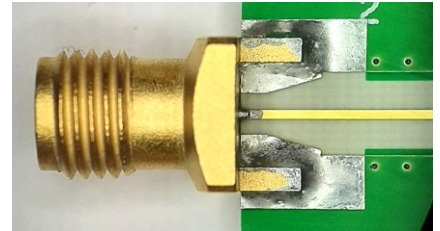
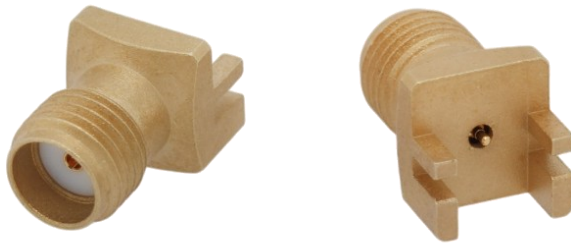


**Withwave's Solder Flow Board Edge SMA Connector** is a newly designed connector that ensures thermal and electrical stability during **SMT (Surface Mount Technology) processing**. It features an internal structure using LCP (Liquid Crystal Polymer) material, allowing it to withstand temperatures **exceeding 200 °C** while maintaining reliable performance when mounted onto PCB substrates.



### ■ Features

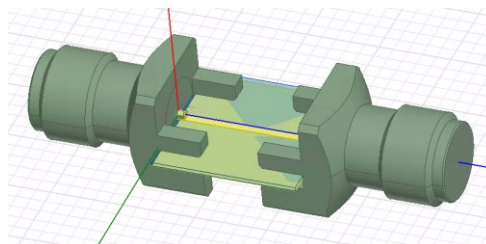
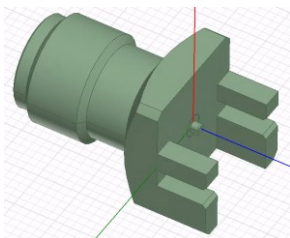
- DC to 26.5 GHz
- Reliable soldering on SMT process
- Various Board Clearance : 0.6, 0.8, 1.0, 1.1, 1.2, 1.5, 1.6, 1.7, 2.1, 2.3 mm

### ■ Application

- RFIC Chip set evaluation board
- High data rate ASIC and SoC evaluation module test
- Substrate Characterization

### ■ Design Assistance

- 3D Model for Mechanical Layout (STEP file)
- **ANSYS HFSS models** (version 17.0 or newer) for 3D EM(Electromagnetic) Simulation

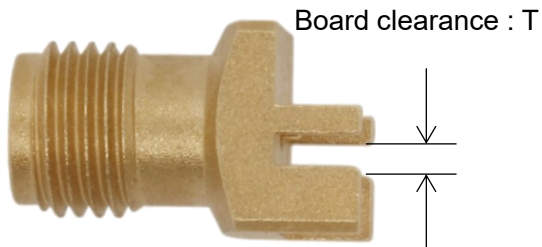


### ■ Specification

Scope	Items	Specification
Electrical	Freq. range	DC to 26.5 GHz
	Impedance	50 Ohm
	VSWR(Max)	1.20 : 1 (18 GHz) 1.30 : 1 (26.5 GHz)
Material	Connector type	SMA
	Body	Brass (gold plated)
	Contact	BeCu (gold plated)
	Insulator	PTFE, LCP*
Environmental	Operating Temperature	-40~+125°C
RoHS Compliant		

