

RoHS Compliant

COAXIAL CONNECTORS

2008

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

COAXIAL
CONNECTORS

Japan Aviation Electronics Industry, Ltd.

- FREQUENCY RANGE TO 3GHz
- PUSH-ON COUPLING

SMB Series

SMB series coaxial connectors are small size, push-on coupling type, basis of the general purpose standards (IEC60169-10) .

For panel to cable or board to cable application, achieving high frequency signal transmission and high density packaging inside equipment. Applicable frequencies : from DC up to 3GHz.

High performance with a VSWR (voltage standing wave ratio) of 1.2 or less (Straight plug) .

- Lightweight, compact in size and rugged construction.
- A high degree of reliability provides stable electric continuity and high frequency performance.
- Reliable and stable interconnection.
- Applications : Automobile Telephone, Communications Equipment, Measuring Instruments



SPECIFICATIONS

Characteristic Impedance	50 Ω
Frequency Range	DC to 3GHz
D. W. Voltage	AC500Vr.m.s. (1minute)
Insulation Resistance	500 megohms min. (DC250V) SMBS001D00 : 500 megohms min. (DC500V)
Contact Resistance	Center Contacts : 5 milliohms max. SMBS001D00 : 8 milliohms max. Outer Contacts : 2.5 milliohms max. SMBS001D00 : 12 milliohms max.
V. S. W. R.	1.2 max. (DC to 3GHz)
Applicable Cables	1.5D-V, 1.5D-W, UT85

MATERIALS/FINISHES

Description	Materials/Finishes
Contacts	Copper Alloy/Gold Plated over Nickel
Insulator	PTFE or SPS
Shell	Copper Alloy/Nickel Plated SMBH003DB2, SMBK003DB2, SMB A003DB2 : Copper Alloy/Gold Plated over Nickel SMBS001D00 : Zinc Alloy/Nickel Plated over Copper
Ferrule	Copper Alloy/Nickel Plated
Hexagon Nut	Copper Alloy/Nickel Plated
C-ring	Copper Alloy/Nickel Plated
Sleeve	Copper Alloy/Nickel Plated

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 : J AHL-2237-1
- For 0.085 inch Semi-flexible cables : J AHL-2237-2

■ TYPES AND COMBINATIONS

Receptacle

● Bulkhead · Straight

P/N : SMBV001D00



● Panel Mount · Straight

P/N : 2 Hole Mount · SMBT001D00



● Through-hole Solder · Straight

P/N : SMBR001D00



● Through-hole Solder · Right-angle
P/N : Machined Type · SMBS002D00
Die-cast Type · SMBS001D00



Jack

● Bulkhead · Straight

P/N : SMBK00※D**



● Panel Mount · Straight

P/N : 4 Hole Mount · SMBH00※D**



Plug

● Straight

P/N : SMBA00※D**



● Right-angle

P/N : SMBB00※D**



Adapter



Various adapters are available.
See pages 93 to 107.

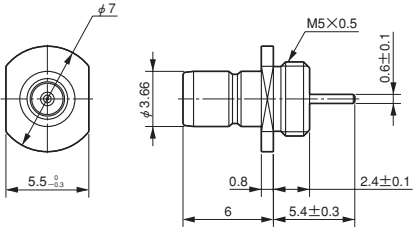
■ **RECEPTACLE**

Bulkhead Type · Panel Mount Type

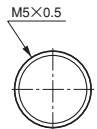
Interchangeable with PLUG (24 Page)

Dimensions in millimeters

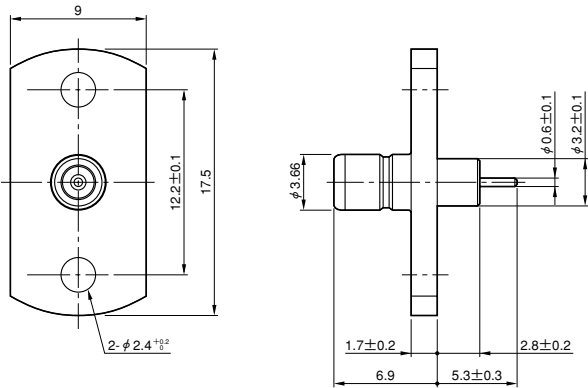
■ Bulkhead · Straight
Part Number : SMBV001D00



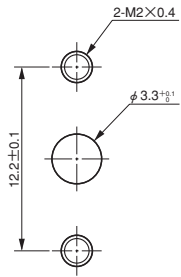
PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS : 2 to 2.3mm)



■ Panel mount · Straight
Two-hole Mount
Part Number : SMBT001D00



PANEL MOUNTING HOLE PATTERNS (REF.)



RECEPTACLE

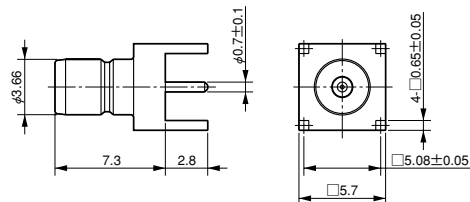
Through-hole Solder Type

Intermatable with PLUG (24 Page)

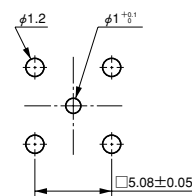
Dimensions in millimeters

Straight

Part Number : SMBR001D00

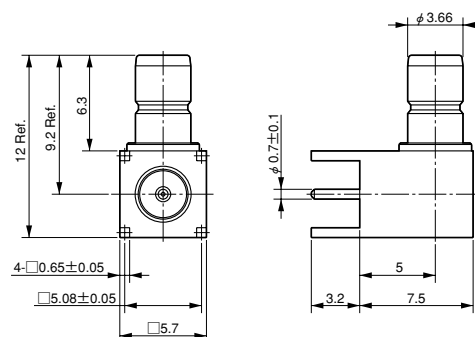


PC BOARD LAYOUT • MOUNTING SIDE (REF.)

