75 ohm BNC PCB Mount Receptacles (Screw Type)

True 75 ohm PC board mount receptacle. Right Angle types can be fixed on PC board with M2.6 screw.

BCJ-BPLHK

Key Features and Benefits

- True 75 ohm PC board mount receptacle.
- Gold plated beryllium copper center contact.
- Right Angle types can be fixed on PC board with M2.6 screw.
- Space-saving design
- Eliminates wiring material and cost.
- Compact 16mm pitch design ideal for high density mounting
- Right Angle types can be fixed on PC board with screws, which improves solderability.
- Compact pitch design ideal for high density mounting.
  Right Angle types:16mm pitch
  Straight types:16.5mm pitch

Note: Any cleaning solvents cannot be used. This leads to insulation problems. Insulation material: m-PPO (m-PPE).

For inquiries about this products

Tech Data | Downloads

Front Mount 12G-SDI

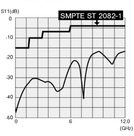
Type	Model	Description	Stud Position	Panel Mount	Standard Package
	BCJ-BPLHK	Right Angle, for 12G-SDI	Horizontal	Front: M2.6 screw	20 pcs / 100 pcs
	BCJ-BPLHK2P	Right Angle, for 12G-SDI	Horizontal		10 pcs
	BCJ-BPCK	Straight, for 12G-SDI	-		20 pcs

Screws not included

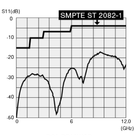
Key Features and Benefits

- 16 mm: Minimum pitch between adjacent connectors
- Right Angle types can be fixed on PC board with screws, which improves soldering process.
- <Rerurn Loss> **BCJ-BPLHK** : 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz
- <Rerurn Loss> **BCJ-BPLHK2P** : 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz
- <Rerurn Loss> **BCJ-BPCK** : 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

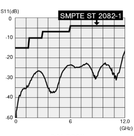
< Rerurn Loss >



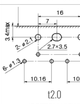
BCJ-BPLHK



BCJ-BPLHK2P



BCJ-BPCK

	BCJ-BPLHK	BCJ-BPLHK2P	BCJ-BPCK
Panel Hole Dim.	 Screw:M2.6 t1.6	 Screw:M2.6 t1.6	 Screw:M2.6 t1.6
PCB Hole Dim.	 t2.0 (BOTTOM VIEW)	 t2.0 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)

Front Mount

Type	Model	Description	Stud Position	Panel Mount	Standard Package
	BCJ-BPLHA	Right Angle	Horizontal	Front: M2.6 screw	20 pcs / 100 pcs
	BCJ-BPLH2PA	Right Angle, Dual Jack			10 pcs
	BCJ-BPLH3PA	Right Angle, Triple Jack			10 pcs
	BCJ-BPC2P	Straight, Dual Jack	-		10 pcs / 100 pcs

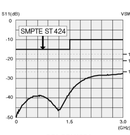
Screws not included

Key Features and Benefits

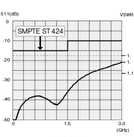
- 16 mm: Minimum pitch between adjacent connectors
- Compact pitch design ideal for high density mounting.
  Right Angle types:16mm pitch
  Straight types:16.5mm pitch
- <Rerurn Loss> **BCJ-BPLHA** : 26 dB @ 1.5 GHz, 20 dB @ 3 GHz
- <Rerurn Loss> **BCJ-BPC2P** : 26 dB @ 1 GHz, 20 dB @ 2.5 GHz

< Rerurn Loss >

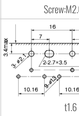
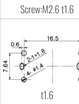
BCJ-BPLHA



BCJ-BPLH2PA



BCJ-BPC2P

	BCJ-BPLHA	BCJ-BPLH2PA	BCJ-BPLH3PA	BCJ-BPC2P
Panel Hole Dim.	 Screw:M2.6 t1.6	 Screw:M2.6 t1.6	 Screw:M2.6 t1.6	 Screw:M2.6 t1.6
PCB Hole Dim.	 t2.0 (BOTTOM VIEW)	 t2.0 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)	 t1.6 (BOTTOM VIEW)

Technical Note

Voltage Standing - wave Ratio (VSWR) and Return Loss

Terminating the receiving end of a limited length coaxial cable using a resistance value not equal to its characteristic impedance creates a reflected wave that returns back down the cable to the sending end. The result is interference developing between the travelling wave and the return wave which results in a standing wave that causes voltage levels to fluctuate. The degree to which terminating resistance matches the characteristic impedance is indicated using the VSWR or voltage standing-wave ratio standard shown in Fig. 1. Going hand in hand with the VSWR ratio is the return loss factor which measures the size of the reflected wave current in relation to the travelling wave current. (See Fig. 2)

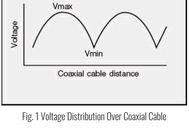


Fig. 1 Voltage Distribution Over Coaxial Cable

VSWR	Return Loss (dB)
2	9.54
1.5	13.98
1.2	20.83
1.1	26.44
1.05	32.26
1.02	40.09
1.01	46.06

Fig. 2 VSWR to Return Loss Conversion Table

PRODUCT SPECIFICATIONS

SAB503
(BCJ-BPLHK) Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC receptacle
(2) Model name BCJ-BPLHK
(3) Applicable standard IEC*1 61169-8,JIS*2 C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL503).
(6) Weight Approx 11g
(7) Designation Brand name(CANARE) on the body.
(8) Packaging 20pcs/package (150 x 50 x 44mm),100pcs/package (220 x158 x 50mm)

*1International Electrotechnical Commission
*2Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +85 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	5000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Return loss	26dB or more (0 ～ 1.5GHz) 20dB or more (0 ～ 3GHz) 15dB or more (0 ～ 6GHz) 10dB or more (0 ～ 12GHz)	Terminating with 75 Ω and measured. The measuring frequency up to 12GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.0N or more	Following pin gauge (**Fig**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N･m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3 ℃ Solder wetting time : 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 9s to 11s Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

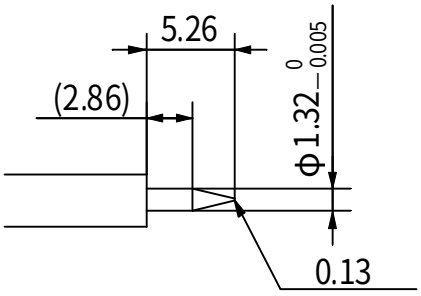
Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

