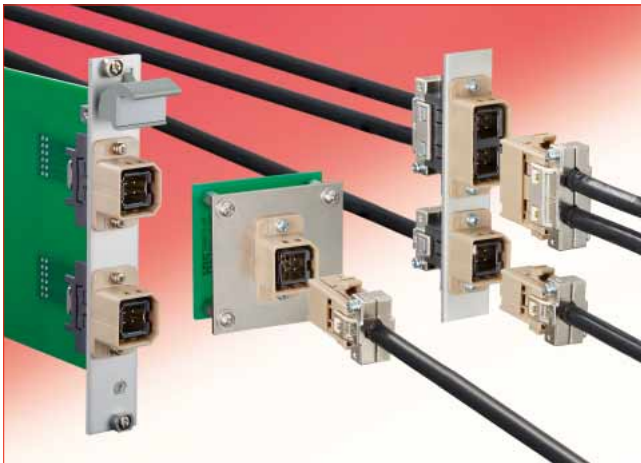


NEW

Interface Connector for Industrial Ethernet Applications

TJ*L Series



■ Overview

The TJL Series is designed as an ideal choice for widely used Industrial Ethernet applications. It supports the on-site information wiring system, JIS X 5150 (ISO/IEC 11801) Class D (Category 5). Variations are available in a Board mount and relay types. Available in 1 port (4 pos) and 2 ports (8 pos) type.

Conventional industrial connector (M12 etc.)	<ul style="list-style-type: none"> · Screw Locking · This type requires torque management and screw fastening space.
Hirose TJ*L Series	<ul style="list-style-type: none"> · Snap-in lock type provides easy mating and demating / mounting and demounting · More efficient operation is realized during installation and maintenance (How about : No torque management required)

■ Features

1. Supports Ethernet

Supports on-site information wiring system, JIS X 5150 (ISO/IEC 11801) Class D (Category 5), and can be used for connecting Ethernet. Additionally, it ensures sufficient creepage distance and withstand voltage of AC1500V between contacts and shield.

2. Withstands vibration and impact

The connector is highly resistant to shock and vibration, and has passed shock and vibration tests for railway vehicles (JIS E 4031 Group 1 Grade B).

3. Snap-in lock feature

Snap-in lock design provides easy locking just by inserting the connector. Provides a clear tactile click when fully mated. (Refer to page 3 for details.)

4. Uniform cable strip length to produce stable transmission performance

Unique "2-piece structure" equalizes cable strip length and contributes to stabilizing transmission performance by reducing variations in workmanship. (Fig.1)

5. Supports the panel size of 3U4HP

Can be mounted on a 3U4HP panel of a VME rack or a Compact PCI rack.

*One 1-port and one 2-port type can be mounted on one panel (3 ports resp. 12 positions)

6. Incorrect insertion prevention key

By providing an incorrect insertion prevention keying, incorrect insertion of plugs can be prevented when multiple plugs are used side by side. There are 3 different combinations of the incorrect insertion prevention key available. (Fig.2)

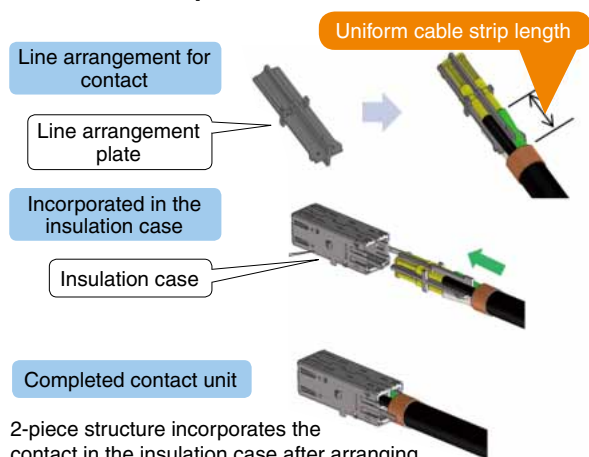
7. Cutting terminal

The cutting terminal is widely used in railway markets etc.

8. Available for wire connecting work in the field

The wire crimping type with commercially available hand tools (MIL-compliant products) is suited for field wire connecting work.

● Uniform cable strip length enables stable transmission performance

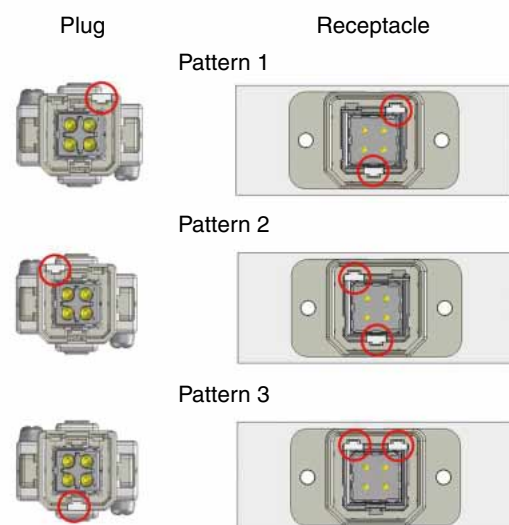


2-piece structure incorporates the contact in the insulation case after arranging the wire with a wire arrangement plate

Note: Please refer to our technical directive (ATAD-E3078) for wiring details.

Fig.1

● Incorrect insertion prevention key



Prevents incorrect insertion in the adjacent connector by a 3 pattern keying

Fig.2

9. Selectable cable size

2 different cable sizes are supported.
 • 0.3mm² (22AWG)
 • 0.75mm² (18AWG)
 (Fig.3)

10. Can be temporarily held on the board

Right angle type receptacle can be held on the board before mounting. To fix the receptacle you can choose either screws or rivets.
 (Fig.4)

11. Board thickness

The receptacle supports a board thickness of 1.6mm to 2.4mm.

