

## High Density Board Connector

**Withwave's SMPM Connectors** are covering 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 SMPM connectors.

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



### ■ Features

- Frequency range : DC to 26.5 GHz & 67 GHz
- High density SMT packaging available
- Push-on mating for quick installation



### ■ Application

- 4G, 5G Telecommunications
- Satellite Communications
- RFIC Chip set evaluation board
- High data rate ASIC and SoC EV module test



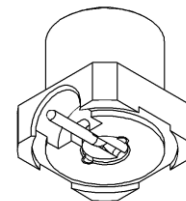
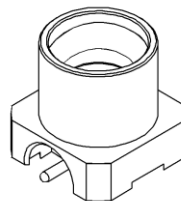
#### ■ Specification

Scope	Items	Specification
Electrical	Freq. range	DC to 26.5 GHz (ST17MS001) DC to 67.0 GHz (ST17MS002)
	Impedance	50 Ohm
	VSWR(RL, Typical)	1.43:1 (-15dB) to 26.5 GHz (ST17MS001) 1.43:1 (-15dB) to 40 GHz (ST17MS002) 1.93:1 (-10dB) to 67 GHz (ST17MS002)
Material	Mating Cycles	Full Detent : 100 (min)
	Typical Engage (Disengage) Force	Full Detent: 4lbs typ.(6lbs typ.)
	Operating Temperature	-40~+125°C

\* RoHS Compliant

#### ■ Ordering Information

Application	Freq.(GHz)	Type	Part No.
SMPM, Straight Plug, PCB (Full Detent)	DC to 26.5	Male	ST17MS001
SMPM, Straight Plug, PCB (Full Detent)	DC to 67.0	Male	ST17MS002



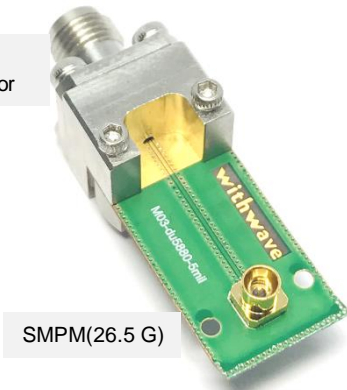
### ■ Test Result

## SMPM Connector

Substrate : RT/DU5880 (5 mil)

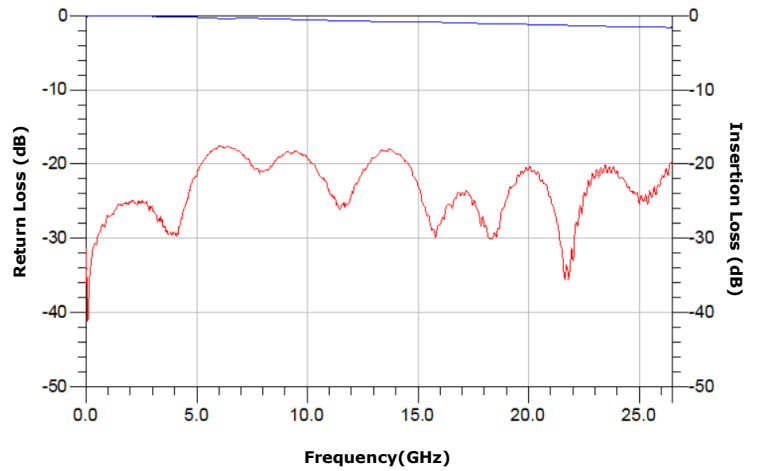
Part No. : ST17MS001

End Launch  
1.85 mm Connector



SMPM(26.5 G)

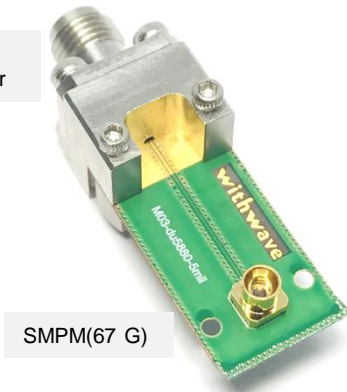
Freq. : 10 MHz to 26.5 GHz



Substrate : RT/DU5880 (5 mil)