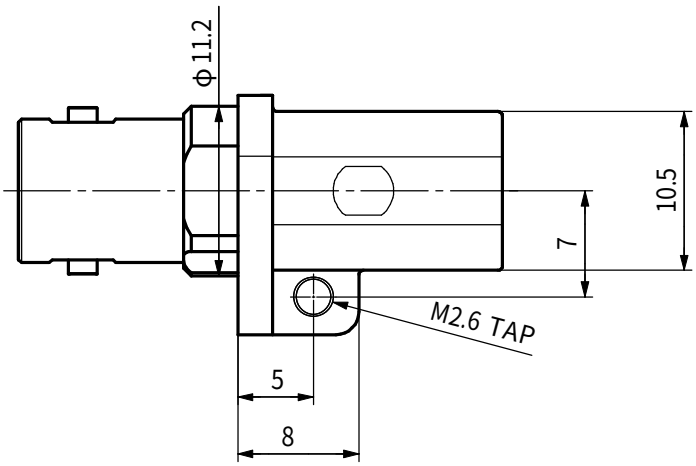
6. For soldering

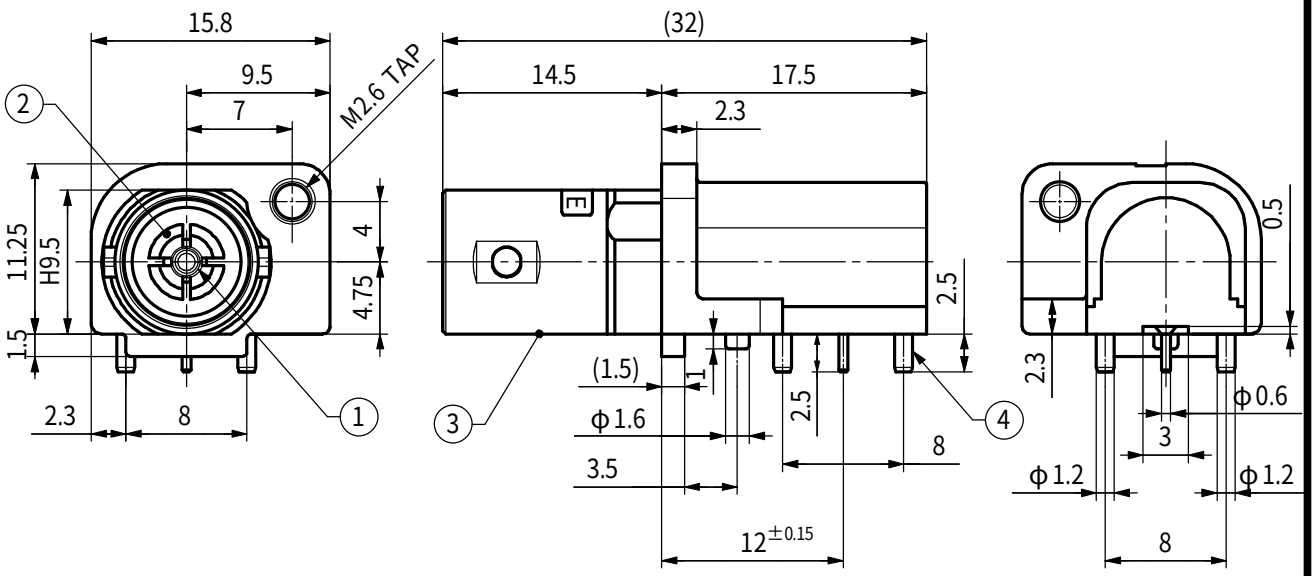
(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

(2) Washing：Do not wash connector after soldering.

Fig. Unit: mm

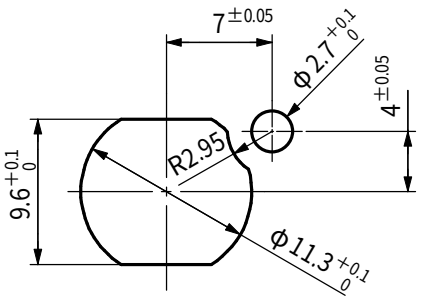






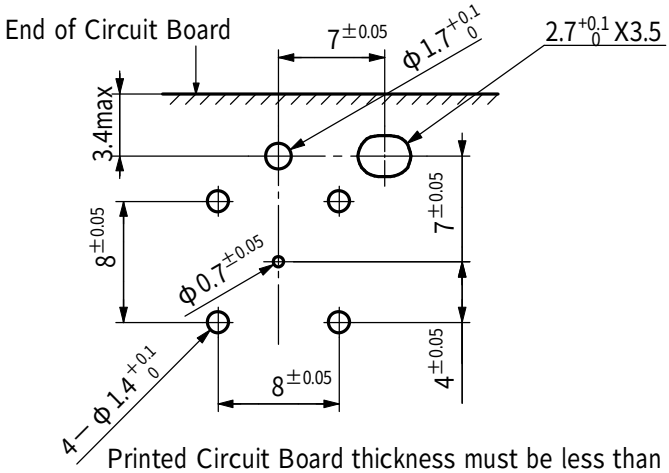
Mounting Hole

(Use M2.6 screw)



The panel thickness must be less than 1.6mm.

Printed Circuit Board
(BOTTOM VIEW)



Printed Circuit Board thickness must be less than 2mm.

No.	Name of Parts	Pc(s).	Material	End Finish
4	Body2	1	Zinc Alloy Die-Cast	Nickel Plating
3	Body	1	Zinc Alloy Die-Cast	Nickel Plating
2	Insulator	1	SPS	—
1	Female Center Contact	1	Beryllium Copper	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
75Ω BNC RECEPTACLE		mm	2:1	±0.1	2017-05-18	BCJ-BPLHK	BL503

PRODUCT SPECIFICATIONS

SAB504
Ver. 1.0

(BCJ-BPLHK2P)

CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75Ω BNC receptacle.

