PRODUCT SPECIFICATIONS

(RJSP-6AFT)

CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE Cat6A Field termination modular plug compatible with U/FTP.

2. General specifications

(1) Product name	Field termination modular plug compatible with Cat6A U/FTP
(2) Model name	RJSP-6AFT
(3) Applicable standard	ANSI/TIA-568-C.2 Cat6A,ISO 11801,ANSI/TIA-1096-A,IEC 60603-7
(4) Nominal impedance	Differential 100Ω
(5) Construction	As shown in the drawing (BL616).
(6) Weight	Approx 18.4g
(7) Packaging	1Unit
(8) Designation	Brand name (CANARE) is displayed in side of body and latch-button.
(9) Applicable cable diameter	6.0~7.7mm
(10) Applicable insulator diameter	0.8~1.47mm
(11) Applicable conductor diameter	26AWG~23AWG (Stranded wire/Single wire)
(12) PoE standard	Meet PoE+ (IEEE802. 3at), PoE++ (IEEE802. 3bt)

3. Ratings

(1) Operating temperature	-20~+60℃
(2) Operating humidity	90%RH or less

4. Characteristics

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

Table 1

Items	Specified values	Test methods
Insulation resistance	500MΩ or more	Measure the insulation resistance between adjacent conductors while energized with a d.c. voltage of 100 V. *See IEC60512-3a for details.
Voltage proof	Without any damage such as electric breakdown etc.	Between adjacent conductors: 1000V d.c. shall be applied for 1 min between the contacts. Between twisted pair and shield: 1500V d.c. shall be applied for 1 min between the contacts. Trip current :0.5mA. *See IEC60512-4a for details.
Contact resistance	Between contacts: 20mΩor less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.) *See IEC60512-2a for details.
Return loss	Meet ANSI/TIA-568-C.2 Cat6A and ISO/IEC 11801 Class EA	An applied cable shall be attached to the plug and measure with FLUKE. *See ISO/IEC 11801 Class EA for details.
NEXT	Meet ANSI/TIA-568-C.2 Cat6A and ISO/IEC 11801 Class EA	An applied cable shall be attached to the plug and measure with FLUKE. *See ISO/IEC 11801 Class EA for details.

3.2 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.
Insertion and withdrawal forces	Insertion force: 20N or less Withdrawal force: 20N or less	Combine with a applicable adapter and check the load. *See IEC60512-13b for details.
Mechanical operation (repeated)	Contact resistance: 20 mΩ or less change from initial	The endurance test consists of repeated engagement and separation of connector pairs. The measurement shall be made after 750 cycles. *See IEC60512-9a for details.
Strength of coupling mechanism	Coupling device shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 50N shall be applied for 60±5 sec. *See IEC60512-15f for details.
Vibration resistance	Contact resistance: 20 mΩ or less change from initial. There should not be momentary disconnection.	Frequency: 10~500Hz, Sweep speed: 1oct/min Single amplitude: 0.35m, 10 cycles,3 directions *See IEC60512-6d for details.

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

Table 3

Items	Specified values	Test methods
Gas corrosion resistance (Flowing mixed gas corrosion)	Contact resistance: 20 mΩ or less change from initial. No cracks, significant corrosion, or other abnormalities in the external appearance.	Leave the product for 96 hours under the following conditions and measure the contact resistance after leaving the product. H_2S: 0.1±0.02 ppm CO_2: 0.5±0.02 ppm Temperature：25±1℃ Humidity: 75±3% *See IEC60512-11g for details.
Heat resistance (Electrical load and temperature)	Contact resistance: 20 mΩ or less change from initial. No cracks, significant corrosion, or other abnormalities in the external appearance.	Leave the product for 500 hours under the following conditions and measure the contact resistance after leaving the product. Temperature：+70℃ Energized at 0.8A *See IEC60512-9b for details.
Humidity resistance (Cyclic damp heat)	Contact resistance: 20 mΩ or less change from initial. No cracks, significant corrosion, or other abnormalities in the external appearance.	Test and measure contact resistance under the following conditions. Low temperature: -10℃ High temperature: +65℃ Relative humidity: 93%,21 Cycles *See IEC60068-2-38 for details.
Thermal shock resistance (Rapid change of temperature)	Contact resistance: 20 mΩ or less change from initial. No cracks, significant corrosion, or other abnormalities in the external appearance.	Test and measure contact resistance under the following conditions. Low temperature: -40℃ High temperature: +70℃ 25 Cycles, Exposure time: 30 min *See IEC60512-11d for details.

5. Special Notes

(1) Please refer to the assembly procedure (M072) for assembly.

(2) Recommended compatible cables are RJC6A-F4PH and RJC6A-F4PH-EM manufactured by Canare.

6. 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).