

RoHS Compliant

COAXIAL CONNECTORS

2008

CAT.NO.COAX-007A-E.FEB.2008

COAXIAL
CONNECTORS

- FREQUENCY RANGE TO 18GHz (Straight adapter)
- THREADED COUPLING (1/4-36UNS)

SMA Series

SMA series coaxial connectors are small size, with threaded coupling, conforming to the general purpose standards (IEC60169-15). It enables high density packaging inside equipment, as well as compact interconnection between subassemblies and between units. Applicable frequencies : from DC up to 18GHz (Straight adapter). High performance with a VSWR of 1.2 or less.

- A wide variety of products, Panel mount receptacles, enable diversified mount styles.
- Lightweight, compact in size and rugged construction.
- A high degree of reliability provides stable electric continuity and high frequency performance.
- Applications: Base Station for Mobile Communications, Communications Equipment, Measuring Instruments



SPECIFICATIONS

Characteristic Impedance	50 Ω
Frequency Range (Note)	Straight Adapter : DC to 18GHz Right Angle Adapter : DC to 12.4GHz Cable Harness : DC to 3GHz
D. W. Voltage	AC500Vr. m. s. (1 minute)
Insulation Resistance	500 megohms min. (DC500V)
Contact Resistance	Center Contacts : 4 milliohms max. Outer Contacts : 4 milliohms max.
V. S. W. R.	1.2 max. (DC to 3GHz)
Applicable Cables	1.5D-V, 1.5D-W, 2.5D-V, UT141, UT85

(Note) For panel mount type and P.C.B.mount type receptacles, please consult us.

Products applicable over 3 GHz are available.
For detail, please consult us.

In addition to independent cable application type, we also harness products which satisfy your specification are available. Refer to pages 109 to 111 for details.

Guide to Operation Manuals

When using any of these products, please confirm the following operation manuals.

- For 1.5D-V and 1.5D-W cables : JAHL-2056-1
- For 2.5D-V cables : JAHL-2056-2
- For 0.141 and 0.085 inch Semi-flexible cables : JAHL-2056-3

MATERIALS/FINISHES

Description	Materials/Finishes
Contacts	Copper Alloy/Gold Plated over Nickel
Insulator	PTFE
Shell	Copper Alloy/Nickel Plated or Stainless Steel Semi-flexible Cable type : Copper Alloy/Gold over Nickel
Coupling Nut	Stainless Steel
O- ring	Silicone Rubber (Black)
Gasket	Silicone Rubber (Brick Red)
C- ring	Copper Alloy/Nickel Plated
Ferrule	Copper Alloy/Nickel Plated

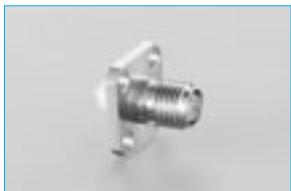
SMA Series

TYPES AND COMBINATIONS

12 to 15 Pages

Receptacle

- Panel Mount · Straight
P/N : 4 Hole Mount · SMAT001D00
2 Hole Mount · SMAT002D00



- Panel Mount · Right-angle
P/N : 4 Hole Mount · SMAU001D00



- Through-hole Solder · Straight
P/N : SMAR001D00

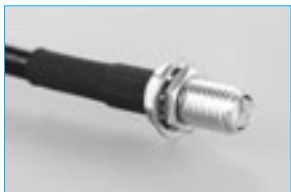


- Through-hole Solder · Right-angle
P/N : SMAS001D00



Jack

- Bulkhead · Straight
P/N : SMAK00※D37



- Panel Mount · Straight
P/N : 4 Hole Mount · SMAH00※D**



Plug

- Straight
P/N : SMAA00※D**



- Right-angle
P/N : SMAB00※D**



■ TYPES AND COMBINATIONS

16 to 17 Pages

Jack

● Straight
P/N : SMAF00※D**



Plug Receptacle

● Panel Mount · Straight
P/N : 4 Hole Mount · SMAP001D00
2 Hole Mount · SMAP002D00



● Panel Mount · Right-angle
P/N : 4 Hole Mount · SMAQ001D00



Dust Cap
(For Receptacle & Jack)



See page 18

Adapter



Various adapters are available.
See pages 93 to 107.