\* LCP, Melting temperature : 350 °C  
PTFE, Melting temperature : 327 °C

### ■ Ordering Information



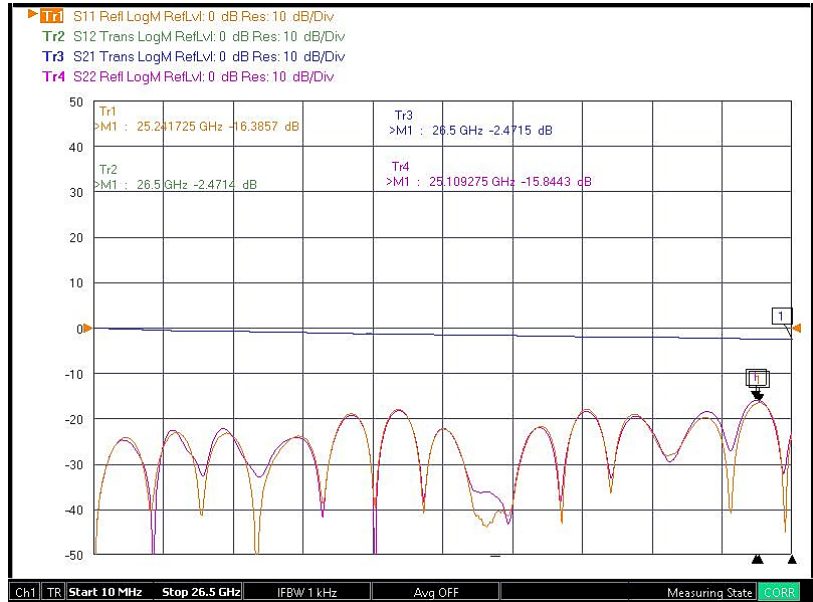
Board Clearance (T : mm)	Part No.
0.6	SM06FS030
0.8	SM06FS031
1.0	SM06FS032
1.1	SM06FS033
1.2	SM06FS034
1.5	SM06FS035
1.6	SM06FS036
1.7	SM06FS037
2.1	SM06FS038
2.3	SM06FS039

### Measurement data

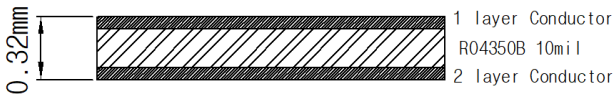
- Frequency : 10 MHz to 26.5 GHz
- Connector : Board Edge SMA (#SM06FS033)
- Substrate : RO4350B (10 mil)
- Trace length : 40 mm (microstrip)



