

Preliminary Specification of COAXIAL CONNECTOR

Preliminary SPEC No. : NMM04-PU0076A

Part Number : MM206621

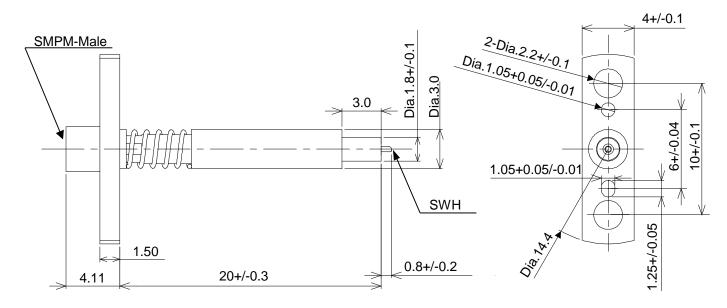
# **SPECIFICATION**

## 1. MECHANICAL

Automatic measurement probe for SWH.

MM126511 and MM126512 are used as calibration adapters.

Written by T.Yamamoto
Checked by T.Kuriyama
Date 22/Jun./2016
Revised A: 26/Sep./\*16 KT



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 6GHz
Nominal Impedance	$50\Omega$
Temperature Rating	-40°C to +85°C
Insulation Resistance	500 MΩ minimum
Withstanding Voltage	No evidence of breakdown
Initial Contact Resistance	Center contact 70.0mΩmax.
(without conductor resistance)	Outer contact 20.0mΩmax.
A> Voltage Standing Wave Ratio (V.S.W.R.)	Meet the requirements of following spec.
	1.5 max.(DC to 3GHz)
	1.6 max.(3GHz to 6GHz)
A> Insertion loss	0.3dB max.(DC to 3GHz)
	0.5dB max.(3GHz to 6GHz)
A> Durability	250K cycles



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#### 3. USE THIS PRODUCT

#### 3.1 Attach to measurement machine

MM206621 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).

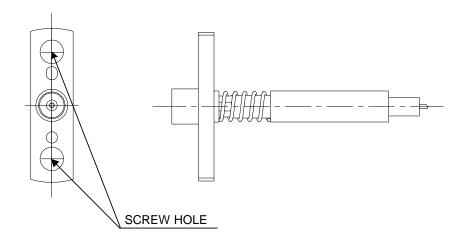


Figure 2. Screw hole

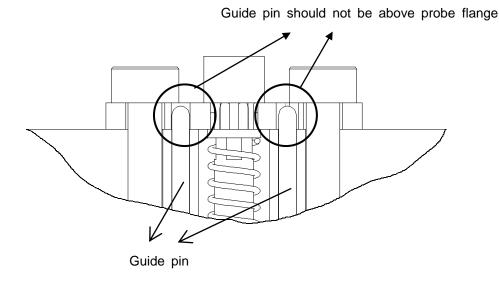


Figure 3. Positional relation between guide pin and probe flange



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- 3.2 The tolerance of position against SWH type receptacle
- 3.2.1 MM206621 has a centering function by its design, +/-0.4mm 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, MXFLM3SH3000/ MXFJM3SJ3000 (Figure 4/Figure 5).

Centering function +/-0.4mm may not be permitted against the hole center of SWH type receptacle, when MM206621 is affected by the needless force.

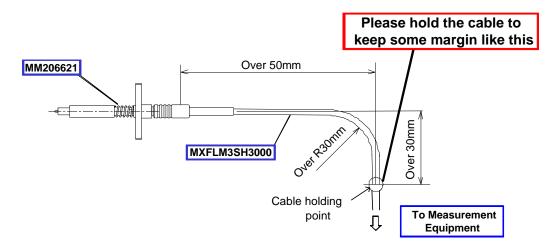


Figure 4. Instruction of MXFLM3SH3000

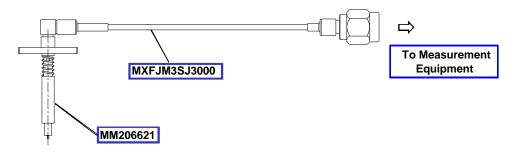


Figure 5. Instruction of MXFJM3SJ3000

Please use M19500 for un-mating MM206621 with MXFLM3SH3000/ MXFJM3SJ3000 (Figure 6).

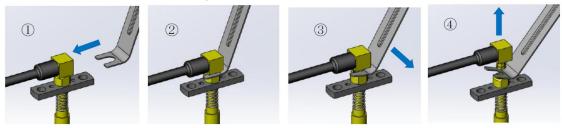


Figure 6. SMPM interface un-mating jig: M19500



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3.2.2 To get 10dB or higher isolation (up to 6GHz), the engagement strokes from the flange to the tip of probe is 18.5mm to 19.5mm (Figure 7).

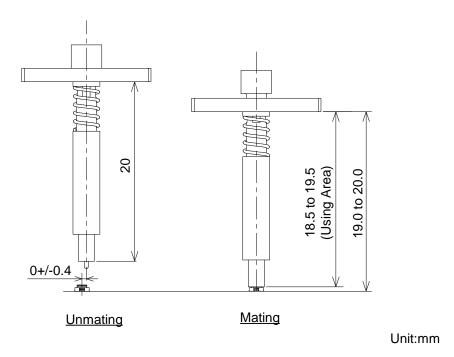


Figure 7. Acceptable Engagement range to SWH type receptacle

3.3 The slant angle tolerance of probe against SWH type Receptacle (Figure 8) To have a stable measurement, slant angle of MM206621 must be within +/-2degree.

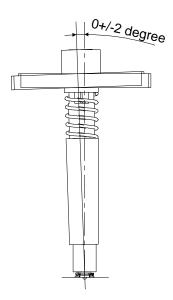


Figure 8. Probe Shape Operation Manual for Auto Measurement probe (MM206621)