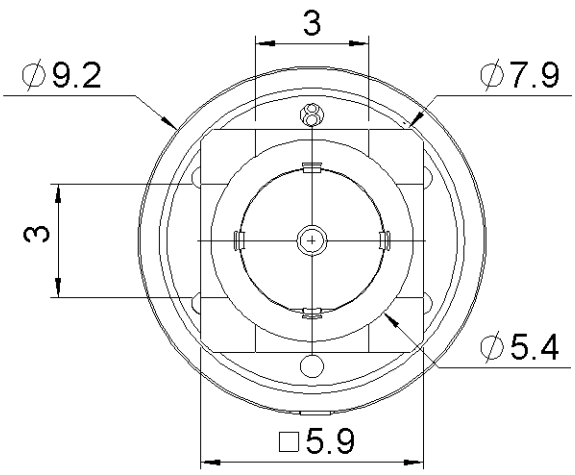
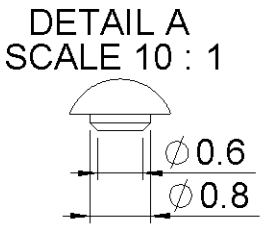
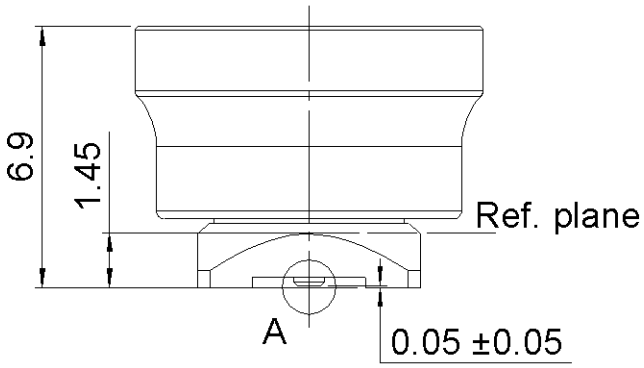
Technical Data Sheet

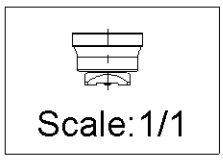
STRAIGHT MALE RECEPTACLE FOR SMT SLIDE TYPE - REEL OF 500

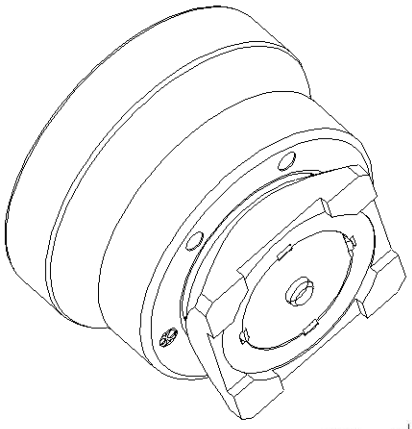
PAGE **1/5**	ISSUE **17-05-17B**	SERIES **SMP-MAX**	PART NUMBER **R222M03710**











All dimensions are in mm.

COMPONENTS	MATERIALS	PLATING (µm)
Body	**PA 10T 30%GF Color BLACK**	**-**
Center contact	**BRASS**	**NPGR(Au0.1-0.2µm,NiP 1.27-2.54 µm)**
Outer contact	**BRASS**	**NPGR(Au0.1-0.2µm,NiP 1.27-2.54 µm)**
Insulator	**PTFE/LCP/PEEK**	
Gasket	**-**	
Others parts	**PTFE/LCP/PEEK**	**-**
-	**-**	**-**
-	**-**	**-**

PACKAGING

Standard	Unit	Other
500	**Contact us**	**Contact us**

ELECTRICAL CHARACTERISTICS

Impedance		**50**	Ω
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***	√F(GHz) dB
RF leakage	- (	**70@3**	- F(GHz)) dB Maxi
Voltage rating		**335**	Veff Maxi
Dielectric withstanding voltage		**1000**	Veff mini
Insulation resistance		**5000**	MΩ mini

MECHANICAL CHARACTERISTICS

Center contact retention		
Axial force – Mating End	**10**	N mini
Axial force – Opposite end	**10**	N mini
Torque	**NA**	N.cm mini
Pull-in-range	**0.0000**	mm
Recommended torque		
Mating	**NA**	N.cm
Panel nut	**NA**	N.cm
Mating life	**100**	Cycles mini
Weight	**0.7640**	g

Engagement (mating) force: 3-6N
Disengagement (un-mating) force: 3-6N

ENVIRONMENTAL

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

SPECIFICATION

HUAWEI 14040995

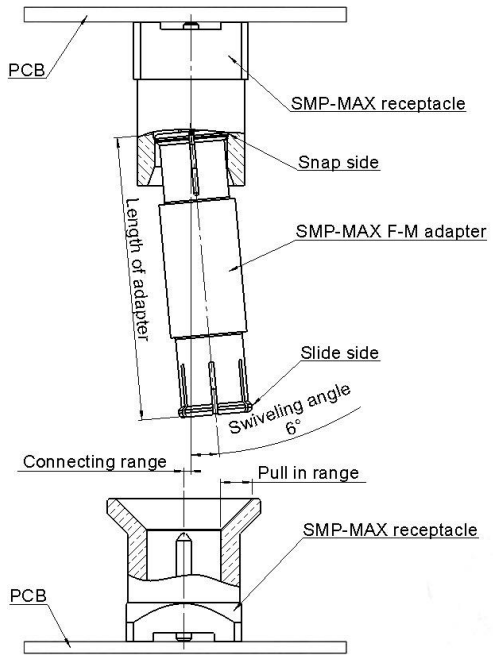
OTHER CHARACTERISTICS

Assembly instruction: NA

Others:
*Coaxial Transmission Line Only
Center contact resistance≤5mΩ
Outer contact resistance≤5mΩ
3rd passive intermodulation (IMP_3):
≤-135dBc@1.8/2.1/2.6GHz, 2*20w