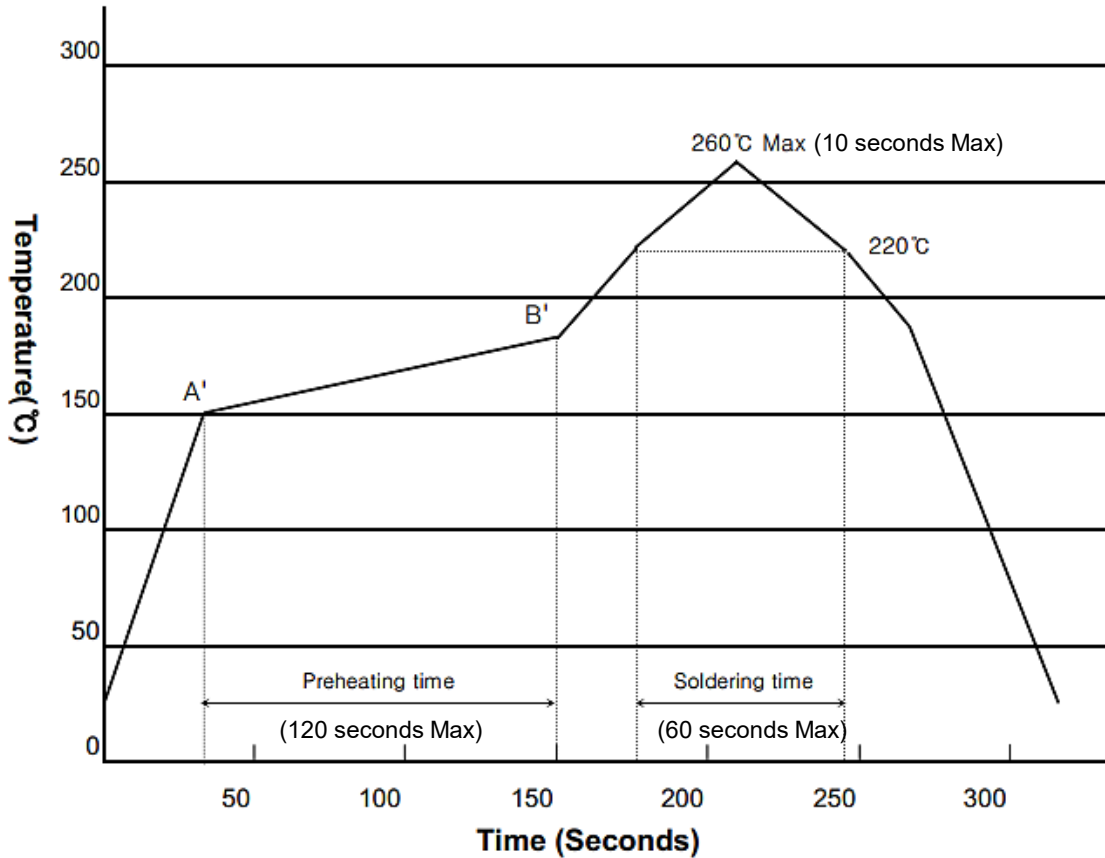
**RO4350B 10mil**



RO4350B 10mil Layers

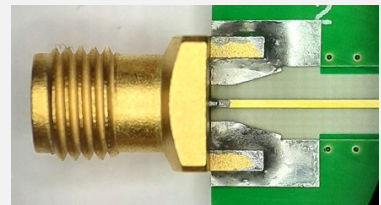


### ■ Recommended Reflow Profile



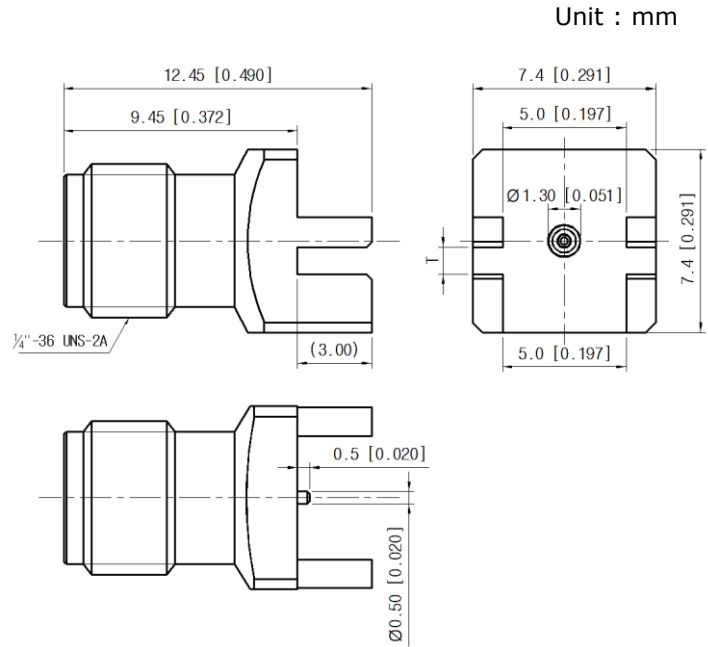
### ■ Test Condition

- Solder: Cream type Sn / 3 Ag / 0.5 Cu, Flux content 11%wt (M705 Lead free or Halogen free)
- Metal mask thickness: 0.1 mm
- Preheating time: 150°C~190°C, Max 120seconds
- Soldering time: 260°C Max, 220°C Min, Max 60 seconds

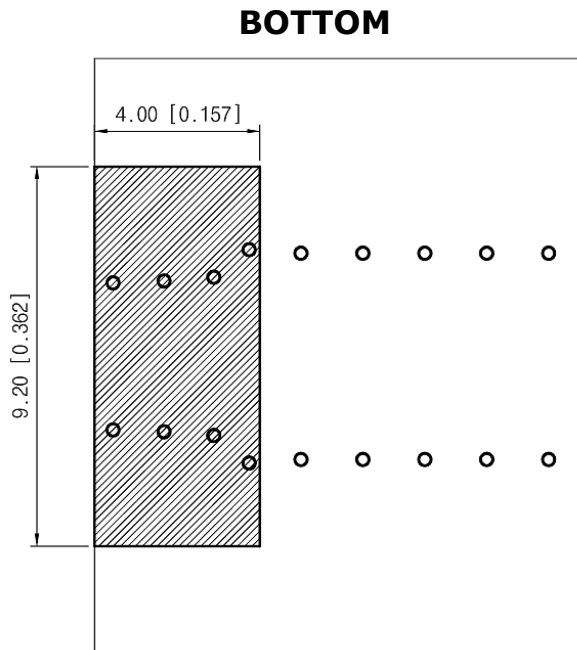
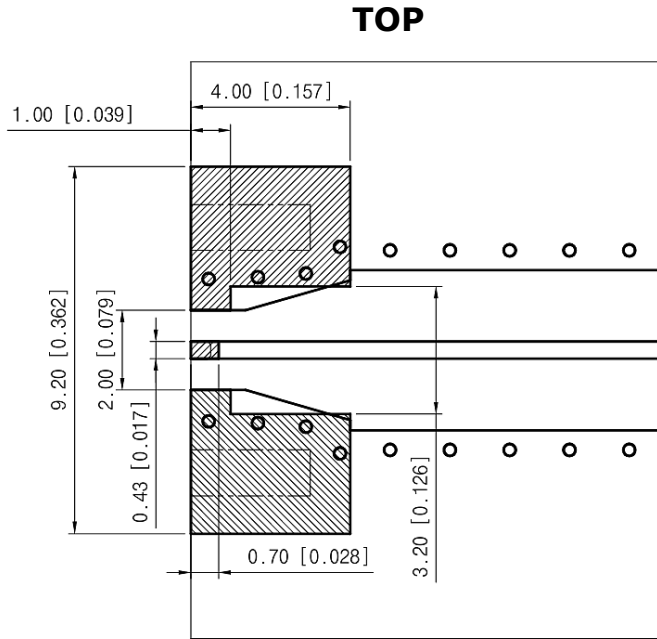


