

**PRODUCT SPECIFICATIONS**

(BCJ-JRUD)

SAB322

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 recessed bulkhead receptacle  
 (2) **Model name** BCJ-JRUD  
 (3) **Applicable standard** JIS\* C 5412  
 (4) **Nominal impedance** 75 Ω unbalanced  
 (5) **Construction** As shown in the drawing (BL322).  
 (6) **Weight** Approx 19.6g  
 (7) **Designation** Stamp model name (BCJ-JRUD) and brand name (CANARE) on flange.  
 (8) **Packaging** 20pcs/package (158 x 132 x 40mm)  
 \*Japanese Industrial Standard

3. **Rating**

- (1) **Operating temperature** -20 °C ~ +85 °C  
 (2) **Operating humidity** ~ 90%

4. **Characteristics**

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

**Table 1**

Items	Specified values	Test methods
<b>Insulation resistance</b>	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
<b>Voltage proof</b>	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
<b>Contact resistance</b>	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.)
<b>Voltage standing wave ratio(V.S.W.R)</b>	1.1 or less	Terminated with 75 Ω. The measurement frequency up to 2GHz.

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

**Table 2**

Items	Specified values	Test methods
<b>Intermatability</b>	To be engaged without any abnormality	The receptacle and applicable plug shall be engaged.
<b>Female contact retention force</b>	1.5 ~ 3.9N	Following JIS C 5412 pin gauge ( <b>Fig.1</b> ) shall be inserted the female contact and measurement shall be made.
<b>Fixing force of contact with lock mechanism</b>	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
<b>Strength of coupling mechanism</b>	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.
<b>Attachment strength</b>	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.
<b>Mechanical operation (repeated)</b>	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.

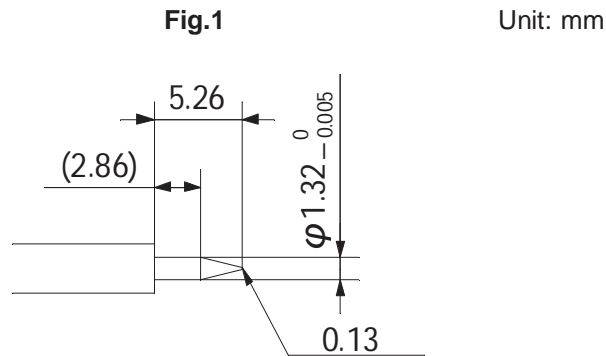
4.3 Environmental characteristics As shown in Table 3

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 °C 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.

5. Measurement conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 °C to 35 °C), 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 °C), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).



6. Loading procedure: The connectors shall be loaded as follows. Refer to the drawing (BL322) for the panel hole dimensions.

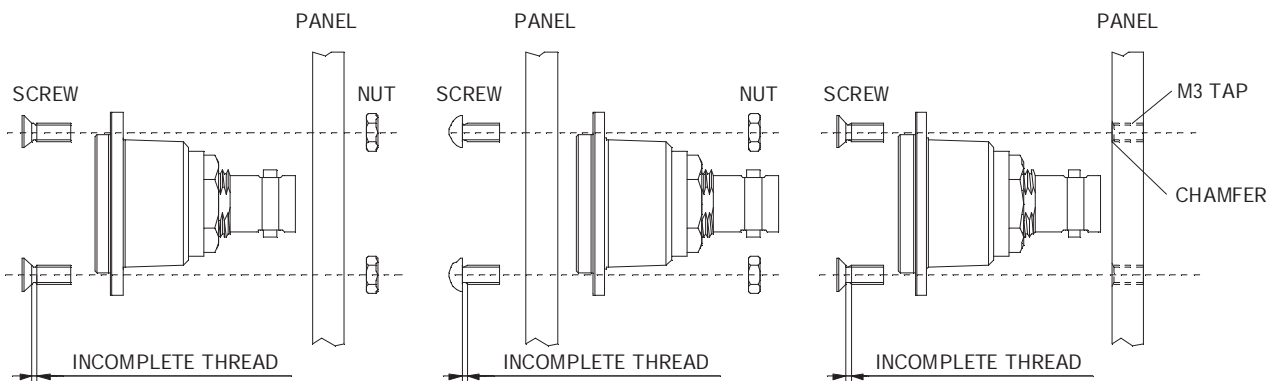
6.1 To load connectors with screws and nuts in a through hole panel, use M3 size screws and nuts.

See Fig. 2 for FRONT-loading connector and Fig. 3 for REAR-loading connector.