2. General Specifications

(1) Product name 75Ω BNC receptacle
(2) Model name BCJ-BPLHK2P
(3) Applicable standard IEC*1 61169-8,JIS*2 C 5412
(4) Nominal impedance 75Ω unbalanced
(5) Construction As shown in the drawing (BL504).
(6) Weight Approx 17g
(7) Designation Brand name(CANARE) on the body.
(8) Packaging 10pcs/package (150 x 50 x 44mm)

*1International Electrotechnical Commission
*2Japanese Industrial Standard

3. Rating

(1) Operating temperature -40℃ ～ +85℃
(2) Operating humidity ～90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	5000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Return loss	26dB or more (0～1.5GHz) 20dB or more (0～3GHz) 15dB or more (0～6GHz) 10dB or more (0～12GHz)	Terminating with 75Ω and measured. The measuring frequency up to 12GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.0N or more	Following pin gauge (**Fig**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50mΩ or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3℃ Solder wetting time : 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3℃ Immersion time: 9s to 11s Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

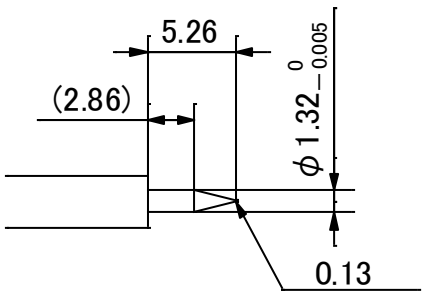
Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15℃ to 35℃),Relative humidity (25% to 75%),Air pressure(86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

6. For soldering

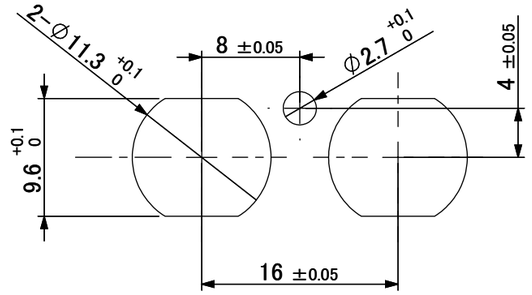
(1) Soldering by dipping: Be aware that this type of process needs to be done quickly.If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

(2) Washing: Do not wash connector after soldering.

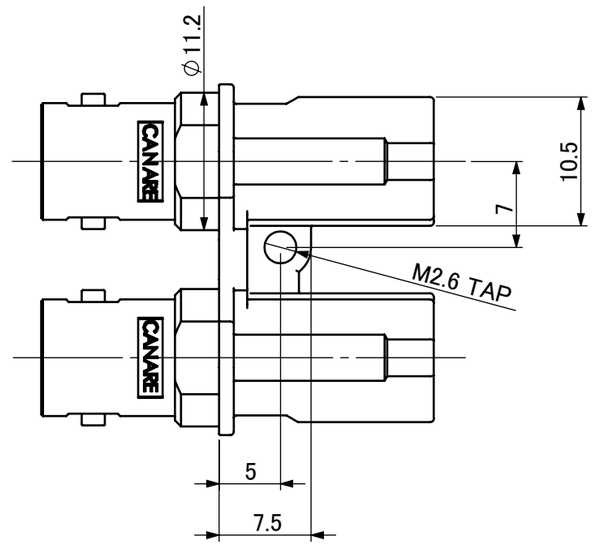
Fig. Unit: mm

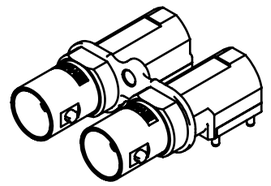


Mounting Hole
(Use M2.6 screw)

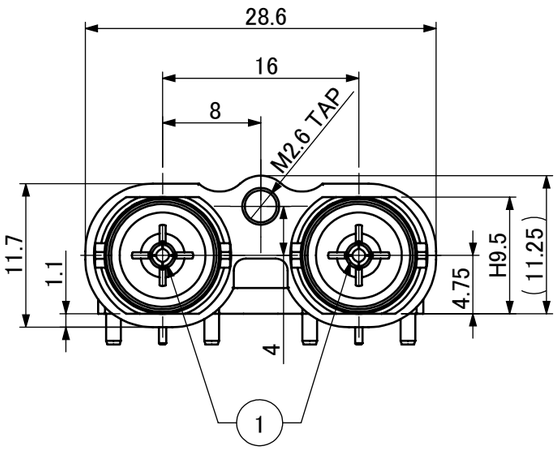


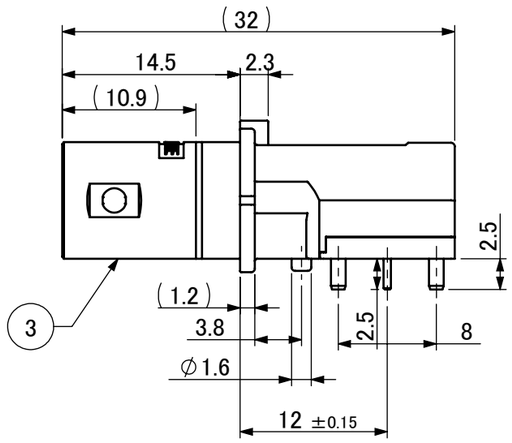
The panel thickness must be less than 1.6mm.

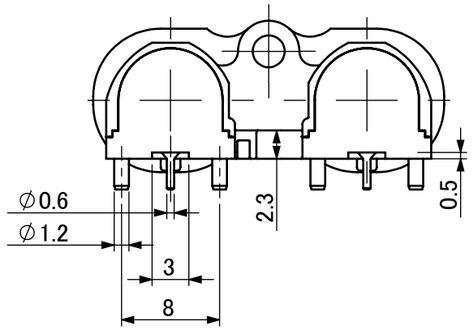




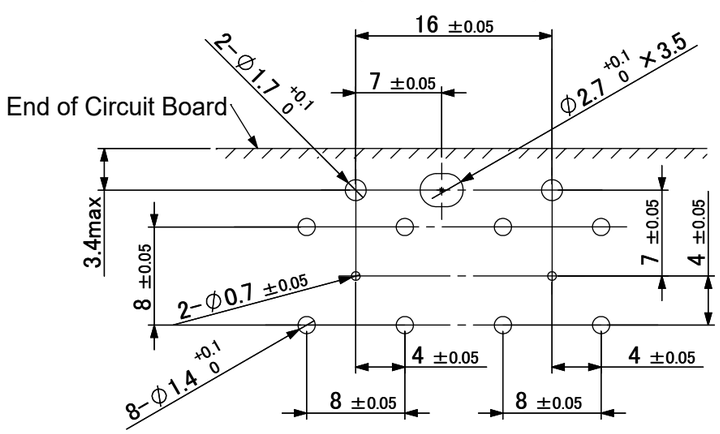
Scale 1 : 1



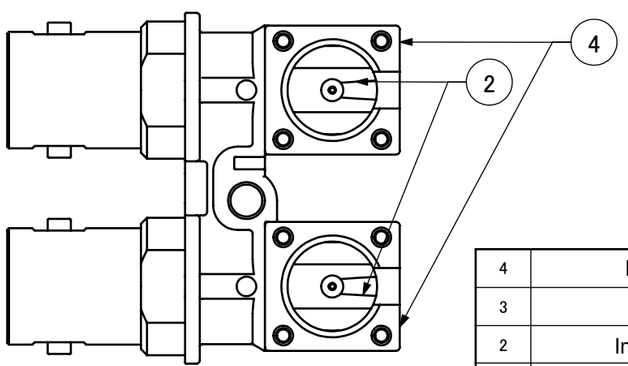




Printed Circuit Board
(BOTTOM VIEW)