### ■ Drawing

Board Clearance (T : mm)	Part No.
0.6	SM06FS030
0.8	SM06FS031
1.0	SM06FS032
1.1	SM06FS033
1.2	SM06FS034
1.5	SM06FS035
1.6	SM06FS036
1.7	SM06FS037
2.1	SM06FS038
2.3	SM06FS039

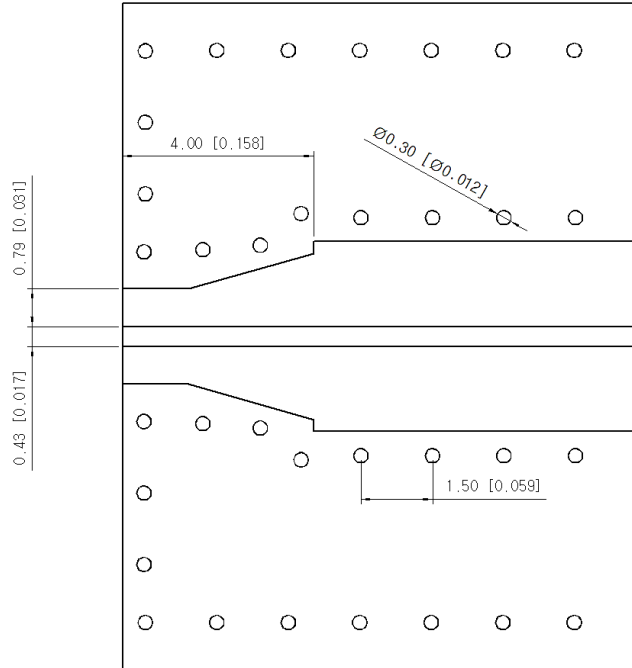


■ Recommended Solder mask information (RO4003C 8mil Microstrip type)

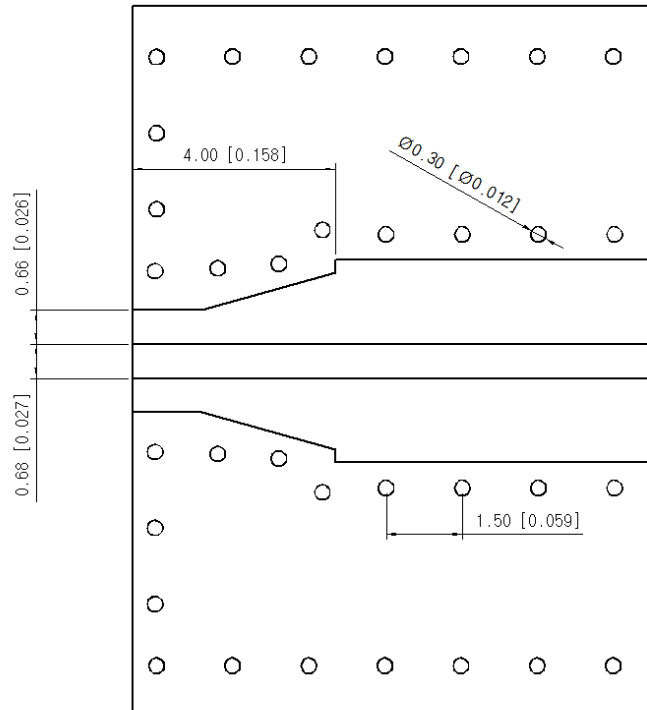


■ Recommended Patten (Microstrip type)

