Preliminary Specification of COAXIAL CONNECTOR
Preliminary SPEC No. : NMM04-PU0076H
Part Number : MM206621

Written by T.Yamamoto
Checked by T.Kuriyama
Date 22/Jun./2016

SPECIFICATION Revised A: 26/Sep./'16 KT, B: 18/Jun./'21 MS, C: 8/Oct./'21 MS, D: 3/Nov./'21 MS E: 22/Feb./'22 NM, F: 21/Oct./'22 MS, G: 31/Oct./'25 XL, H: 17/Nov./'25 XL

1. MECHANICAL

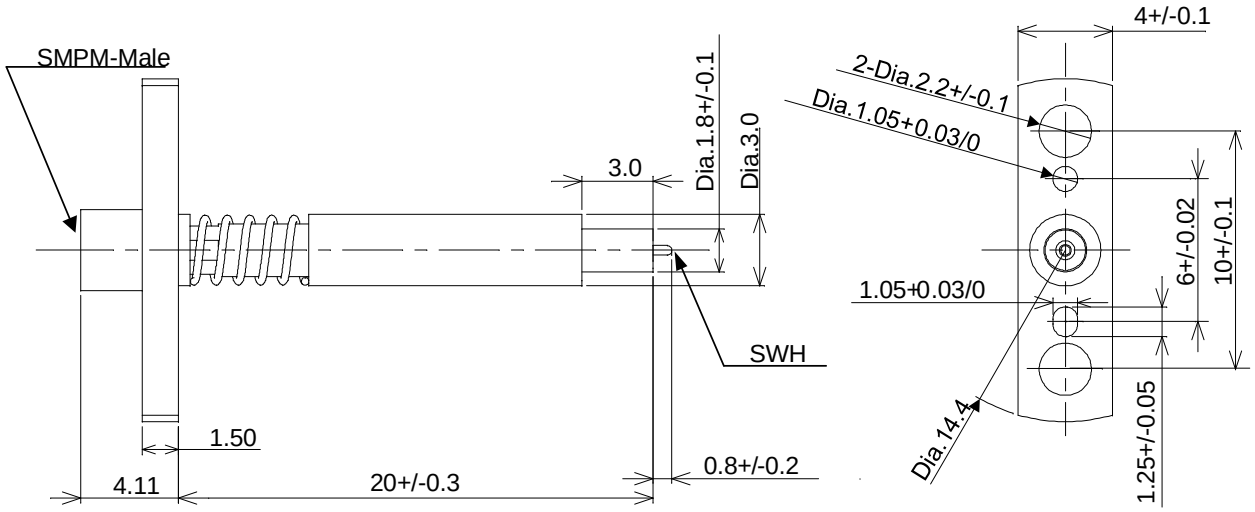
H>

Automatic measurement probe for SWH

MM126511 and MM126512 are used as calibration adapters.

SOP of this probe setting in the fixture is VG16-OT-MM006.

B>



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

Figure 1. Construction

2. RATING:

Item	Specification
Voltage Rating	30Vr.m.s. maximum
C> Nominal Frequency Range	DC to 12GHz
Nominal Impedance	50Ω
B> Temperature Rating	25°C +/- 15°C
Insulation Resistance	500 MΩ minimum
B> Withstanding Voltage	No evidence of break down in AC200Vr.m.s, 1minute
B> Initial Contact Resistance (without conductor resistance)	70mΩ max.
D>C>A> Voltage Standing Wave Ratio (V.S.W.R.)	1.5 max.(DC to 3GHz) 1.6 max.(3GHz to 6GHz) 1.7 max.(6GHz to 9GHz) 2.2 max.(9GHz to 12GHz)
D>C>A> Insertion loss	0.3dB max.(DC to 3GHz) 0.5dB max.(3GHz to 6GHz) 0.7dB max.(6GHz to 9GHz) 1dB max.(9GHz to 12GHz)
A> Durability	250K cycles

3. USE THIS PRODUCT

B>

3.1 Attach to fixture

The probe must be attached to fixture at the two screw holes in probe flange (Figure 2).
Using guide pins is recommended. The guide pins should not be above probe flange.

