



Preliminary Specification of COAXIAL CONNECTOR

Preliminary SPEC No. : NMM04-PV0062D

Part Number : MM126320

Written by Y. Mori

Checked by T. Kuriyama

Date 30/Jul./2012

SPECIFICATION

Revised A:24/Apr./2012 MR, B:30/Jul./2012 MR, C:4/Sep./2014 YM, D:21/Oct./2015 IG

1. MECHANICAL

C>

Automatic measurement probe for SWD, SWF and SWG.

MM126317 and MM126312 are used as calibration adapter.

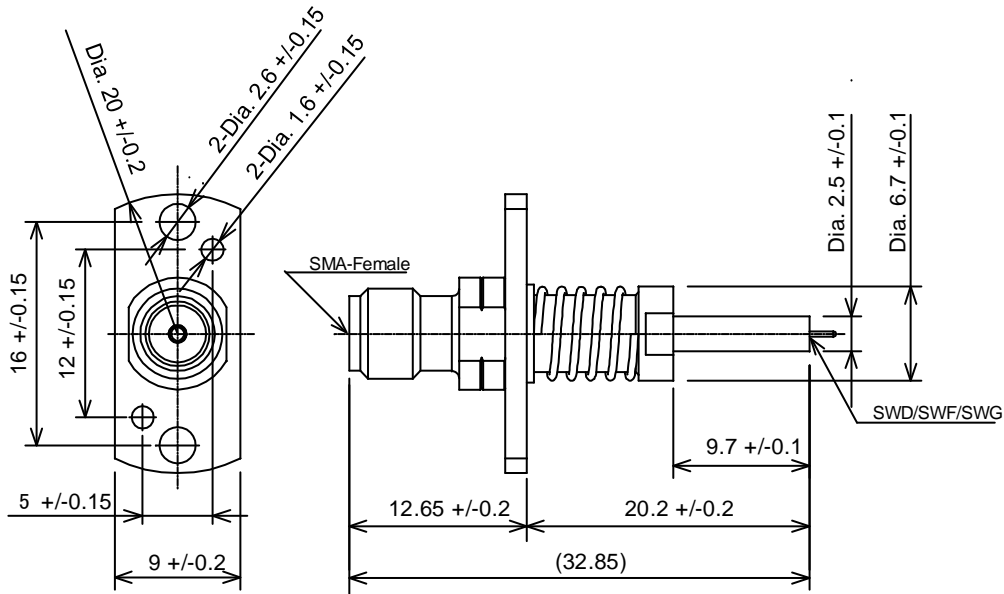


Figure.1 Construction

SCALE:FREE  
TOLERANCES UNLESS  
OTHERWISE SPECIFIED: +/-0.5  
UNIT:mm

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 in AC 300V r.m.s, 1 minute
A> Initial Contact Resistance (without conductor resistance)	Center contact 25.0mΩmax. Center contact 70.0mΩmax. (SWG only) Outer contact 20.0mΩmax.
Voltage Standing Wave Ratio (V.S.W.R.)	1.6max (DC~3GHz) 1.7max (3~6GHz) 2.1max (6~11GHz) (SWG only)
Insertion Loss	0.5dB max (DC~3GHz) 0.85dB max (3~6GHz) 1.4dB max (6~11GHz) (SWG only)
B> Durability	1M cycles

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)

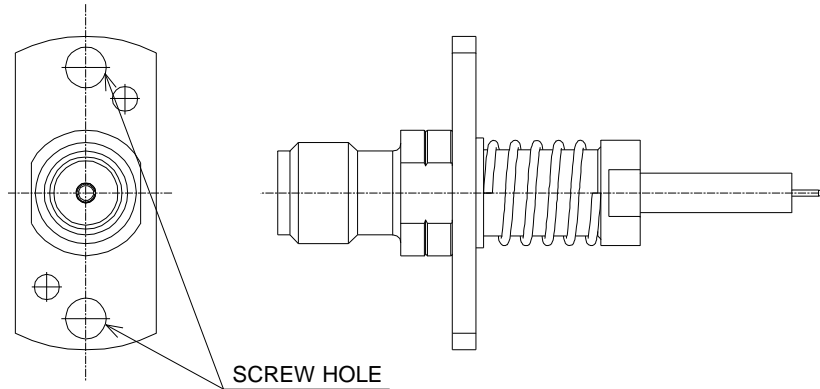


Figure.2 Screw hole position

3.2 The tolerance of position against SWD, SWF and SWG.

3.2.1 Probe has the centering function by itself, +/-0.5mm is permitted against the hole center of SWD, SWF and SWG.

Please keep avoid needless force to SMA connector for come back the center position, when disengagement of probe. (Figure 3)

There is the possibility, following function +/-0.5mm is not permitted against the hole center of SWD, SWF and SWG, when probe effect the needless force.

