Preliminary Specification of COAXIAL CONNECTOR — Written by H.Matsukawa
Preliminary SPEC No. : NMM04-PU0027D — Checked by Y.Kurasawa
Part Number : MM126517 — Date 14 /June/2013

SPECIFICATION

Revised A: 3/Sep./'13 MA B: 12/Dec./'14 OM C:19/Jul/'21MS
D:27/Nov./'25 SN

1. MECHANICAL

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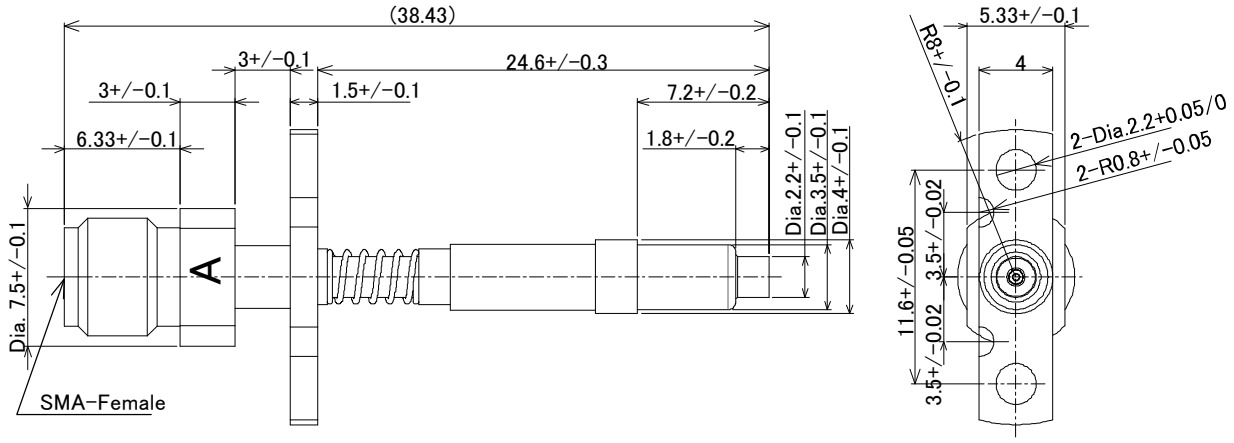
Automatic measurement probe for SWH-2WAY to measure antenna side performance.
MM126518 and MM126527 are used as calibration adapters.
SOP of this probe setting in the fixture is VG25-SOP-MM032.



SCALE:FREE
Tolerances Unless
Otherwise Specified: +/-0.2
UNIT: mm

Figure1.Construction

2. RATING:

Item	Specification
Voltage Rating	30Vr.m.s. maximum
Nominal Frequency Range	DC to 6GHz
Nominal Impedance	50Ω
C> Temperature Rating	25℃ +/- 15°C
Insulation Resistance	500 MΩ minimum
Withstanding Voltage	No evidence of break down in AC200Vr.m.s, 1minute
Initial Contact Resistance (without conductor resistance)	70mΩ max.
A> Voltage Standing Wave Ratio (V.S.W.R.)	2.2 max. (DC to 3GHz) 2.6 max. (3GHz to 6GHz)
A> Insertion loss	0.8 dB max. (DC to 3GHz) 1.8dB max. (3GHz to 6GHz)
B> Durability	1M cycles

