

45 degree connectors

2.92 mm, 2.4 mm, 1.85 mm

WithWave’s 45 degree connectors are specifically designed for easy installation in tight spaces, providing a reliable 45-degree connection with a solderless contact to the PCB surface on test and measurement boards. These connectors deliver outstanding electrical transition performance up to 67 GHz while also significantly reducing installation time by eliminating the need for soldering.

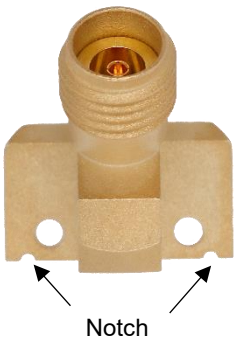


Features

- DC to 40, 50, 67 GHz
- 2.92, 2.4 & 1.85 mm interface
- Easy & Solderless Installation on designed substrate

Application

- Useful testing with 45 degree angle
- Easy & Solderless installation on PCB
- Universal, Robust and Reusable



Specification

Specification		AS03FS001	AS02FS001	AS01FS001
Electrical	Impedance (Ohm)	50		
	Operation Freq.(GHz)	40	50	67
	VSWR(Max.)	1.3 : 1	1.45 : 1	1.45 : 1 (DC to 50GHz) 2.00 : 1 (50 to 67GHz)
Material	Connector type	2.92 mm (F)	2.4 mm (F)	1.85 mm (F)
	Body	Brass with Gold Plated		
	Center Contact	BeCu with Gold Plated		
	Dielectric	Ultem 1000		

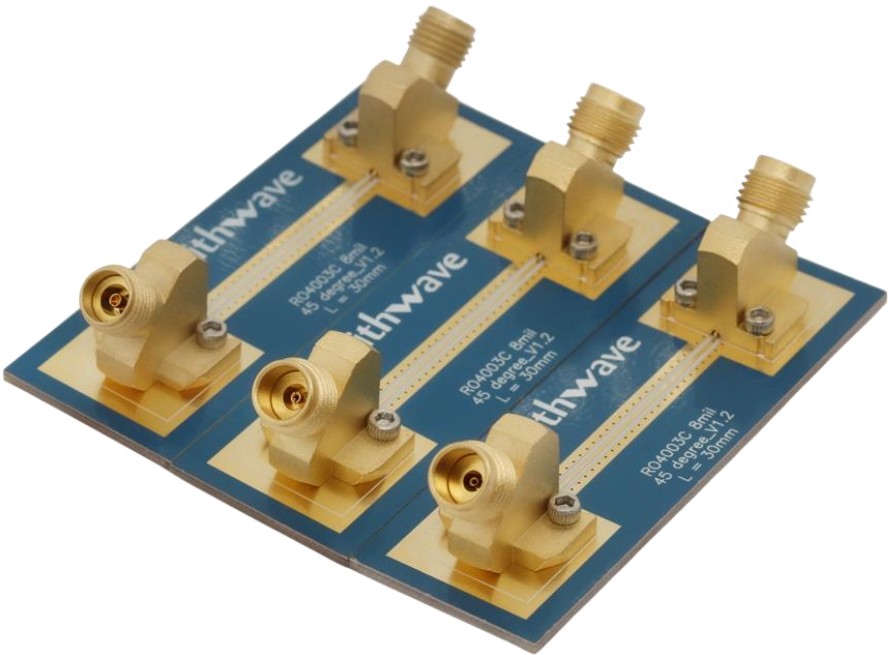
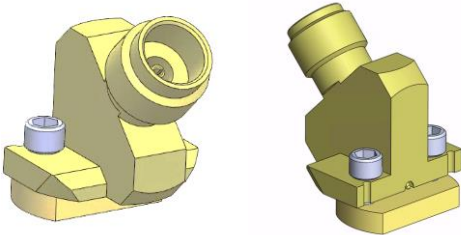
* RoHS Compliant