Printed Circuit Board thickness must be less than 2mm



No.	Name of Parts	Pc(s).	Material	End Finish
4	Body2	2	Zinc Alloy Die-Cast	Nickel Plating
3	Body	1	Zinc Alloy Die-Cast	Nickel Plating
2	Insulator	2	SPS	—
1	Female Center Contact	2	Beryllium Copper	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
75Ω BNC RECEPTACLE		mm	2:1	±0.1	2021-02-03	BCJ-BPLHK2P	BL504

CANARE

PRODUCT SPECIFICATIONS

SAB541
(BCJ-BPCK)
Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC receptacle
(2) Model name BCJ-BPCK
(3) Applicable standard IEC*1 61169-8,JIS*2 C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL541).
(6) Weight Approx 9g
(7) Designation Brand name(CANARE) on the body.
(8) Packaging 20pcs/package (150 x 50 x 44mm)

*1International Electrotechnical Commission
*2Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +85 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	5000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Return loss	26dB or more (0 ～ 1.5GHz) 20dB or more (0 ～ 3GHz) 15dB or more (0 ～ 6GHz) 10dB or more (0 ～ 12GHz)	Terminating with 75 Ω and measured. The measuring frequency up to 12GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.0N or more	Following pin gauge (**Fig**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3 ℃ Solder wetting time : 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 9s to 11s Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

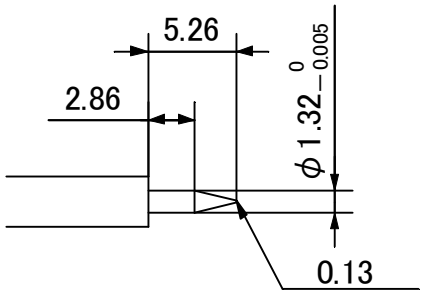
Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

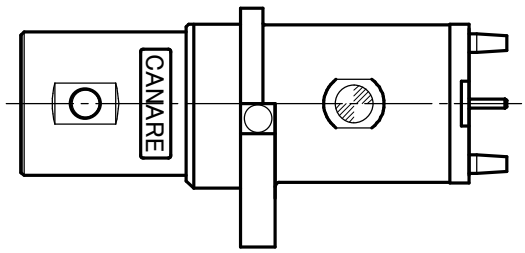
6. For soldering

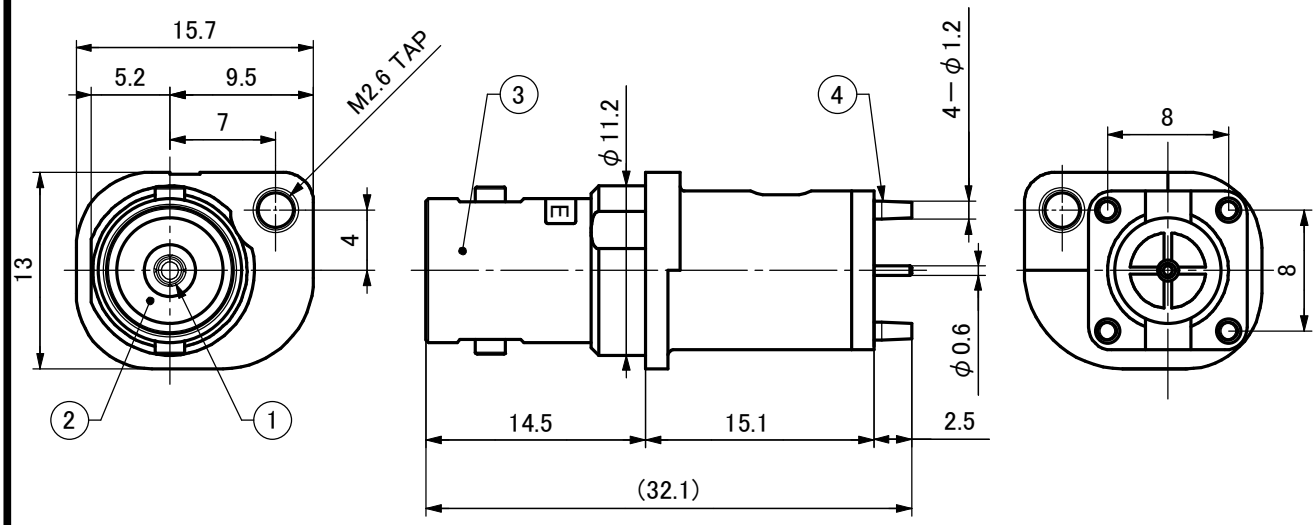
(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

(2) Washing : Do not wash connector after soldering.

Fig. Unit: mm

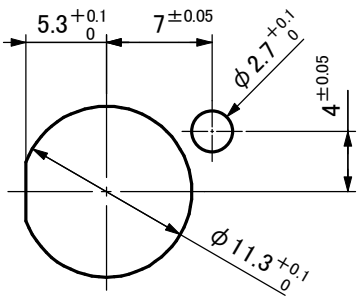




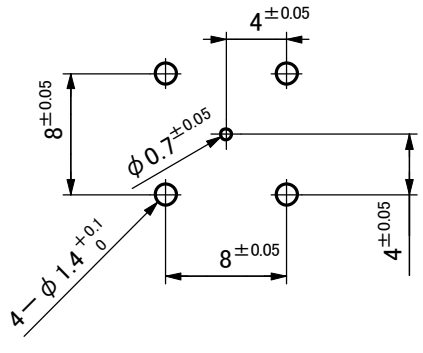


Mounting Hole

(Use M2.6 screw)



Printed Circuit Board



The panel thickness must be less than 1.6mm.

Printed Circuit Board thickness must be less than 2mm.