SMA Series

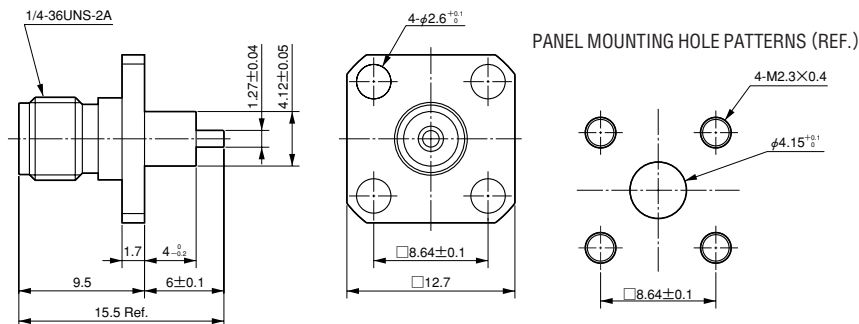
RECEPTACLE

Panel Mount Type

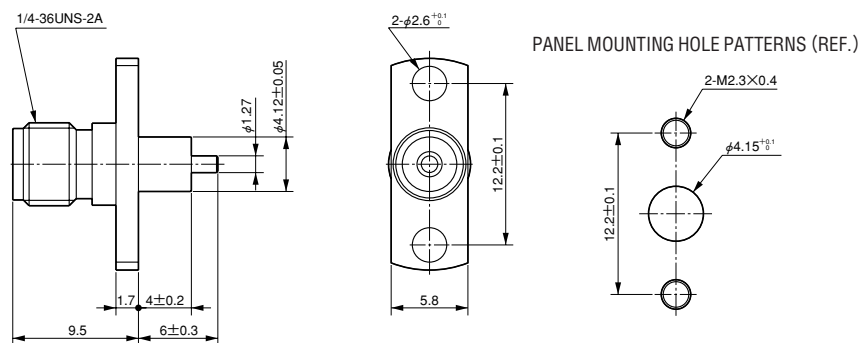
Interchangeable with PLUG (15 Page)

Dimensions in millimeters

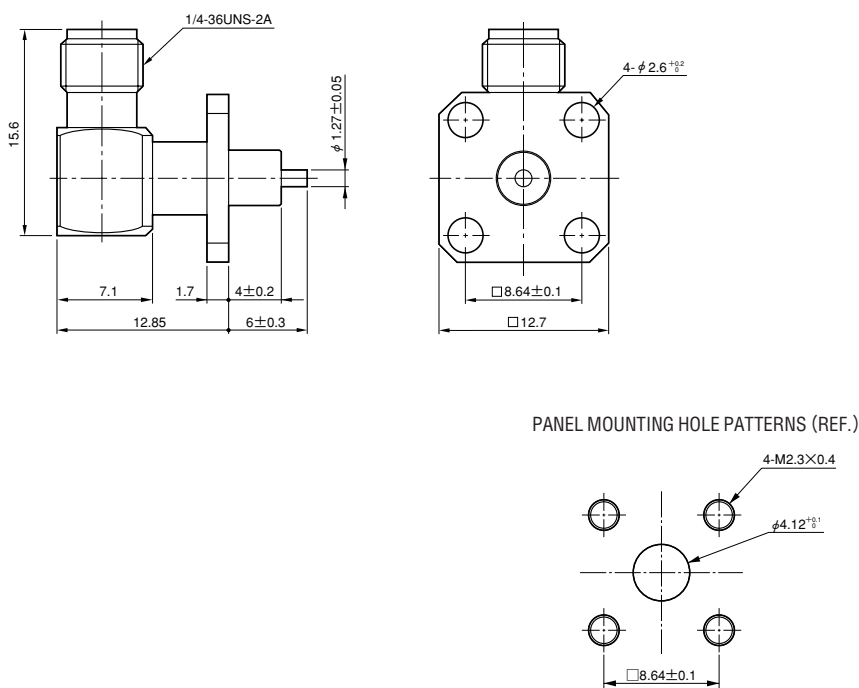
Straight · Four-hole Mount Part Number : SMAT001D00