3.2.2 To get the 15dB or higher isolation (up to 6GHz), the proper engagement strokes from the top surface of Fixture STAGE to the top surface of PWB is 18.2 to 20.0mm (SWD/SWF/SWG)

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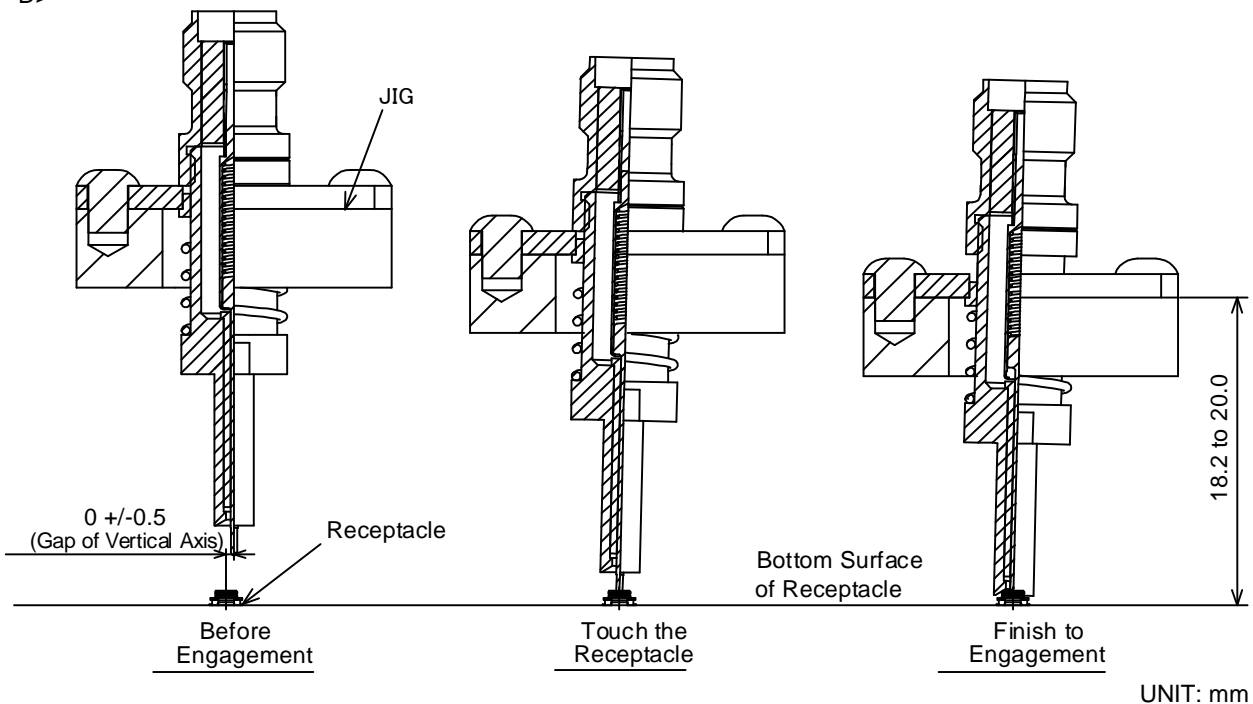
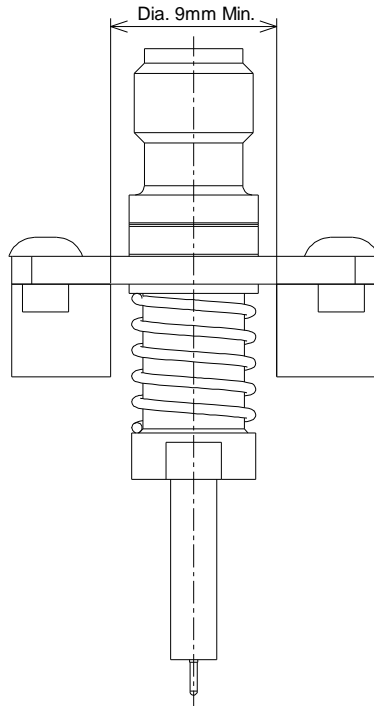


Figure.3 Acceptable Engagement range

3.3 The machine's hole diameter for attachment probe.  
To accept  $\pm 0.5\text{mm}$  against the hole center of SWD, SWF and SWG. Please design the machine by Figure 4.



UNIT: mm

Figure.4 Machine's hole diameter for attachment probe

3.4 The slant angle tolerance of probe against SWD, SWF and SWG. (Figure 5)  
To have the stable measurement, MM126320 slant angle must be  $\pm 2$ degree.

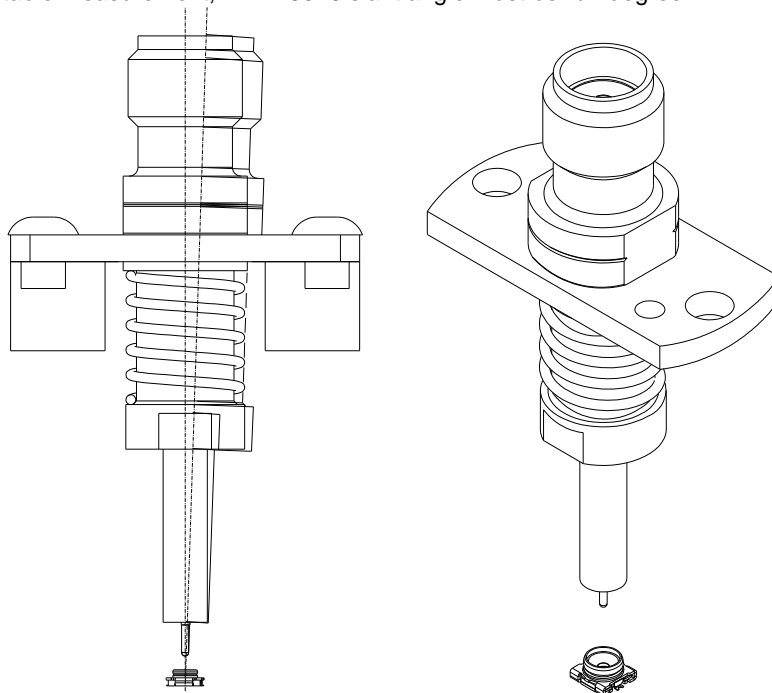


Figure.5 Probe Shape Operation Manual for Auto Measurement probe (MM126320)



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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.