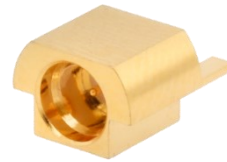


**Withwave's SMP Edge Mount Connectors** cover wide frequency ranges from RF to Microwave with excellent frequency performance and high density. The proprietary internal insulator enables simple structure with higher performance compared to the conventional SMP connectors.

The best applications could be 5G complex mobile communications modules, systems and various other wireless systems.



### ■ Features

- Frequency Range : DC to 18 GHz
- Push-On and Snap-On for Quick Installation
- Edge Mount configurations

### ■ Application

- Telecommunication
- High Speed Applications
- Surface Mount Connection
- Broadband

### ■ Specification

Scope	Items	Specification
Electrical	Freq. Range (Max)	18.0 GHz
	Impedance	50 Ohm
	VSWR	1.30 :1 (12 GHz) 1.50 :1 (18 GHz)
Material	Connector Type	SMP
	Body	Brass (Gold Plated)
	Contact	Brass (Gold Plated)
	Insulator	PTFE
Mechanical & Environmental	Temperature	-40 ~+125 °C

\*RoHS Compliant

### Ordering Information

Interface	Part No.
Smooth Bore	EL05MS001
Full Detent	EL05MS002

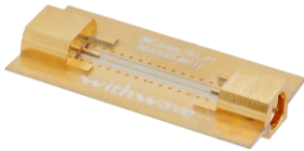
### Test Results

Freq: 10 MHz to 18 GHz

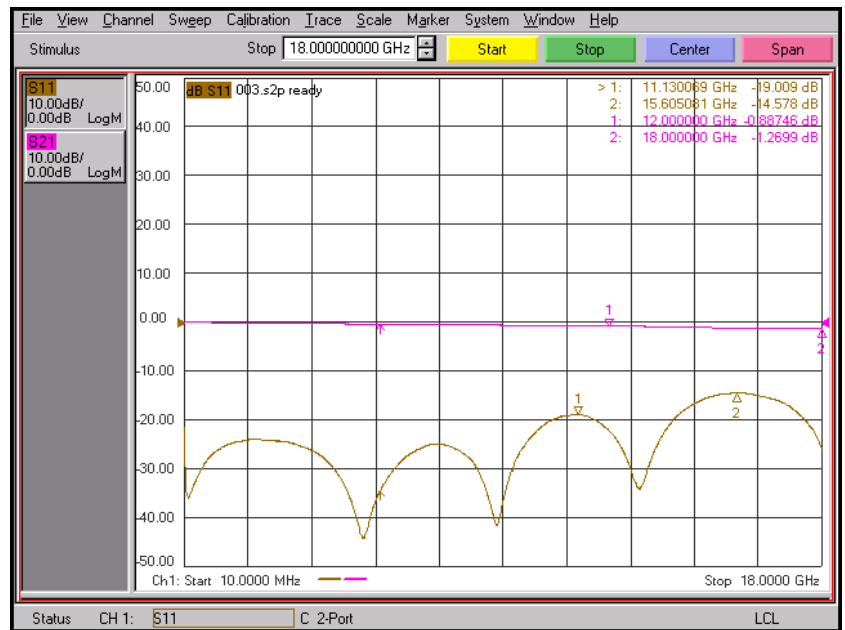
Substrate : RO4003 8 mil

Part No. : EL05MS001

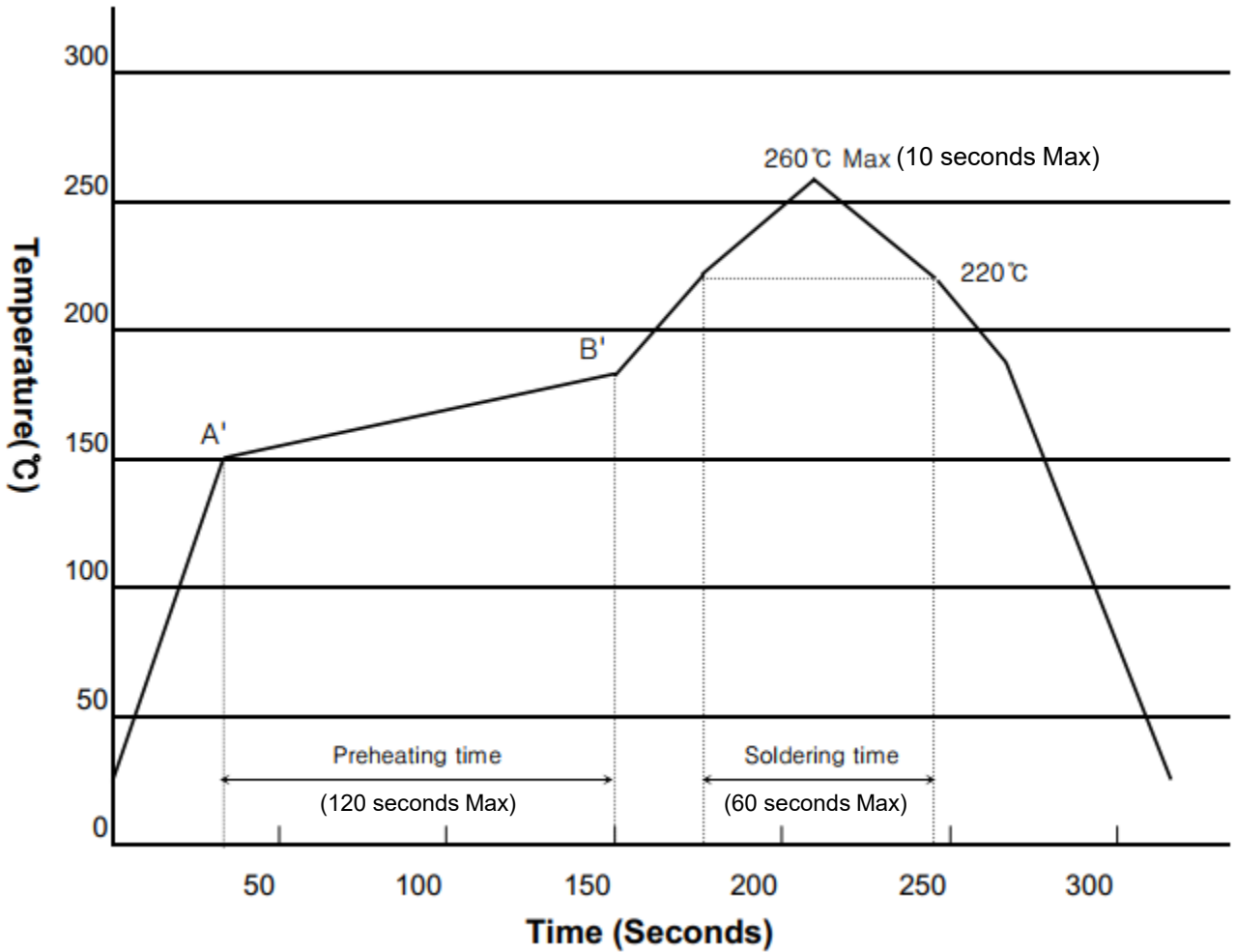
SMP Connector



SMP Connector



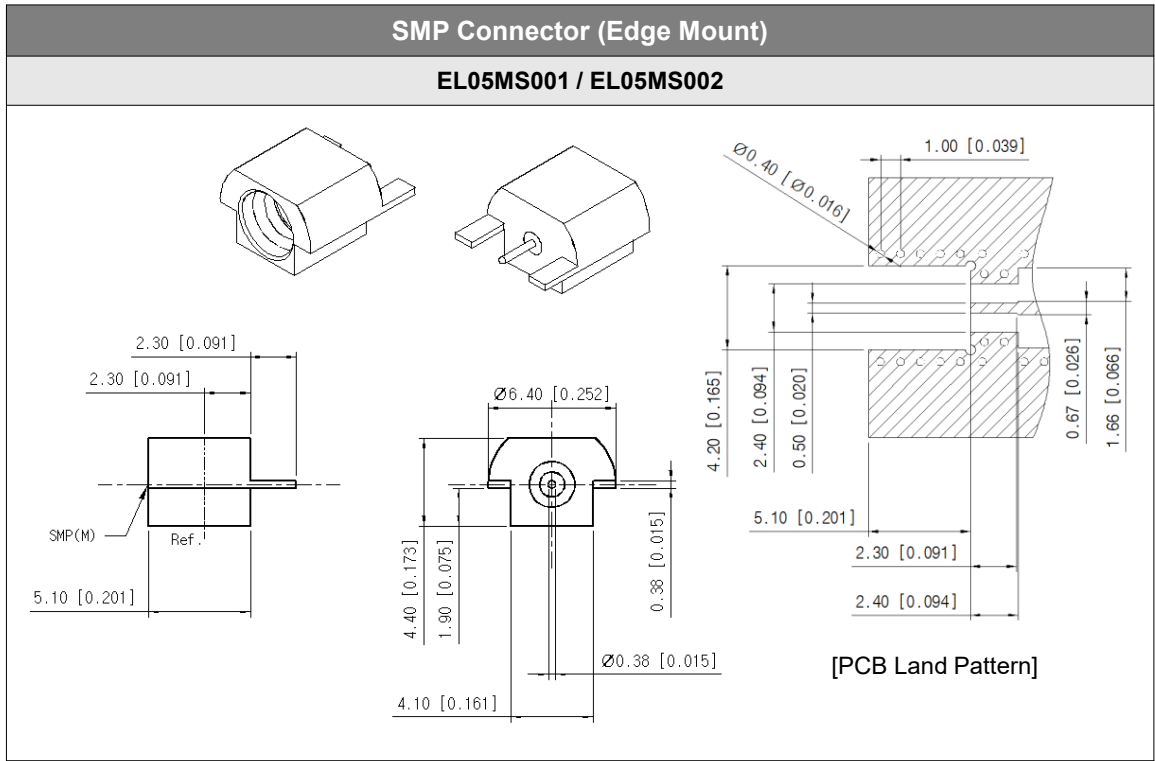
### ■ Recommended Reflow Profile



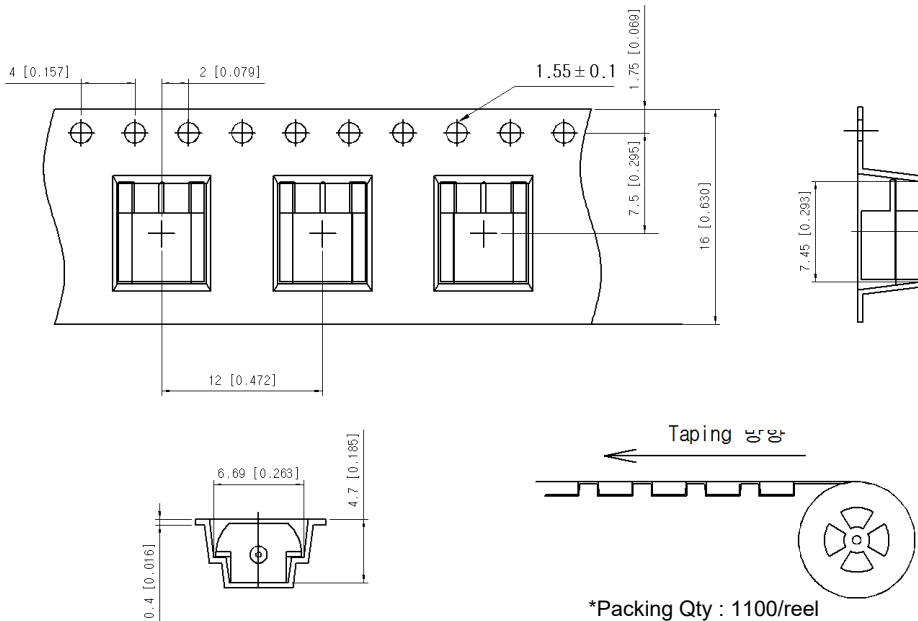
### ■ Test Condition

- 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

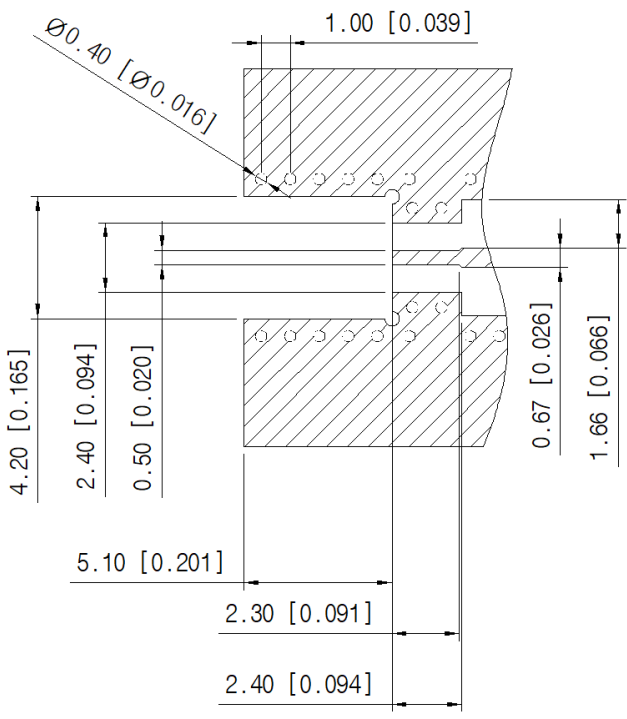


### ■ Packaging Information

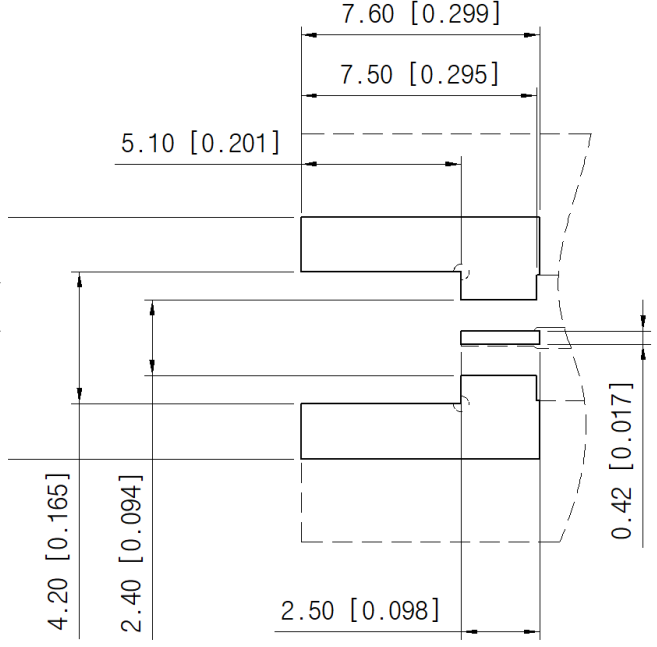