Straight · Two-hole Mount Part Number : SMAT002D00



Right-angle · Four-hole Mount Part Number : SMAU001D00

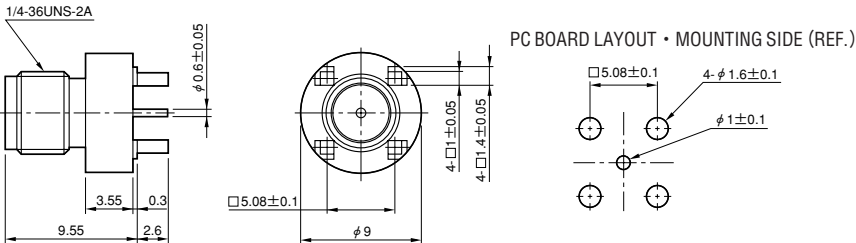


RECEPTACLE
Through-hole Solder Type

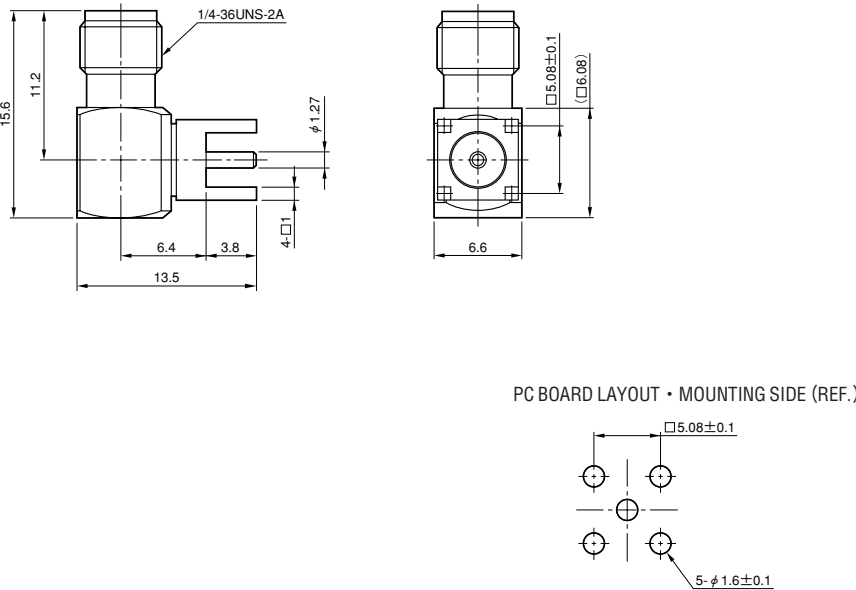
Interchangeable with PLUG (15 Page)

Dimensions in millimeters

Straight
Part Number : SMAR001D00



Right-angle
Part Number : SMAS001D00



SMA Series

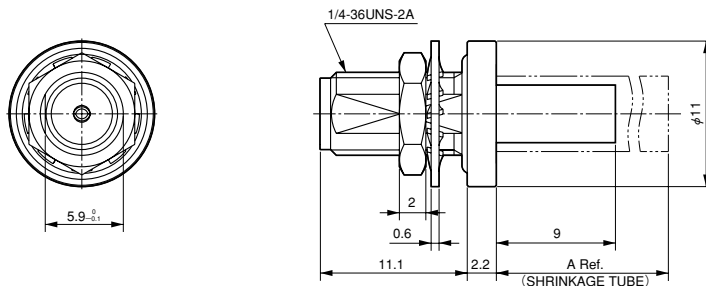
JACK

Bulkhead Type · Panel Mount Type

Interchangeable with PLUG (15 Page)

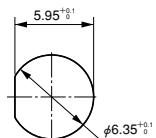
Dimensions in millimeters

Bulkhead · Straight



(Note) The picture on the above shows the SMAK001D37.
The shape varies slightly for the SMAK002D37.

PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS : 1 to 2mm)

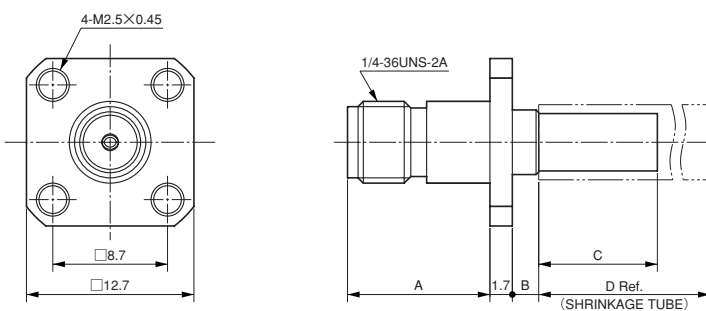


Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A Ref.
1.5D-2V	SMAK001D37	—
1.5D-2W	SMAK002D37	20

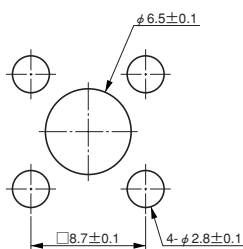
(Note) Procedure for wire connection...See pages 113 to 120

Panel mount · Straight Four-hole Mount



(Note) The picture on the above shows the SMAH001D37.
The shapes of other models vary slightly.

PANEL MOUNTING HOLE PATTERNS (REF.)



Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B	C	D Ref.
1.5D-2V	SMAH001D37	10.8	2	9	—
1.5D-2W	SMAH002D37	10.8	2	9	20
0.085 inch Semi-flexible	SMAH003DB2	7.8	1.5	5	13

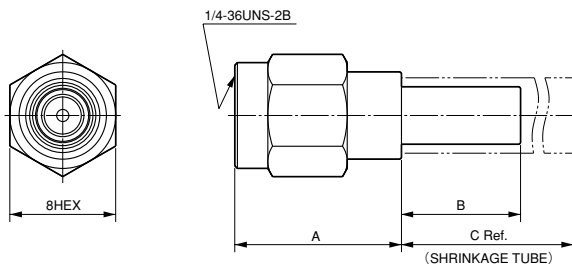
(Note) Procedure for wire connection...See pages 113 to 120

PLUG

Interchangeable with RECEPTACLE (12,13 Page) & JACK (14 Page)

Dimensions in millimeters

Straight



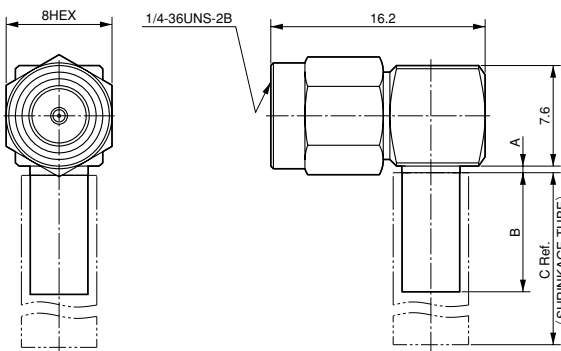
(Note) The picture on the above shows the SMAA002D37. The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B	C Ref.
1.5D-2V	SMAA002D37	12.6	9	—
1.5D-2W	SMAA003D37	12.6	9	20
2.5D-2V	SMAA001D13	12.4	10	—
0.141 inch Semi-flexible	SMAA007DA2	9.5	5	15
0.085 inch Semi-flexible	SMAA006DB2	9	5	13

