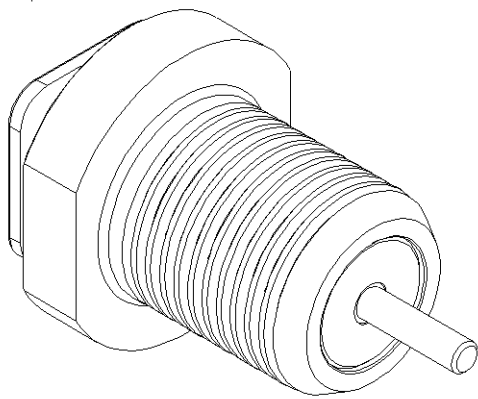
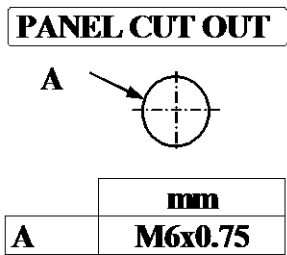
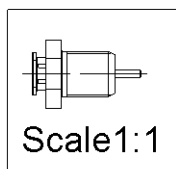
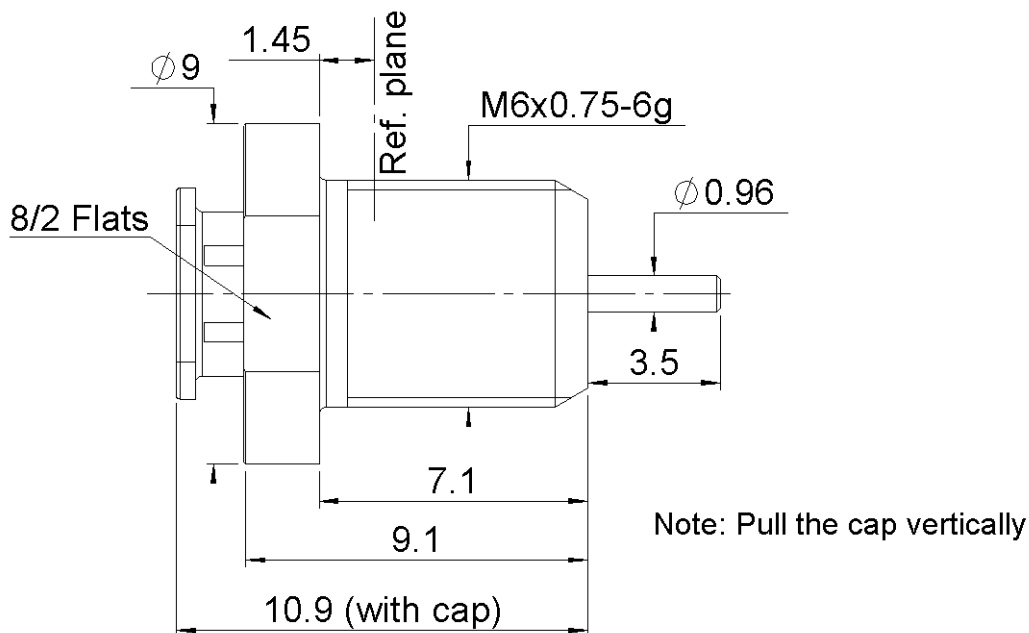
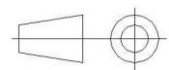


|          |                 |                       |                               |
|----------|-----------------|-----------------------|-------------------------------|
| PAGE 1/4 | ISSUE 10-11-16C | SERIES <b>SMP-MAX</b> | PART NUMBER <b>R222M10030</b> |
|----------|-----------------|-----------------------|-------------------------------|



All dimensions are in mm.



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

PAGE **2/4**

ISSUE **10-11-16C**

SERIES **SMP-MAX**

PART NUMBER **R222M10030**

## PACKAGING

| Standard   | Unit              | Other             |
|------------|-------------------|-------------------|
| <b>100</b> | <b>Contact us</b> | <b>Contact us</b> |

## ELECTRICAL CHARACTERISTICS

Impedance **50**  $\Omega$   
 Frequency **0 - 10** GHz  
 VSWR (max.) / Return Loss (max.)

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

Insertion loss **< 0.03\***  $\sqrt{F(\text{GHz})}$  dB  
 RF leakage - ( **NA** - F(GHz)) dB Maxi  
 Voltage rating **335** Veff Maxi  
 Dielectric withstanding voltage **1000** Veff mini  
 Insulation resistance **5000** M $\Omega$  mini

## MECHANICAL CHARACTERISTICS

Center contact retention  
 Axial force – Mating End **7** N mini  
 Axial force – Opposite end **7** N mini  
 Torque **NA** N.cm mini  
 Pull-in-range **0.0000** mm

Recommended torque  
 Mating **NA** N.cm  
 Panel nut **100** N.cm

Mating life **100** Cycles mini  
 Weight **2.0880** g

## ENVIRONMENTAL

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

## SPECIFICATION

**827169a . .**

## OTHER CHARACTERISTICS

Assembly instruction: **NA**

Others:

