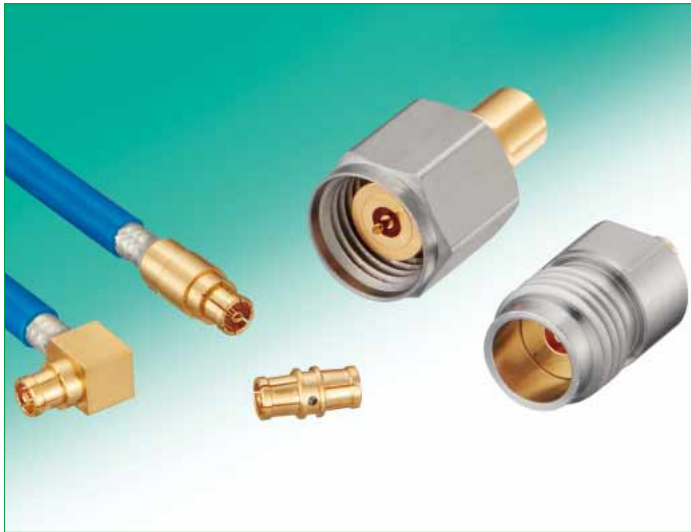


# Push-On Lock, SMPM Coaxial Connectors in MIL Standard

## SMPM Series

Compatible with 65GHz configurations



### ■ Features

#### 1. Features : Up to 65GHz

A speeding request of the transmission speed is rising by a rise of optical communication systems, superior performance of a transmission system and the data communication amount. The 65GHz high frequency connector by which a SMPM series is correspondence in a large-volume high-speed transmission system.

#### 2. Push-On which could excel the operability, lock system

#### 3. Compliant to SMPM in MIL Standard

### ■ Applications

Optical transmission devices, Measuring instruments, Communication equipment etc.

### ■ Product Specifications

Ratings	Nominal characteristic impedance	50Ω	Operating Temperature Range	-55°C to +125°C (95% RH or less)
	Rated frequency	DC to 65GHz	Storage Temperature Range	-55°C to +50°C (95% RH or less)

Items	Specifications	Conditions
1. Contact resistance	Center : Less than 16mΩ External : Less than 16mΩ	Measured at less than 100mA
2. Insulation resistance	500MΩ min.	Measured at 250V DC
3. Withstanding voltage	No flashover or breakdown	250V AC for 1 minute
4. Return loss	15dB min.	DC to 26.5GHz
	10dB min.	DC to 40GHz
	7dB min.	DC to 65GHz
5. Holding power of female contact	0.1N more	Measured with φ0.2896 pin gauge
6. Mating Cycles	Contact resistance at center : Less than 28mΩ External : Less than 28mΩ No broken, cracked, or loose parts	100 cycles
7. Moisture resistance of temperature/humidity cycle	Insulation resistance : More than 100MΩ (in a high humidity environment) Insulation resistance : More than 500MΩ (in a dry environment) No broken, cracked or loose parts	Left for 10 cycles (240 hours) in an environment with the temperature ranging from -10 to 65°C and the humidity ranging from 90 to 98%.
8. Temperature cycle	No broken, cracked or loose parts	Temperature : 5 cycles for a series of time periods : -65°C for 30 minutes → 3 minutes → +125°C for 30 minutes → 3 minutes
9. Salt spray	No considerable corrosion	Continuous 48 hour cycle in 5% salt water solution

### ■ Materials / Finish

Part	Materials	Finish
Shell	Beryllium copper	Gold plated
Contact	Male contact	Phosphor bronze
	Female contact	Beryllium copper
Insulator	PTFE (resin)	—

In cases where the application will demand a high level of reliability, such as automotive, please contact a company representative for further information.

## Product Number Structure

Refer to the chart below when determining the product specifications from the product number.  
Please select from the product numbers listed in this catalog when placing orders.

**SMPM** - [ 1 ] [ 2 ] [ 3 ]

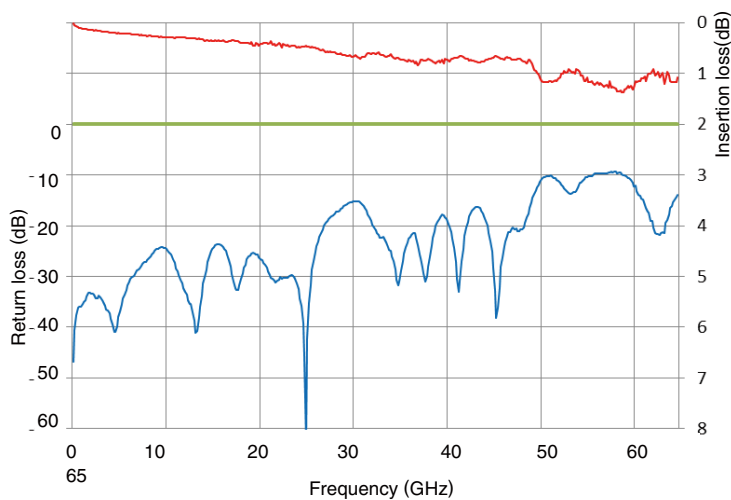
1	Series name : SMPM
2	Connector type J : Straight jack LJ : Right angle jack A-JJ : Relay adapter
3	Applicable cable SF047 : 0.047-inch, semi-flexible cable SF085 : 0.085-inch, semi-flexible cable 532 : 5.32mm 1270 : 12.70mm