(Note) Procedure for wire connection...See pages 113 to 120

Right-angle



(Note) The picture on the above shows the SMAB002D37. The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B	C Ref.
1.5D-2V	SMAB002D37	0.5	9	—
1.5D-2W	SMAB003D37	0.5	9	20
2.5D-2V	SMAB001D13	1	10	—
0.141 inch Semi-flexible	SMAB007DA2	0	5	15
0.085 inch Semi-flexible	SMAB004DB2	1.3	5	13

(Note) Procedure for wire connection...See pages 113 to 120

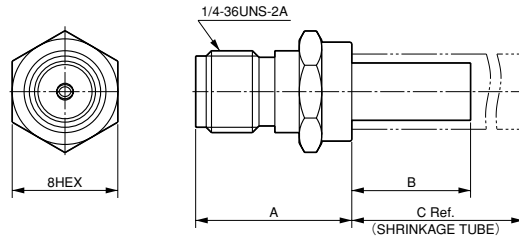
SMA Series

JACK

Interchangeable with PLUG RECEPTACLE (17 Page)

Dimensions in millimeters

Straight



(Note) The picture on the above shows the SMAF001D37.
The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B	C Ref.
1.5D-2V	SMAF001D37	11.8	9	—
1.5D-2W	SMAF002D37	11.8	9	20
2.5D-2V	SMAF003D13	12	10	—

(Note) Procedure for wire connection...See pages 113 to 120

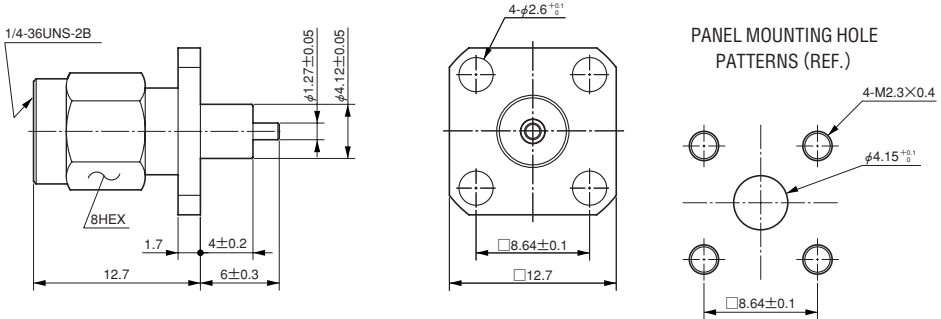
■ PLUG RECEPTACLE

Panel Mount Type

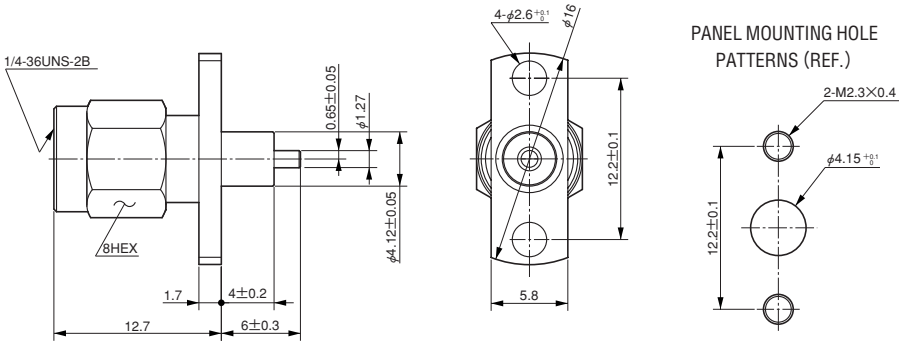
Interchangeable with JACK (16 Page)