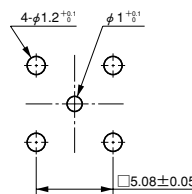


Right-angle • Machined Type

Part Number : SMBS002D00

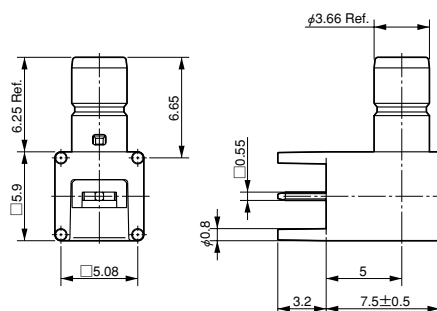


PC BOARD LAYOUT • MOUNTING SIDE (REF.)

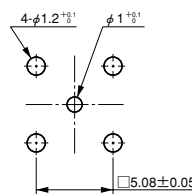


Right-angle • Die-cast Type

Part Number : SMBS001D00



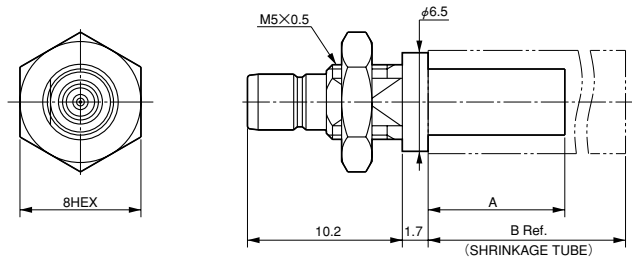
PC BOARD LAYOUT • MOUNTING SIDE (REF.)



JACK**Bulkhead Type · Panel Mount Type**

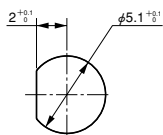
Intermatable with PLUG (24 Page)

Dimensions in millimeters

Bulkhead · Straight

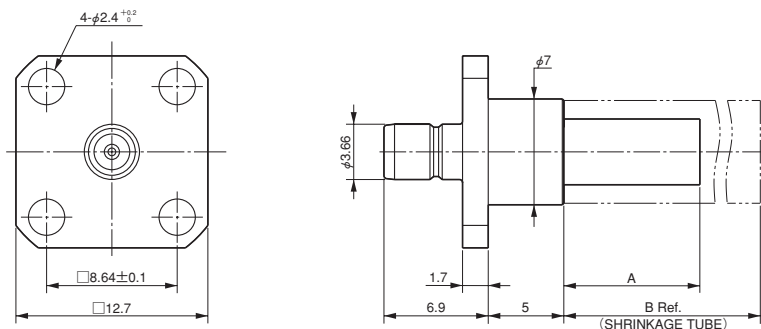
(Note) The picture on the above shows the SMBK001D37.
The shapes of other models vary slightly.

PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS : 3mm Max.)

**Part Number/Dimensions**

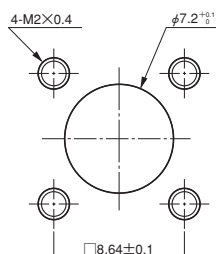
Cable Type (Equivalent)	Part Number	A	B Ref.
1.5D-2V	SMBK001D37	9	—
1.5D-2W	SMBK002D37	9	20
0.085 inch Semi-flexible	SMBK003DB2	5	13

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

**Panel mount · Straight
Four-hole Mount**

(Note) The picture on the above shows the SMBH001D37.
The shapes of other models vary slightly.

PANEL MOUNTING HOLE PATTERNS (REF.)

**Part Number/Dimensions**

Cable Type (Equivalent)	Part Number	A	B Ref.
1.5D-2V	SMBH001D37	9	—
1.5D-2W	SMBH002D37	9	20
0.085 inch Semi-flexible	SMBH003DB2	5	13

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

COAXIAL CONNECTORS

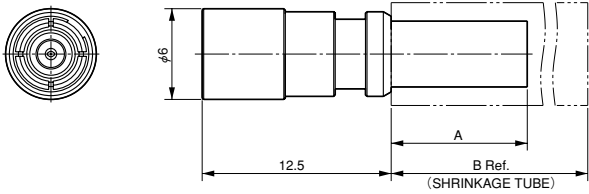
SMB Series

PLUG

Intermatable with RECEPTACLE (21,22 Page) & JACK (23 Page)

Dimensions in millimeters

Straight



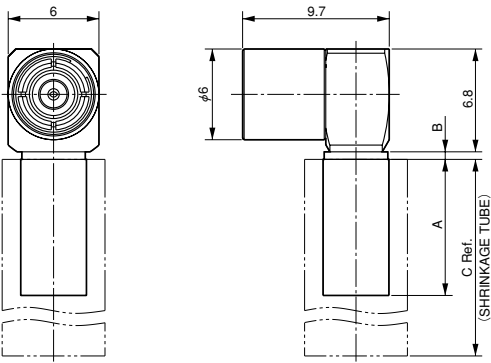
(Note) The picture on the above shows the SMBA001D37.
The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B Ref.
1.5D-2V	SMBA001D37	9	—
1.5D-2W	SMBA002D37	9	20
0.085 inch Semi-flexible	SMBA003DB2	5	13

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

Right-angle



(Note) The picture on the above shows the SMBB001D37.
The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	A	B	C Ref.
1.5D-2V	SMBB001D37	9	0.5	—
1.5D-2W	SMBB002D37	9	0.5	20
0.085 inch Semi-flexible	SMBB003DB2	5	0	13

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

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:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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