### **High Density Board Connector**

*Withwave's SMP 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 40 GHz
- High density SMT packaging available
- Push-on mating for quick installation

#### Application

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

#### Specification

Scope	Items	Specification
Electrical	Freq. Range (Max)	40.0 GHz
	Impedance	50 Ohm
	VSWR (Typ.)	1.50 : 1
Material	Connector Type	SMP
	Body	Brass (Gold Plated)
	Contact	Brass (Gold Plated)
	Insulator	LCP
Mechanical & Environmental	Temperature	-40 ~+125 °C

\*RoHS Compliant



### High Density Board Connector

#### Ordering Information

Interface	Part No.
Smooth Bore	SM05MS001
Full Detent	SM05MS002

#### Test Results

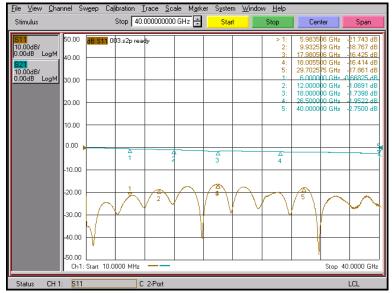
Substrate: RO4003 8 mil

Part No.: SM05MS002

End Launch 2.92 mm Connector(Narrow Block)

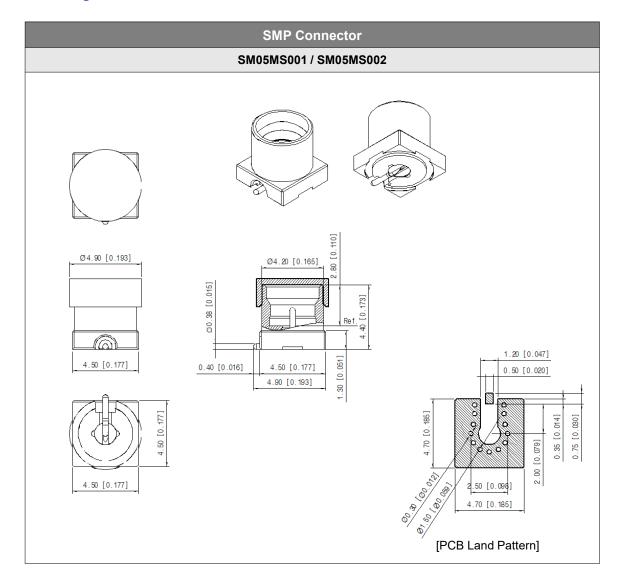


Freq: 10 MHz to 40 GHz



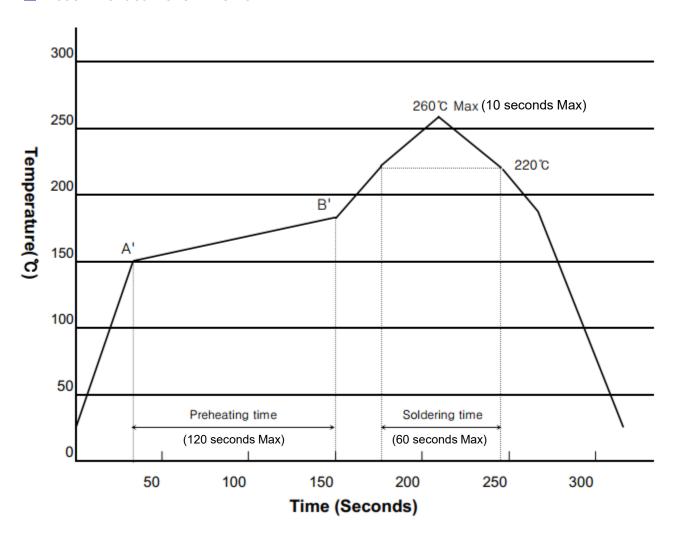
## **High Density Board Connector**

## Drawing



### High Density Board Connector

#### ■ Recommended Reflow Profile

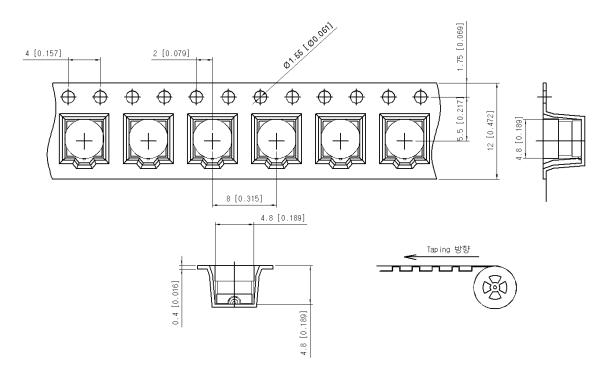


#### Test Condition

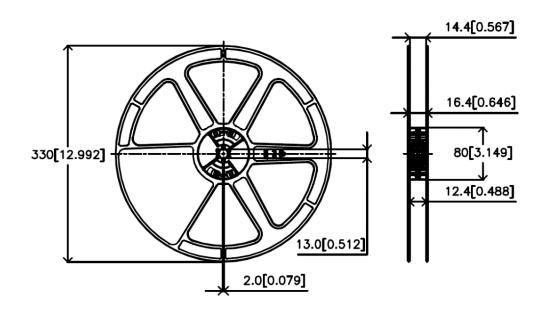
- Solder: Cream type Sn / 3 Ag / 0.5 Cu, Flux content 11%wt (M705 Lead free or Halogen free)
- · Metal mask thickness: 0.1 mm
- Preheating time: 150°C~190°C, Max 120seconds
- Soldering time: 260°C Max, 220°C Min, Max 60 seconds

## High Density Board Connector

#### ■ Packaging Information



Packing Qty 1,700 ea/Reel

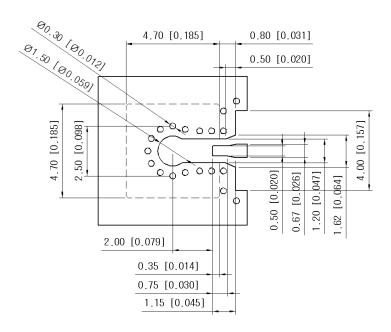


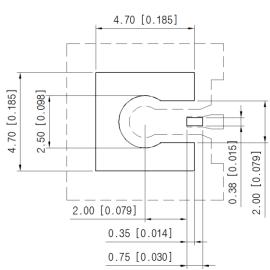
### **High Density Board Connector**

#### ■ Recommended PCB Patterns for Rogers RO4003C 12mil

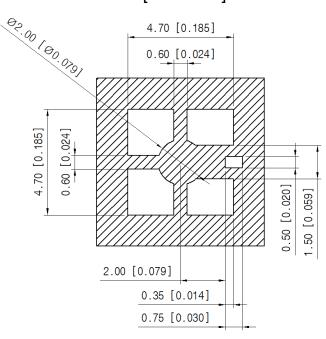
## [RF Trace/Via Info.]

## [Solder Mask Info.]





## [PSR Info.]



## **SMP Connectors**

DC to 40 GHz



## **High Density Board Connector**

## ■ Revision History

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