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Ordering Information

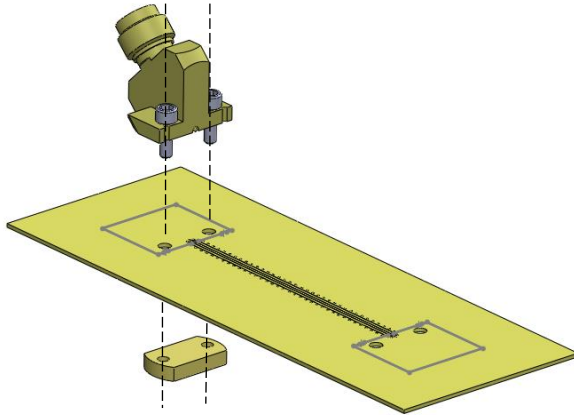
Application	Connector	Type	Part No.
45 Degree type	2.92 mm	Female	AS03FS001
	2.4 mm	Female	AS02FS001
	1.85 mm	Female	AS01FS001



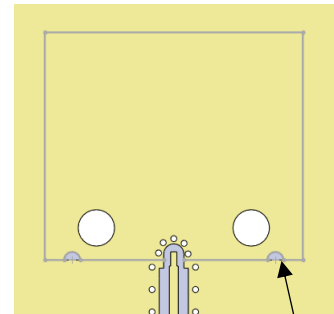
■ Installation Procedure

STEP 1 :

Position the connector, block, and screw on the installation area of the substrate.



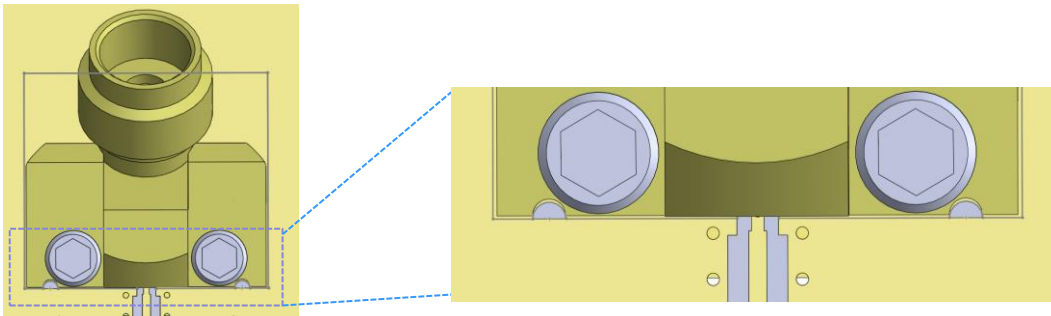
Installation area on substrate



Notch

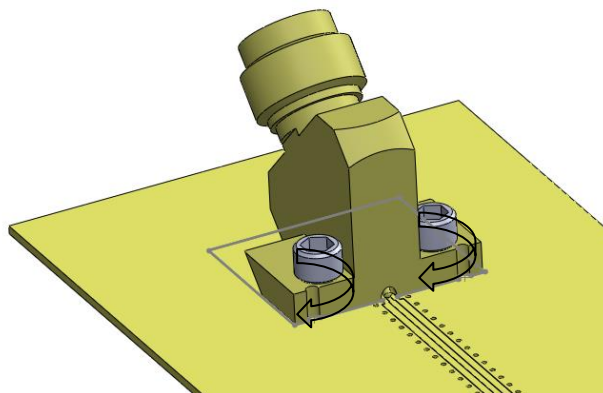
STEP 2:

Ensure the notch on the connector aligns with the notch on the substrate.



STEP 3:

Ensure the connector and block are tight against the substrate.

