

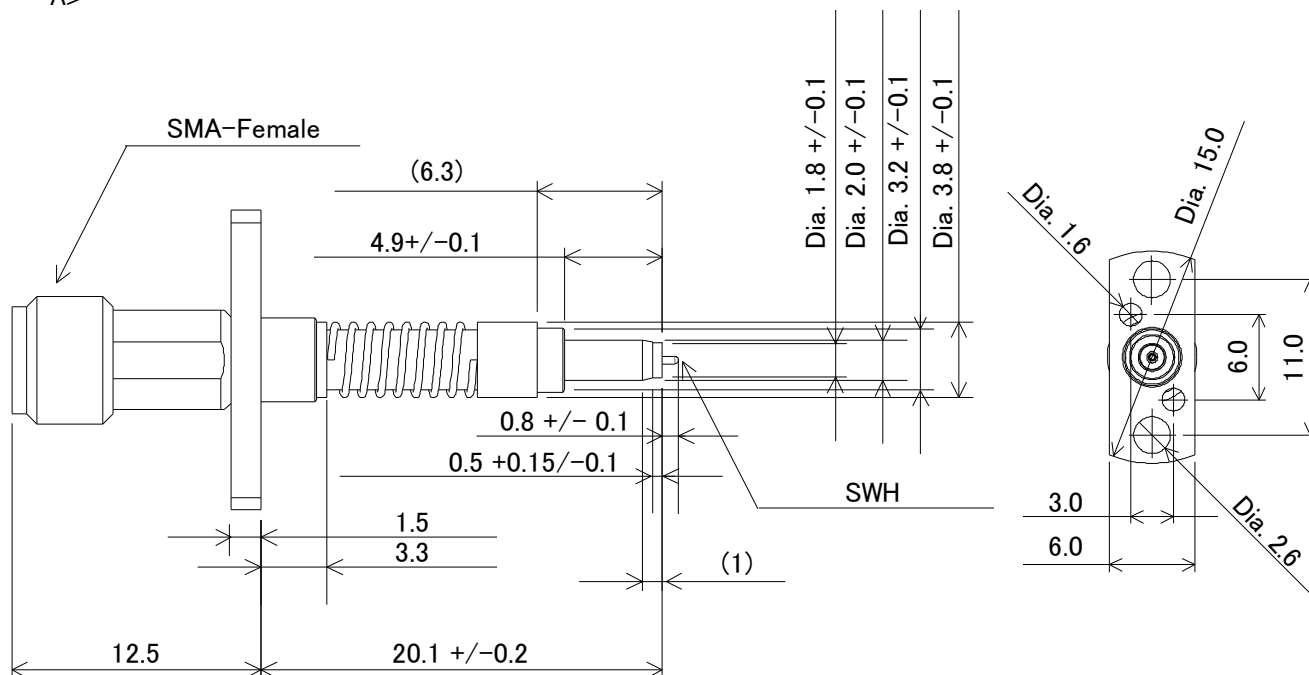
SPECIFICATION

1. MECHANICAL

Revised A: 10/May./'13 MA Revised B: 18/Aug./'15 IG

Automatic measurement probe for SWH

A>



Scale: Free
Tolerance Unless
Otherwise Specified: +/- 0.5
Unit: mm

Figure 1 Construction

2. RATING:

Item	Specification
Voltage Rating	30Vr.m.s. maximum
Nominal Frequency Range	DC to 6GHz
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.
Voltage Standing Wave Ratio (V.S.W.R.)	Meet the requirements of following spec. 1.3 (DC to 3GHz) 1.8 (3GHz to 6GHz)
Insertion loss	0.4dB max (DC to 3GHz) 0.7dB max (3GHz to 6GHz)
Durability	750K

Preliminary Specification of COAXIAL CONNECTOR
Preliminary SPEC No. : NMM04-PU0024B
Part Number : MM126515

