

RoHS Compliant

COAXIAL CONNECTORS

2008

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



COAXIAL
CONNECTORS

Japan Aviation Electronics Industry, Ltd.

- FREQUENCY RANGE TO 3GHz (50Ω Type)
- BAYONET COUPLING

BNC Series

BNC series are small size coaxial connectors, conforming to the general purpose standards (IEC60169-8).

Easy to operate bayonet lock, best suited for connection between indoor devices, involving frequent connecting and disconnecting.

Applicable frequencies : from DC up to 3GHz (50Ω) /DC up to 1.5GHz (75Ω). High performance with a VSWR (voltage standing wave ratio) of 1.2 or less.

- A wide variety of products enable various mounting styles.
- Two impedance models are available: 50 and 75 ohms. (Note)
- A high degree of reliability provides stable electric continuity and high frequency performance.
- Applications : Broadcasting Equipment, Various Audio-visual Equipment, Measuring Instruments

(Note) We recommend that you couple connectors with the same impedance (50Ω to 50Ω or 75Ω to 75Ω).



SPECIFICATIONS

Characteristic Impedance	50Ω、75Ω
Frequency Range (Note)	50Ω : DC to 3GHz 75Ω : DC to 1.5GHz
D. W. Voltage	AC500Vr.m.s. (1minute)
Insulation Resistance	500 megohms min. (DC500V)
Contact Resistance	Center Contacts : 10 milliohms max. Outer Contacts : 5 milliohms max.
V. S. W. R.	1.2 max.
Applicable Cables	0.8C-V, 1.5C-V, 1.5C-W, 1.5D-V, 1.5D-W, 2.5D-V, 3C-V

(Note) For Right-angle receptacles, please consult us.

MATERIALS/FINISHES

Description	Materials/Finishes
Contacts	Copper Alloy/Gold Plated over Nickel
Insulator	PTFE Part of Right-angle Receptacle : Polymethylpentene BNCS005C00 : PBT
Shell	Copper Alloy/Nickel Plated Right-angle Receptacle: Zinc Alloy/Nickel Plated over Copper BNCS003C00 : Zinc Alloy/Nickel Plated
Toothed Lock Washer	Stainless Steel BNCS003C00 : Copper Alloy/ Nickel Plated
Hexagon Nut	Copper Alloy/Nickel Plated
Sleeve	Copper Alloy/Nickel Plated
Ferrule	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 0.8C-V cables : JAHL-20028-1
- For 1.5C-V, 1.5C-W,
1.5D-V and 1.5D-W cables : JAHL-20028-2
- For 2.5D-V cables : JAHL-20028-3
- For 3C-V cables : JAHL-20028-4

BNC Series

TYPES AND COMBINATIONS

Receptacle

● Bulkhead · Straight
P/N : BNCV001D00



● Through-hole Solder · Straight
P/N : BNCR001D00



● Through-hole Solder · Right-angle
P/N : BNCS002C00



● Through-hole Solder
Bulk Head · Right-angle
P/N : BNCS003C00

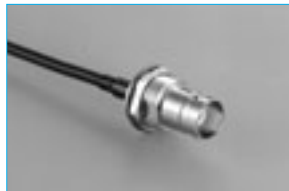


● Through-hole Solder
4 Contacts · Right-angle
P/N : BNCS005C00



Jack

● Bulkhead · Straight
P/N : BNCK00****



● Panel Mount · Straight
P/N : 4 Hole Mount · BNCH00****



Plug

● Straight
P/N : BNCA00****



● Right-angle
P/N : BNCA00****



Dust Cap

● For Receptacle & Jack
P/N : BNCD001Z00



Adapter



Various adapters are available.
See pages 93 to 107.

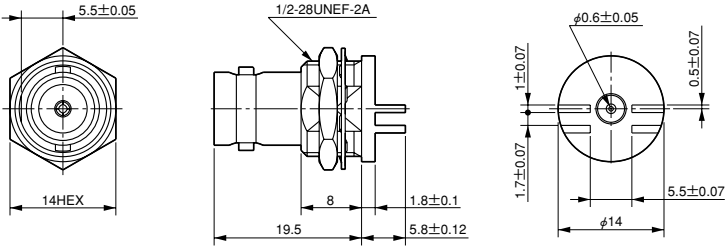
RECEPTACLE

Bulkhead Type · Through-hole Solder Type

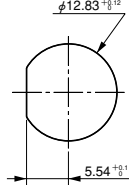
Interchangeable with PLUG (33 Page)

