

Ultra Small Push-On Type Connector

MSS Series



■ Features

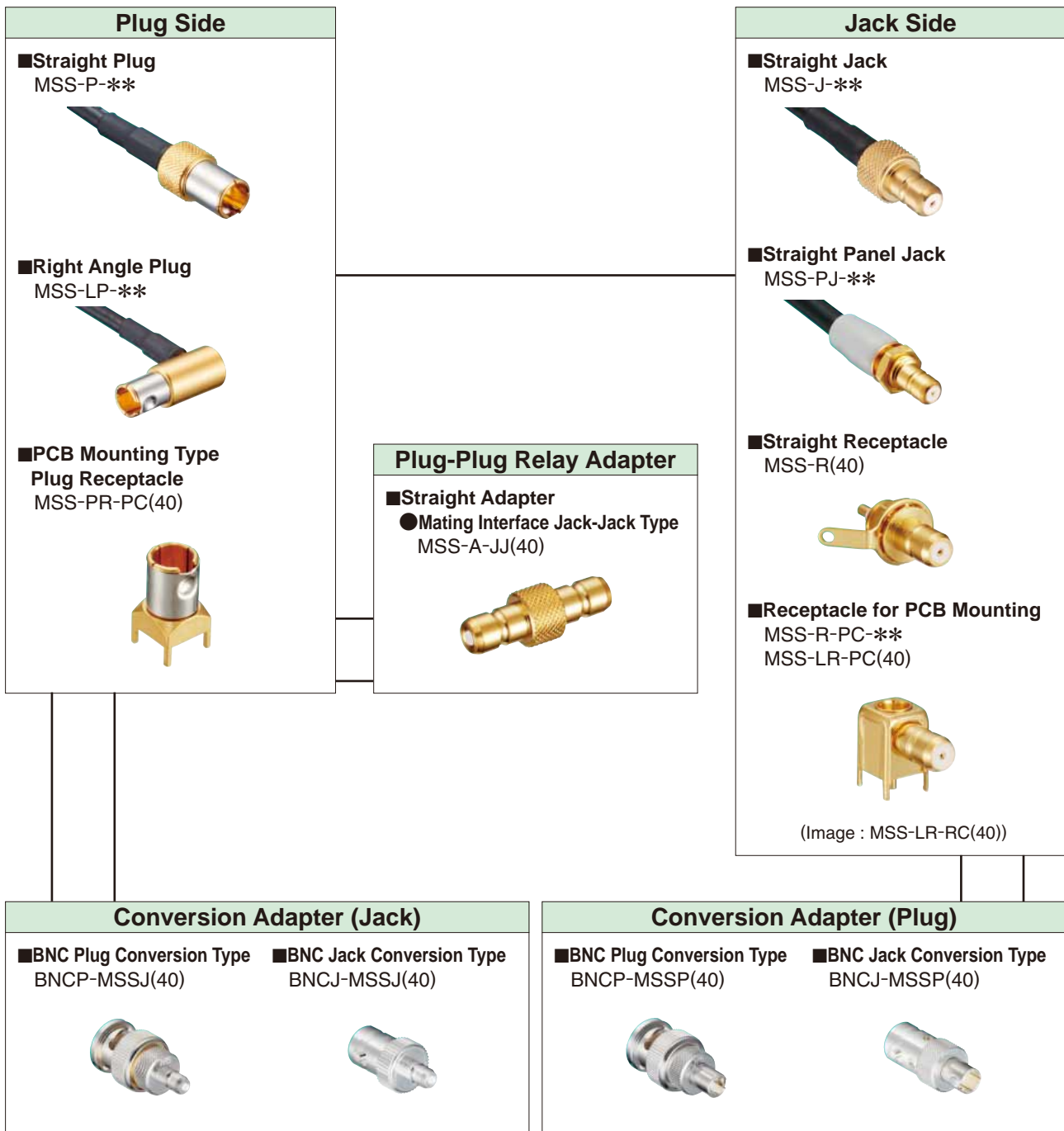
1. Defined in DSPC 6206 of the Japan Defense Agency specification
2. Performance comparable to medium-size connectors.

Minimized volume with performance comparable to a medium-size high frequency connector.

3. Push-on lock system

Both the inner and outer conductor provide superior surface contact while maintaining high vibration resistance.

