



STRAIGHT MALE RECEPTACLE FOR PCB SNAP TYPE - REEL OF 400

PAGE **1/5** ISSUE **09-11-16E** SERIES SMP-MAX PART NUMBER R222M00090 □5.9 **DETAIL A** Ø8.2 **SCALE 8:1** 4x □ 1.2 4x □ 0.8 ∅0.6 Ø.08 Ø6.6 ASPIRATION PORT \emptyset 5.45max. Ref. plane 11(with cap) Cap for reel package 10.9 57 0 0.1 All dimensions are in mm.

| COMPONENTS | MATERIALS | PLATING (μm) |
|--------------------------------------|----------------|--------------|
| Body Center contact | BRASS BRASS | NPGR NPGR |
| Outer contact Insulator Gasket | PTFE/LCP/PEEK | |
| Others parts | KAPTON | |
| - | - | - |
| - | - | - |



Technical Data Sheet

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| PAGE 2/5 | ISSUE 09-11-16E | SERIES SMP-MAX | PART NUMBER R222M00090 |
|-----------------|------------------------|----------------|------------------------|

PACKAGING

| 400 | Contact us | Contact us | |
|----------|------------|------------|--|
| Standard | Unit | Other | |

ELECTRICAL CHARACTERISTICS

 $\begin{array}{ccc} \text{Impedance} & & \textbf{50} & \Omega \\ \text{Frequency} & & \textbf{0-10} & \text{GHz} \end{array}$

VSWR (max.) / Return Loss (max.)

DC - 4 GHz 4 - 6 GHz 1.07 / -30dB 1.12 / -25dB

 Insertion loss
 < 0.03*</th>
 √F(GHz) dB

 RF leakage
 - (
 NA
 - F(GHz)) dB Maxi

 Voltage rating
 335
 Veff Maxi

 $\begin{array}{ccc} \text{Dielectric withstanding voltage} & \textbf{1000} & \text{Veff mini} \\ \text{Insulation resistance} & \textbf{5000} & \text{M}\Omega \text{ mini} \\ \end{array}$

MECHANICAL CHARACTERISTICS

Center contact retention

Recommended torque

Mating NA N.cm Panel nut NA N.cm

Mating life 100 Cycles mini Weight 1.3500 g

ENVIRONMENTAL

Operating temperature -55/+165 °C
Hermetic seal NA Atm.cm3/s
Panel leakage NA

SPECIFICATION

OTHER CHARACTERISTICS

Assembly instruction:

Others:

*Coaxial Transmission Line Only



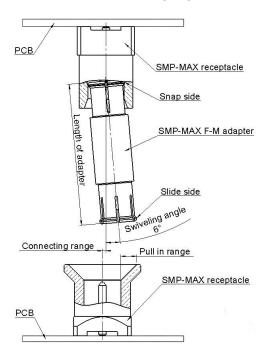


STRAIGHT MALE RECEPTACLE FOR PCB SNAP TYPE - REEL OF 400

PAGE 3/5 ISSUE 09-11-16E SERIES SMP-MAX PART NUMBER R222M00090

GENERAL DATA OF SMP-MAX SERIE

SMP-MAX connecting range

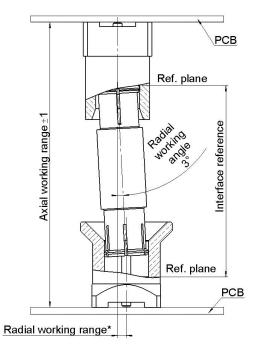


The connecting range represents the maximum misalignment during connection.

The swiveling angle is the maximum possible angle of the adapter in a snap receptacle.

A blind assembly is guaranteed if radial misalignment is smaller than connecting range. Otherwise a manual lead-in is necessary.

SMP-MAX radial and axial working range



Electrical performance is achieved when radial and axial misalignments are within their working ranges.

Radial working range = (length of the adapter) x Sinus(radial working angle).