12. Robust structure

By integrating the panel in between the receptacle body and the hood (supplied item/attached item), the robustness of the installed connector rises.
 (Fig.5)

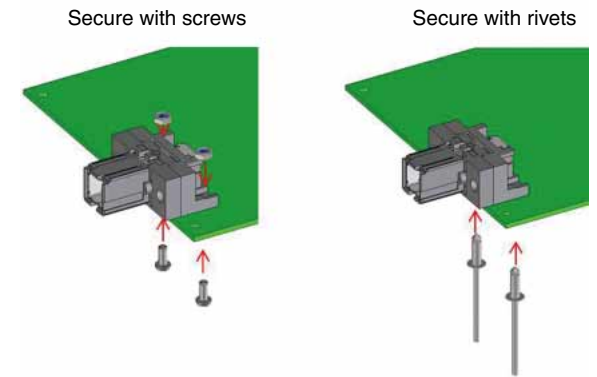
●Selectable cable size

Cable size	Applicable contact	Remarks
(22AWG) 0.3mm ²	TJ50L-22PCA	Male contact for a trunk jack
	TJ50L-22SCA	Female contact for plug
(18AWG) 0.75mm ²	TJ50L-18PCA	Male contact for a trunk jack
	TJ50L-18SCA	Female contact for plug

Recommended cables
 (1) Manufactured by Harting, outer diameter of cable $\phi 6.6 \pm 0.2$
 Ha-VIS EtherRail Cable, 4x AWG#22/7, Cat. 5/5e
 (2) Manufactured by Hitachi Metals Ltd, Outer diameter of the cable $\phi 8.5 \pm 0.3$
 CQEV-SAB(CAT5E) 0.75SQx4C
 (3) Manufactured by Harting, outer diameter of cable $\phi 8.2 \pm 0.2$
 Ha-VIS EtherRail Cable, 4x AWG#18/7, Cat. 5e
 (4) Manufactured by Harting, outer diameter of cable (max.) $\phi 8.8$ (minimum diameter N/A)
 Ha-VIS EtherRailR Cable, 4x 0.75sq, Cat. 5/5e
 Note : Recommended cables are just examples.
 If intending to use a different cable, please contact us.

Fig.3

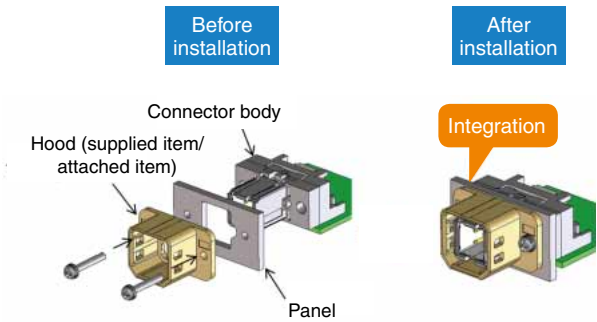
●It can be temporarily fixed on the board.



The connector can be temporarily fixed on the board before actually mounting it.
 This method can be used with either screw or rivet.

Fig.4

●Robust structure



The assembly design holds the panel between the connector body and the hood. After the installation the panel is held in between the connector body / receptacle body and the hood (supplied item/attached item).

Fig.5

Comparison with M12 connector 1

● Easy to mate with audible, tactile click when fully mated.

TJ*L Series	Conventional products (M12 connector)
Snap-in lock	Screw fastening locking type
Enhances work efficiency	
Lock is complete just by inserting.	Screw fastening is needed.

● High density mounting achieved by insert / pull-out locking.

TJ*L Series	Conventional products (M12 connector)
Insertion/pull-out possible	The central part cannot be inserted/pulled out due to the surrounding connectors.

Comparison with M12 connector 2

	Plug side	Trunk jack side	Mating state / connected state
TJ*L Series			
M12 Connector			

Comparison items			TJ*L Series	M12 connector (compared with our products)
Dimension (mm)	Jack	width	31.35	φ19.6
		Height	18.8	φ19.6
		Depth (full length)	41.9	20
	Plug	Width	23.95	φ14
		Height	18.8	φ14
		Depth (full length)	36.2	40.8
	At the time of mating	Depth (full length)	65.4	48.3
		Depth (at the front side of the panel)	38.5	42.3
Mate lock structure			Snap-in lock	Screw lock
Installation of 3 serial back panels			The center connector can be inserted/pulled out.	The center cannot be accessed.
Incorrect insertion prevention structure			Equipped (3-pattern keying)	No key options
Protection level			IP20	IP67

Note 1 : Please note that it is not compatible with M12.

