  
 Underplate : Nickel, 2 µm min.  
 Plating : Gold 1.27 mini Type II of MIL-G-45204

##### (d) Gaskets

Material : Silicone rubber

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>16/ 21 |

(e) Accessories (ferrule, crimping sleeve and nut) etc...

Material : Brass or copper or stainless steel  
Underplate : Nickel, 2.0 µm minimum  
Plating : Gold, 0.2 µm minimum Type II of MIL-G-45204

4.4.4.2 Hermetic Types – added permitted material

(a) Shell

Material : Iron  
Underplate : Nickel, 2.0 µm minimum  
Plating : Gold, 0.5 µm minimum, Type II of MIL-G-45204

(b) Insert

Material : Glass

(c) Centre Contact

Material : Iron  
Underplate : Nickel, 2.0 µm minimum  
Plating : Gold, 1.27 µm minimum, Type II of MIL-G-45204

4.4.2 Passivated Stainless Steel Versions

(a) Shell, Coupling Nut

Material : Amagnetic stainless steel, electro-passivated

(b) Centre Contact

Material : Beryllium copper or brass  
Underplate : Nickel, 2.0 µm minimum  
Plating : Gold, 1.27 µm minimum, Type II of MIL-G-45204

(c) Inserts

Material : PTFE

(d) Gaskets

Material : Silicone rubber

(e) Accessories

- Crimping or soldering elements

Material : Brass or copper or stainless steel  
Underplate : Nickel, 2.0 µm minimum  
Adequate coating for good solderability

- Nut

Material : Amagnetic stainless steel, electro-passivated

- Washers

Material : Beryllium copper  
Plating : Nickel, 2.0 µm minimum



|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>17/ 21 |

## **4.5 MARKING**

### **4.5.1 General**

The marking of all delivered to this specification shall be in accordance with the following paragraphs. Each component shall be marked in respect of:

- (a) The RADIALL Component Number
- (b) Traceability Information

### **4.5.2 The RADIALL Component Number**

The RADIALL Component Number shall be constituted and marked as follows :

R 125.704.101 X                      (Example of RADIALL Reference Number)

### **4.5.3 Traceability Information**

Each component shall be marked in respect of traceability information in accordance with the requirements of ESA/SCC Basic Specification N° 21700.

### **4.5.4 Marking of Small Components**

When it is considered that the component is too small to accomodate the marking as specified above, as much as space permits shall be marked. The order of precedence shall be as follows :

- Traceability information
- RADIALL component number

The marking information in full shall accompany each component in its primary package.

|                                                                                   |                                      |                  |                  |
|-----------------------------------------------------------------------------------|--------------------------------------|------------------|------------------|
|  | DETAIL SPECIFICATION                 |                  |                  |
|                                                                                   | REF. : RAD-DET-CONN-004              |                  |                  |
|                                                                                   | Date:<br>April 27 <sup>th</sup> , 04 | ED/REV:<br>2 / - | PAGE :<br>18/ 21 |

#### **4.6 ELECTRICAL MEASUREMENTS**

##### **4.6.1 Electrical Measurements at Room Temperature**

The parameters to be measured in respect of electrical characteristics are scheduled in Table 2. Unless otherwise specified, the measurements shall be performed at  $T_{amb} = +22 \pm 3^{\circ}\text{C}$ .

##### **4.6.2 Electrical Measurements at High and Low Temperatures (Table 3)**

Not applicable.

##### **4.6.3 Circuits for Electrical Measurements**

Not applicable.

#### **4.7 BURN-IN TEST (TABLES 4 AND 5)**

Not applicable.

**Table 2 – ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE**

| N° | CHARACTERISTICS                                 | SYMBOL         | SPEC.AND/OR TEST METHOD           | TEST CONDITIONS      | LIMITS |     | UNIT |
|----|-------------------------------------------------|----------------|-----------------------------------|----------------------|--------|-----|------|
|    |                                                 |                |                                   |                      | MIN    | MAX |      |
| 1  | Insulation Resistance                           | Ri             | RADIAL RAD-GEN-CONN-001 Para. 9.1 | 500 Vdc              | 5000   | -   | MΩ   |
| 2  | Dielectric Withstanding Voltage Leakage Current | I <sub>i</sub> | RADIAL RAD-GEN-CONN-001 Para. 9.2 | Technical Data Sheet | -      | 2.0 | mA   |

**Table 3 - ELECTRICAL MEASUREMENTS AT HIGH AND LOW TEMPERATURES** (Not applicable)

Not applicable.

**Tables 4 and 5 – BURN-IN TEST** (Not applicable)

Not applicable.

#### **4.8 ENVIRONMENTAL AND ENDURANCE TESTS**

##### **4.8.1 Measurements and Inspections on Completion of Environmental Tests**

The parameters to be measured on completion of environmental tests are scheduled in Table 6 of this specification. Unless otherwise stated, the measurements shall be performed at  $T_{amb} = +22 \pm 3^{\circ}\text{C}$ .