No.	Name of Parts	Pc(s).	Material	End Finish
4	Body2	1	Zinc Alloy Die-Cast	Nickel Plating
3	Body	1	Zinc Alloy Die-Cast	Nickel Plating
2	Insulator	1	SPS	—
1	Female Center Contact	1	Beryllium Copper	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
75Ω BNC RECEPTACLE		mm	2:1	±0.1	2018-09-18	BCJ-BPCK	BL541

CANARE

PRODUCT SPECIFICATIONS

SAB381
(BCJ-BPLHA)
Ver. 1.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC PCB mount receptacle
(2) Model name BCJ-BPLHA
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL381).
(6) Weight Approx 8g
(7) Designation Brand name (CANARE) on the body.
(8) Packaging 20pcs/package (150 x 50 x 44mm), 100pcs/package (220 x158 x 50mm)
*Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +100 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio(V.S.W.R)	1.1 or less (0 ～ 1.5GHz) 1.2 or less (0 ～ 3GHz)	Terminating with 75 Ω and measured. The measuring frequency up to 3GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.5 ～ 3.9N	Following JIS C 5412 pin gauge (**Fig.**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 245N and rotation strength of 2.45N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The measurement shall be made after 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3℃ Solder wetting time: 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 5s to 6s Number of cycles: 2 cycles Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

6. Note

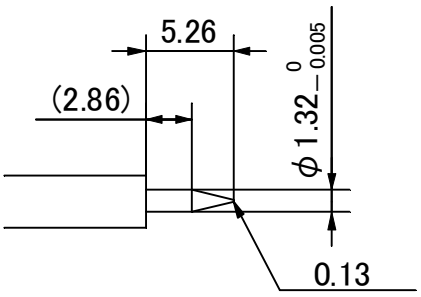
6.1 Tightening screw force: For panel mount, use a M2.6 screw and apply the tightening screw force of 0.69N·m.

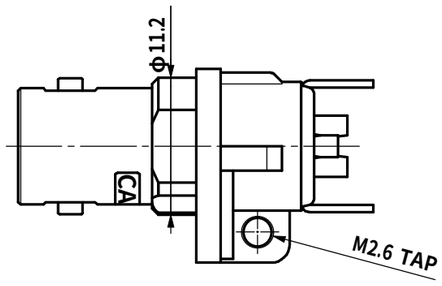
6.2 For soldering

(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

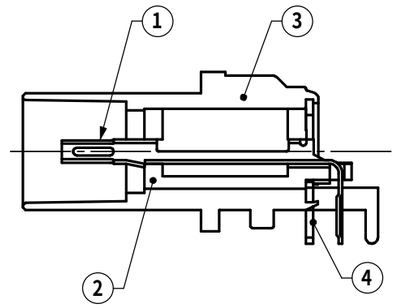
(2) Washing : Do not wash connector after soldering. This product contains modified PPO. Please check with detergent manufacture if washing is mandatory.

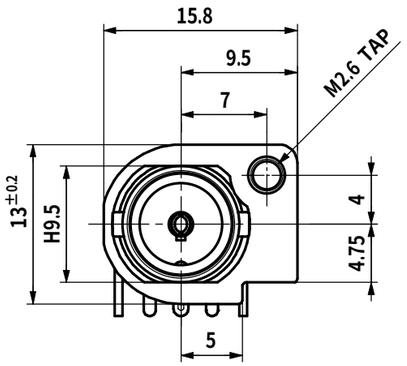
Fig. Unit: mm

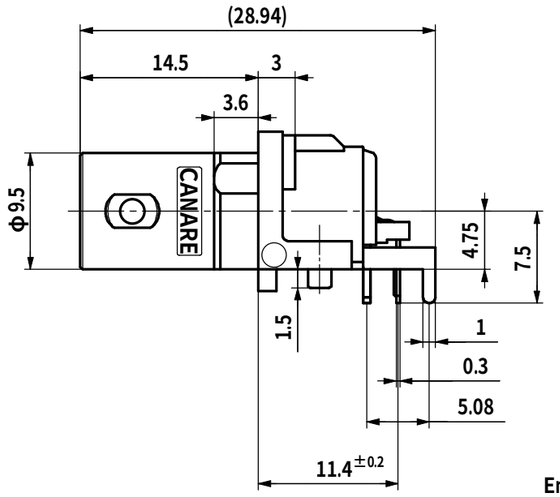


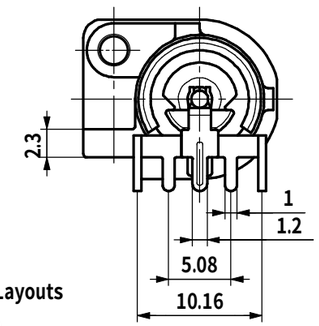


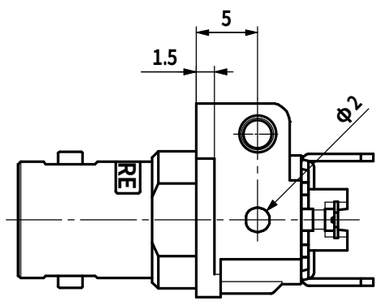
Construction



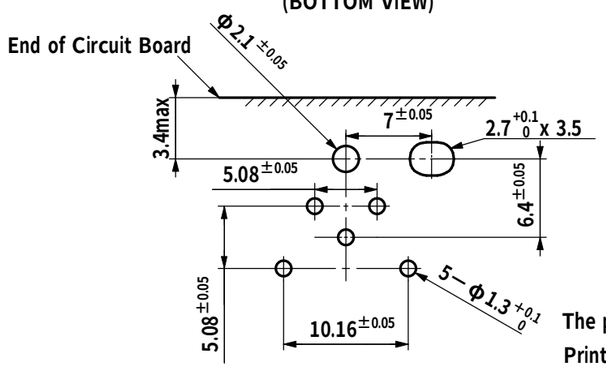




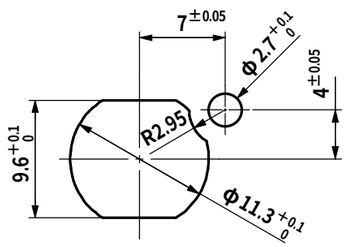




Printed Circuit Board Layouts
(BOTTOM VIEW)



Mounting Hole
(Use M2.6 screw)



The panel thickness must be less than 1.6mm.
Printed Circuit Board thickness must be less than 2.0mm.