Written by H. Minami
Checked by T. Kuriyama
Date 13/May./2013

3. USE THIS PRODUCTS

3.1 The directions for attachment to measurement machine.

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

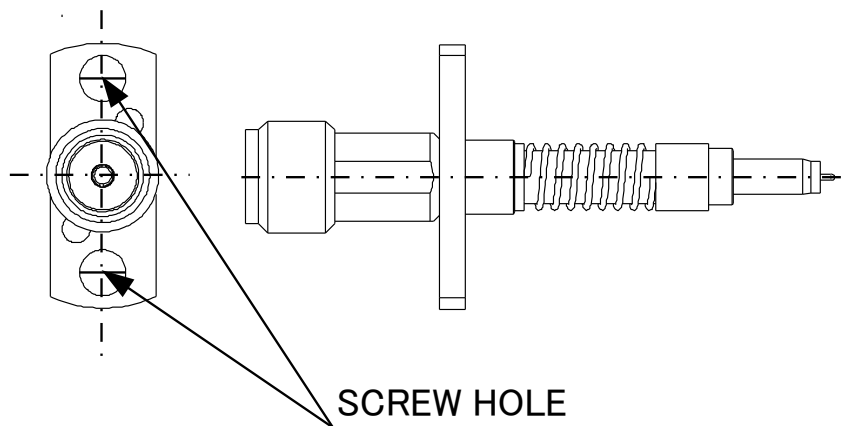


Figure.2 Screw hole position

B>

3.2 The tolerance of position against SWH.

- 3.2.1 Probe has the centering function by itself, **+0.4mm** is permitted against the hole center of SWH. Please avoid needless force to SMA connector to come back the original position when disengagement of probe. To avoid the needless force, we recommend using extension cable assembly, MXHR87HR3000. The instruction of the MXHR87HR3000 is as Figure 3.
There is the possibility, following function $\pm 0.4\text{mm}$ is not permitted against the hole center of SWH, when probe effects the needless force.

