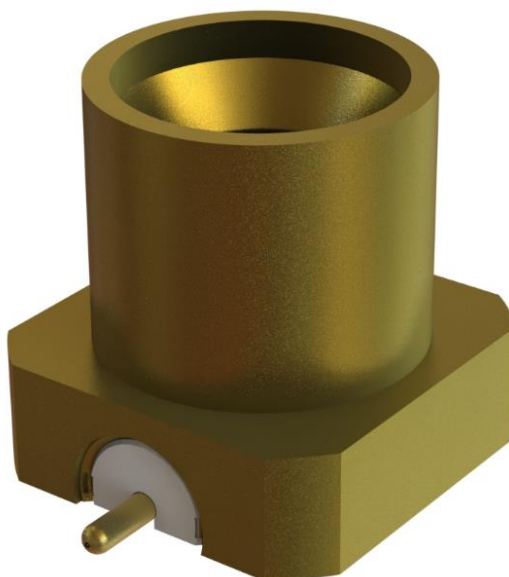


Series: SMPM, Plug, PCB Surface Mount, 50  $\Omega$



Part Number:

SMPM-XX-P-XX-ST-SM-1

- GENDER
  - PF: PLUG FULL DETENT
  - PS: PLUG SMOOTH BORE
- TYPE
  - P: PCB
- FINISH
  - EG: 50 $\mu$ " HEAVY GOLD
  - CENTER CONTACT, 10 $\mu$ " GOLD
  - OUTER BODY
- ORIENTATION
  - ST: STRAIGHT
- TERMINATION
  - SM: SURFACE MOUNT
- OPTION
  - 01

## MATERIAL AND FINISHES

Connector part	Material	Finish
Body	Brass	10 $\mu$ " Gold over Nickel
Bead(s)	PEEK	N/A
Pin	Beryllium Copper	50 $\mu$ " Gold over Nickel

**Series:** SMPM, Plug, PCB Surface Mount, 50  $\Omega$

## ELECTRICAL DATA

Impedance	50 Ohm
Frequency Range	DC to 55 GHz
VSWR <sup>1</sup>	DC to 26.5 GHz: 1.25:1 Max. 26.5 GHz to 40 GHz: 1.45:1 Max. 40 GHz to 55 GHz: 2:1 Max.
Insertion Loss <sup>2</sup>	$0.04\sqrt{F(GHz)} \text{ dB Max.}$
Insulation Resistance	5000 M $\Omega$ Min.
Voltage Rating (Sea Level) <sup>3</sup>	170 Vrms Max.
DWV <sup>3</sup>	325 Vrms Min. (sea level)

<sup>1</sup> VSWR per connector when tested on Samtec multi-layer test PCB.

<sup>2</sup> Single connector insertion loss only.

<sup>3</sup> May be further limited by PCB design.

## MECHANICAL DATA

Mating Interface <sup>4</sup>	IAW MIL-STD-348, Figure 328-2 & 328-3
Mating Cycles	Full Detent: 100 cycles Smooth Bore: 500 cycles
Engagement Force	Full Detent: 36N (8 lbs.) Max. Smooth Bore: 18N (4 lbs.) Max.
Disengagement Force	Full Detent: 13N (3 lbs.) Min. Smooth Bore: 2N (0.5 lbs.) Min.
Radial Misalignment	+/- 0.025cm (0.010") Min.
Axial Misalignment	0.025cm (0.010") Max.
Mass	0.29 g

<sup>4</sup> Compatible with GPPO™ and SSMP™ interfaces

## ENVIRONMENTAL DATA

Temperature Range	-65 to +165°C
Thermal Shock	MIL-STD-202-107, Condition B, high temperature +165°C per DSCC 10019
Vibration (High Frequency)	MIL-STD-202-204, Condition D per DSCC 10019
Vibration (Random)	MIL-STD-202-214, Condition F per DSCC 10019
Mechanical Shock	MIL-STD-202-213, Condition I per DSCC 10019

Series: [SMPM, Plug, PCB Surface Mount, 50  \$\Omega\$](#)

## REFERENCED DOCUMENTS

Interface	Drawing & Footprint
Full Detent	<a href="#">SMPM-PF-P-EG-ST-SM-1</a>
Smooth Bore	<a href="#">SMPM-PS-P-EG-ST-SM-1</a>

## USE OF PRODUCT SPECIFICATION SHEET

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