No.	Name of Parts	Pc(s).	Material	End Finish
4	Ground Lug	1	Brass (t0.6)	Sn-Cu Plating
3	Body	1	Zinc Alloy Die-Cast	Nickel Plating
2	Insulator	1	m-PPO (White)	—
1	Female Center Contact	1	Beryllium Copper (t0.3)	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
75Ω BNC PCB MOUNT RECEPTACLE		mm	2:1	±0.1	2008-12-22	BCJ-BPLHA	BL381

CANARE

PRODUCT SPECIFICATIONS

SAB448
(BCJ-BPLH3PA)
Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC PCB mount receptacle
(2) Model name BCJ-BPLH3PA
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL448).
(6) Weight Approx 28g
(7) Designation Brand name (CANARE) on the body.
(8) Packaging 10pcs/package (150 x 50 x 44mm)
*Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +100 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio(V.S.W.R)	1.1 or less (0 ～ 1.5GHz) 1.2 or less (0 ～ 3GHz)	Terminated with 75 Ω. The measurement frequency up to 3GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.5 ～ 3.9N	Following JIS C 5412 pin gauge (**Fig.**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The measurement shall be made after 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3℃ Solder wetting time: 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 5s to 6s Number of cycles: 2 cycles Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

6. Note

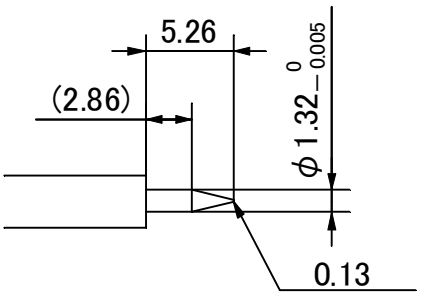
6.1 Tightening screw force: For panel mount, use a M2.6 screw and apply the tightening screw force of 0.7N·m .

6.2 For soldering

(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

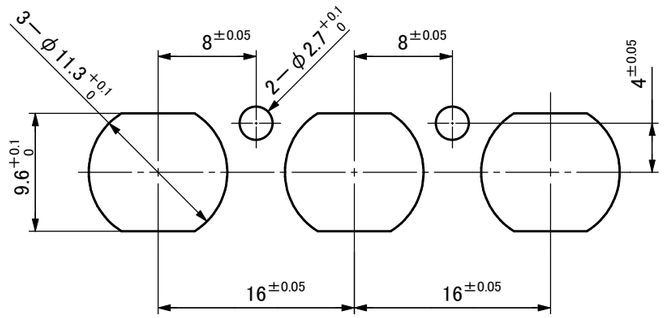
(2) Washing : Do not wash connector after soldering. This product contains modified PPO. Please check with detergent manufacture if washing is mandatory.

Fig. Unit: mm

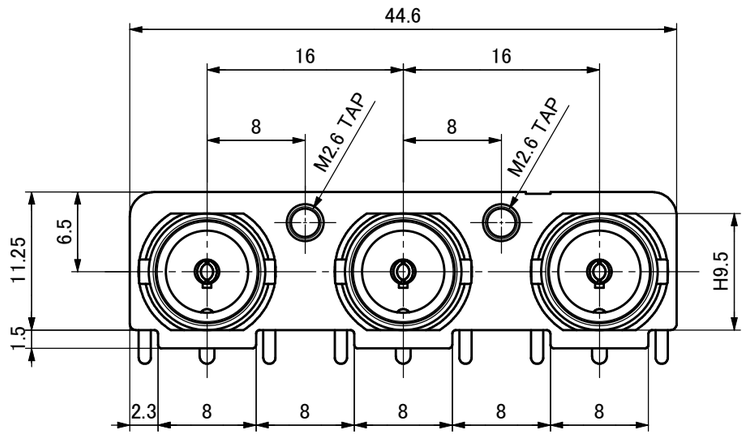


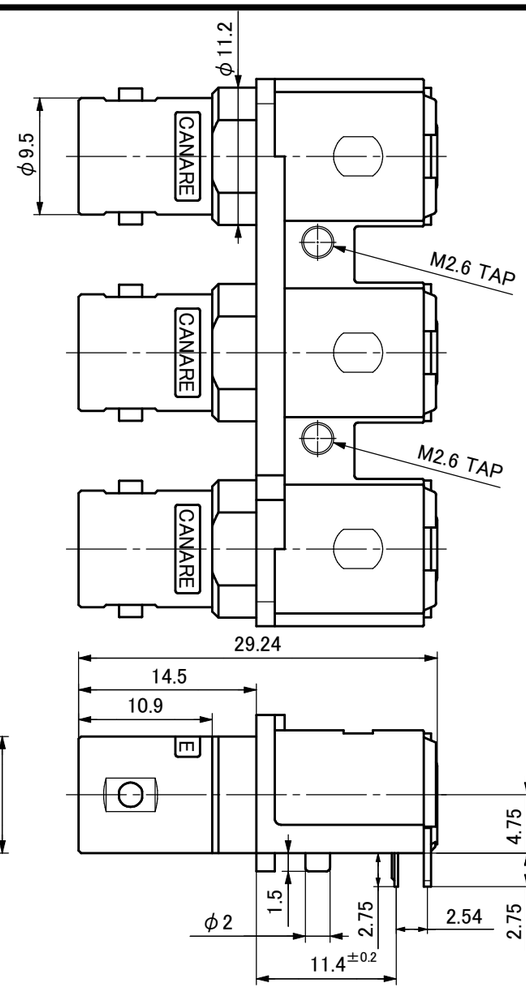
Mounting Hole

(Use M2.6 screw)

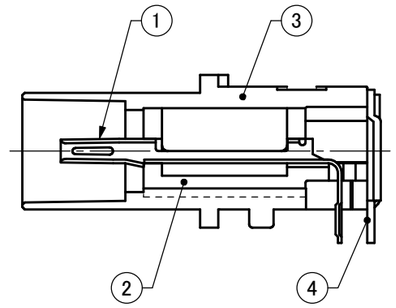


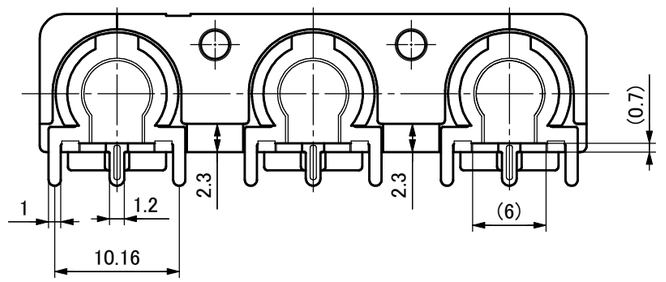
The panel thickness must be less than 1.6mm.