<u>Typical RF performances for a set:</u> <u>slide receptacle + adapter + snap receptacle (receptacles soldered on boards):</u>

| | Misalignment | DC - 3 GHz | 3 - 6 GHz |
|-----------------------|--|----------------|-----------------|
| V.S.W.R / Return loss | Radial 0°, Axial 0mm | <1.15/-23.9 dB | <1.25/-19.10 dB |
| | Radial 0°, Axial +/-1mm | <1.20/-20.8 dB | <1.35/-16.5 dB |
| | Radial 3°, Axial 0mm | <1.15/-23.1 dB | <1.25/-19.1 dB |
| | Radial 3°, Axial +/-1mm | <1.20/-20.8 dB | <1.35/-16.5 dB |
| | Misalignment | DC - 3 GHz | 3 - 6 GHz |
| | Radial 0°, Axial 0mm | <0.10 dB | <0.15 dB |
| Insertion loss | Radial 0°, Axial +/-1mm | <0.12 dB | <0.25 dB |
| | Radial 3°, Axial 0mm | <0.10 dB | <0.15 dB |
| | Radial 3°, Axial +/-1mm | <0.12 dB | <0.25 dB |
| handling power | >300W@2.7GHz at 25°C; >200W@2.7GHz at 85°C | | |





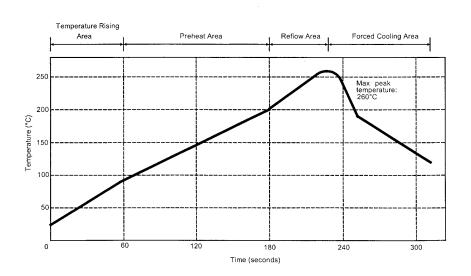
STRAIGHT MALE RECEPTACLE FOR PCB SNAP TYPE - REEL OF 400

| PAGE 4/5 | ISSUE 09-11-16E | SERIES SMP-MAX | PART NUMBER R222M00090 |
|-----------------|------------------------|-----------------------|------------------------|
|-----------------|------------------------|-----------------------|------------------------|

SOLDER PROCEDURE

- 1. Deposit solder paste 'SnAg4Cu0.5' on mounting zone by screen printing application. We recommend a low residue flux. We advise a thickness of 150 micromm (5.850 microinch). Verify that the edges of the zone are clean.
- 2. Placement of the receptacle on the mounting zone with an automatic machine of 'pick and place' type. A video camera is recommended for positioning of the component. Adhesive agents must not be used on the receptacle.
- 3. This process of soldering has been tested with convection oven .Below please find, the typical profile to use.
- 4. The cleaning of printed circuit boards is not obliged.
- 5. Verification of solder joints and position of the component by visual inspection

TEMPERATURE PROFILE



| Parameter | Value | Unit |
|-------------------------|-----------|--------|
| Temperature rising Area | 1 - 4 | °C/sec |
| Max Peak Temperature | 260 | °C |
| Max dwell time @260°C | 10 | sec |
| Min dwell time @235°C | 20 | sec |
| Max dwell time @235°C | 60 | sec |
| Temperature drop in | -1 to - 4 | °C/sec |
| cooling Area | | |
| Max dwell time above | 420 | sec |
| 100°C | | |

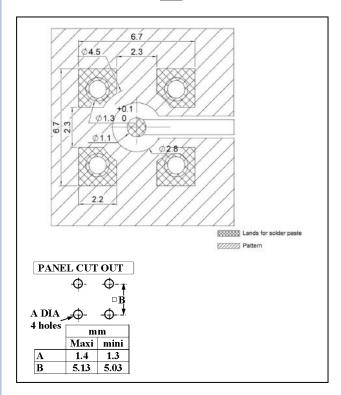






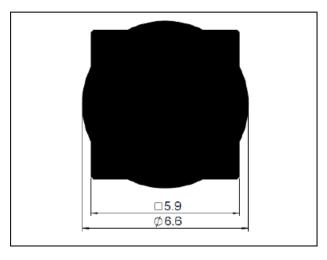
PAGE 5/5 ISSUE 09-11-16E SERIES SMP-MAX PART NUMBER R222M00090

PCB



NOTE: Due to the potential large variation of performances depending on PCB and line parameters, we recommend the user to process a RF analyze of the connector mounted on his PCB.

SHADOW OF RECEPTACLE FOR VIDEO CAMERA



PACKAGE