■Product Specifications

Ratings	Voltage	AC/DC 100V	Operating temperature range	-40°C to +85°C (Note 2)
	Current	4A/pin (Note 1)	Storage temperature range	-10°C to +60°C (Note 3)

Item	Specifications	Conditions
1. Contact resistance	(1) Contact resistance of the contact : 10mΩ or less (Note 4) (2) Contact resistance of the shield plate : 50mΩ or less (Note 4)	Measured at 100mA
2. Insulation resistance	5000MΩ min.	Measured at DC 500V
3. Withstanding voltage	No flashover or breakdown	Apply AC 500V for 1minute. · Between contacts · Between the contact and the shield
4. Mechanical operation	(1) Contact resistance of the contact : 25mΩ or less (Note 4) (2) Contact resistance of the shield plate : 70mΩ or less (Note 4)	Carry out insert and pull out operations 500 times.
5. Vibration resistance	(1) No electrical discontinuity of 10μs or more (2) No damage, crack or loosening of the parts	JIS E4031 class 1, grade B Frequency range : 5 to 150Hz, rms value of vibration application condition : 7.9m/s ² Conduct a test for 5 hours in each of the 3-axial directions
6. Shock resistance		JIS E4031 class 1, grade B The test shall be conducted with the acceleration of 50m/s ² for 30ms, 3 times in each of the 3-axial directions of half-sine waves
7. Temperature cycles	(1) Contact resistance of the contact : 25mΩ or less (Note 4) (2) Contact resistance of the shield plate : 70mΩ or less (Note 4) (3) No damage, crack or loosening of the parts	Temperature-40 → +15 to +35 → +125 → +15 to +35°C Time 30 → 2 to 3 → 30 → 2 to 3 minutes in 5 cycles
8. Humidity resistance	(1) Contact resistance of the contact 25mΩ or less (note 4) (2) Contact resistance of the shield plate : 70mΩ or less (Note 4) (3) Insulation resistance : 10MΩ or more (after drying) (4) No damage, crack or loosening of the parts	Left in RH at a temperature of 60°C±2°C, and a humidity of 95%±3% for 96 hours (mated state)

Note 1 : Varies depending on the board design and the cable used.

Note 2 : Includes temperature rise due to current flow.

Note 3 : Indicates the preservation conditions in unused state including packing materials. The operating temperature range is applied to the preservation conditions after mounting the product.

Note 4 : Not including the conductor resistance of the cable.

■Materials / Finish (Refer to the diagram for part names.)

●Receptacle (board type)

Component	Materials	Color/Finish	Remarks
Insulation case	PBT resin	Dark grey	UL94V-0
Male contact	Copper alloy	Gold plated	-
Shield plate	Stainless steel	Nickel plating+partial tin plating	-
R case	PBT resin	Dark grey	UL94V-0
Insertion nut	Copper alloy	Nickel plating	-
Hood	PPS resin	Natural (beige)	UL94V-0

●Plug

Component	Materials	Color/Finish	Remarks
P case	PPS resin	Natural (beige)	UL94V-0
Clamp metal fittings	Zinc alloy	Nickel plating	-
Dropout prevention screw	Steel	Chromium plating	M2.5×0.45

●Trunk jack

Component	Materials	Color/Finish	Remarks
J case	PBT resin	Black	UL94V-0
Insertion nut	Copper alloy	Nickel plating	-
Hood	PPS resin	Natural (beige)	UL94V-0
Clamp metal fittings	Zinc alloy	Nickel plating	-
Dropout prevention screw	Steel	Chromium plating	M2.5×0.45

●Units (for plugs and trunk jacks)

Component	Materials	Color/Finish	Remarks
Shield plate	Stainless steel	Nickel plating+partial tin plating	-
Insulation case	PBT resin	Dark grey	UL94V-0

●Crimping contact (female contact for plug and male contact for trunk jack)

Component	Materials	Color/Finish	Remarks
Crimp contact	Brass	Gold plating	-
Sleeve	Copper alloy	Gold plating	-

●Protective cap

Component	Materials	Color/Finish	Remarks
Cap	PPS resin	Natural	UL94V-0

●Incorrect insertion prevention key

Component	Materials	Color/Finish	Remarks
Incorrect insertion prevention key	PBT resin	White	UL94V-0

Product Number Structure

Refer to the chart below when determining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

Receptacle (board type)