Dimensions in millimeters

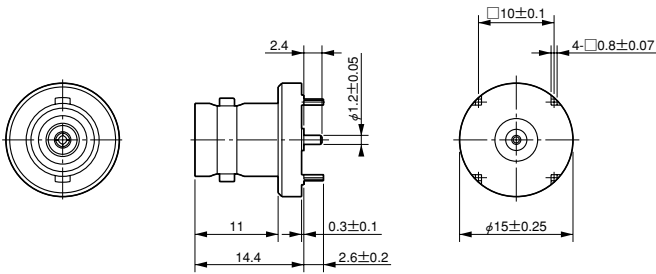
Bulkhead · Straight
Characteristic Impedance : 50 Ω
Part Number : BNCV001D00



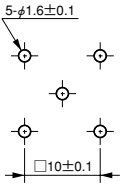
PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS:1 to 4mm)



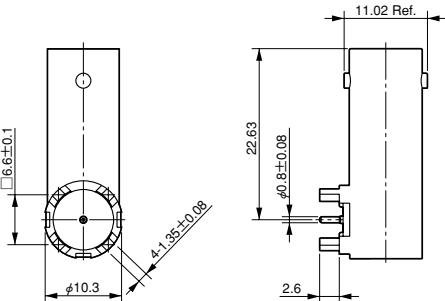
Through-hole Solder · Straight
Characteristic Impedance : 50 Ω
Part Number : BNCR001D00



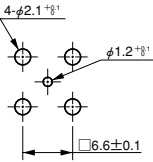
PC BOARD LAYOUT · MOUNTING SIDE (REF.)



Through-hole Solder · Right-angle
Characteristic Impedance : 75 Ω
Part Number : BNCS002C00



PC BOARD LAYOUT · MOUNTING SIDE (REF.)



BNC Series

RECEPTACLE

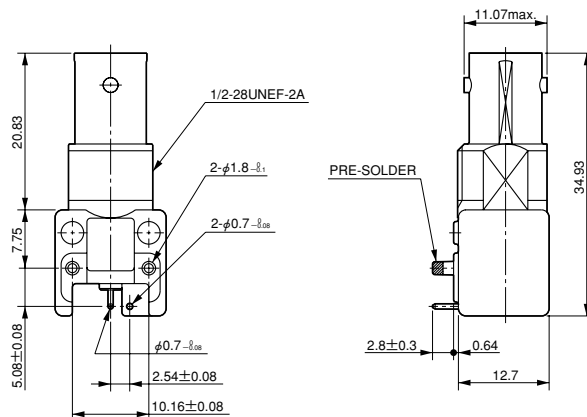
Through-hole Solder Type (Bulkhead)

Interchangeable with PLUG (33 Page)

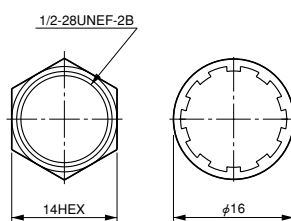
Dimensions in millimeters

Right-angle

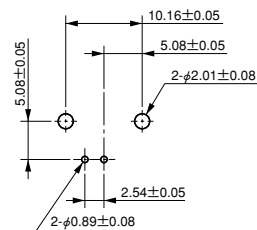
Characteristic Impedance : 75 Ω
Part Number : BNCS003C00



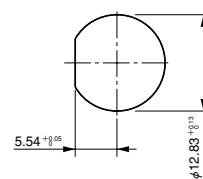
Attached Parts



PC BOARD LAYOUT • MOUNTING SIDE (REF.)



PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS : 1 to 4mm)



BNC Series

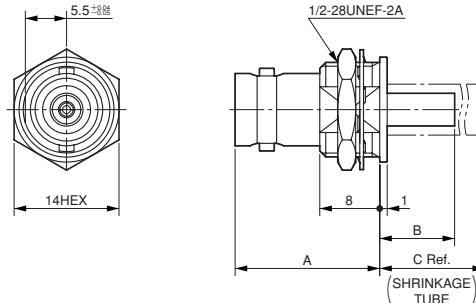
JACK

Bulkhead Type · Panel Mount Type

Interchangeable with PLUG (33 Page)

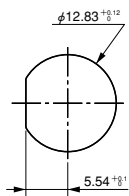
Dimensions in millimeters

Bulkhead · Straight



(Note) The picture on the above shows the BNCK002D37.
The shapes of other models vary slightly.