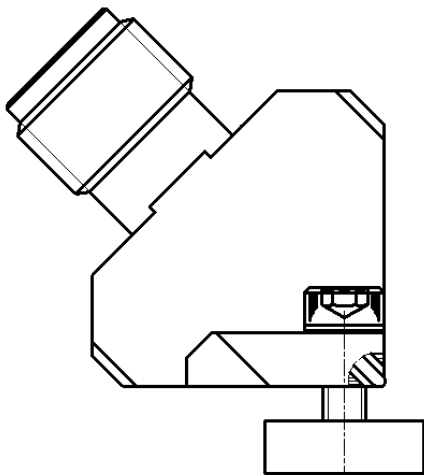


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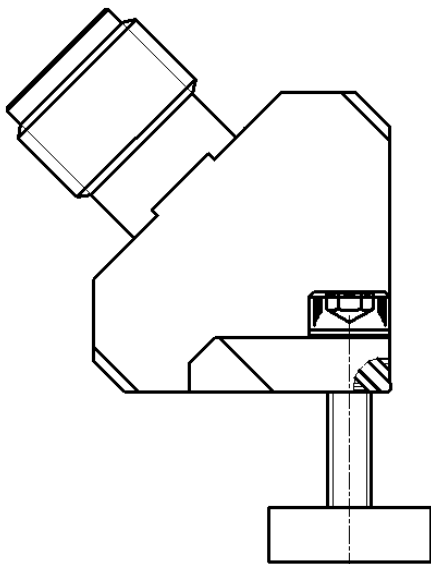
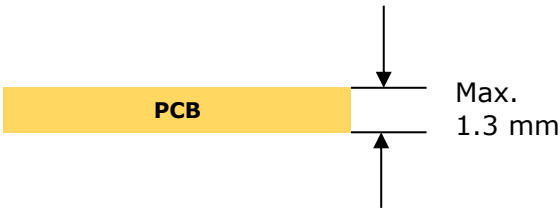
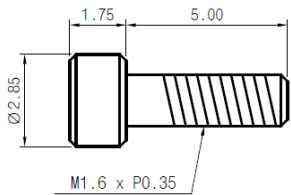
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■ Maximum PCB Thickness

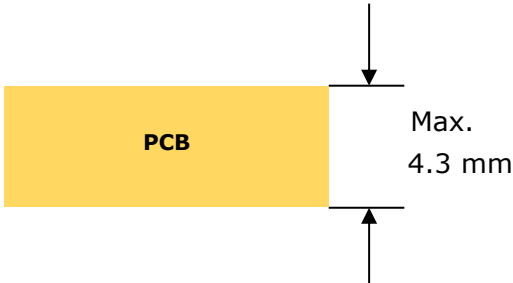
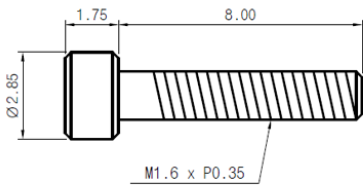
Unit : mm



Bolt Size: M1.6 x P0.35 x L5.0



Bolt Size: M1.6 x P0.35 x L8.0

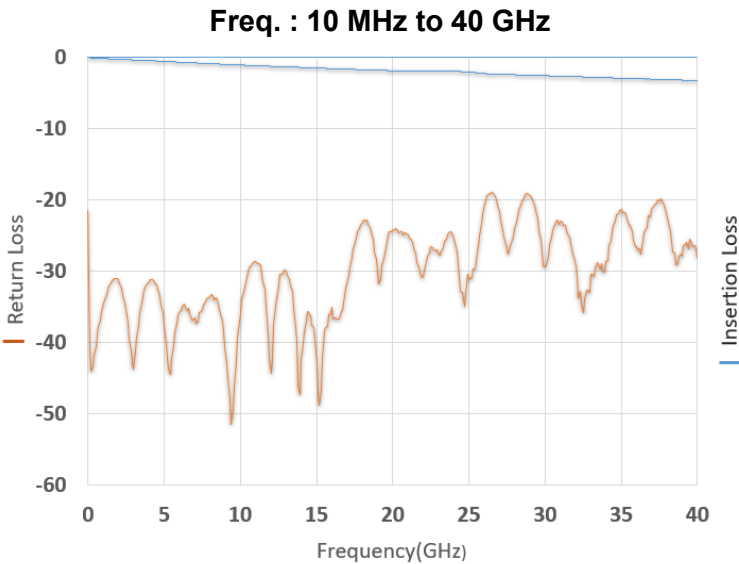
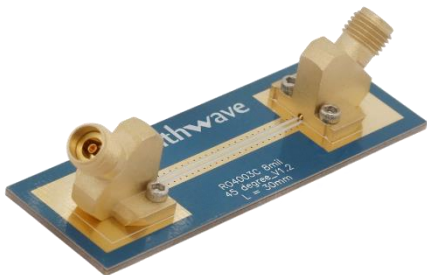