**Recommended PCB Patterns for Rogers RO4003C 12mil**

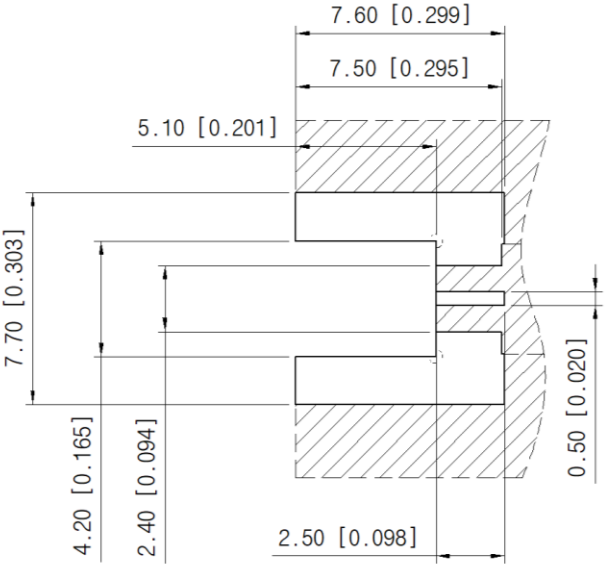
[RF Trace/Via Info.]



[Solder Mask Info.]



[PSR Info.]



**TIP**

Solder connector body on the back side of substrate (ground plane) to improve RF performance. Remove any excess solder and clean all flux and other residues from trace area.



Top plane



Back side(ground plan)

### ■ Revision History

Revision	Date	Changes
Ver 1.0	2024-04-01	Released SMP Edge Mount Connectors
Ver 1.1	2024-09-23	Add Recommended PCB Patterns & Reflow profile