TJ 10 L (1) - 4 P
 ① ② ① ③ ④ ⑤

Plug and trunk jack

TJ 50 L (1) - 4 P - C (6.6)
 ① ② ① ③ ④ ⑤ ⑥ ⑦

Unit

TJ 50 L - 4 P - UNIT
 ① ② ① ④ ⑤ ⑥

Crimp contact

TJ 50 L - 22 P C A
 ① ② ① ⑧ ⑤ ⑨ ⑩

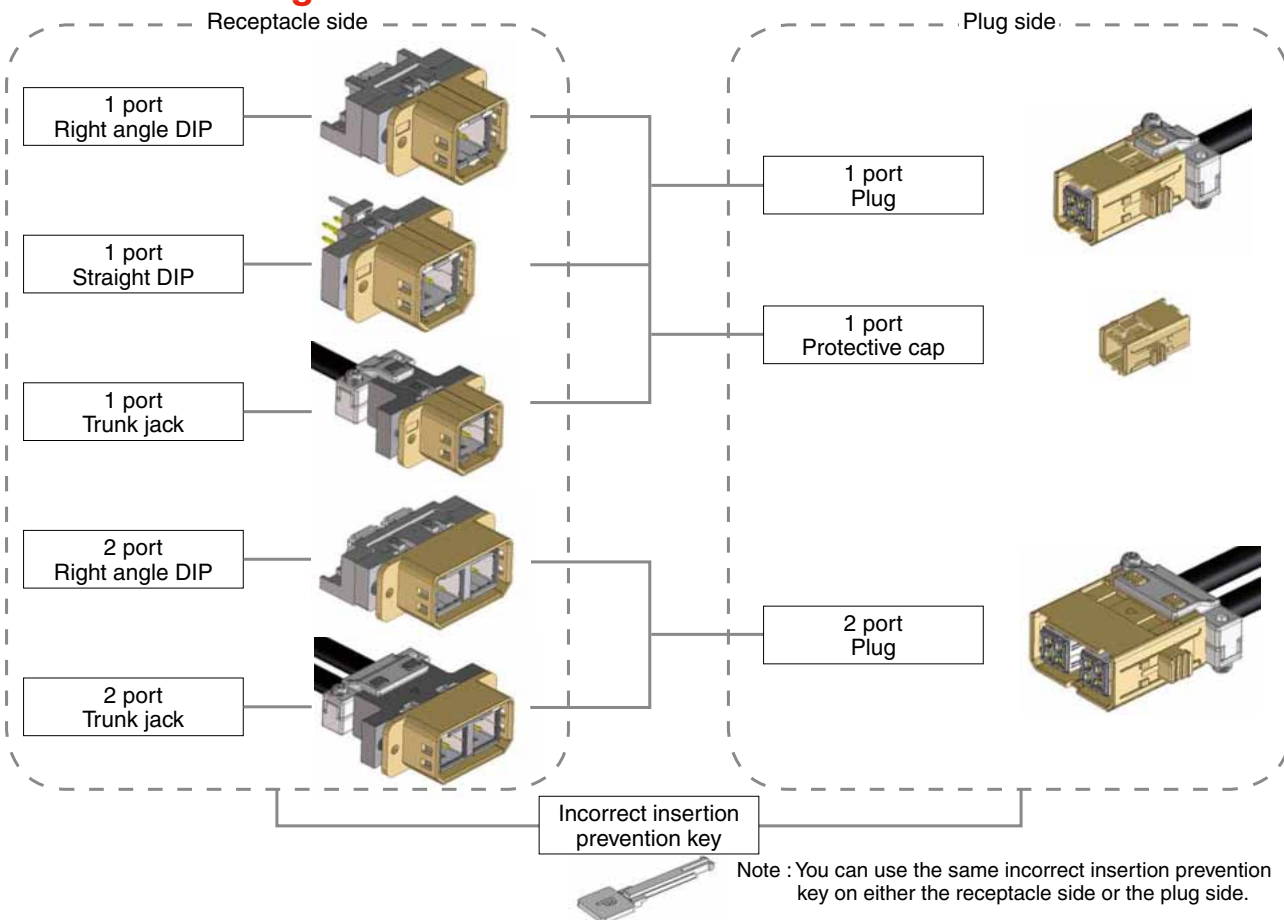
Protective cap/incorrect insertion prevention key

TJL - KY
 ① ⑥

① Series name	TJ*L
② Mounting method	: 10 Right angle DIP type : 20 Straight DIP type : 50 Crimp type
③ Number of ports	: (1) 1 port : (2) 2 port
④ Number of contacts	: 4 4 pos. : 8 8 pos.
⑤ Connector type 1	: P Receptacle connector (male contact) : S Plug connector (female contact)

⑥ Connector type 2	C Outer cover UNIT Inner unit KY Incorrect insertion prevention key CP Protective cap
⑦ Applicable cable diameter	: (6.6) Applicable cable diameter $\phi 6.6 \pm 0.2$: (8.4) Applicable cable diameter $\phi 8.4 \pm 0.4$
⑧ Applicable cable core	: 18 18AWG / 0.75mm ² : 22 22AWG / 0.3mm ²
⑨ Form type	Crimp contact
⑩ Plating type	Gold plating

Functional diagram



Note 1 : For trunk jacks and plugs, multiple products need to be used in combination. Please refer to pages 6 and 7 for the combinations.

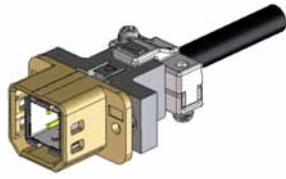
Note 2 : Depending on the cable size, the corresponding products varies. Please refer to pages 6 and 7 for details.

Note 3 : Optional use of the incorrect insertion prevention key. The key is not required for normal connector use. If keying is required, please make a selection according to usage. When using the key, be sure to install on both the plug and receptacle side. Please note that installation on one side only, will NOT prevent incorrect insertion.

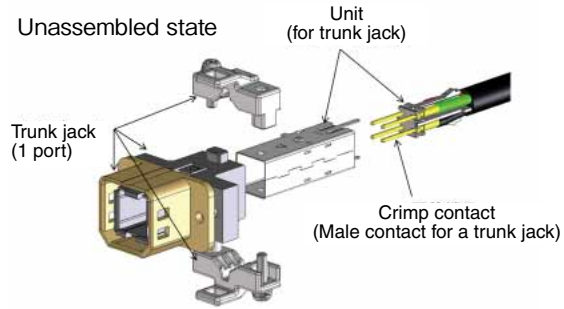
Combination of Products

1 port trunk jack

<Assembled state>



Unassembled state



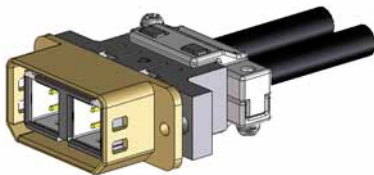
1 port trunk jack required products / Required products (1 port trunk jack)

	Trunk jack		Unit (For trunk jack)	Crimp contact (Male contact for trunk jack)		
Qty.	1 pc		1 pc	4 pcs		
Part No. HRS No.	TJ50L(1)-4P-C(6.6) 236-3219-0 00	Cable outer diameter φ6.6±0.2	TJ50L-4P-UNIT 236-3217-5 00	-	TJ50L-18PCA 236-3216-2 00	18AWG (0.75mm ²)
	TJ50L(1)-4P-C(8.4) 236-3228-1 00	Cable outer diameter φ8.4±0.4			TJ50L-22PCA 236-3215-0 00	22AWG (0.3mm ²)

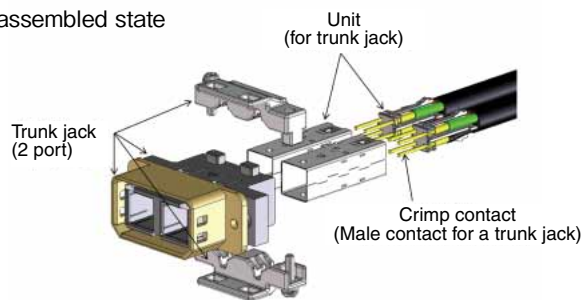
Note : Please choose the right contact size according to the cable size.
The incorrect insertion prevention keys are sold separately.

