

SPECIFICATION

1. MECHANICAL

Automatic measurement probe for SWG.

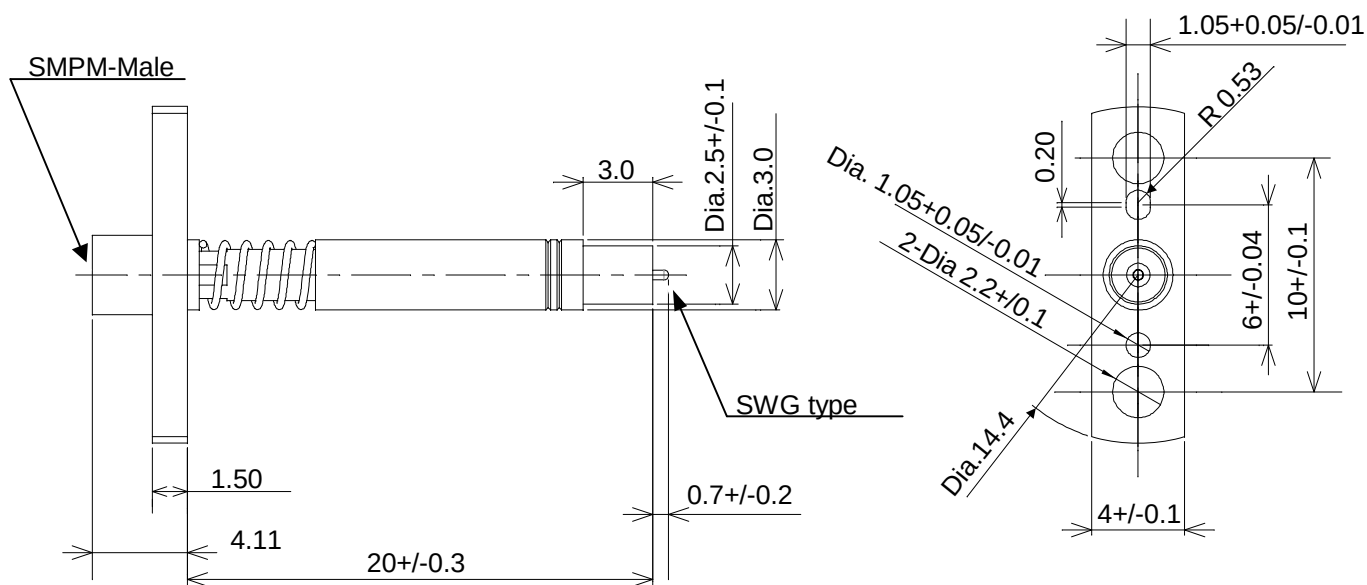
MM126317 and MM126312 are used as calibration adapters.

Written by I.Gan

Checked by T.Kuriyama

Date 26/Aug./2015

Revised A: 8/Mar. /'16 YM



Scale: Free
Tolerance Unless
Otherwise Specified: +/- 0.2
Unit: mm

Figure 1. Construction

2. RATING:

Item	Specification
Voltage Rating	30Vr.m.s. maximum
Nominal Frequency Range	DC to 11GHz
Nominal Impedance	50Ω
Temperature Rating	-40°C to +85°C
Insulation Resistance	500 MΩ minimum
Withstanding Voltage	No evidence of breakdown
Initial Contact Resistance (without conductor resistance)	Center contact 70.0mΩmax. Outer contact 20.0mΩmax.
A> Voltage Standing Wave Ratio (V.S.W.R.)	Meet the requirements of following spec. 1.4max (DC to 3GHz) 1.5max (3GHz to 6GHz) 2.3max (6GHz to 11GHz)
A> Insertion loss	0.4 dB Max (DC to 3GHz) 0.6 dB Max (3GHz to 6GHz) 1.8 dB Max (6GHz to 11GHz)
Durability	250K cycles



Preliminary Specification of COAXIAL CONNECTOR

Preliminary SPEC No. : NMM04-PV0122A

Part Number : MM206417

Written by I.Gan

Checked by T.Kuriyama

Date 26/Aug./2015

3. USE THIS PRODUCT

3.1 Attach to measurement machine

MM206417 must be attached to machine at the two screw holes in probe flange (Figure 2).

Using guide pins is recommended. The guide pins should not be above probe flange (Figure 3).