■ Test Result

2.92mm Type

Microstrip Structure

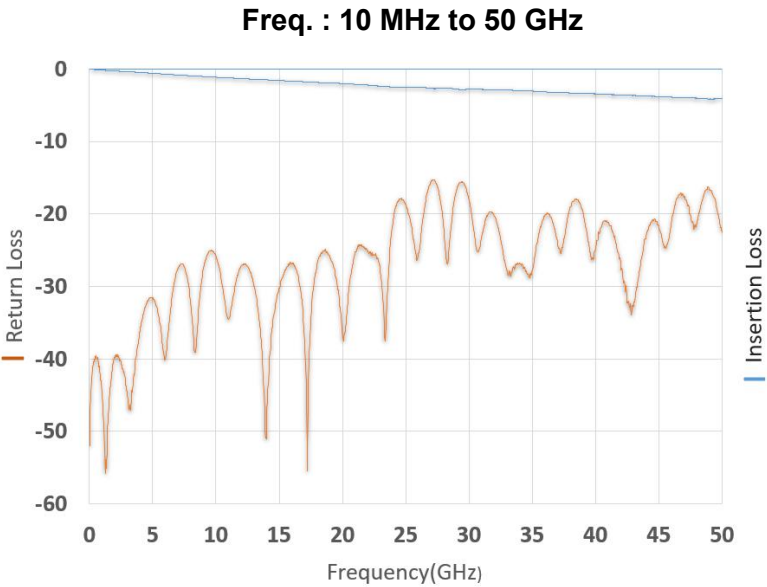
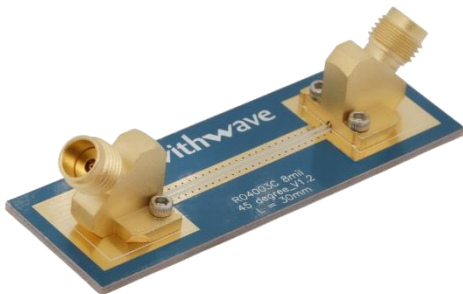
Substrate : RO4003C (8 mil)
Part No. : AS03FS001



2.4mm Type

Microstrip Structure

Substrate : RO4003C (8 mil)
Part No. : AS02FS001



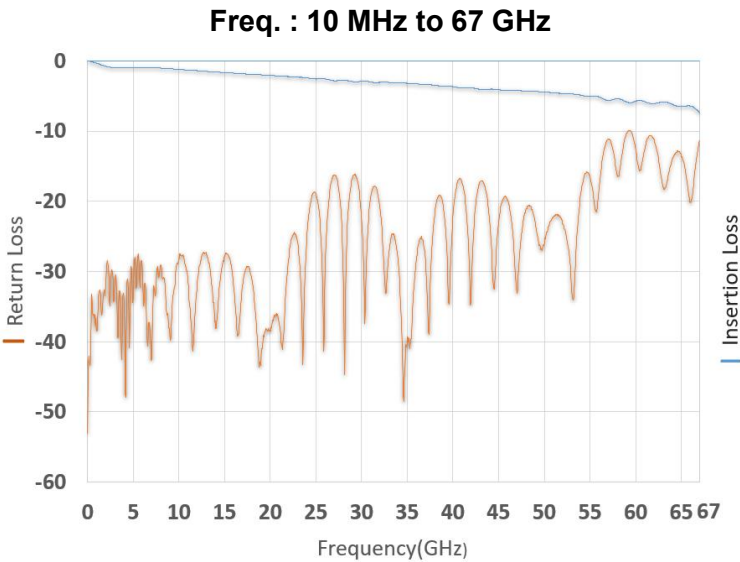
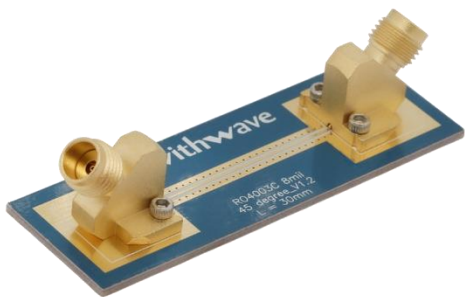
■ Test Result