2 port trunk jack

<Assembled state>



Unassembled state



2 port trunk jack required products / Required products (2 port trunk jack)

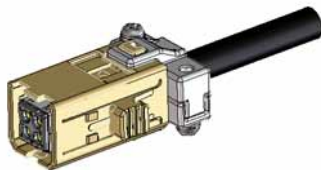
	Trunk jack		Unit (For trunk jack)	Crimp contact (Male contact for trunk jack)		
Qty.	1 pc		2 pcs	8 pcs		
Part No. HRS No.	TJ50L(2)-8P-C(6.6) 236-3220-0 00	Cable outer diameter φ6.6±0.2	TJ50L-4P-UNIT 236-3217-5 00	-	TJ50L-18PCA 236-3216-2 00	18AWG (0.75mm ²)
	TJ50L(2)-8P-C(8.4)	Cable outer diameter			TJ50L-22PCA 236-3215-0 00	22AWG (0.3mm ²)

Note : Please choose the right contact size according to the cable size.
The incorrect insertion prevention keys are sold separately.

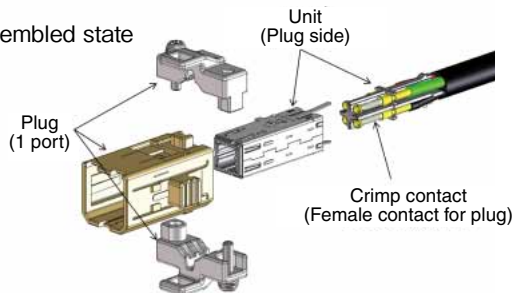
Combination of Products

1 port plug

<Assembled state>



Unassembled state



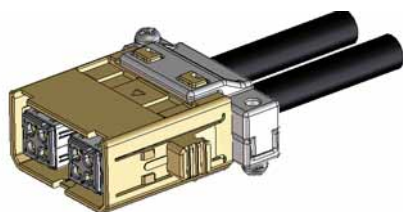
1 port plug required products / Required products (1 port plug)

	Plug		Unit (Plug side)		Crimp contact (Female contact for plug)	
Qty.	1 pc		1 pc		4 pcs	
Part No. HRS No.	TJ50L (1)-4S-C (6.6) 236-3211-9 00	Cable outer diameter φ6.6±0.2	TJ50L-4S-UNIT 236-3203-0 00	-	TJ50L-18SCA 236-3204-3 00	18AWG (0.75mm ²)
	TJ50L (1)-4S-C (8.4) 236-3227-9 00	Cable outer diameter φ8.4±0.4			TJ50L-22SCA 236-3210-6 00	22AWG (0.3mm ²)

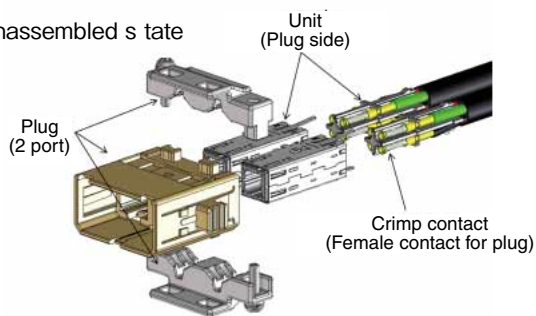
Note : Please choose the right contact size according to the cable size.
The incorrect insertion prevention keys are sold separately.

2 port plug

<Assembled state>



Unassembled s tate



2 port plug required products / Required products (2 port plug)

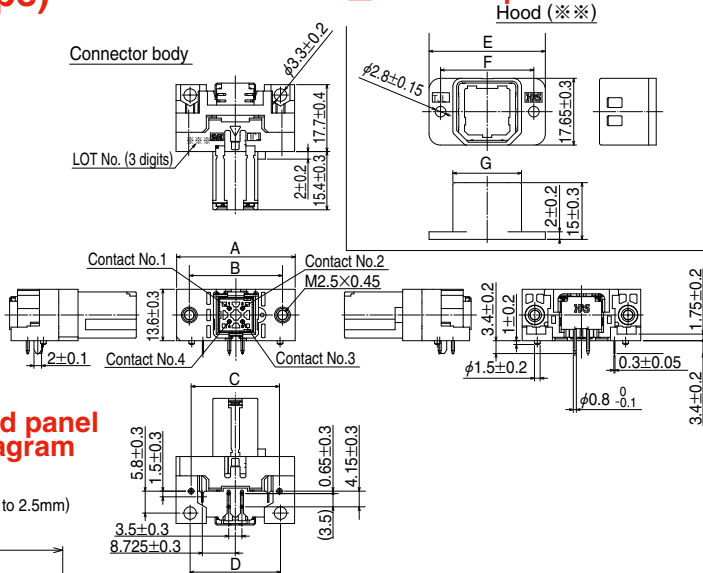
	Plug		Unit (Plug side)		Crimp contact (Female contact for plug)	
Qty.	1 pc		2 pcs		8 pcs	
Part No. HRS No.	TJ50L (2)-8S-C (6.6) 236-3213-4 00	Cable outer diameter φ6.6±0.2	TJ50L-4S-UNIT 236-3203-0 00	-	TJ50L-18SCA 236-3204-3 00	18AWG (0.75mm ²)
	TJ50L (2)-8S-C(8.4) 236-3230-6 00	Cable outer diameter φ8.4±0.4			TJ50L-22PCA 236-3210-6 00	22AWG (0.3mm ²)

Note : Please choose the right contact size according to the cable size.
The incorrect insertion prevention keys are sold separately.