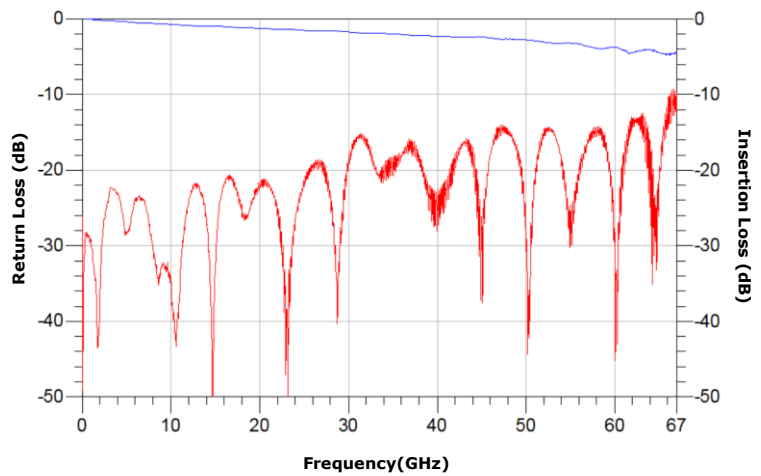
Part No. : ST17MS002

End Launch  
1.85 mm Connector



SMPM(67 G)