■ Functional Diagram



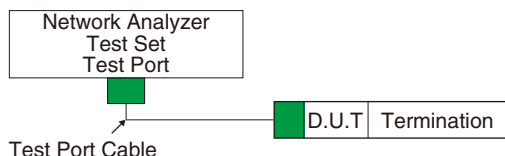
Product Specifications

Rated Value	Nominal Characteristic Impedance Rated Voltage Rated Frequency	50Ω 150Vrms AC DC to 1GHz	Operating Temperature Relative Humidity	-40 to +85 85% Max.
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Item	Specifications	Conditions
1. Contact Resistance	5mΩ Max.	Measured at a maximum of 100mA DC.
2. Insulation Resistance	2000MΩ Min.	Measured at 500V DC.
3. Withstanding Voltage	No flashover or dielectric breakdown.	500V AC for 1 min.
4. V.S.W.R. (*)	1.2 Max.	Up to 1GHz
5. Female Contact Insertion/Extraction Force	0.5N Min.	Measured with a pin gauge of φ0.450
6. Mating Force (Extraction Force)	9.8 to 44N	Measured with compatible connector
7. Mating Durability	Contact Resistance : 10mΩ Max.	3,000 times
8. Moisture Resistance	Insulation Resistance : 100MΩ Min. (at high temperatures) Insulation Resistance : 2000MΩ Min. (when dry) No damage, cracks or loosened parts.	Temperature : +25 to +65°C Humidity : 90-96% Left for 10 cycles (240 hours)
9. Corrosion Resistance	No heavy corrosion	Left in 5% salt water solution for 48 consecutive hours

*V.S.W.R. Measurement System

The specified V.S.W.R. values were measured using the following measuring system shown in the figure below:



Note 1 : The cable connector is measured with the connector attached to the applicable cable at 10cm from both ends.

Note 2 : Board connectors are measured with the connector attached to a 50Ω PCB.

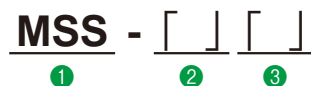
*Some products may have different specifications from those shown above.

Materials / Finish

Part	Material	Finish	UL Regulation
Shell	Brass	Gold Plating	————
Male Contact	Brass	Gold Plating	————
Female Contact	Beryllium Copper	Gold Plating	————
Insulator	PTFE Resin	————	Flame Retardant
Lock Spring	Beryllium Copper	Nickel Plating	————

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.



① Series Name	③ 1) Applicable Cable for Plug/ Jack 1.5DV : 1.5D-2V 2.5 : 2.5D-2V 196/U : RG-178B/U
② Connector Type P : Straight Plug LP : Right Angle Plug J : Straight Jack PJ : Panel Jack R : Straight Receptacle LR : Right Angle Receptacle PR : Plug Receptacle A : Straight Adapter	2) Mounting Style for Receptacle or Plug Receptacle PC : PCB Mounting Type 3) Mating Section for Straight Adapter JJ : Jack-Jack Type

■ Plug

● Straight Plug



Fig. 1

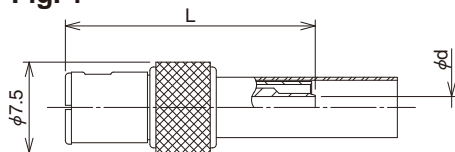
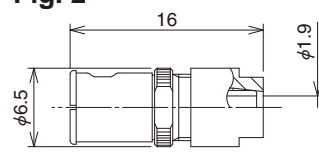


Fig. 2



Part No.	HRS No.	Applicable Cable	L	φd	Remarks	RoHS
MSS-P-1.5DV	319-0002-0 00	1.5D-2V	20.7	1.8	Fig. 1	○
MSS-P-2.5(40)	319-0013-1 40	2.5D-2V	20.5	2.8	Fig. 1	
MSS-P-196/U(40)	319-0026-3 40	RG-178B/U	—	—	Fig. 2	

● Right Angle Plug



Fig. 3

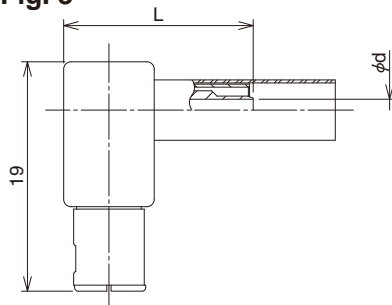
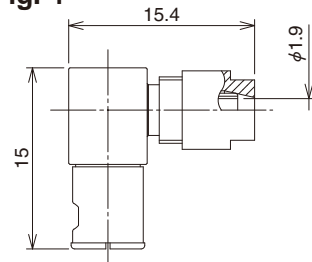