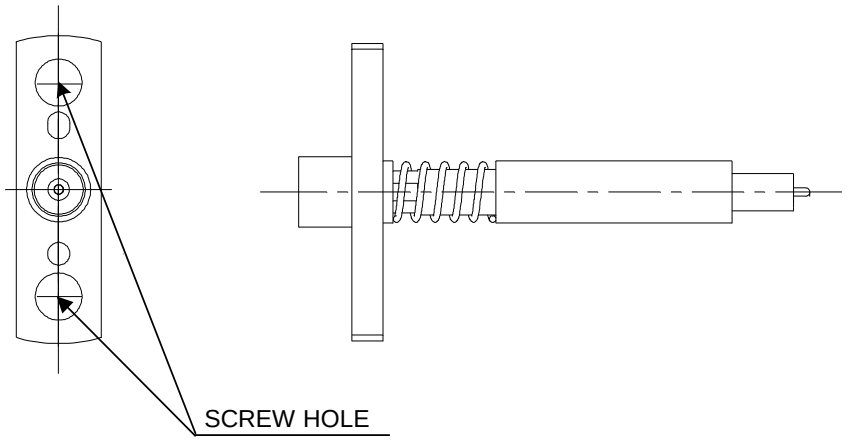


Figure 2. Screw hole

3.2 The tolerance of position against SWH type receptacle

F>B>

3.2.1 MM206621 has a centering function by its design, +/-0.4(Typical)mm is permitted against the hole center of SWH type receptacle.
Please avoid needless force to SMPM interface when MM206621 is disengaged from SWH type receptacle and comes back to its original position.
To avoid the needless force, please use extension cable assembly, MXHQ87SM3000 / MXHQ87SN3000 (Figure 3/Figure 4).
Centering function +/-0.4(Typical)mm may not be permitted against the hole center of SWH type receptacle, when MM206621 is affected by the needless force.

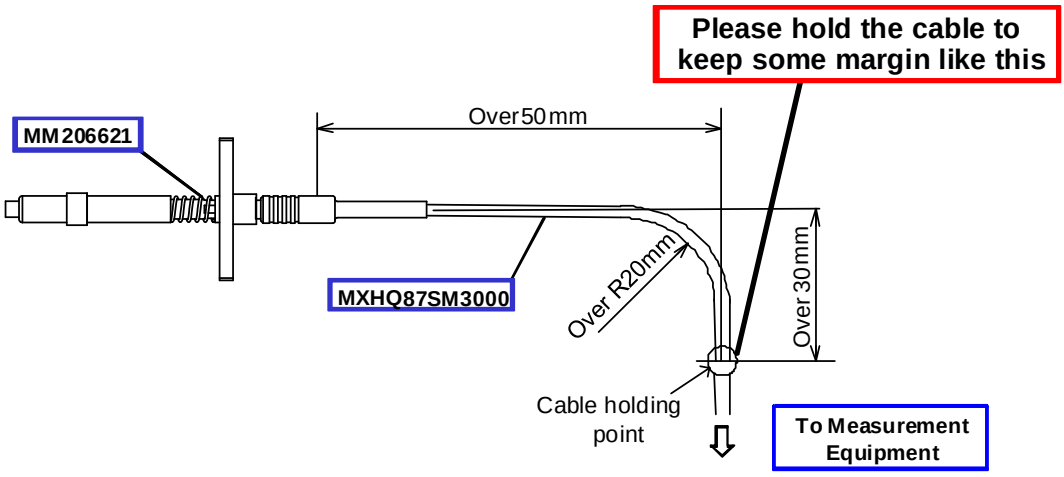


Figure 3 Instruction of MXHQ87SM3000

F>

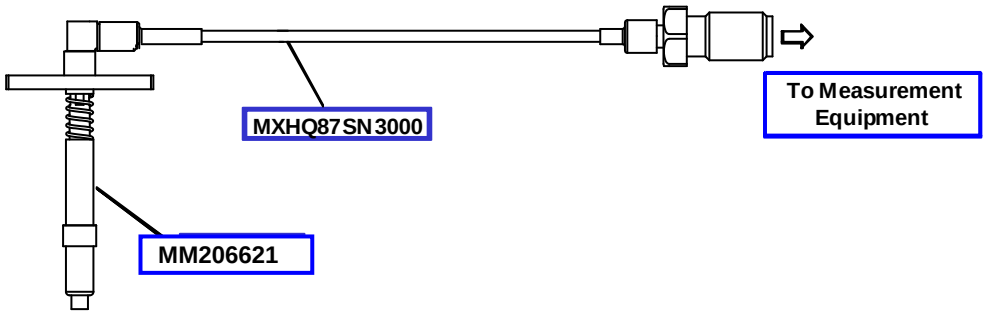


Figure 4. Instruction of MXHQ87SN3000

F>

Please use M19500 for un-mating MM206621 with MXHQ87SM3000/MXHQ87SN3000 (Figure 5).