Freq. : 10 MHz to 67 GHz

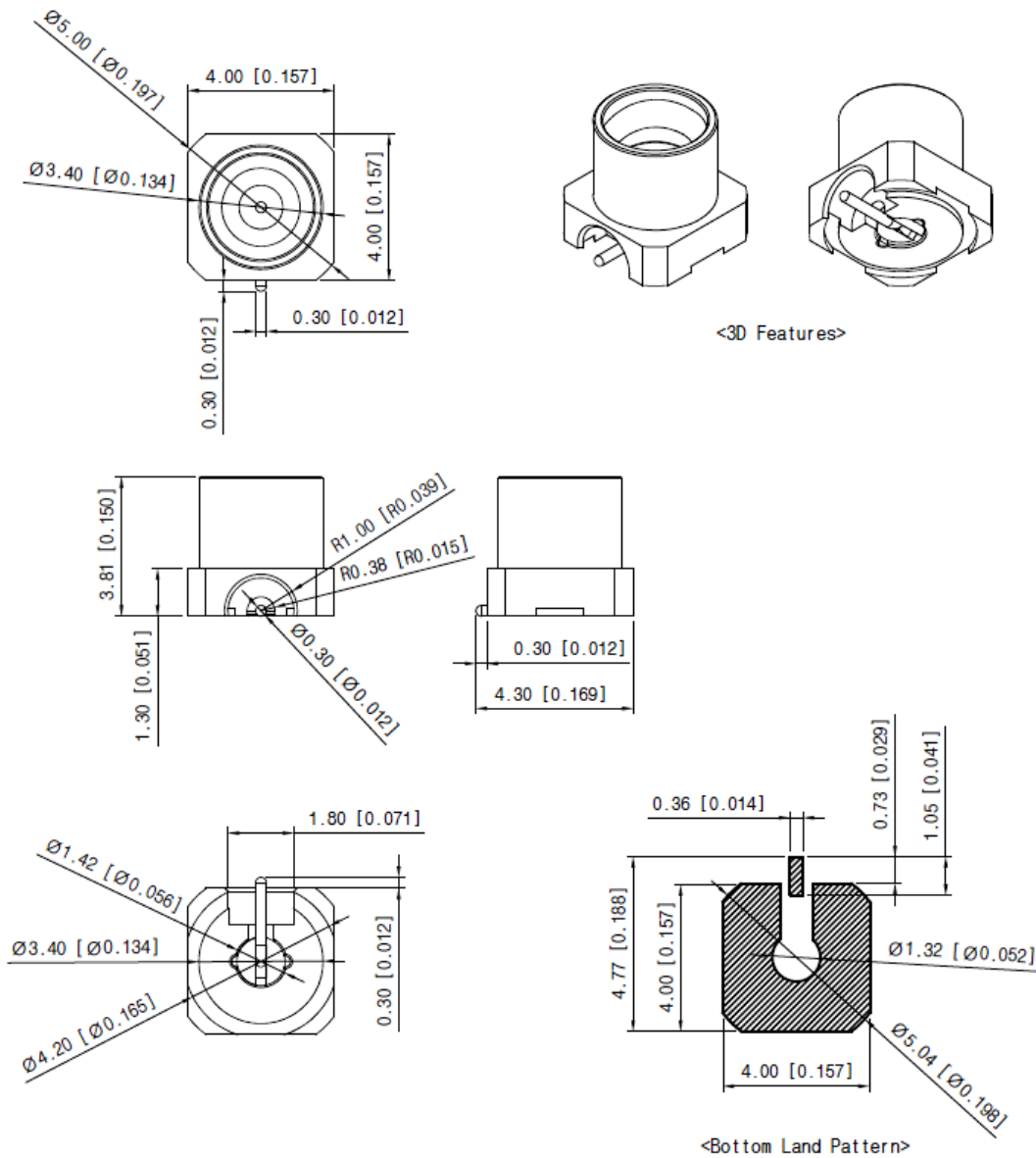


■ Drawing

### SMPM Connector

Part No. : SM17MS001

Unit : mm[inch]

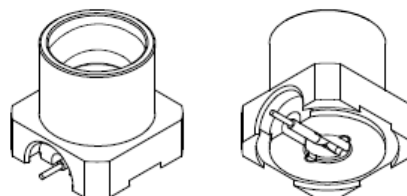
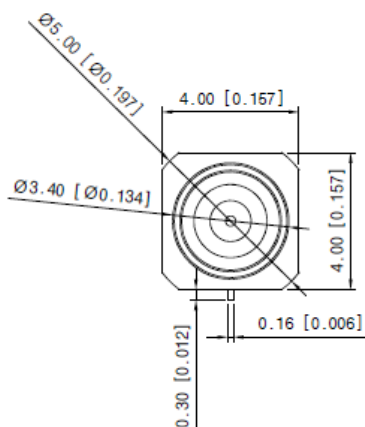


### ■ Drawing

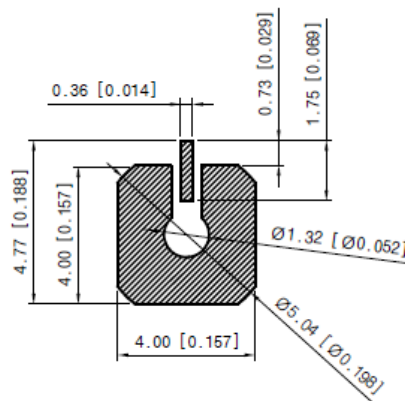
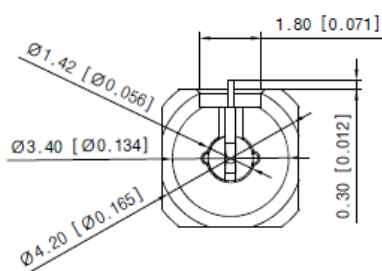
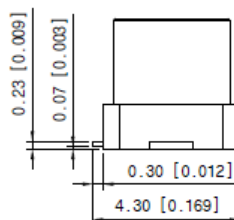
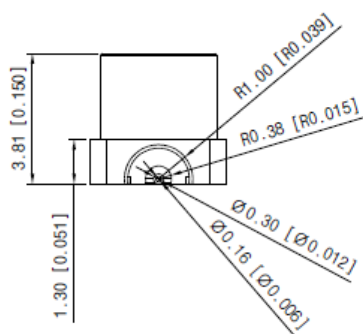
## SMPM Connector

Part No. : SM17MS002

Unit : mm[inch]

