

Preliminary Specification of COAXIAL CONNECTOR

Preliminary SPEC No. : NMM04-PU0024B
Part Number : MM126515

**SPECIFICATION** 

1. MECHANICAL

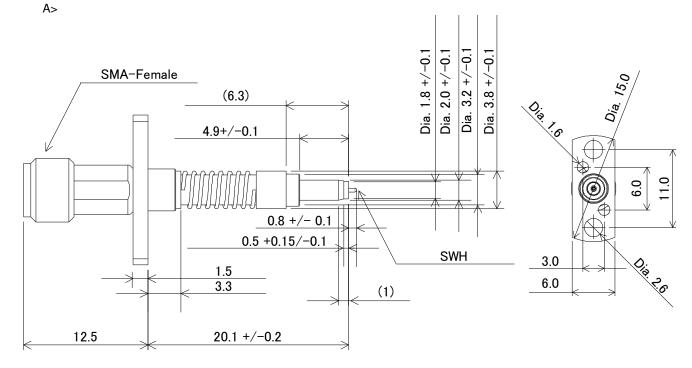
Automatic measurement probe for SWH

Checked by T. Kuriyama
Date 13/May./2013

Written by

H. Minami

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



Scale: Free Tolerance Unless

Otherwise Specified: +/- 0.5

Unit: mm

Figure 1 Construction

2	RAT	INIG:

. 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 M $Ω$ minimum	
Withstanding Voltage	No evidence of breakdown	
Initial Contact Resistance	Center contact 70.0mΩmax.	
(without conductor resistance)	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	



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- 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)

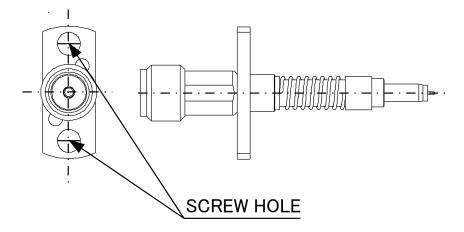


Figure.2 Screw hole position

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- 3.2 The tolerance of position against SWH.
- 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 +/-0.4mm is not permitted against the hole center of SWH, when probe effects the needless force.

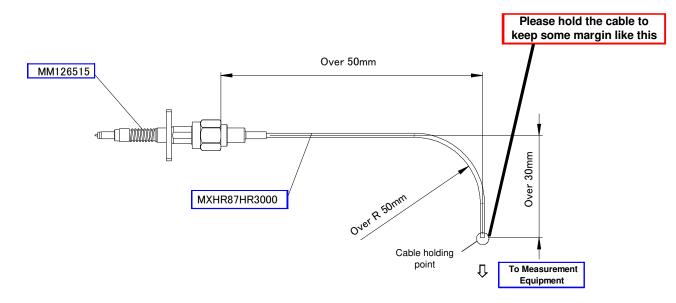
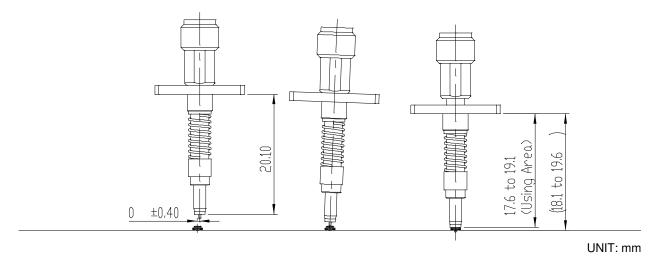


Figure.3 Instruction of MXHR87HR3000



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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)

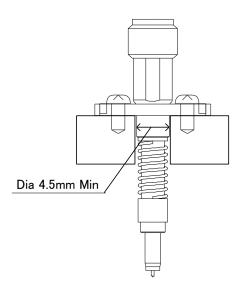


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Figure.4 Acceptable engagement range to SWH

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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



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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 +/-2degree.

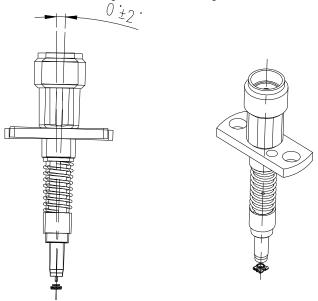


Figure.6 Probe Shape Operation Manual for Auto Measurement probe (MM126515)

## 4. ACAUTION

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.