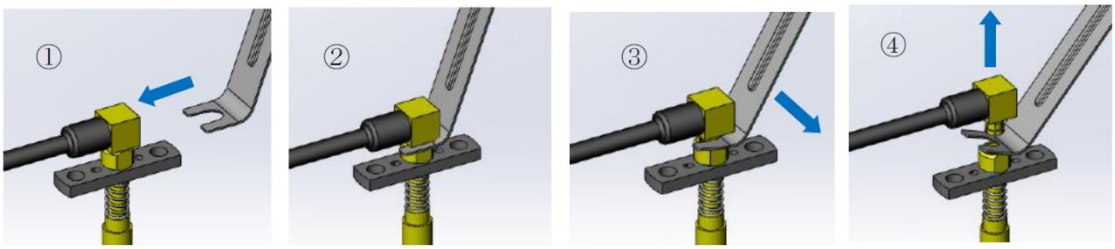
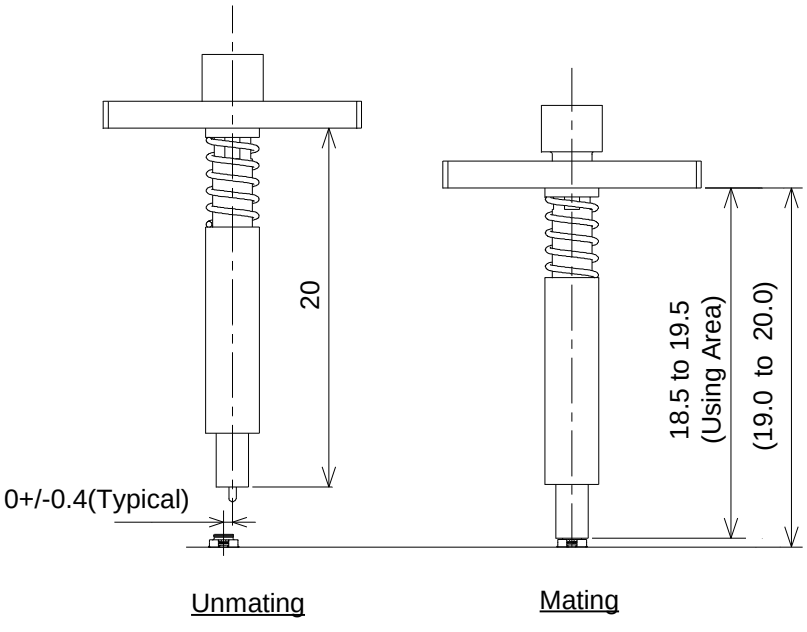


Figure 5. SMPM interface un-mating jig: M19500

E>

3.2.2 To get 10dB or higher isolation (up to 12GHz), the engagement strokes from the bottom surface of flange to the tip of probe is 18.5mm to 19.5mm (Figure 6).

B>



Unit:mm

Figure 6. Acceptable Engagement range to SWH type receptacle

3.3 The slant angle tolerance of probe against SWH type Receptacle (Figure 7)
To have a stable measurement, slant angle of MM206621 must be within 0+/-2degree.

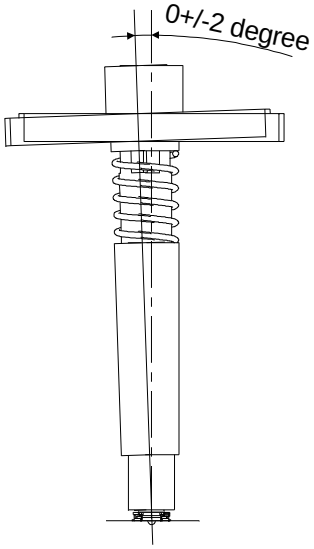
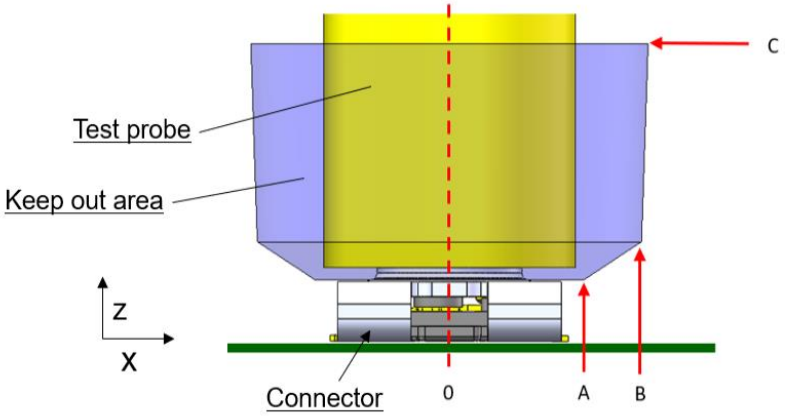


Figure 7. Probe Shape Operation Manual for Auto Measurement probe (MM206621)

4. Keep out area of test probe

G>

Following is keep out area of test probe tip. Please do not put any parts or devices in that area in order to ensure proper alignment.



Keep out coordinates from connector center

	x	z
A	0.97	0.41
B	1.38	0.66
C	1.42	2.00

Unit: mm

Figure.3. Keep out area of test probe