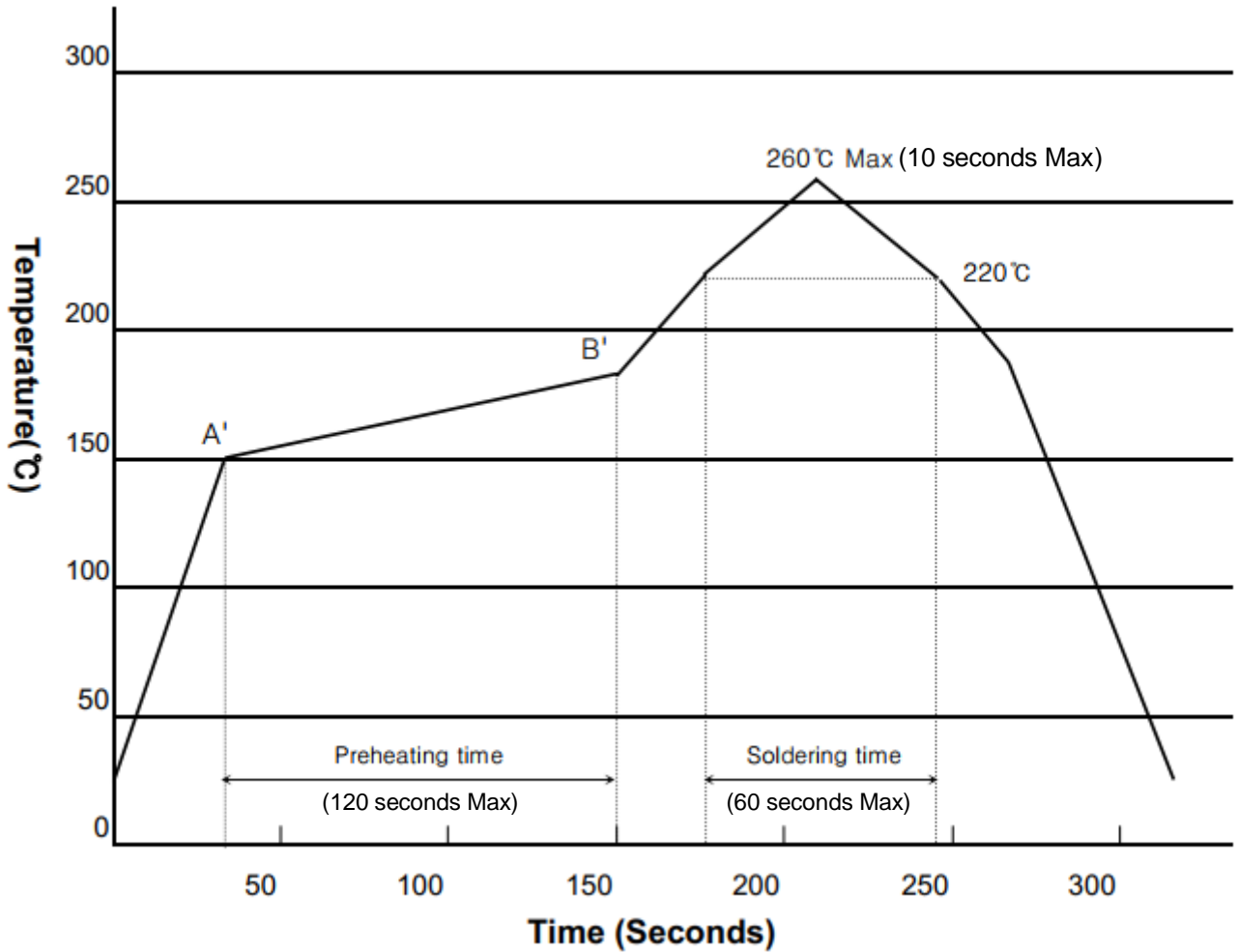


<3D Features>



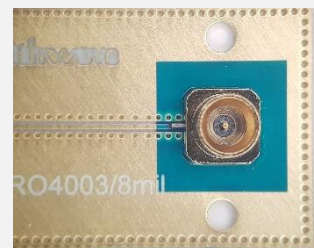
<Bottom Land Pattern>

#### Recommended Reflow Profile



#### Test Condition

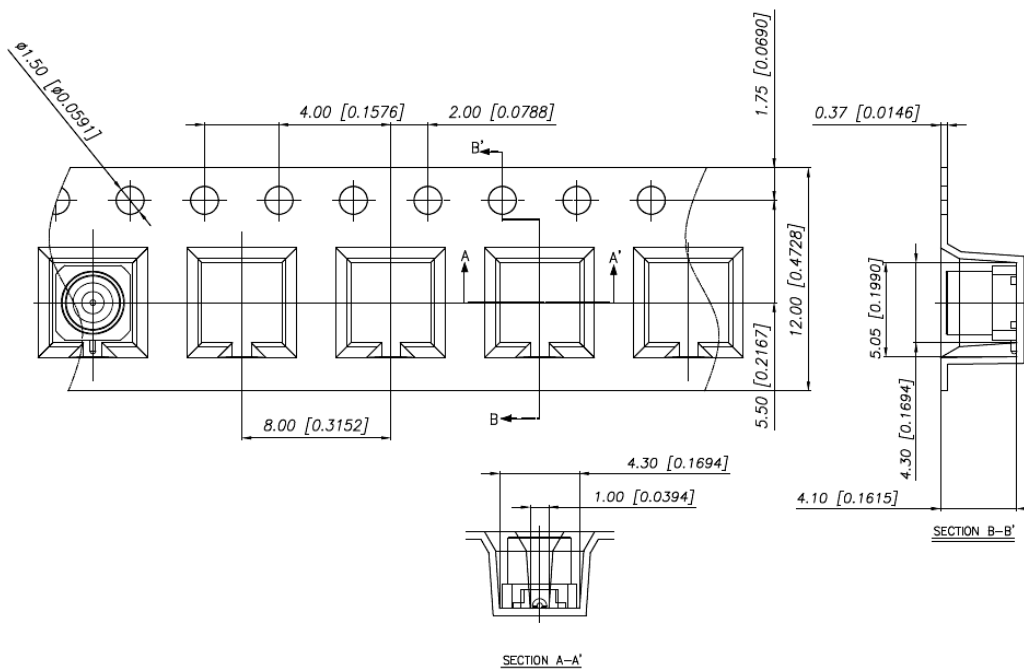
- Reflow System: IR reflow
- Solder: Cream type Sn / 3 Ag / 0.5 Cu, Flux content 11%wt (SMIC M705 Lead free or Halogen free)
- Metal mask thickness: 0.08 mm