1.85mm Type

Microstrip Structure

Substrate : RO4003C (8 mil)

Part No. : AS01FS001

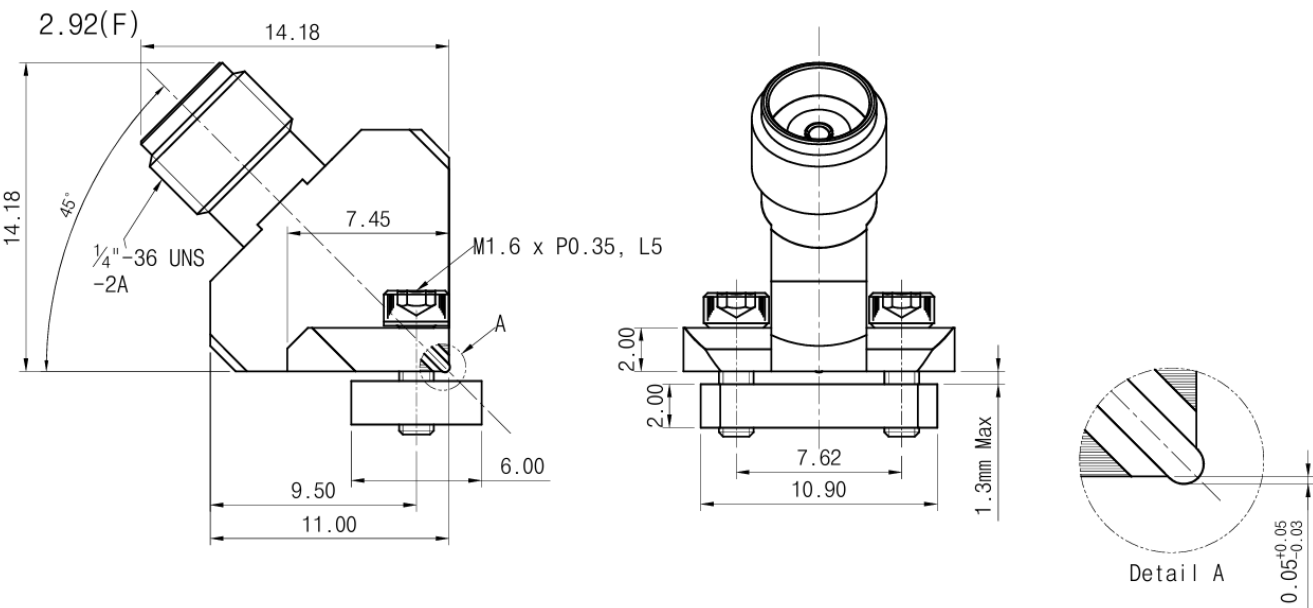


2.92 mm Type (Female type)