3. USE THIS PRODUCTS

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3.1 Attach to fixture

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

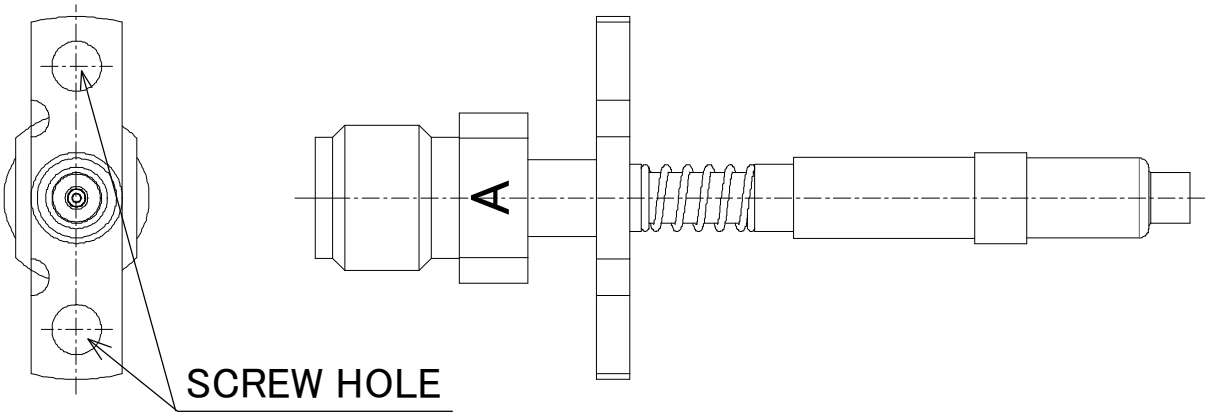

Figure.2 Screw hole position

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3.2 The tolerance of position against SWH-2WAY type receptacle

3.2.1 MM126517 has a centering function by its design, 0.5(Typical)mm is permitted against the hole center of SWH-2WAY type receptacle.
Please avoid needless force to SMA interface when MM126517 is disengaged from SWH-2WAY type receptacle and comes back to its original position.
To avoid the needless force, please use extension cable assembly MXHQ87HR3000(Figure 3)
Centering function +/-0.5(Typical)mm may not be permitted against the hole center of SWH-2WAY type, when MM126517 is affected by the needless force.

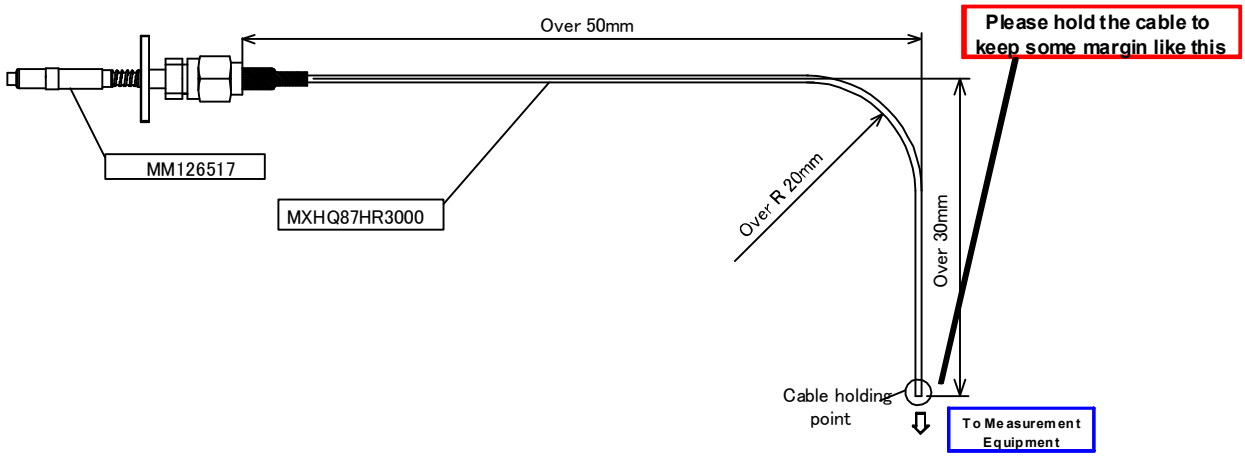
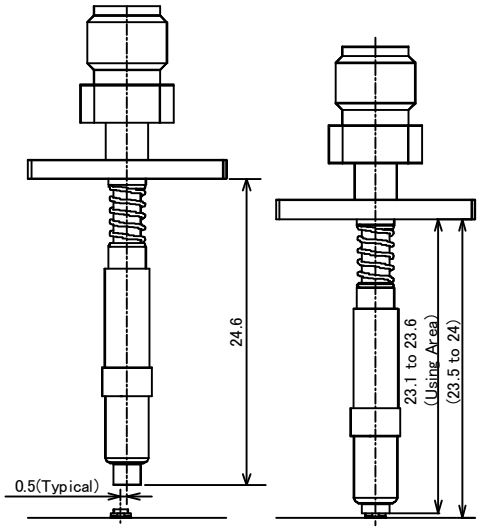