### RO4003C 8 mil

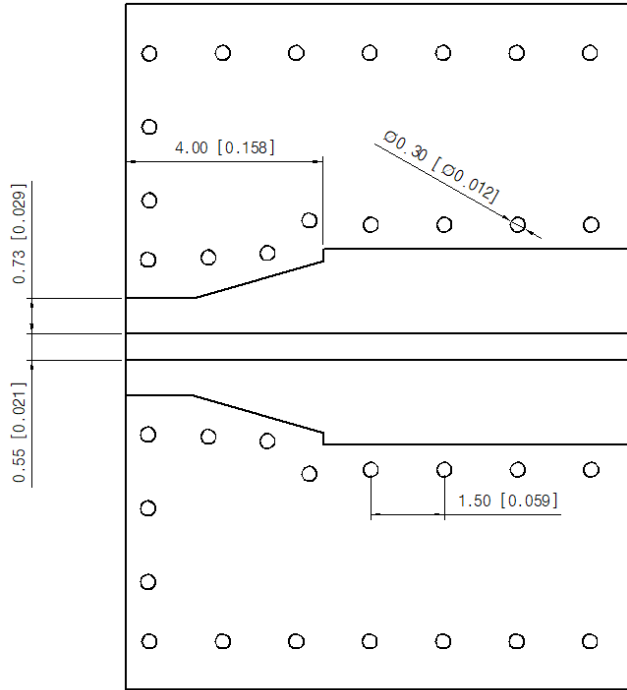


### RO4003C 12 mil

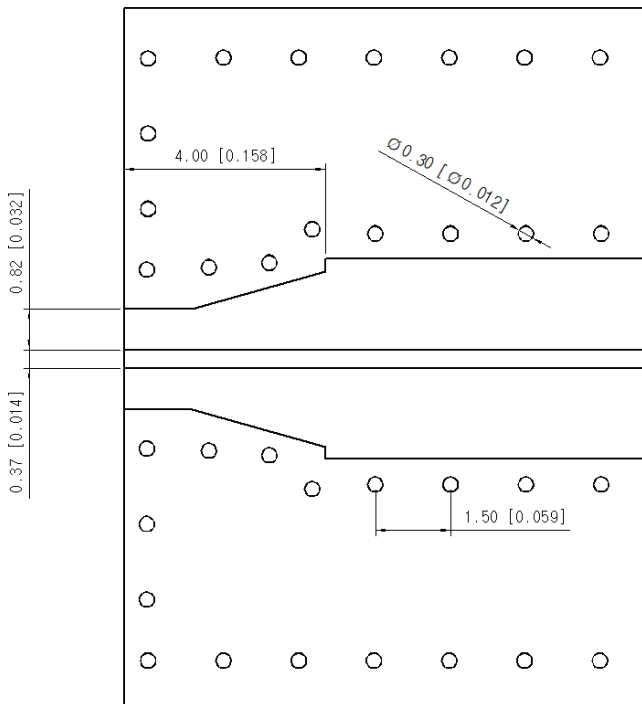


■ Recommended Patten (Microstrip type)

### RO4350B 10 mil

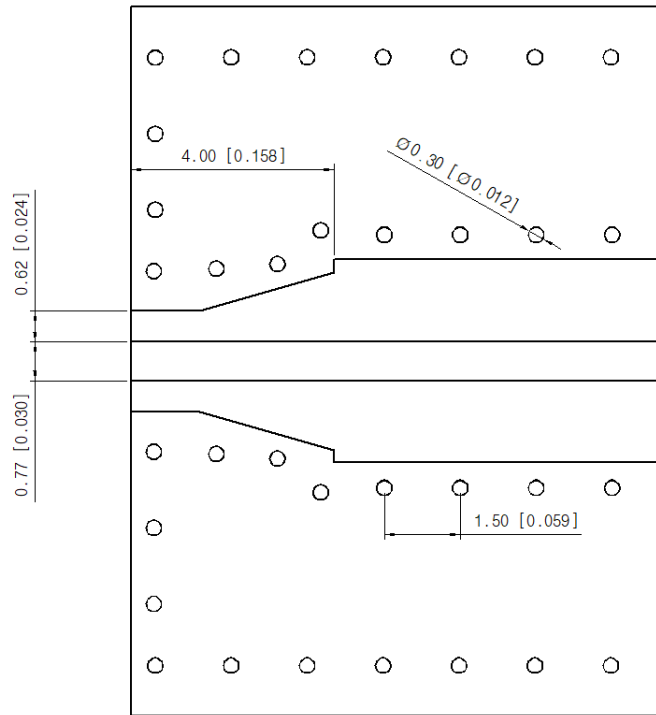


### Du5880 5 mil



■ Recommended Patten (Microstrip type)

**Du5880 10 mil**



### ■ Revision History

Revision	Date	Changes
Ver 1.0	2025-06-01	Release Solder Flow Board Edge SMA