Fig. 4



Part No.	HRS No.	Applicable Cable	L	φd	Remarks	RoHS
MSS-LP-1.5DV	319-0064-0 00	1.5D-2V	15.7	1.8	Fig. 3	○
MSS-LP-2.5(40)	319-0015-7 40	2.5D-2V	15.5	2.8	Fig. 3	
MSS-LP-196/U(40)	319-0027-6 40	RG-178B/U	—	—	Fig. 4	

■ Jack

● Straight Jack



Fig. 5

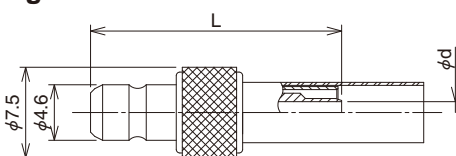
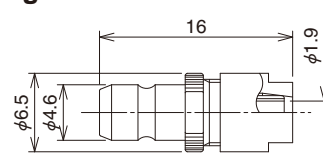
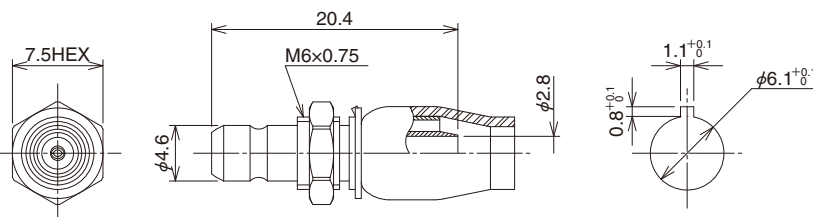


Fig. 6



Part No.	HRS No.	Applicable Cable	L	φd	Remarks	RoHS
MSS-J-1.5DV	319-0003-0 00	1.5D-2V	20.8	1.8	Fig. 5	○
MSS-J-2.5(40)	319-0014-4 40	2.5D-2V	20.6	2.8	Fig. 5	
MSS-J-196/U(40)	319-0028-9 40	RG-178B/U	—	—	Fig. 6	

● Panel Jack

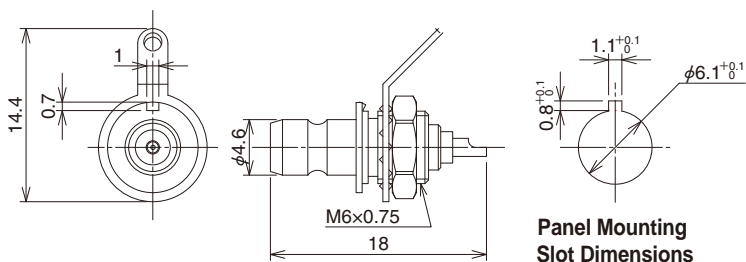


Panel Mounting Slot Dimensions

Part No.	HRS No.	Applicable Cable	RoHS
MSS-PJ-2.5(40)	319-0016-0 40	2.5D-2V	○

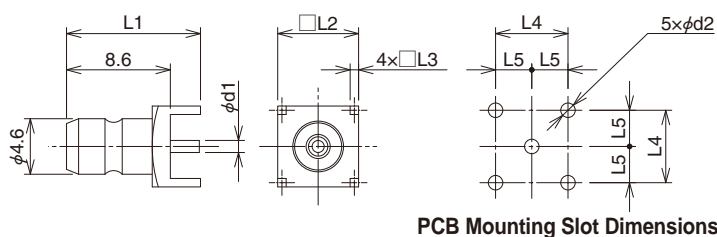
Receptacle

Straight Receptacle



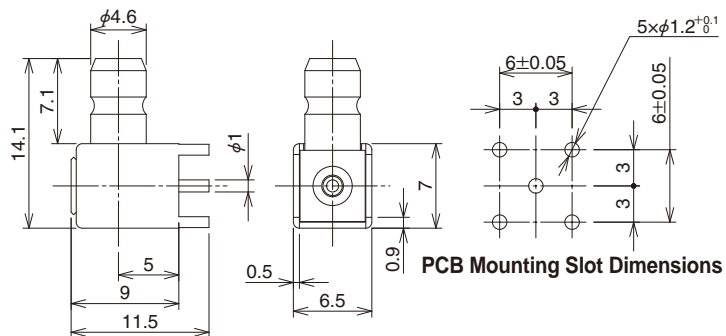
Part No.	HRS No.	RoHS
MSS-R(40)	319-0010-3 40	○

Straight Receptacle (PCB Mounting Type)