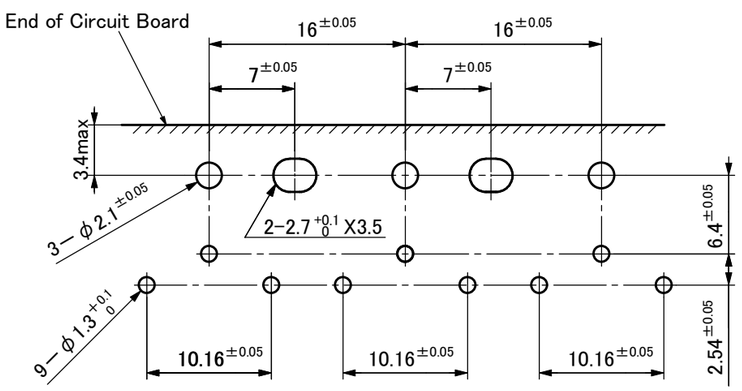
Construction



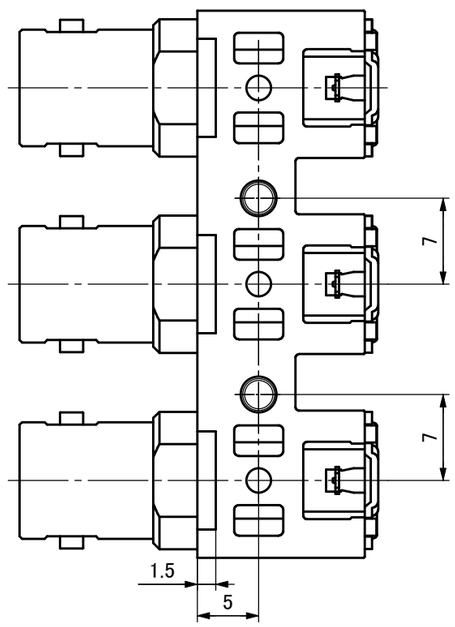


Printed Circuit Board Layouts

(BOTTOM VIEW)



Printed Circuit Board thickness must be less than 2mm.



No.	Name of Parts	Pc(s).	Material	Finish
4	Ground Lug	3	Brass (t0.6)	Sn-Cu Plating
3	Body	1	Zinc Alloy Die Casting	Nickel Plating
2	Insulator	3	m-PPO (White)	—
1	Female Center Contact	3	Beryllium Copper (t0.3)	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.0	Model	No.
75Ω BNC PCB MOUNT RECEPTACLE		mm	2:1	±0.1	2012-01-04		BCJ-BPLH3PA	BL448

CANARE

PRODUCT SPECIFICATIONS

SAB447
(BCJ-BPLH2PA)
Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC PCB mount receptacle
(2) Model name BCJ-BPLH2PA
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL447).
(6) Weight Approx 19g
(7) Designation Brand name (CANARE) on the body.
(8) Packaging 10pcs/package (150 x 50 x 44mm)
*Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +100 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio(V.S.W.R)	1.1 or less (0 ～ 1.5GHz) 1.2 or less (0 ～ 3GHz)	Terminated with 75 Ω. The measurement frequency up to 3GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.5 ～ 3.9N	Following JIS C 5412 pin gauge (**Fig.**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The measurement shall be made after 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3℃ Solder wetting time: 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 5s to 6s Number of cycles: 2 cycles Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

6. Note

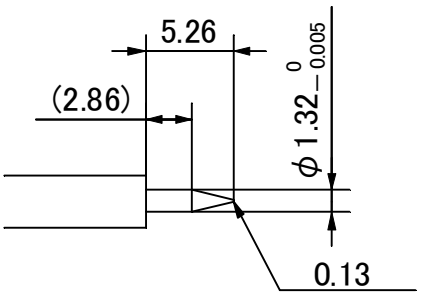
6.1 Tightening screw force: For panel mount, use a M2.6 screw and apply the tightening screw force of 0.7N·m .

6.2 For soldering

(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

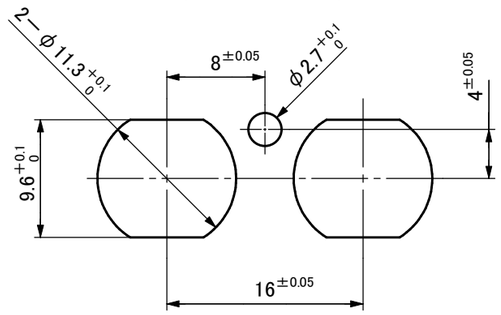
(2) Washing : Do not wash connector after soldering. This product contains modified PPO. Please check with detergent manufacture if washing is mandatory.

Fig. Unit: mm

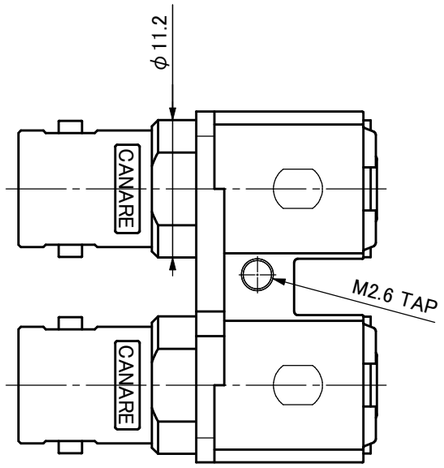


Mounting Hole

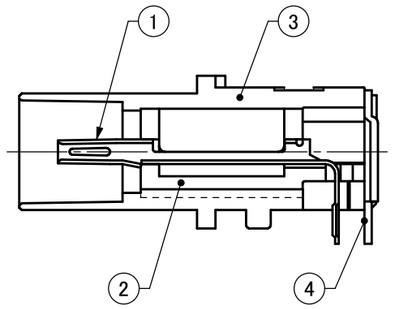
(Use M2.6 screw)