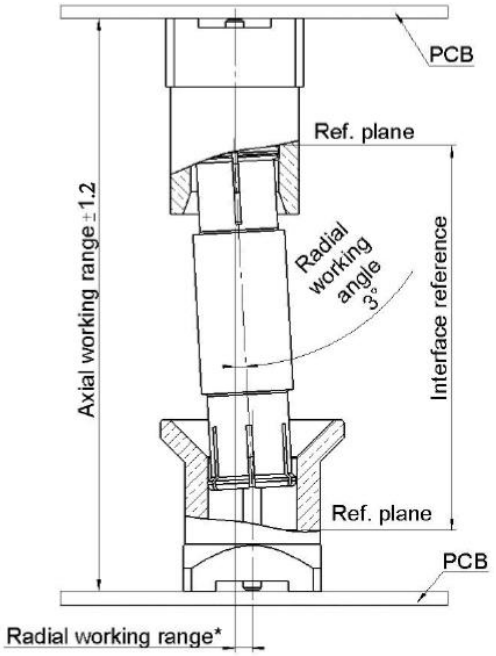
GENERAL DATA OF SMP-MAX SERIE

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).

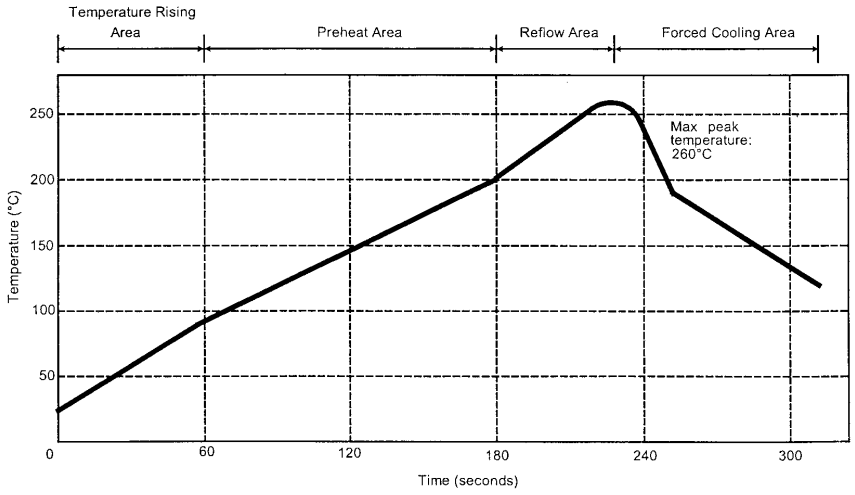
Typical RF performances for a set:
slide receptacle + adapter + snap receptacle (receptacles soldered on boards):

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℃; >200W@2.7GHz at 85℃		

SOLDER PROCEDURE

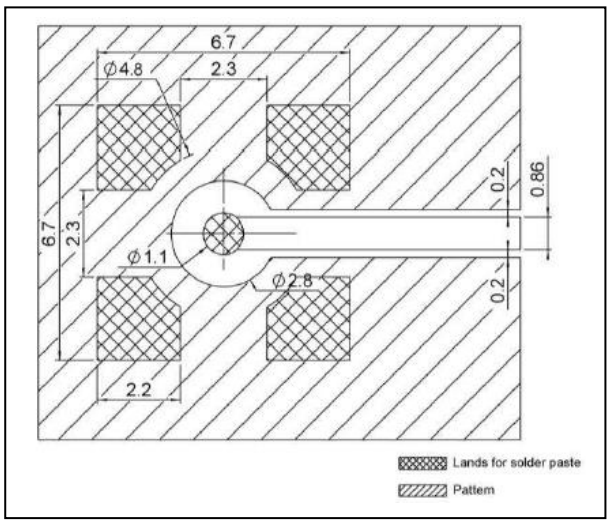
1. Deposit solder paste 'SnAg4Cu0.5' on mounting zone by screen printing application. We recommend a low residue flux. We advise a thickness of 150 micromm (5.850 microinch). Verify that the edges of the zone are clean.
2. Placement of the receptacle on the mounting zone with an automatic machine of '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



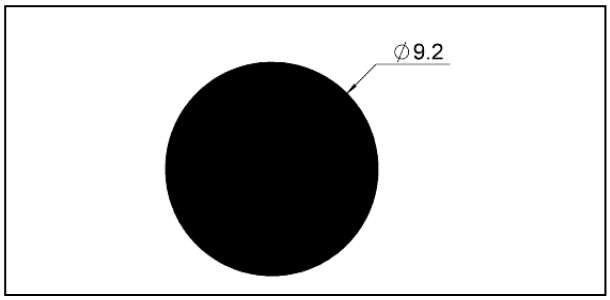
Parameter	Value	Unit
Temperature rising Area	1 - 4	°C/sec
Max Peak Temperature	260	°C
Max dwell time @260°C	10	sec
Min dwell time @235°C	20	sec
Max dwell time @235°C	60	sec
Temperature drop in cooling Area	-1 to - 4	°C/sec
Max dwell time above 100°C	420	sec

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