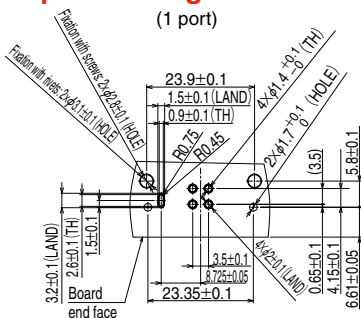
Receptacle (right angle DIP type)



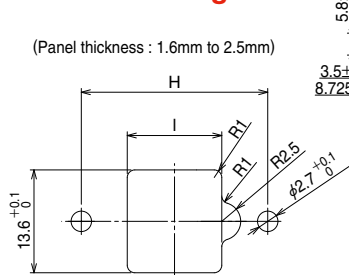
Attached parts



Recommended land pattern diagram



Recommended panel dimension diagram



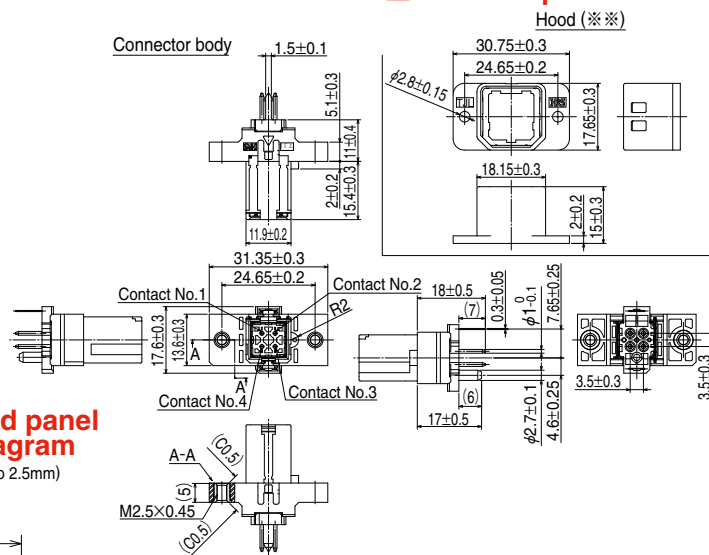
Part No.	HRS No.	No. of contacts	A	B	C	D	E	F	G	H	I	Sales unit	Remarks
TJ10L (1)-4P	236-3232-9 00	1 port	31.35 ±0.3	24.65 ±0.2	23.35 ±0.3	23.9 ±0.3	30.75 ±0.3	24.65 ±0.2	18.15 ±0.3	24.65 ±0.05	12.5 ±0.1/-0	1 pc	-
TJ10L (2)-8P	236-3233-0 00	2 port	44.35 ±0.3	37.65 ±0.2	36.35 ±0.3	36.9 ±0.3	43.75 ±0.3	37.65 ±0.2	31.15 ±0.3	37.65 ±0.05	25.5 ±0.1/-0		

Note : Screws for fixing the board and the panel are not attached. Please purchase a commercially available product.

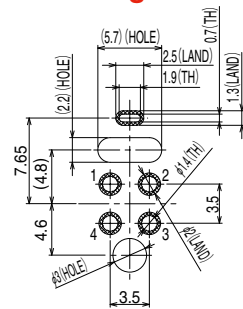
Receptacle (straight DIP type)



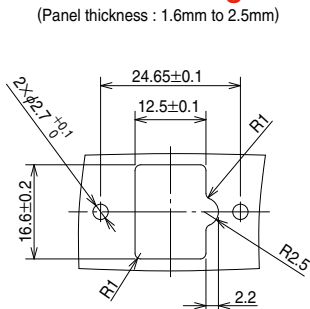
Attached parts



Recommended land pattern diagram



Recommended panel dimension diagram

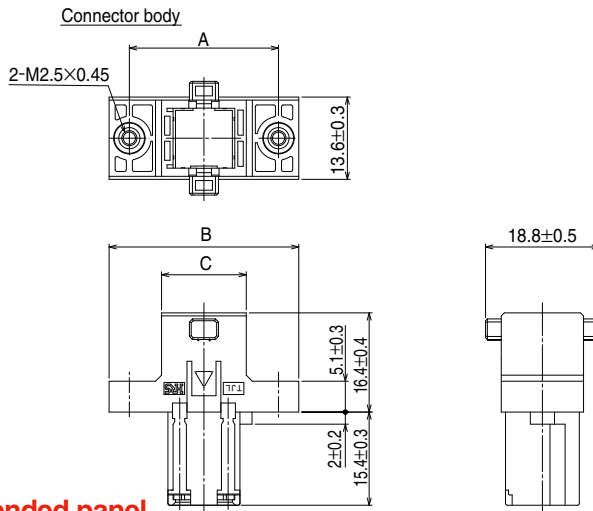
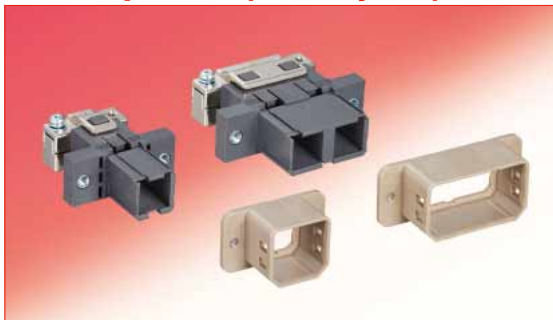