PANEL MOUNTING HOLE PATTERNS (REF.)
(PANEL THICKNESS : 2 to 4 mm)

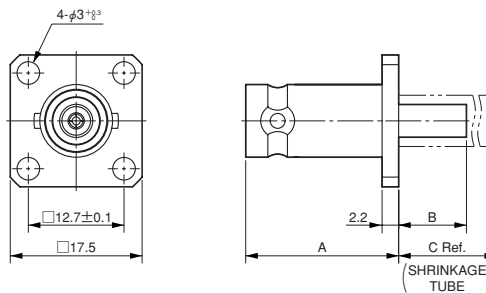


Part Number/Dimensions

Cable Type (Equivalent)	Part Number	Characteristic Impedance	A	B	C ±2
1.5D-2V	BNCK002D37	50 Ω	19	10	—
1.5D-2W	BNCK006D37	50 Ω	19	9	21
2.5D-2V	BNCK003D13	50 Ω	19	11	—
0.8C-2V	BNCK001C21	75 Ω	20	8	—

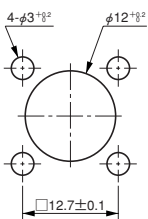
(Note) Procedure for wire connection...See pages 113 to 120

Panel mount · Straight Four-hole Mount



(Note) The picture on the above shows the BNCH002D37.
The shapes of other models vary slightly.

PANEL MOUNTING HOLE PATTERNS (REF.)



Part Number/Dimensions

Cable Type (Equivalent)	Part Number	Characteristic Impedance	A	B	C Ref.
1.5D-2V	BNCH002D37	50 Ω	20	9	—
1.5D-2W	BNCH005D37	50 Ω	20	9	20
2.5D-2V	BNCH003D13	50 Ω	20	10	—
0.8C-2V	BNCH001C21	75 Ω	21	7	—

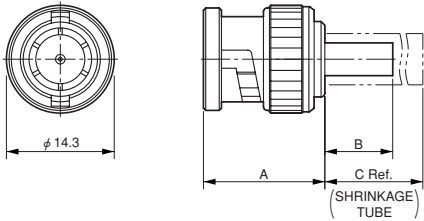
(Note) Procedure for wire connection...See pages 113 to 120

PLUG

Interchangeable with RECEPTACLE (29 to 31 Page) & JACK (32 Page)

Dimensions in millimeters

Straight



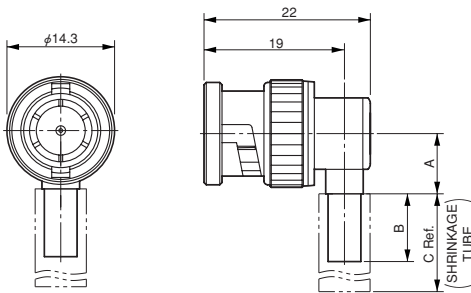
(Note) The picture on the above shows the BNCA003C37. The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	Characteristic Impedance	A	B	C Ref.
1.5C-2V	BNCA003C37	75 Ω	16	9	—
1.5C-2W	BNCA006C37	75 Ω	16	9	20
1.5D-2V	BNCA002D37	50 Ω	16	9	—
1.5D-2W	BNCA005D37	50 Ω	16	9	20
3C-2V	BNCA004C61	75 Ω	16	12	—
0.8C-2V	BNCA001C21	75 Ω	18	7	—

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

Right-angle



(Note) The picture on the above shows the BNCB002C37. The shapes of other models vary slightly.

Part Number/Dimensions

Cable Type (Equivalent)	Part Number	Characteristic Impedance	A	B	C Ref.
1.5C-2V	BNCB002C37	75 Ω	7.8	9	—
1.5C-2W	BNCB005C37	75 Ω	7.8	9	20
1.5D-2V	BNCB001D37	50 Ω	7.8	9	—
1.5D-2W	BNCB004D37	50 Ω	7.8	9	20
3C-2V	BNCB003C61	75 Ω	8	12	—

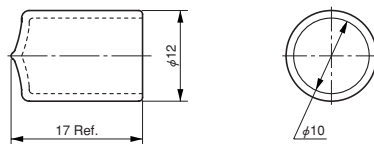
(Note) Procedure for wire connection...See pages 113 to 120

BNC Series

■ DUST CAP (For Receptacle & Jack)

Dimensions in millimeters

■ Plastic Type
Part Number : BNC001Z00



● 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:

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

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