- Preheating time: 150°C~190°C, Max 120seconds
- Soldering time: 260°C Max, 220°C Min, Max 60 seconds (N2 condition recommended)



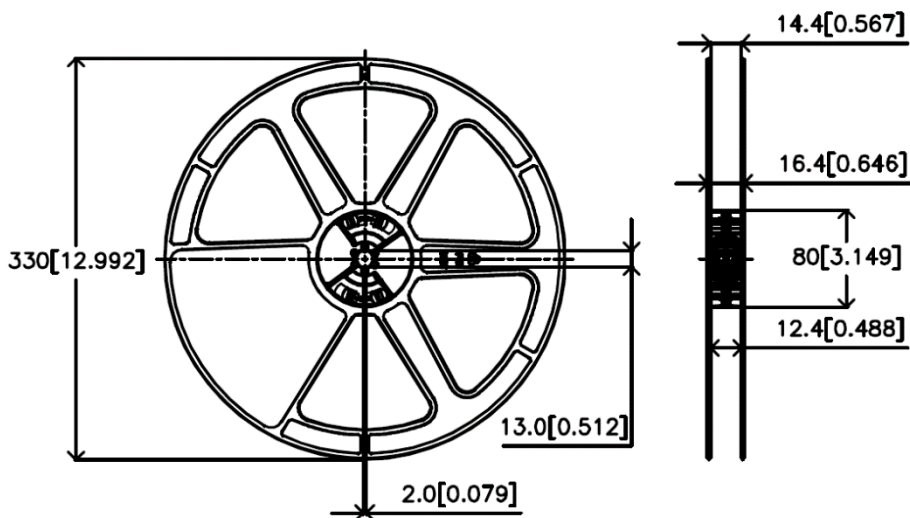
### High Density Board Connector

#### ■ Packaging Information

Unit : mm[inch]



Packing Qty 2,000 ea/Reel



## ■ Revision History

Revision	Date	Changes
Ver 1.0	2019-09-01	Released SMPM Connectors