Part No.	HRS No.	No. of contacts	Sales unit	Remarks
TJ20L (1)-4P	236-3218-8 00	1 port	1 pc	-

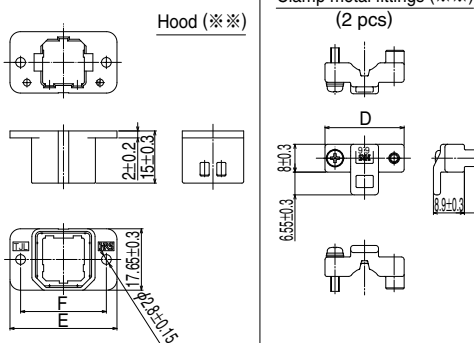
Note : Screws for fixing the panel are not attached. Please purchase a commercially available product.

Dec.1.2018 Copyright 2018 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Receptacle (trunk jack)

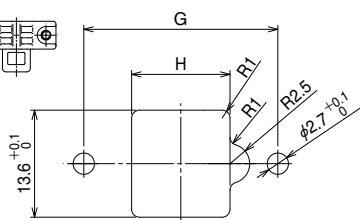


Attached item



Recommended panel dimension diagram

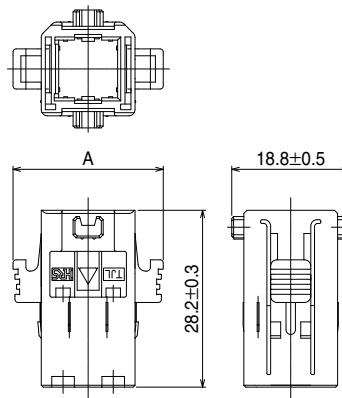
(Panel thickness : 1.6mm to 2.5mm)



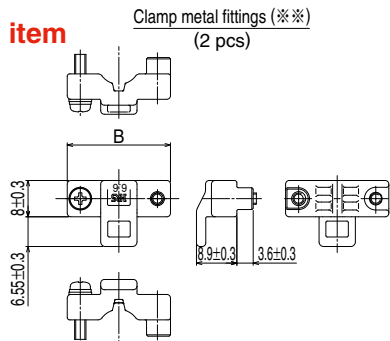
Part No.	HRS No.	No. of contacts	A	B	C	D	E	F	G	H	Sales unit	Remarks
TJ50L (1)-4P-C (6.6)	236-3219-0 00	1 port	24.65	31.35	14	22.75	30.75	24.65	24.65	12.5	1 pc	Cable outer diameter φ6.6±0.2 supported
TJ50L (1)-4P-C (8.4)	236-3228-1 00		±0.2	±0.5	±0.3	±0.3	±0.3	±0.2	±0.05	±0.1/-0		Cable outer diameter φ8.4±0.4 supported
TJ50L (2)-8P-C (6.6)	236-3220-0 00	2 port	37.65	44.35	27	35.75	43.75	37.65	37.65	25.5		Cable outer diameter φ6.6±0.2 supported
TJ50L (2)-8P-C (8.4)	236-3231-6 00		±0.2	±0.5	±0.3	±0.3	±0.3	±0.2	±0.05	±0.1/-0		Cable outer diameter φ8.4±0.4 supported

Note : Screws for fixing the panel are not attached. Please purchase a commercially available product.

Plug



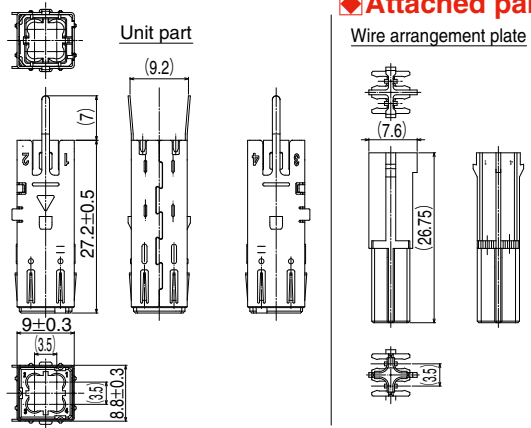
Attached item



Part No.	HRS No.	No. of contacts	A	B	Sales unit	Remarks
TJ50L (1)-4S-C (6.6)	236-3211-9 00	1 port	23.95±0.5	22.75±0.3	1 pc	Cable outer diameter φ6.6±0.2 supported
TJ50L (1)-4S-C (8.4)	236-3227-9 00					Cable outer diameter φ8.4±0.4 supported
TJ50L (2)-8S-C (6.6)	236-3213-4 00	2 port	36.95±0.5	35.75±0.3		Cable outer diameter φ6.6±0.2 supported
TJ50L (2)-8S-C (8.4)	236-3230-3 00					Cable outer diameter φ8.4±0.4 supported

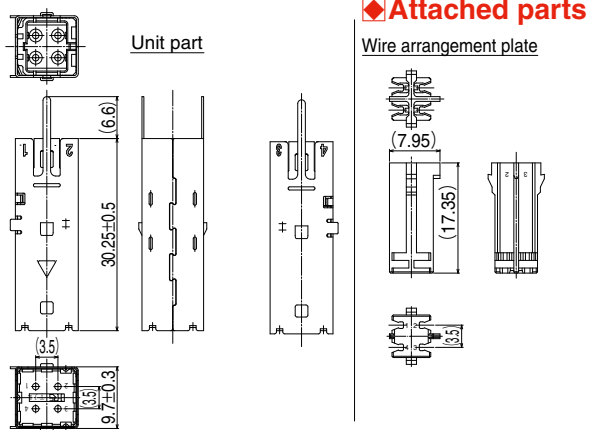
Note : Screws for fixing the panel are not attached. Please purchase a commercially available product.

