APPLICABLE STANDARD		ISO/IEC 11801 CLASS D CATEGORY 5		
RATING	Operating temperature range	-40 to +85 °C (Note 1)	Storage temperature range	-10 to +60 °C (Note 2)
	Voltage	100 V AC, 100 V DC	Operating humidity range	10 to 90 %
	Current	4 A / pin (Note 4)	Applicable cable	AWG18 / 0.75 sq

SPECIFICATIONS

ITEM	PROCEDURE	REQUIREMENTS	QT	AT
CONSTRUCTION				
General examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRICAL CHARACTERISTICS				
Contact resistance	100 mA MAX. (DC or 1000 Hz)	1) Contact : 10 mΩ MAX. (Note 3) 2) Shielding : 50 mΩ MAX. (Note 3)	X	-
Insulation resistance	500 V DC.	5000 MΩ MIN.	X	-
Voltage proof	1500 V AC for 1 min. ・Distance between two male contacts. ・Distance between male contact and the J-Shield plate.	No flashover or breakdown.	X	-
MECHANICAL CHARACTERISTICS				
Contact insertion, release and extraction force	Measured by applicable contact.	Insertion force : 12 N MAX. Extraction force : 0.5 N MIN.	X	-
Engaging and separating forces	Measured by applicable connector.	Engaging force : 40 N MAX. (Typical:16.7N) Separating force : 10 N MIN. (Typical:13.8N)	X	-
Mechanical operation	500 times insertions and extractions.	1) Contact : 25 mΩ MAX. (Note 3) 2) Shielding : 70 mΩ MAX. (Note 3) 3) No damage, crack and looseness of parts.	X	-
Vibration (sinusoidal)	Frequency 10 to 55 Hz single amplitude 0.75 mm, 3 axial directions, 2 h each.	1) No electrical discontinuity of 10 μs. 2) No damage, crack and looseness of parts.	X	-
Vibration (Railway random vibration test)	JIS E 4031 CATEGORY 1 CLASS B Frequency : 5 to 150 Hz Excitation condition RMS : 7.90 m/s^2 ASD level : 1.857 $(m/s^2)^2/Hz$ 3 axial directions, 5 h each.	1) No electrical discontinuity of 10 μs. 2) No dppfukuyyhaamage, crack and looseness of parts.	X	-
Shock	Acceleration 490 m/s^2, duration of pulse 11 ms, for 3 times in 3 both axial directions. (half-sine wave)	1) No electrical discontinuity of 10 μs. 2) No damage, crack and looseness of parts.	X	-
Shock (Railway)	JIS E 4031 CATEGORY 1 CLASS B Peak acceleration : 50 m/s^2 Nominal time : 30 ms 3 both axial directions, 3 times each.	1) No electrical discontinuity of 10 μs. 2) No damage, crack and looseness of parts.	X	-
ENVIRONMENTAL CHARACTERISTICS				
Rapid change of temperature	Temperature : −40 → 15 to 35 → 125 → 15 to 35 °c Time : 30 → 2 to 3 → 30 → 2 to 3 min. Under 5 cycles.	1) Contact : 25 mΩ MAX. (Note 3) 2) Shielding : 70 mΩ MAX. (Note 3) 3) No damage, crack and looseness of parts.	X	-

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	0				

REMARK
This specification sheet shows the performance with incorporated applicable crimp contacts and compatible connector.

Unless otherwise specified, refer to IEC 60512.

APPROVED	RI. TAKAYASU	16. 07. 06
CHECKED	AH. KODAMA	16. 07. 06
DESIGNED	TA. TORIHARA	16. 07. 06
DRAWN	TA. TORIHARA	16. 07. 06

Note QT: Qualification Test AT: Assurance Test X: Applicable Test

DRAWING NO. ELC4-128280-00

HRS	SPECIFICATION SHEET	PART NO.	TJ50L-18PCA	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL236-3216-2-00 △1	1/3

FORM HD0011-2-1

ITEM	PROCEDURE	REQUIREMENTS	QT	AT
ENVIRONMENTAL CHARACTERISTICS				
Dry heat	Exposed at 105 ± 2 °C for 96 h. Combining the applicable connector.	1) Contact : 25 mΩ MAX. (Note 3) 2) Shielding : 70 mΩ MAX. (Note 3) 3) Insulation resistance : 10 MΩ MIN. 4) No damage, crack and looseness of parts.	X	-
Cold	Exposed at -55 ± 3 °C for 96 h. Combining the applicable connector.	1) Contact : 25 mΩ MAX. (Note 3) 2) Shielding : 70 mΩ MAX. (Note 3) 3) Insulation resistance : 10 MΩ MIN. 4) No damage, crack and looseness of parts.	X	-
Damp heat, steady state	Exposed at 60 ± 2 °C, 95 ± 3 % RH for 96 h. Combining the applicable connector.	1) Contact : 25 mΩ MAX. (Note 3) 2) Shielding : 70 mΩ MAX. (Note 3) 3) Insulation resistance : 10 MΩ MIN. 4) No damage, crack and looseness of parts.	X	-
Flowing mixed gas corrosion test	Exposed in H_2S 0.1 ± 0.02 ppm, SO_2 0.5 ± 0.1 ppm, 25 ± 2 °C, 75 ± 5 % RH, 96 h. Combining the applicable connector.	No excessive corrosion in contact area that would impair the function.	X	-
Corrosion, salt mist	Exposed in 5 % salt water spray for 48 h. Combining the applicable connector.	No excessive corrosion in contact area that would impair the function.	X	-

Note

1. 1) The product performance is guaranteed only in the temperature adequate people's activities.
   2) The operation temperature includes the temperature rise by current carrying.
   3) Specifications for assembled item with applicable housing.
2. Storage temperature range shows storage condition for unused products including packing materials.
3. The cable conductor resistance is not considered.
4. The value varies depending on board design and cable.
5. This specification sheet describes the In-Line Jack connector consisting of the below listed parts together with the TJ*L series 1 port plug connector.

In-Line Jack Connector

Part No.	Code No.
TJ50L(1)-4P-C(8.4)	CL236-3228-1-00
TJ50L-4P-UNIT	CL236-3217-5-00
TJ50L-18PCA	CL236-3216-2-00

CONNECTOR SPECIFICATION SUPPLEMENT

1. RoHS directive
Compliance: Avoidance of the 6 restricted substances declared by the rohs directive.

2.Detailed material information
See appendix.

3. Weight
0.31 g (1 pc)

4. Packaging
Refer to packing specification sheet. (ATAP-E3131)

5. Product naming conventions

TJ	50	L	−	18	P	C	A
①	②	①		③	④	⑤	⑥

①Series name	TJ*L
②Mounting method	50: Crimp type
③Applicable cable	22: AWG22 / 0.3 sq 18: AWG18 / 0.75 sq
④Connector classification	P: Receptacle connector (male contact) S: Plug connector (female contact)
⑤Shape classification	C: Crimping contact
⑥Plating classification	A: Gold plating

C