PRODUCT SPECIFICATIONS

SAB550
(BCP-A3AHD)
Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE crimp type 75 Ω BNC plug.

2. General specifications

(1) Product name Crimp type 75 Ω BNC plug
(2) Model name BCP-A3AHD
(3) Applicable standard IEC*1 61169-8, JIS*2 C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL438).
(6) Weight Approx 12g (including center contact and crimp sleeve)
(7) Designation Stamp model name (BCP-A3AHD) on washer and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (220 x 155 x 37mm), 20pcs/package (150 x 50 x 31mm)
(9) Applicable cable L-3C-AHD (CANARE)
(10) Crimp tool Frame: TC-1, Die: TCD-35CA

3. Ratings

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

*1 International Electrotechnical Commission
*2 Japanese Industrial Standard

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 external contacts: 3mΩ or less Between center contacts: 6mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Return loss	26.4dB or more(0 ～ 2GHz) 20.8dB or more(0 ～ 3GHz)	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω.
Voltage standing wave ratio (V.S.W.R)	1.1 or less(0 ～ 2GHz) 1.2 or less(0 ～ 3GHz)	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 plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve 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.
Cable connecting force	150N or more for L-3C-AHD	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ 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)	Appearance: By visual inspection, without noticeable rust. Contact resistance: 50mΩ or less	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.

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).