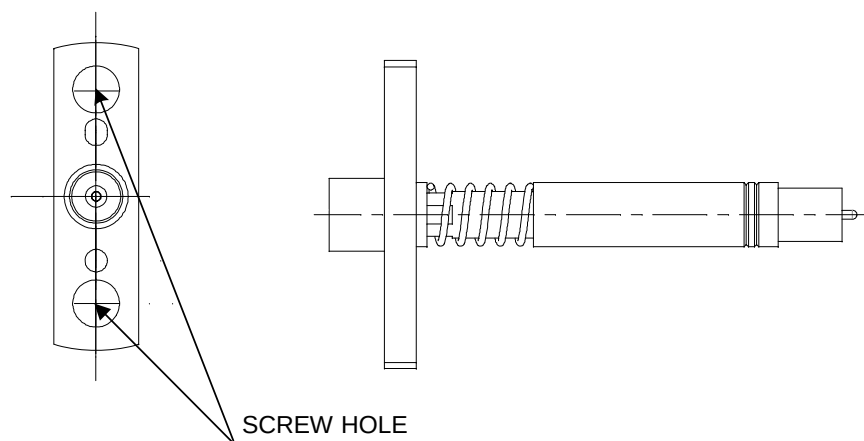


Figure 2. Screw hole

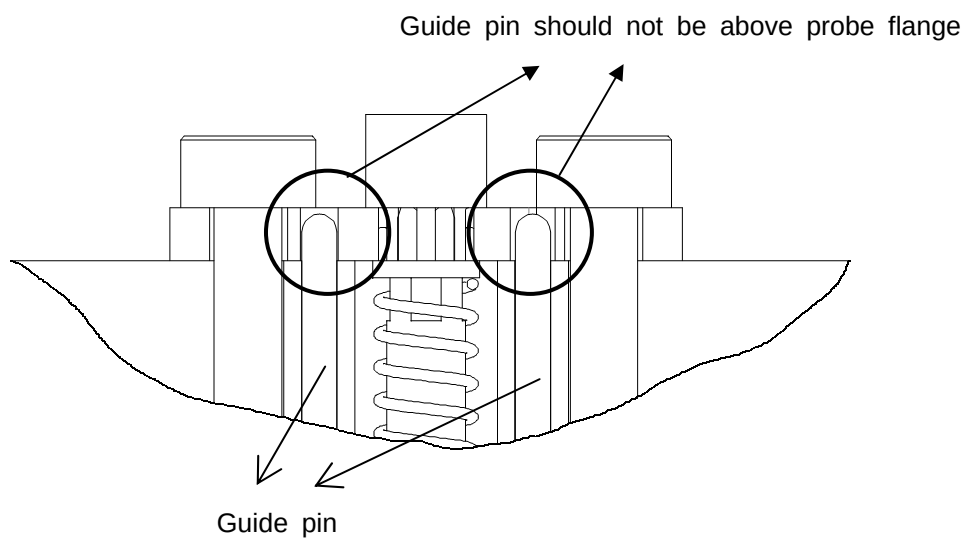


Figure 3. Positional relation between guide pin and probe flange

3.2 The tolerance of position against SWG type receptacle

3.2.1 MM206417 has a centering function by its design, $\pm 0.5\text{mm}$ is permitted against the hole center of SWG type receptacle.

Please avoid needless force to SMPM interface when MM206417 is disengaged from SWG type receptacle and comes back to its original position.

To avoid the needless force, please use extension cable assembly, MXHQ87SM3000/MXHR87SN3000 (Figure 4/Figure 5).

Centering function $\pm 0.5\text{mm}$ may not be permitted against the hole center of SWG type receptacle, when MM206417 is affected by the needless force.