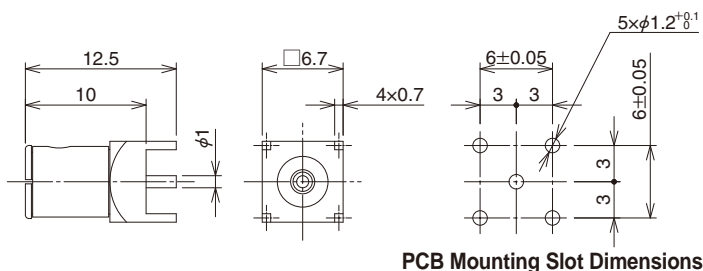
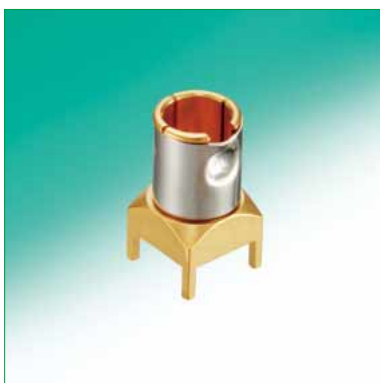
Part No.	HRS No.	$\phi d1$	$L1$	$L2$	$L3$	$L4$	$L5$	$\phi d2$	RoHS
MSS-R-PC(40)	319-0034-1 40	1	11.1	6.7	0.7	6 ± 0.05	3	$1.2 + 0.1/0$	○
MSS-R-PC-3(40)	319-0055-1 40	0.8	12.1	5.7	0.62	5.08 ± 0.05	2.54	$1 + 0.1/0$	○

Right Angle Receptacle (PCB Type)



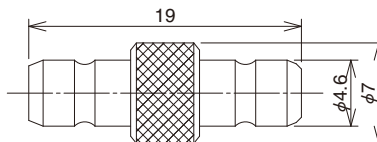
Part No.	HRS No.	RoHS
MSS-LR-PC(40)	319-0035-4 40	○

Plug Receptacle (PCB Mounting Type)



Part No.	HRS No.	RoHS
MSS-PR-PC(40)	319-0038-2 40	○

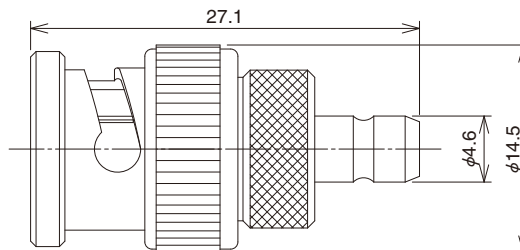
■ Straight Adapter



Part No.	HRS No.	RoHS
MSS-A-JJ(40)	319-0011-6 40	○

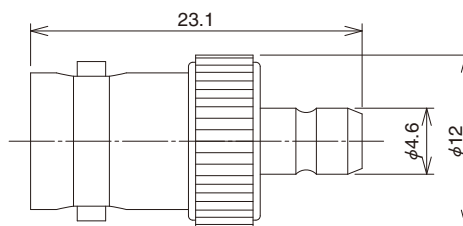
■ Conversion Adapter

● BNC Conversion Adapter (BNC Plug — MSS Jack)



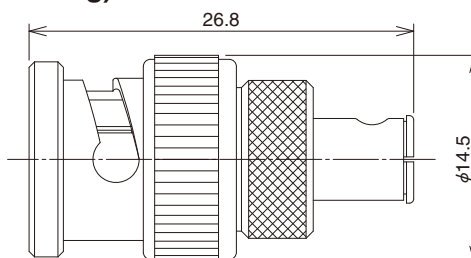
Part No.	HRS No.	RoHS
BNCP-MSSJ(40)	311-0082-3 40	○

● BNC Conversion Adapter (BNC Jack — MSS Jack)



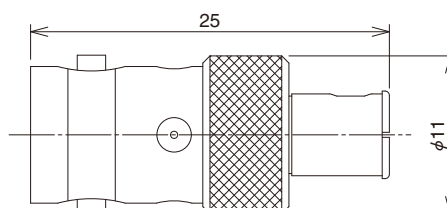
Part No.	HRS No.	RoHS
BNCJ-MSSJ(40)	311-0066-7 40	○

● BNC Conversion Adapter (BNC Plug — MSS Plug)



Part No.	HRS No.	RoHS
BNCP-MSSP(40)	311-0107-2 40	○

● BNC Conversion Adapter (BNC Jack - MSS Plug)



Part No.	HRS No.	RoHS
BNCJ-MSSP(40)	311-0081-0 40	○

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