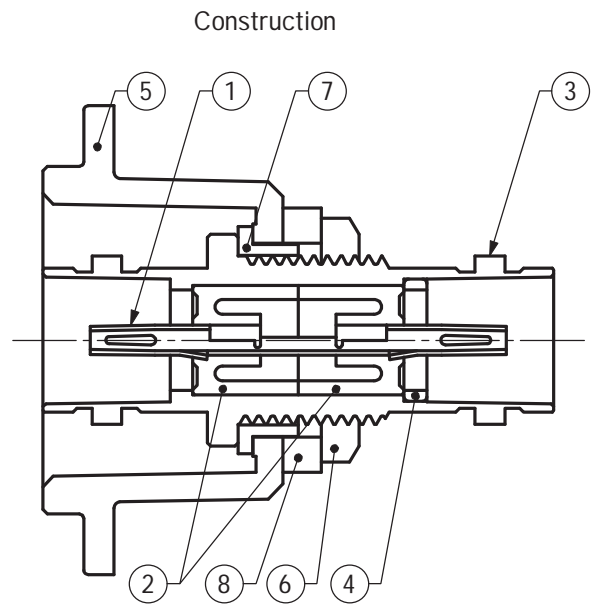
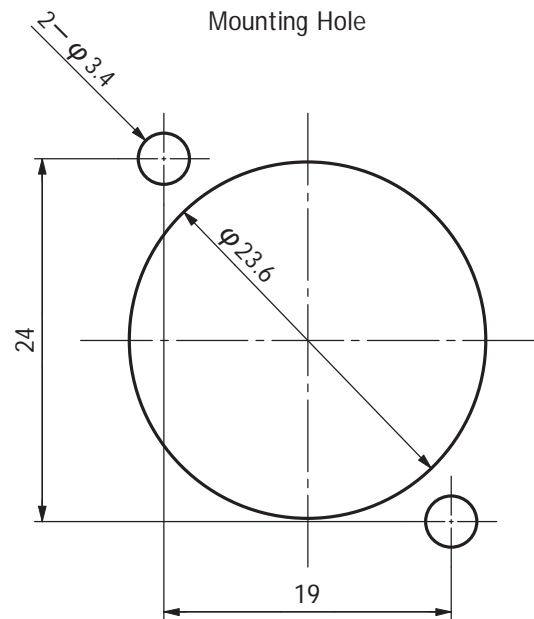
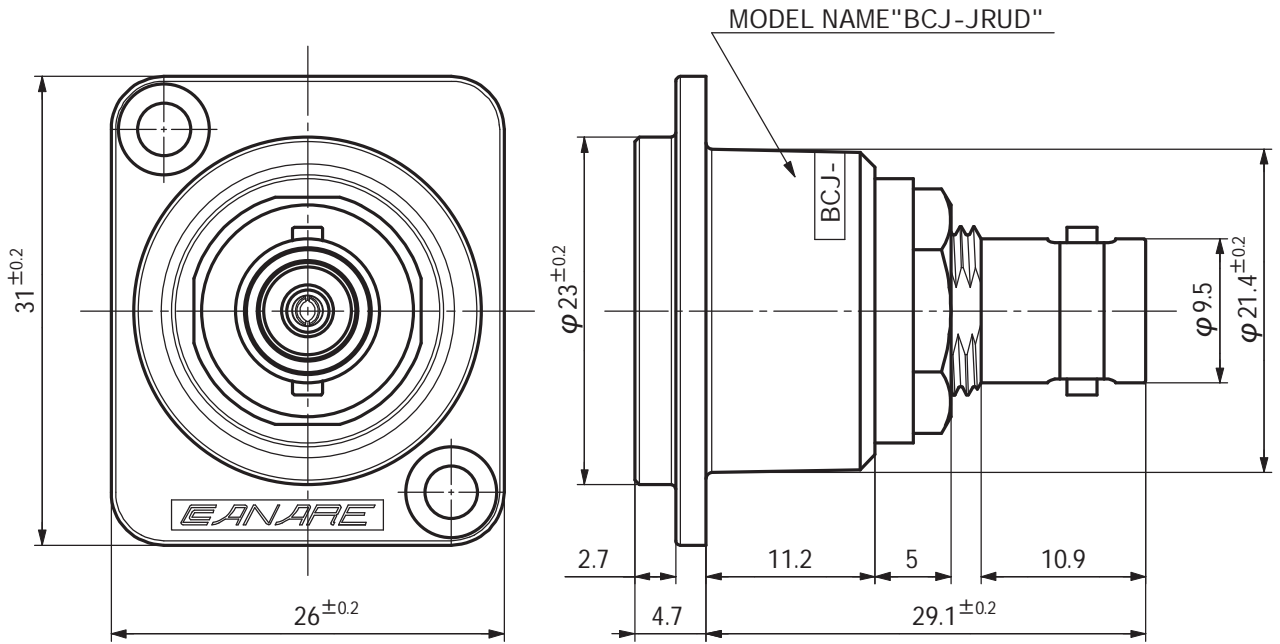
6.2 To load connectors without using nuts, panel need to have holes for screws with M3 size thread.