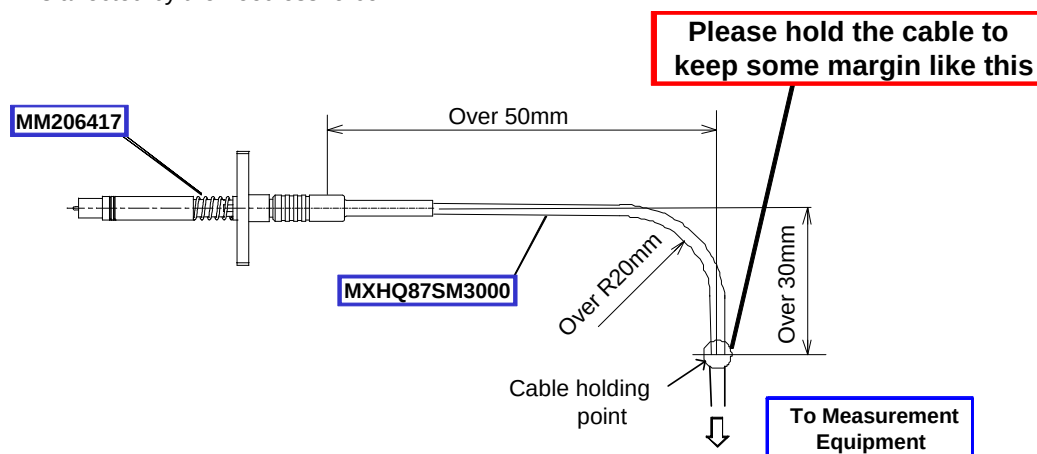


Figure 4. Instruction of MXHQ87SM3000

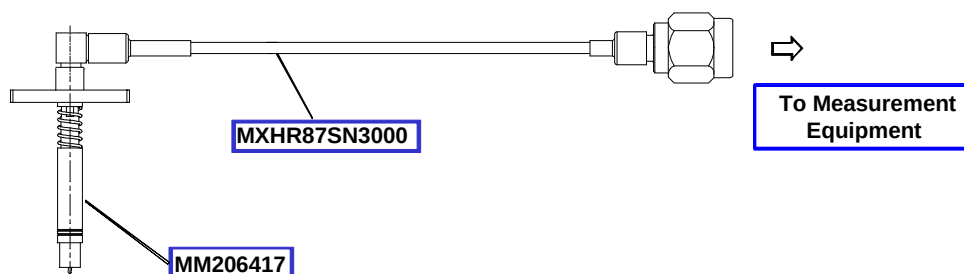


Figure 5. Instruction of MXHR87SN3000

Please use M19500 for un-mating MM206417 with MXHQ87SM3000/MXHR87SN3000 (Figure 6).

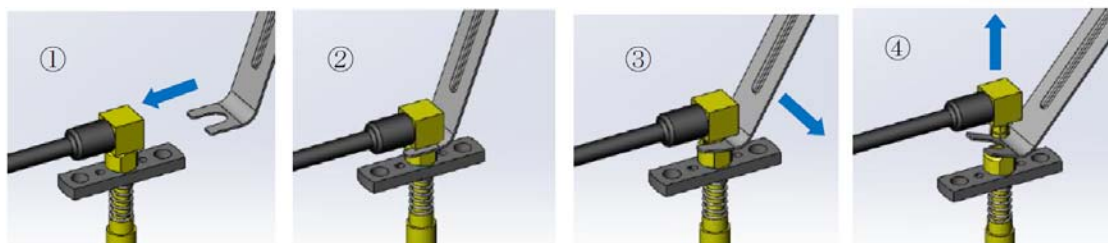


Figure 6. SMPM interface un-mating jig: M19500

3.2.2 To get 10dB or higher isolation (up to 11GHz), the engagement strokes from the flange to the tip of probe is 18.5mm to 19.5mm (Figure 7).

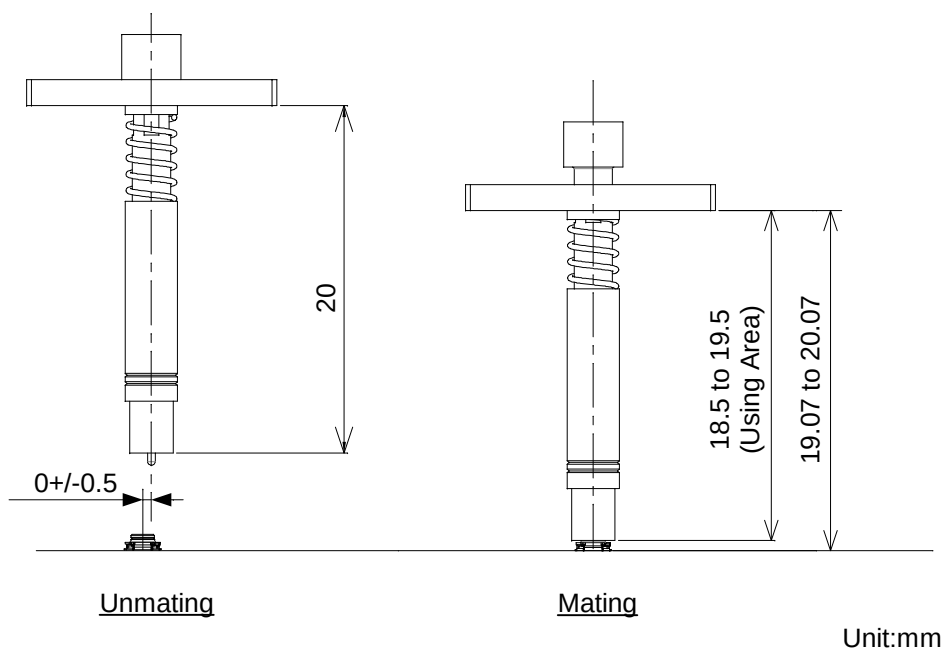


Figure 7. Acceptable Engagement range to SWG type receptacle

3.3 The slant angle tolerance of probe against SWG type Receptacle (Figure 8)

To have a stable measurement, slant angle of MM206417 must be within +/-2degree.

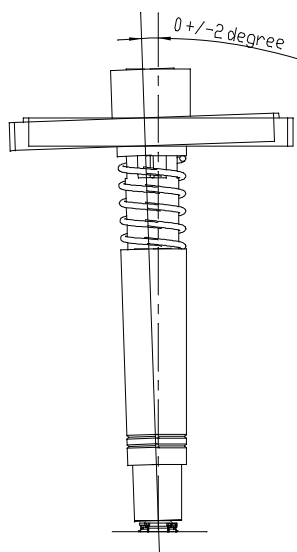


Figure 8. Probe Shape Operation Manual for Auto Measurement probe (MM206417)