Dimensions in millimeters

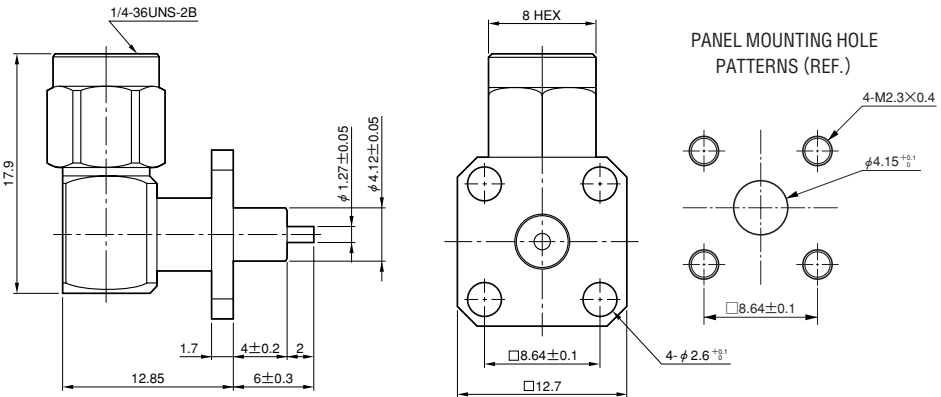
■ Straight · Four-hole Mount
Part Number : SMAP001D00



■ Straight · Two-hole Mount
Part Number : SMAP002D00



■ Right-angle · Four-hole Mount
Part Number : SMAQ001D00



SMA Series

■DUST CAP (For Receptacle & Jack)

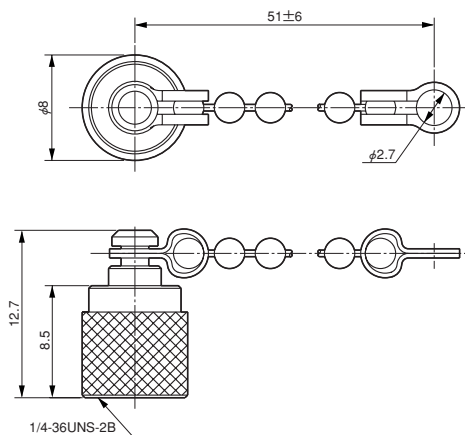
Dimensions in millimeters

■With Chain

Part Number : SMA0D0001-R



●Material : Copper Alloy

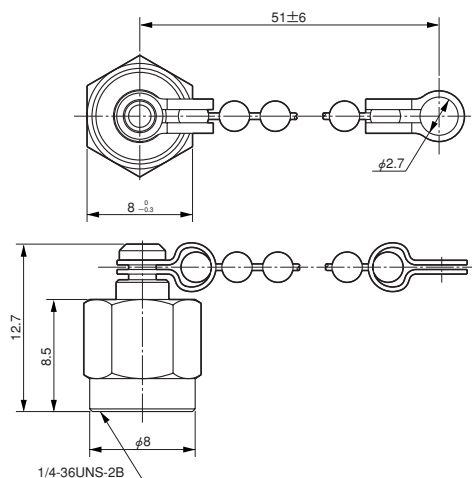


■Hexagon Nut Type · With Chain

Part Number : SMAD001Z00



●Material : Copper Alloy

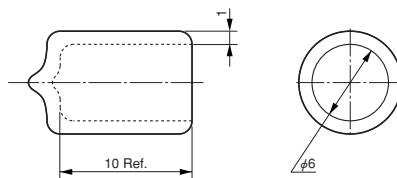


■Plastic Type

Part Number : SMA0D00000



●Material : PVC



Before placing an order

- ①The values specified in this catalogue are only for reference. The products and specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
- ②Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
- ③The products presented in this catalogue are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1)Applications that require consultation:

- (i)Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
- (ii)We may separately give you our support with a quality assurance program that you specify, when you think of a use such as:
Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2)Recommended applications include:

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