##### **4.8.2 Measurements and Inspections at Intermediate Points during Endurance Tests**

Not applicable.

##### **4.8.3 Measurements and Inspections on Completion of Endurance Tests**

The parameters to be measured on completion of endurance tests are scheduled in Table 6 of this specification. Unless otherwise stated, the measurements shall be performed at  $T_{amb} = +22 \pm 3^{\circ}\text{C}$ .

##### **4.8.4 Conditions for Operating Life Tests (Part of Endurance Testing)**

Not applicable.

##### **4.8.5 Electrical Circuits for Operating Life Tests**

Not applicable.

##### **4.8.6 Conditions for High Temperature Storage Test (Part of Endurance Testing)**

The requirements for the high temperature storage test are specified in Section 9 of RADIAL Generic Specification RAD-GEN-CONN-001. The conditions for high temperature storage shall be maximum operating temperature as specified in technical data sheet.

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>19/ 21 |

**Table 6 – MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL AND ENDURANCE TESTS**

| No | RADIAL GENERIC SPÉCIFICATION<br>RAD -GEN-CONN- 001 |                                  | MEASUREMENTS AND INSPECTION                                                                                                                                         |                                                                                                                                                      | SYMBOL                                                                | LIMITS                  |                      | UNIT                 |
|----|----------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------|----------------------|----------------------|
|    | ENVIRONMENTAL &<br>ENDURANCE TEST (1)              | TEST<br>METHOD AND<br>CONDITIONS | IDENTIFICATION                                                                                                                                                      | CONDITIONS                                                                                                                                           |                                                                       | MIN.                    | MAX.                 |                      |
| 01 | Contact resistance                                 | Para. 9.9                        | Contact resistance                                                                                                                                                  | Centre Contact<br>Shell<br>Hermetic Centre Contact                                                                                                   |                                                                       | -<br>-<br>-             | 3.0<br>2.0<br>10     | mΩ<br>mΩ<br>mΩ       |
| 02 | Vibration                                          | Para 9.10                        | Full Engagement<br>Contact Resistance<br>Visual Examination                                                                                                         | Centre Contact<br>.                                                                                                                                  |                                                                       | -                       | 3.0                  | mΩ                   |
| 03 | Shock or Bump                                      | Para 9.11                        | Full Engagement<br>Contact Resistance<br>Visual Examination                                                                                                         | Centre Contact                                                                                                                                       |                                                                       | -                       | 3.0                  | mΩ                   |
| 04 | Rapid Change of<br>Temperature                     | Para 9.12                        | Contact Resistance<br><br>Dielect. Withstanding Volt.<br>Leakage Current<br>Visual Examination                                                                      | Centre Contact<br><br>Technical Data Sheet                                                                                                           | <br><br>I <sub>1</sub>                                                | -<br><br>-              | 3.0<br><br>2.0       | mΩ<br><br>mA         |
| 05 | Climatic sequence                                  | Para 9.13                        | Dielect. Withstanding Volt.<br>At Low Pressure (44 mb)<br>Insulation Resistance<br><br>Dielect. Withstanding Volt.<br>Leakage Current<br>External Visual Inspection | Table 1 (b)<br><br>After Damp Heat (Within<br>1 to 24 Hrs recovery) :<br>Table 2 Item 1<br>Technical Data Sheet<br><br>RAD-GEN-CONN-001<br>para. 9.8 | No breakdown or flashover<br><br>R <sub>i</sub><br><br>I <sub>1</sub> | <br><br>5000<br><br>2.0 | <br><br>-<br><br>2.0 | <br><br>MΩ<br><br>mA |
| 06 | Cable Retention Force                              | Not applicable                   |                                                                                                                                                                     |                                                                                                                                                      |                                                                       |                         |                      |                      |
| 07 | Coupling Proof Torque                              | Para 9.4                         | Interface Dimensions<br>Visual Examination                                                                                                                          |                                                                                                                                                      |                                                                       | Figure 2(a)             |                      |                      |
| 08 | Marking / Unmating Forces                          | Para 9.5                         | Torque                                                                                                                                                              | Para. 4.3.5                                                                                                                                          |                                                                       | -                       | 24                   | N.cm                 |
| 09 | Seal Test                                          | Para 9.7                         | Hermeticity<br>Leakage<br>External Visual Inspection                                                                                                                | If applicable<br><br>As Applicable<br>RAD-GEN-CONN-001<br>para. 9.8                                                                                  |                                                                       | -<br><br>No Bubble      | 1*10 <sup>-8</sup>   | Cm <sup>3</sup> /s   |
| 10 | Cabling and Crimping<br>Capability                 | Not applicable                   |                                                                                                                                                                     |                                                                                                                                                      |                                                                       |                         |                      |                      |
| 11 | VSWR or Reflection<br>Coefficient                  | Para 9.16                        | VSWR                                                                                                                                                                | RAD-GEN-CONN-001<br>Para. 9.16                                                                                                                       |                                                                       | Technical Data<br>Sheet |                      |                      |
| 12 | Corona Level                                       | Para 9.17                        | Corona                                                                                                                                                              | RAD-GEN-CONN-001<br>Para. 9.17                                                                                                                       |                                                                       | Table 1 (b)             |                      |                      |