Drawing

Part No. : AS03FS001

Unit : mm

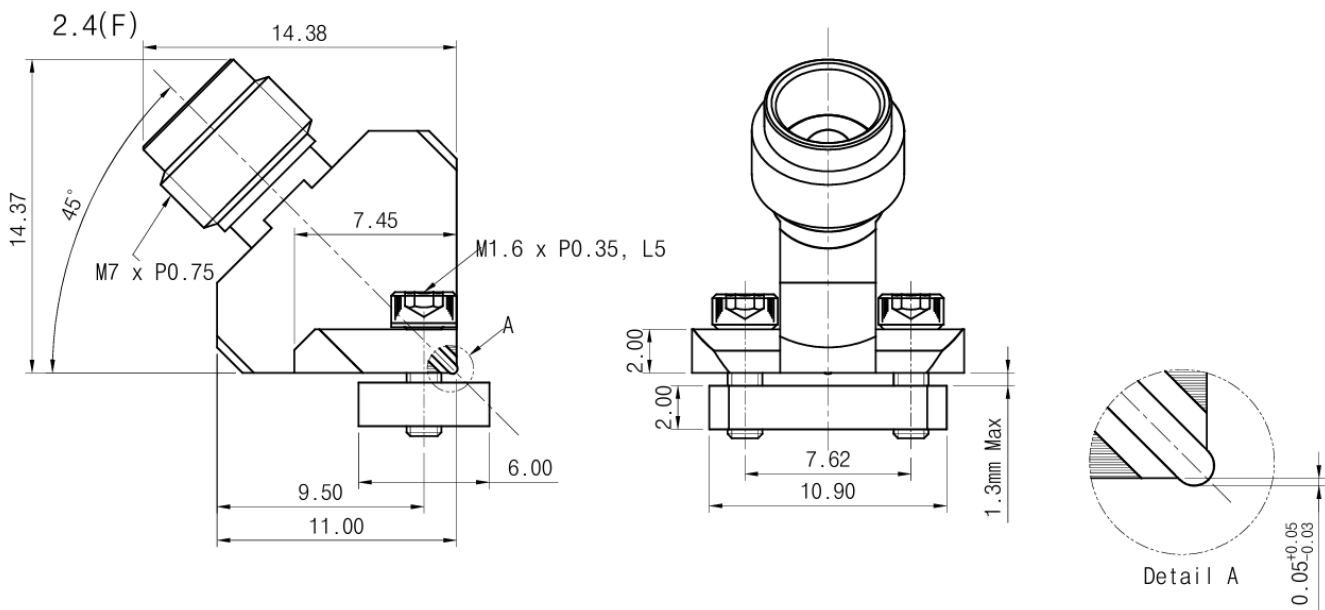


2.4 mm Type (Female type)

Drawing

Part No. : AS02FS001

Unit : mm

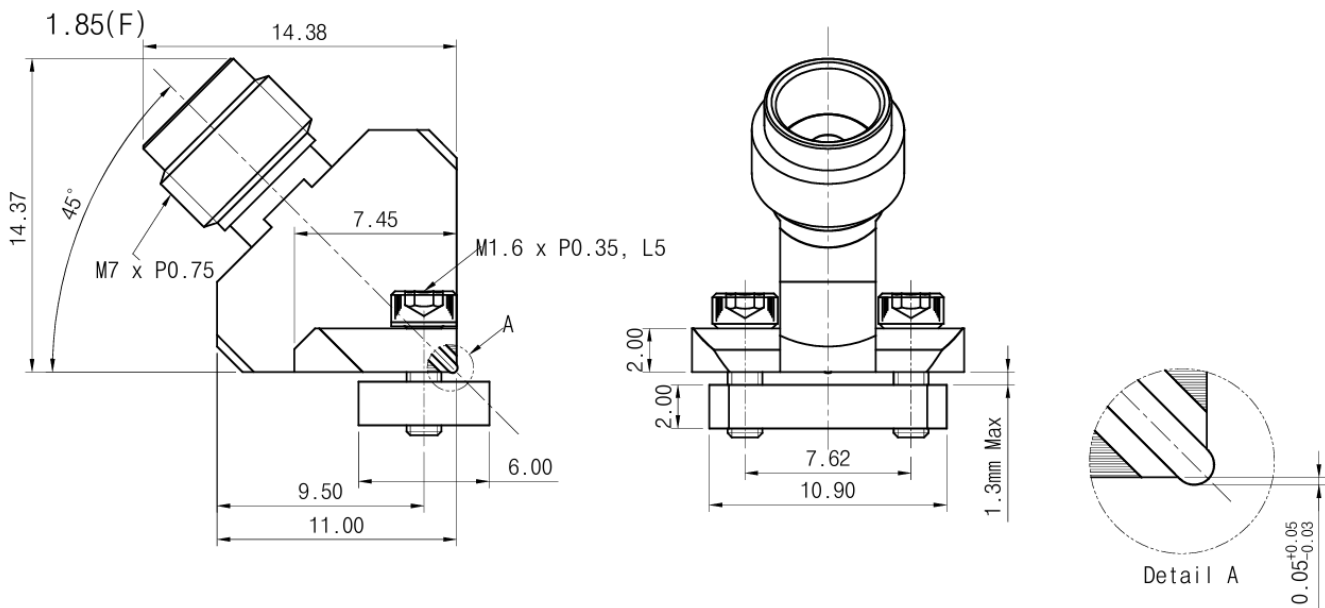


1.85 mm Type (Female type)