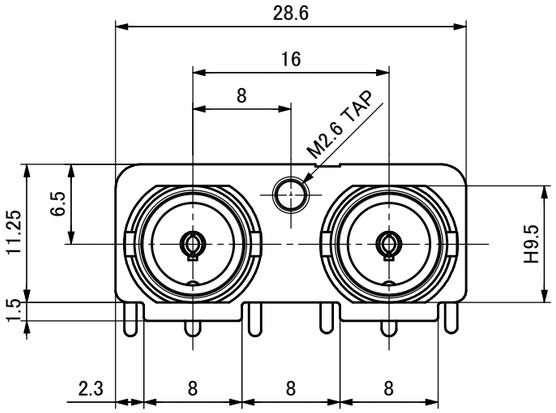


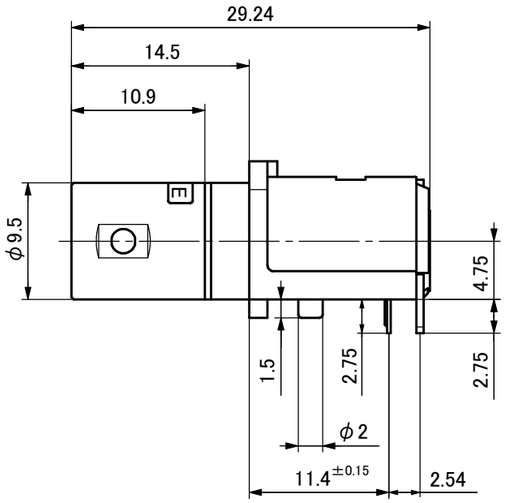
The panel thickness must be less than 1.6mm.

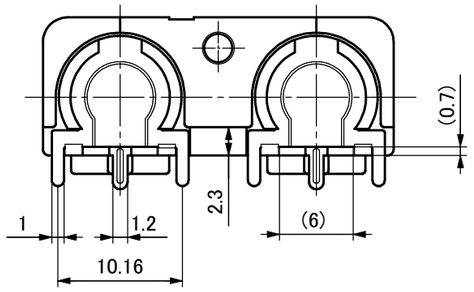


Construction



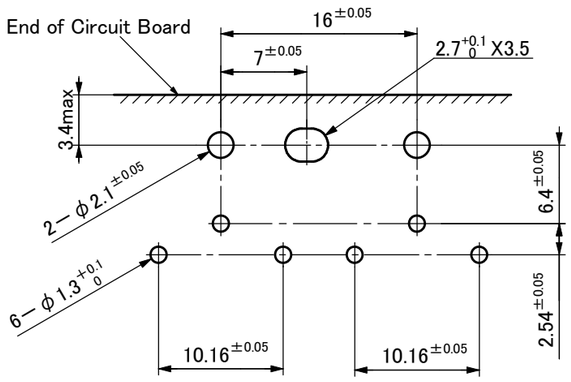




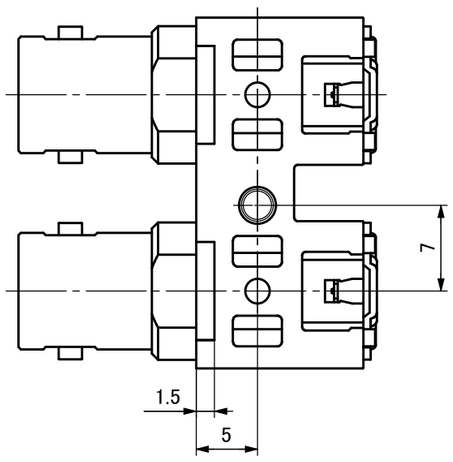


Printed Circuit Board Layouts

(BOTTOM VIEW)



Printed Circuit Board thickness must be less than 2mm.



4	Ground Lug	2	Brass (t0.6)	Sn-Cu Plating
3	Body	1	Zinc Alloy Die Casting	Nickel Plating
2	Insulator	2	m-PPO (White)	—
1	Female Center Contact	2	Beryllium Copper (t0.3)	Gold Plating

No.	Name of Parts	Pc(s).	Material	Finish

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.0	Model	No.
75Ω BNC PCB MOUNT RECEPTACLE		mm	2:1	±0.1	2012-01-04		BCJ-BPLH2PA	BL447

CANARE

PRODUCT SPECIFICATIONS

SAB188A
(BCJ-BPC2P)
Ver. 2.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE 75 Ω BNC receptacle.

2. General Specifications

(1) Product name 75 Ω BNC PCB mount receptacle
(2) Model name BCJ-BPC2P
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL188A).
(6) Weight Approx 17.7g
(7) Designation Brand name (CANARE) on the body.
(8) Packaging 10pcs/package (150 x 50 x 44mm), 100pcs/package (308 x158 x 40mm)
*Japanese Industrial Standard

3. Rating

(1) Operating temperature -40 ℃ ～ +100 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio(V.S.W.R)	1.1 or less (0 ～ 1GHz) 1.2 or less (0 ～ 2.5GHz)	Terminating with 75 Ω and measured. The measuring frequency up to 2.5GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
Female contact retention force	1.5 ～ 3.9N	Following JIS C 5412 pin gauge (**Fig.**) shall be inserted the female contact and measurement shall be made.
Strength of coupling mechanism	Body shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 245N and rotation strength of 2.45N·m shall be applied.
Attachment strength	There shall be no break or damage on each part of connector.	The receptacle shall be attached on the chassis and tensile strength of 200N shall be applied to the axial direction.
Mechanical operation (repeated)	Contact resistance: 10m Ω or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

4.3 Environmental characteristics As shown in **Table 3**

Table 3

Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50m Ω or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

4.4 Other characteristics As shown in **Table 4**

Table 4

Items	Specified values	Test methods
Solderability	A new uniform coating of solder shall cover a minimum of 90% of the surface being immersed.	Solder temperature: 245±3℃ Solder wetting time: 2s to 3s
Resistance to soldering heat	There shall be no damage on appearance.	Soldering by dipping Solder temperature: 260±3 ℃ Immersion time: 5s to 6s Number of cycles: 2 cycles Thickness of printed circuit board: 1.6mm Soldering iron method Bit temperature: 380±10 ℃ Application time of soldering iron: 3s to 4s

5. Measurement conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

6. Note

6.1 Tightening screw force: For panel mount, use a M2.6 screw and apply the tightening screw force of 0.69N・m (7kgf・cm).

6.2 For soldering

(1) Soldering by dipping: Be aware that this type of process needs to be done quickly. If connector body is touching the solder wave for longer periods, there is a possibility that the connector's insulator could melt. To help heat dissipation you can use aluminum tape over the connector body.

(2) Washing : Do not wash connector after soldering. This product contains modified PPO. Please check with detergent manufacture if washing is mandatory.

Fig. Unit: mm