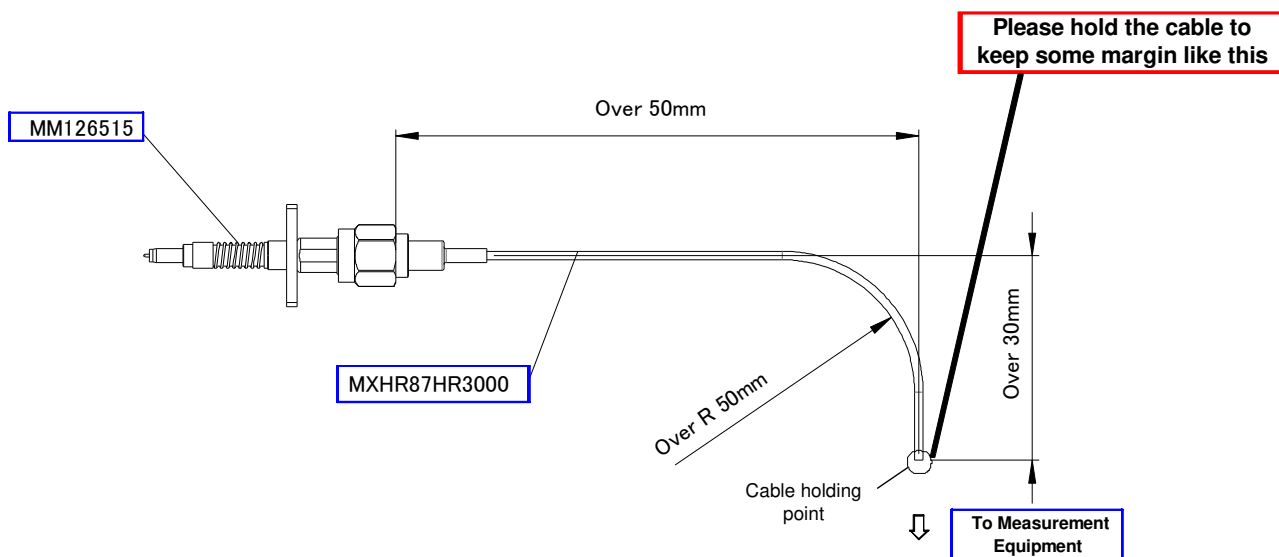


Figure.3 Instruction of MXHR87HR3000

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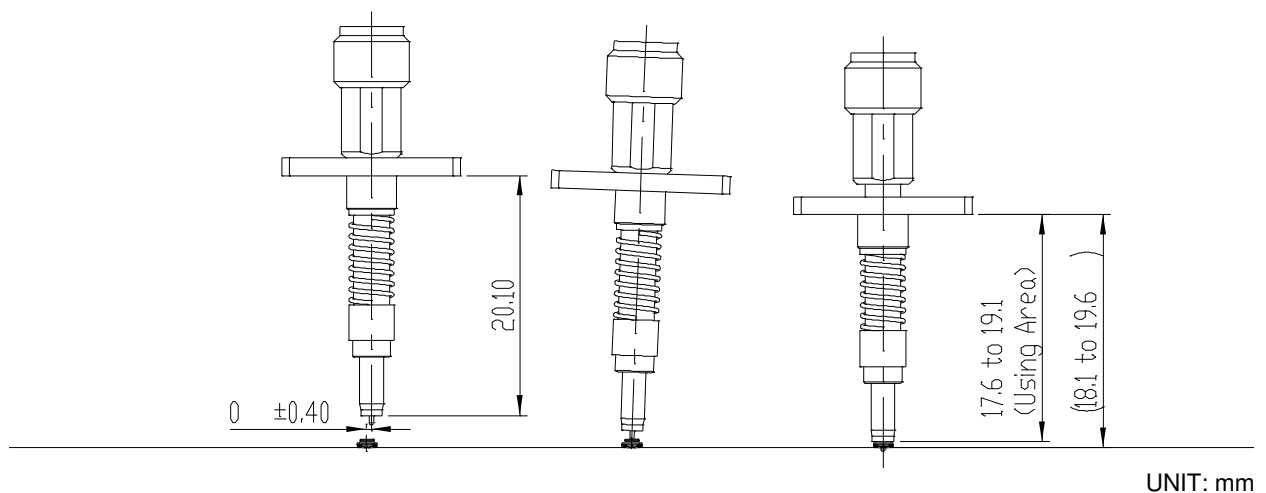
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3.2.2 To get the 15dB or higher isolation (up to 6GHz), The engagement strokes from the flange to the tip of probe is **17.6mm to 19.1mm**. (Figure 4)



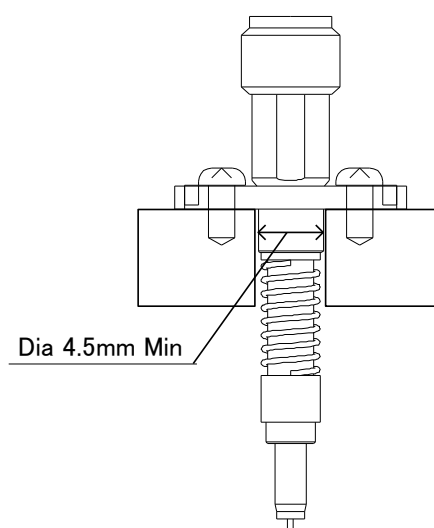
B>

Figure.4 Acceptable engagement range to SWH

B>

3.3 The machine's hole diameter for attachment probe.

To accept +/-0.4mm against the hole center of SWH. Please design the machine by Figure 5.



UNIT: mm

Figure.5 Machine's hole diameter for attachment probe

Preliminary Specification of COAXIAL CONNECTORPreliminary SPEC No. : NMM04-PU0024BPart Number : MM126515Written by H. MinamiChecked by T. KuriyamaDate 13/May./2013

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3.4 The slant angle tolerance of probe against SWH. (Figure 6)

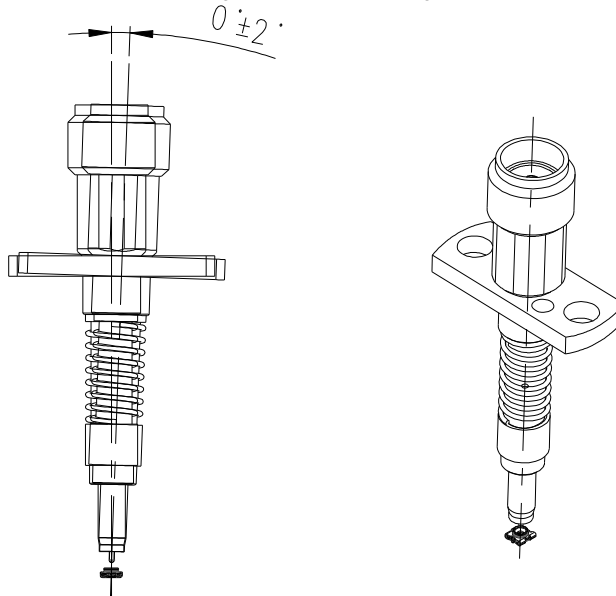
To have the stable measurement, MM126515 slant angle must be $\pm 2^\circ$.

Figure.6 Probe Shape Operation Manual for Auto Measurement probe (MM126515)

4. CAUTION

Limitation of Applications

Please do not use our products for the applications listed below which require specially high reliability for the prevention of defects which may directly or indirectly cause damage to the third party's life, body or property.

- (1) Aircraft equipment
- (2) Aerospace equipment
- (3) Undersea equipment
- (4) Power plant control equipment
- (5) Medical equipment
- (6) Transportation equipment (vehicles, trains, ships, etc.)
- (7) Traffic signal equipment
- (8) Disaster prevention / crime prevention equipment
- (9) Data-processing equipment
- (10) Application of similar complexity and/or reliability requirements to the applications listed in the above.