Drawing

Part No. : AS01FS001

Unit : mm



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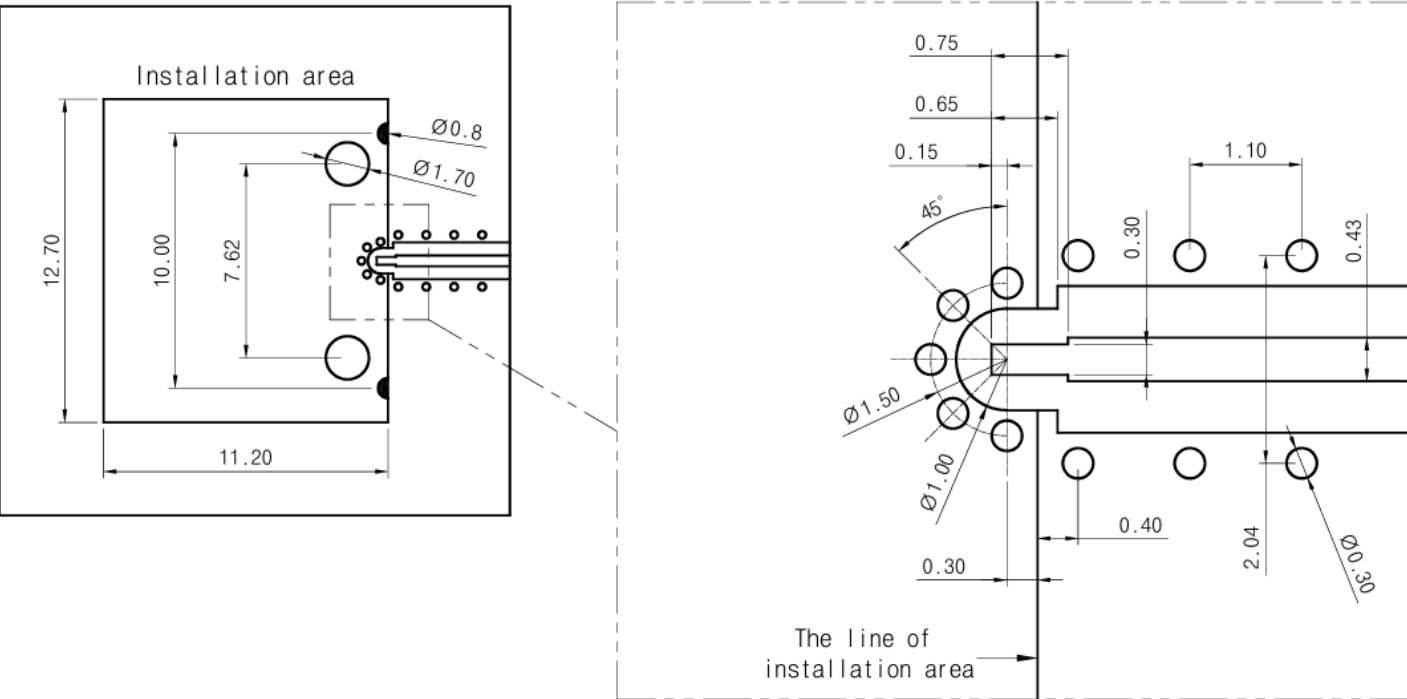


withwave
Next Generation Connectivity

■ PCB Layout

Microstrip (R04003C 8mil)

Unit : mm



■ Revision History

Revision	Date	Changes
Ver 1.0	2025-09-01	Released 45 degree 2.92 mm, 2.4 mm, 1.85 mm connectors