**Notes:**

1. The tests in this table refer to either Chart IV or V and shall be used as applicable.

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>20/ 21 |

**TABLE 6 – MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL  
AND ENDURANCE TESTS**

| No | RADIAL GENERIC SPÉCIFICATION<br>RAD -GEN-CONN- 001 |                                    | MEASUREMENTS AND INSPECTION                                                                                                                                                                                    |                                                                                                                                                                       | SYMBOL                       | LIMITS                                     |                                                             | UNIT                                       |
|----|----------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------|-------------------------------------------------------------|--------------------------------------------|
|    | ENVIRONMENTAL &<br>ENDURANCE TEST (1)              | TEST<br>METHOD AND<br>CONDITIONS   | IDENTIFICATION                                                                                                                                                                                                 | CONDITIONS                                                                                                                                                            |                              | MIN.                                       | MAX.                                                        |                                            |
| 13 | Endurance                                          | Para's 9.18 and 4.3.6 of this spec | Mating /Unmating forces<br><br>Contact resistance<br><br><br>Visual examination                                                                                                                                | Para. 4.3.5<br><br>Centre contact<br><br>Shell<br>Hermetic centre Contact                                                                                             |                              | -<br>-<br>-<br>-                           | 24<br>4.0<br>3.0<br>12                                      | N.cm<br>mΩ<br>mΩ<br>mΩ                     |
| 14 | RF Insertion-Loss                                  | Para.9.19                          | Insertion Loss                                                                                                                                                                                                 | RAD-GEN-CONN-001<br>Para.9.19                                                                                                                                         |                              | Technical Data Sheet                       |                                                             |                                            |
| 15 | Corrosion                                          | Para.9.20                          | Visual examination                                                                                                                                                                                             |                                                                                                                                                                       | No Exposure of Base Metal    |                                            |                                                             |                                            |
| 16 | Residual Magnetism                                 | Para.9.21                          | Magnetism                                                                                                                                                                                                      |                                                                                                                                                                       |                              |                                            |                                                             |                                            |
| 17 | Soldering Proof                                    | Not applicable                     |                                                                                                                                                                                                                |                                                                                                                                                                       |                              |                                            |                                                             |                                            |
| 18 | RF Leakage                                         | Para.9.23                          | Leakage                                                                                                                                                                                                        |                                                                                                                                                                       |                              | Figure 2(b)                                |                                                             |                                            |
| 19 | High Temperature Storage                           | Para.9.23 and 4.8.6 of this spec.  | Mating / Unmating Forces<br><br>Insulation resistance<br><br>Dielect. Withstanding Volt.<br>Leakage Current<br>Contact retention<br>Visual Examination<br>Contact Resistance<br><br>External Visual Inspection | Para.4.3.5<br>Table 2 Item 1<br><br>Technical Data sheet<br><br>Para 4.3.9<br>-<br>Centre contact<br>Shell<br>Hermetic centre Contact<br>RAD-GEN-CONN-001<br>Para.9.8 | Ri<br><br><br>I <sub>1</sub> | -<br>5000<br><br><br>-<br>-<br>-<br>-<br>- | 24<br>-<br>2.0<br>Para. 4.3.9<br>-<br>8.0<br>7.5<br>15<br>- | N.cm<br>MΩ<br><br>mA<br><br>mΩ<br>mΩ<br>mΩ |
| 20 | External Visual Inspection                         | Para.9.8                           |                                                                                                                                                                                                                |                                                                                                                                                                       |                              | -                                          | -                                                           |                                            |
| 21 | Permanence of Marking                              | Para.9.27                          |                                                                                                                                                                                                                |                                                                                                                                                                       |                              | -                                          | -                                                           |                                            |

**Notes:**

1. The tests in this table refer to either Chart IV or V and shall be used as applicable.

|                                                                                   |                                             |                         |                         |
|-----------------------------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------|
|  | DETAIL SPECIFICATION                        |                         |                         |
|                                                                                   | REF. : RAD-DET-CONN-004                     |                         |                         |
|                                                                                   | <b>Date:</b><br>April 27 <sup>th</sup> , 04 | <b>ED/REV:</b><br>2 / - | <b>PAGE :</b><br>21/ 21 |

**Table 7 - LIST OF PART NUMBERS WITH APPLICABLE POWER HANDLING CATEGORY**

See the detail specification RAD-LIS-CONN-001 paragraph 3