Figure.3 Instruction of MXHQ87HR3000

3.2.2 To get the 15dB or higher isolation (up to 6GHz), the engagement strokes from the bottom surface of flange to the tip of probe is 23.1mm to 23.6mm. (Figure 4)



UNIT: mm

Figure.4 Acceptable engagement range to SWH-2WAY

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3.3 The slant angle tolerance of probe against SWH-2WAY type receptacle (Figure 5)
To have the stable measurement, slant angle of MM126517 must be within 0+/-2degree.

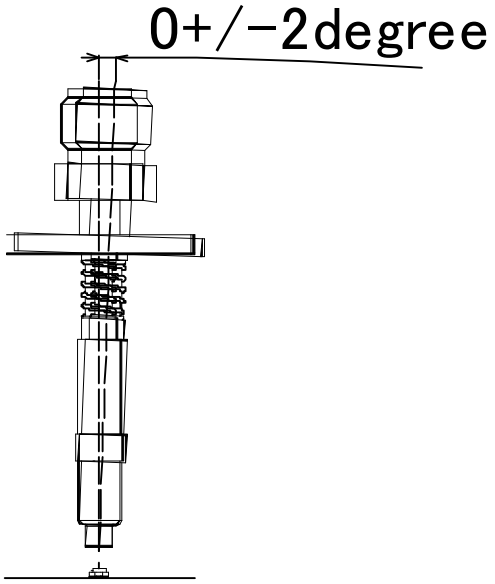

Figure.5 Probe Shape Operation Manual for Auto Measurement probe (MM126517)

4. Keep out area of test probe

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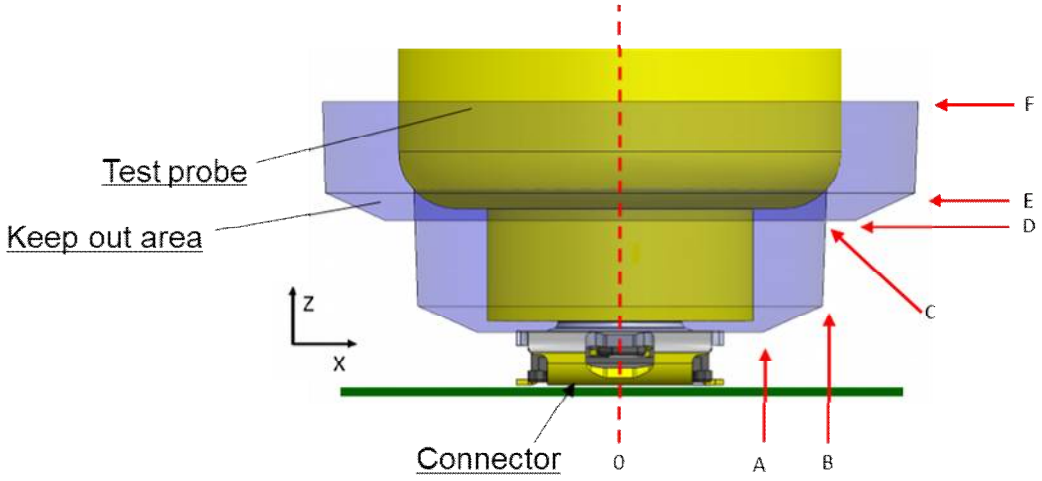
Following is keep out area of test probe tip. Please do not put any parts or devices in that area in order to ensure proper alignment.



Keep out coordinates from connector center

	X	z
A	1.16	0.33
B	1.67	0.62
C	1.67	0.68
D	1.82	0.68
E	2.33	0.97
F	2.37	2.00

Unit: mm

Figure.6. Keep out area of test probe