Chamfer the front part of holes for proper fitting of screws. Important to consider a space for a portion of incomplete thread on screws. See Fig. 4

Fig. 2 (FRONT-loading connector)      Fig. 3 (REAR-loading connector)      Fig. 4 (To load connectors without using nuts)



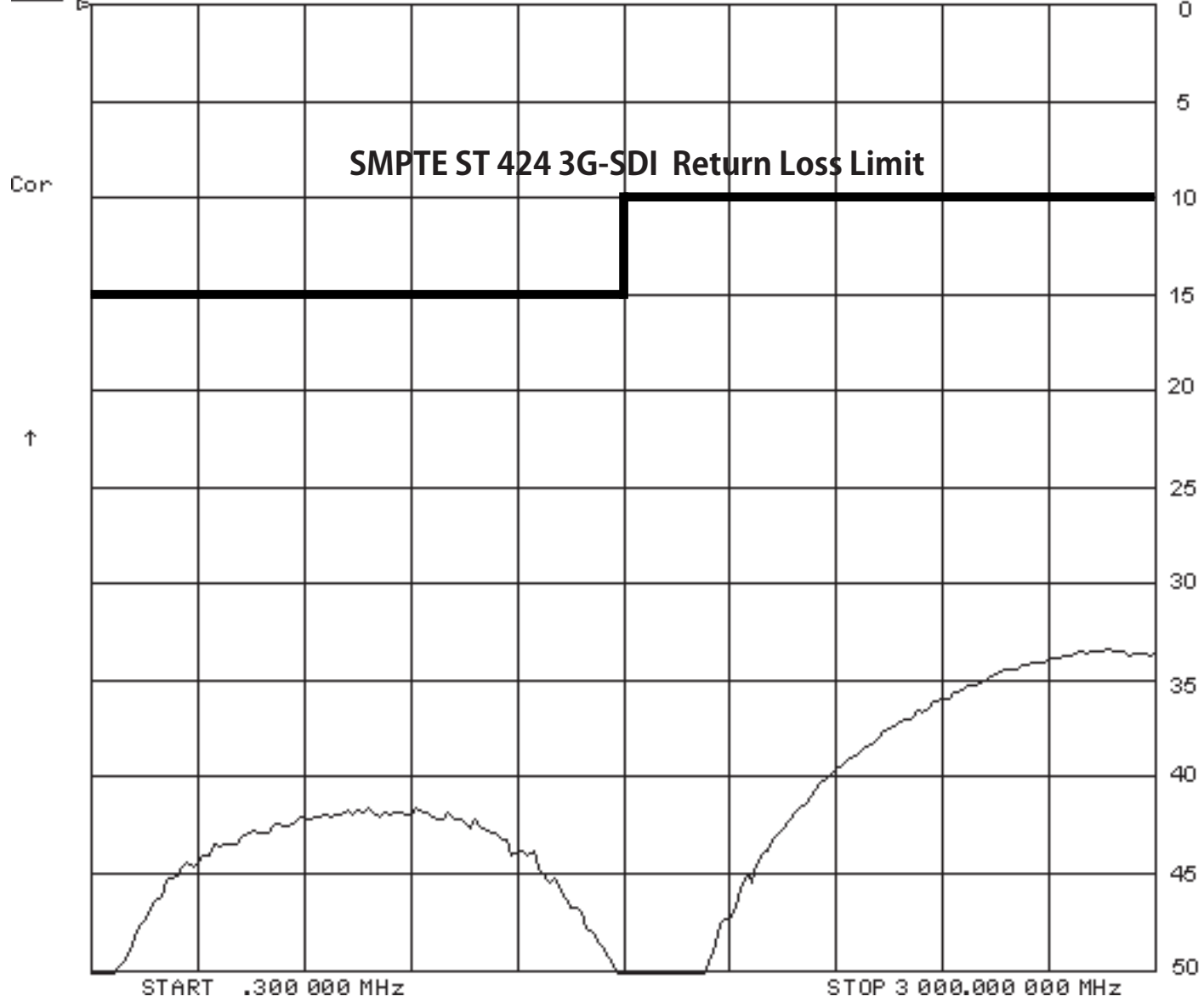
External Appearance



8	Insulation Washer	1	ABS(White)	—					
7	Insulation Bushing	1	ABS(White)	—					
6	Mouting Nut	1	Brass	Nickel Plating					
5	Flange	1	Aluminium Alloy Die Casting	Nickel Plating					
4	Body2	1	Brass	Nickel Plating					
3	Body	1	Brass	Nickel Plating					
2	Insulator	1	Amorphous Polyolefin	—					
1	Female Center Contact	1	Beryllium Copper	Gold Plating					
No.	Name of Parts	Pc(s).	Material	Finish					
Title	75Ω BNC RECESSED BULKHEAD RECEPTACLE	PJTN	Unit mm	Sc. 2:1	Tol. ±0.1	Date 2004-09-15	Ver. 1.0	Model BCJ-JRUD	No. BL322

27 Oct 2006 16:53:08

CH1 S11 LOG 5 dB/REF 0 dB



Return Loss of  
BCJ-J, JR, JRU, JRUD, and JRUB