## High-frequency characteristic

SMPM-A-JJ-532 Figure of measurement



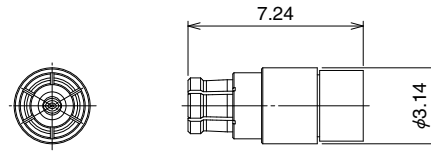
SMPM-A-JJ-532 RF Characteristic data



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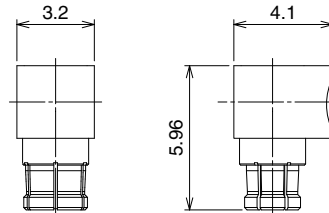
## ■ Straight jack

SMPM-J-SF\*\*\*



## ■ Right angle jack

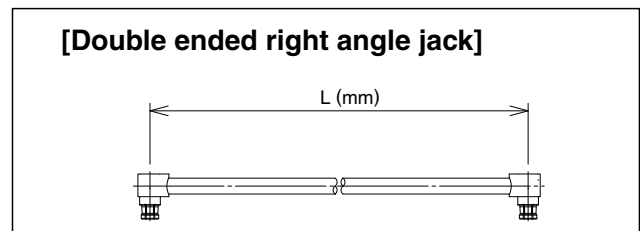
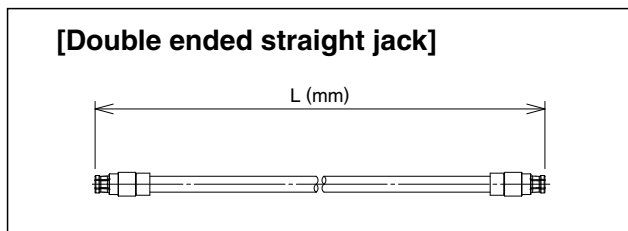
SMPM-LJ-SF\*\*\*



[Please place cable assembly orders per the specifications below]

## ■ Cable assembly specifications

Please specify the dimensions of 2.92mm Series cable assembly as follows : For the cable length, Please contact HRS representative.



## ● Composition of the cable harness specification product number structure

Refer to the chart below when determining the product specifications from the product number.

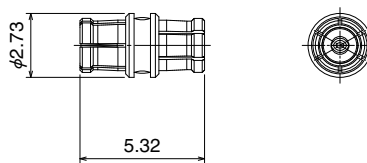
Please select from the product numbers listed in this catalog when placing orders.

**SMPM - [ ] - SF085N 1 - A - L RS**

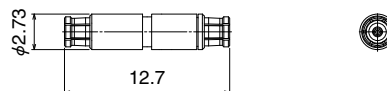
①                      ②                      ③                      ④                      ⑤

① Series name : SMPM
② Harness type 2J : Double ended straight jack 2LJ : Double ended right angle jack JLJ : Single ended straight jack, Single ended right angle jack
③ Cable type SF047N : 0.047-inch, semi-flexible cable SF085N : 0.085-inch, semi-flexible cable
④ Cable color None : No jacket 1 : Blue
⑤ Overall length L (mm) : Length L is expressed by the unit of mm.

## ■ Relay adapter (Jack to Jack)



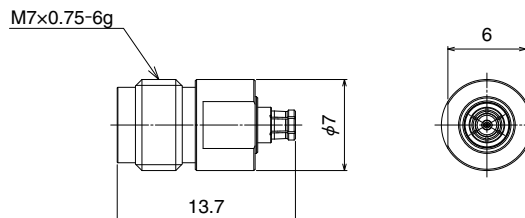
Part No.	HRS No.	RoHS
SMPM-A-JJ-532	338-0500-0	○



Part No.	HRS No.	RoHS
SMPM-A-JJ-1270	338-0503-9	○

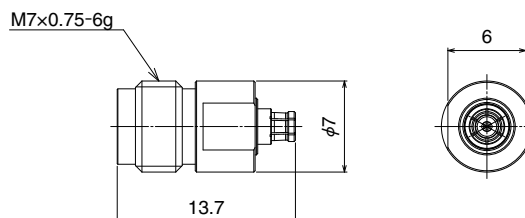
## ■ Conversion adapter

### ● HV conversion adapter (SMPM jack to HV jack)



Part No.	HRS No.	RoHS
SMPMJ-HVJ	311-0421-7	○

### ● HV conversion adapter (SMPM plug to HV plug)



Part No.	HRS No.	RoHS
SMPMP(FD)-HVP	311-0419-5	○
SMPMP(SB)-HVP	311-0420-4	

## ■ Non-reflective terminator

### ● Materials / Finish

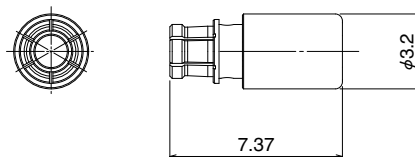
Part	Materials	Finish
Shell	Beryllium copper	Gold plated
Insulator	PTFE resin	————
Female contact	Beryllium copper	Gold plated
Resistive element	Metal film	————

### ● Product Number Structure

**SMPM - TM - J**

①                      ②                      ③

① Series name : SMPM
② TM : Non-reflective terminator
③ Connector type J : Jack type



Part No.	HRS No.	Rated frequency	Voltage standing wave ratio (V.S.W.R.) (Max)		Power (W)	Connector type	Weight (g)	RoHS
			DC to 40GHz	40 to 50GHz				
SMPM-TMJ	353-0163-5	DC to 50GHz	1.35	1.60	1.35	Jack		○

### ◆ Frequency characteristics (TYPICAL)

