

# SERIES SMC SUBMINIATURE CONNECTORS

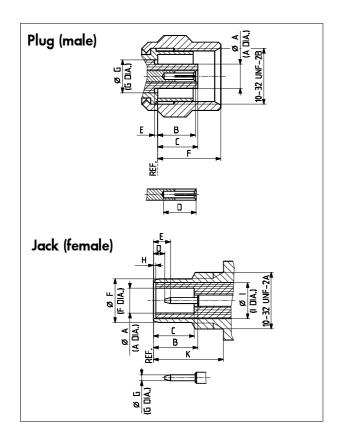
#### **DESCRIPTION**

The HUBER+SUHNER SMC subminiature connector series is based on the same design as the SMB and SMS series. But due to its screw-on coupling mechanism, the HUBER+SUHNER SMC subminiature connectors are suitable for applications up to 10 GHz.

### Coupling mechanism:

The SMC screw-on mechanism permits a vibrationproof connection suitable for semi-permanent connections and for use in mobile equipment with low VSWR requirements.

#### INTERFACE DIMENSIONS



# INTERFACE DIMENSIONS (MM / INCHES)

|   | Plug                   |                   | Jack                   |                   |
|---|------------------------|-------------------|------------------------|-------------------|
| • | min.                   | max.              | min.                   | max.              |
| Α | -                      | 2.60/. <i>081</i> | 2.08/. <i>082</i>      | _                 |
| В | 2.85/. <i>112</i>      | 3.40/. <i>134</i> | 3.40/. <i>134</i>      | _                 |
| С | -                      | 3.40/. <i>134</i> | 3.40/. <i>134</i>      | _                 |
| D | 2.79/.110              | -                 | 0.61/. <i>024</i>      | _                 |
| Е | 0.00/. <i>000</i>      | _                 |                        | 2.13/. <i>084</i> |
| F | -                      | 5.92/. <i>233</i> |                        | 3.71/. 146        |
| G | 3.05/. <i>120</i> nom. |                   | 0.48/.019              | 0.53/. <i>021</i> |
| Н | _                      | _                 | 0.00/. <i>000</i>      | _                 |
|   | -                      | _                 | 3.05/. <i>120</i> nom. |                   |
| K | _                      | _                 | 5.94/. <i>234</i>      | _                 |

# Interface dimensions conformable to the Standards:

International: IEC 60169-9
Europe: CECC 22140
USA: MIL-C-39012 SMC

Interface MIL-STD-348A/312

Great Britain: BS 9210 N 0009 SMC France: NFC 93561 series KMV

Germany: VG 95286

## **TECHNICAL DATA**

Vibration

| ELECTRICAL DATA   | REQUIREMENTS   |
|---|--|
| Impedance   | 50 Ω   |
| Frequency range   | DC 10 GHz  |
| RF-leakage (measured at 1 GHz)  | ≥ 90 dB  |
| Dielectric withstanding voltage (at sea level)  | 750 V rms, 50 Hz (depending on cable)  |
| Working voltage (at sea level)<br>- unmated   | ≤ 250 V rms, 50 Hz (depending on cable)  |
| Working voltage (at sea level)<br>- unmated   | ≤ 350 V DC (depending on cable)  |
| Insulation resistance   | $\geq 10^4 \mathrm{M}\Omega$   |
| Contact resistance - centre contact - outer contact   | $\leq 5 \text{ m}\Omega$<br>$\leq 2.5 \text{ m}\Omega$   |
|   |  |
| MECHANICAL DATA   | REQUIREMENTS   |
| MECHANICAL DATA  Coupling nut torque - recommended - proof torque   | <b>REQUIREMENTS</b> 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs 71 Ncm / 6.2 inlbs   |
| Coupling nut torque<br>- recommended  | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs  |
| Coupling nut torque<br>- recommended<br>- proof torque  | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs<br>71 Ncm / 6.2 inlbs  |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs<br>71 Ncm / 6.2 inlbs<br>≥ 150 N / 33.72 lbs   |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  Contact captivation   | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs 71 Ncm / 6.2 inlbs ≥ 150 N / 33.72 lbs ≥ 10 N / 2.25 lbs   |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  Contact captivation  Durability (matings)   | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs<br>71 Ncm / 6.2 inlbs<br>≥ 150 N / 33.72 lbs<br>≥ 10 N / 2.25 lbs<br>≥ 500   |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  Contact captivation  Durability (matings)  ENVIRONMENTAL DATA                                       | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs 71 Ncm / 6.2 inlbs ≥ 150 N / 33.72 lbs ≥ 10 N / 2.25 lbs ≥ 500  TEST CONDITIONS  |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  Contact captivation  Durability (matings)  ENVIRONMENTAL DATA  Temperature range                    | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs 71 Ncm / 6.2 inlbs ≥ 150 N / 33.72 lbs ≥ 10 N / 2.25 lbs ≥ 500  TEST CONDITIONS - 65° C + 165° C / - 85° F + 329° F  |
| Coupling nut torque - recommended - proof torque  Coupling nut retention force  Contact captivation  Durability (matings)  ENVIRONMENTAL DATA  Temperature range  Climatic category | 25 Ncm 35 Ncm / 2.2 inlbs 3.1 inlbs<br>71 Ncm / 6.2 inlbs<br>$\geq$ 150 N / 33.72 lbs<br>$\geq$ 10 N / 2.25 lbs<br>$\geq$ 500<br>TEST CONDITIONS<br>$-65^{\circ}$ C + $165^{\circ}$ C / $-85^{\circ}$ F + $329^{\circ}$ F<br>IEC $\rightarrow$ 55 / 155 / 21 |

| MATERIAL DATA       |   |                            |         |  |  |  |
|---------------------|---|----------------------------|---------|--|--|--|
| CONNECTOR PART      | STANDARDS                               | MATERIAL                   | PLATING |  |  |  |
| Bodies, pin contact | QQ-B-626                                | brass                      | gold    |  |  |  |
| Socket contact      | QQ-C-530                                | beryllium-copper, hardened | gold    |  |  |  |
| Crimp ferrule       | HUBER+SUHNER® specification<br>QQ-B-626 | copper<br>brass            | gold    |  |  |  |
| Springs             | QQ-C-530                                | beryllium-copper, hardened | gold    |  |  |  |
| Insulators          |   | PTFE or PFA                |         |  |  |  |

MIL-STD-202, Method 204, Condition D

Some connectors may have a specification that differs from the above mentioned data.

The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.