\*Coaxial Transmission Line Only

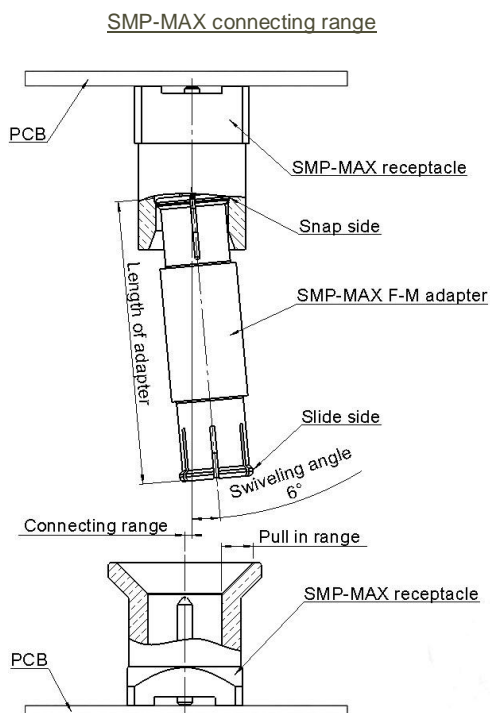
PAGE 3/4

ISSUE 10-11-16C

SERIES **SMP-MAX**

PART NUMBER **R222M10030**

### GENERAL DATA OF SMP-MAX SERIE

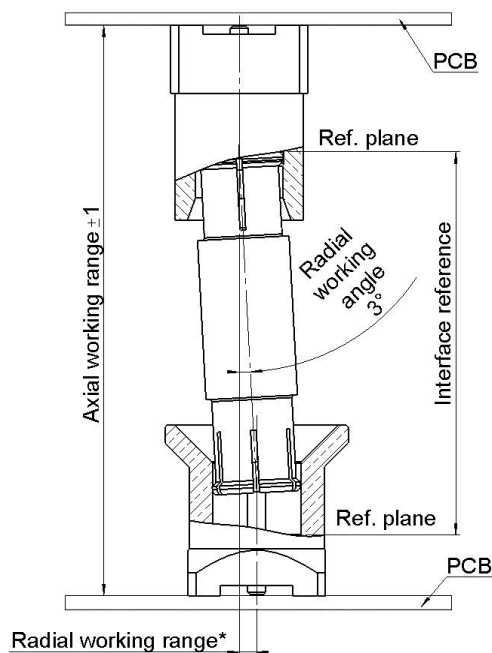


The connecting range represents the maximum misalignment during connection.

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).

### Typical RF performances for a set:

slide receptacle + adapter + snap receptacle (receptacles soldered on boards):

| V.S.W.R / Return loss | Misalignment                                 | DC - 3 GHz     | 3 - 6 GHz       |
|-----------------------|--|----------------|-----------------|
|                       | 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  |
| Insertion loss        | Misalignment                                 | DC - 3 GHz     | 3 - 6 GHz       |
|                       | Radial 0° , Axial 0mm                        | <0.10 dB       | <0.15 dB        |
|                       | 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 |                |                 |

PAGE 4/4

ISSUE 10-11-16C

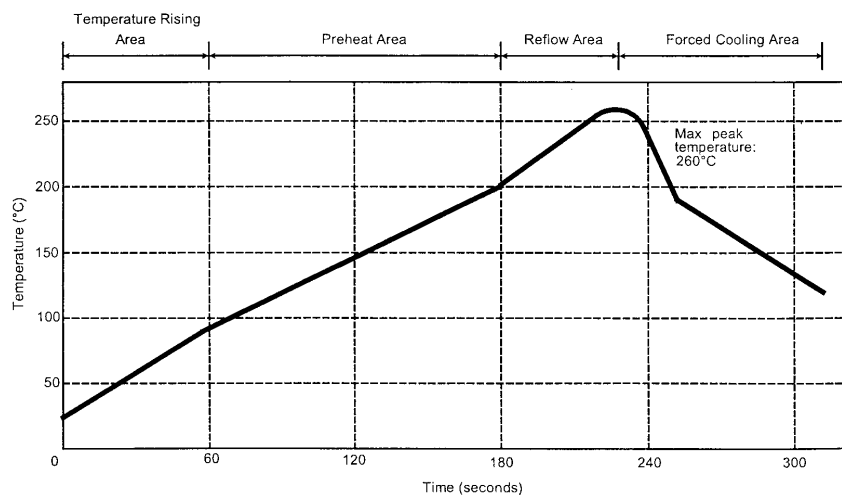
SERIES **SMP-MAX**

PART NUMBER **R222M10030**

### 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 cooling Area | -1 to - 4 | °C/sec |
| Max dwell time above 100°C       | 420       | sec    |