◆ Unit (for a plug)



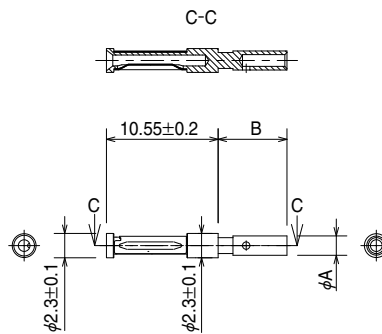
Part No.	HRS No.	Sales unit	Remarks
TJ50L-4S-UNIT	236-3203-0 00	1 pc	Unit for a plug

◆ Unit (for a trunk jack)



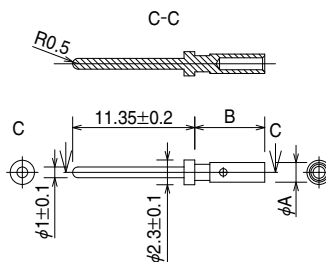
Part No.	HRS No.	Sales unit	Remarks
TJ50L-4P-UNIT	236-3217-5 00	1 pc	Unit for a receptacle (trunk jack)

◆ Crimp contact (female contact for plug)



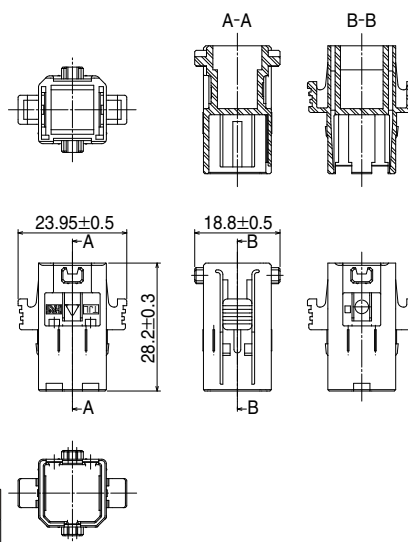
Part No.	HRS No.	A	B	Sales unit	Remarks
TJ50L-18SCA	236-3204-3 00	2.35±0.1	8.8±0.2	100 pcs/pack	Cable diameter 0.75mm ² (18AWG) supported
TJ50L-22SCA	236-3210-6 00	1.83±0.1	6.5±0.2	100 pcs/pack	Cable diameter 0.3mm ² (22AWG) supported

◆ Crimp contact (male contact for trunk jack)



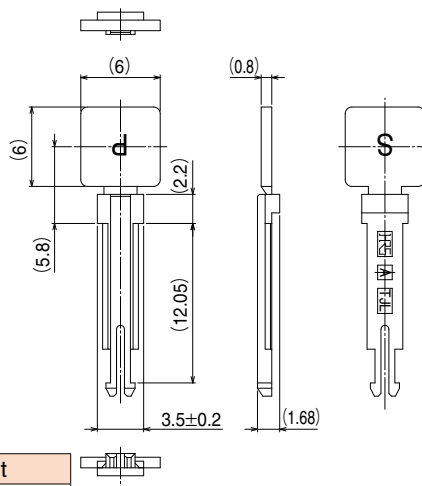
Part No.	HRS No.	A	B	Sales unit	Remarks
TJ50L-18PCA	236-3216-2 00	2.35±0.1	8.8±0.2	100 pcs/pack	Cable diameter 0.75mm ² (18AWG) supported
TJ50L-22PCA	236-3215-0 00	1.83±0.1	6.5±0.2	100 pcs/pack	Cable diameter 0.3mm ² (22AWG) supported

◆ Protective cap



Part No.	HRS No.	Sales unit
TJL-CP	236-3229-4 00	1 pc

◆ Incorrect insertion prevention key



Part No.	HRS No.	Sales unit
TJL-KY	236-3209-7 00	100 pcs/pack

◆ Crimp tool

Crimp tooling needs to be assembled using a dedicated applicator attached to a commercially available hand tool. The following are commercially available hand tools:

- Commercially available hand tool MIL-C-22520/1-01 crimp hand tool (Manufactured by DMC : M22520/1-01 AF8 CRIMP TOOL) Please select the appropriate applicator to install it on the hand tool according to the cable size.

Locator dedicated for HRS

Wire size	Part No.	HRS No.	Applicable contact
0.3mm ² (22AWG)	TJ50L/CRMD-22LCT	250-0040-8 00	TL50L-22PCA
			TL50L-22SCA
0.75mm ² (18AWG)	TJ50L/CRMD-18LCT	250-0041-0 00	TL50L-18PCA
			TL50L-18SCA

USA:

HIROSE ELECTRIC (U.S.A.), INC. HEADQUARTERS CHICAGO OFFICE
2300 Warrenville Road, Suite 150,
Downers Grove, IL 60515
Phone : +1-630-282-6700
<http://www.hirose.com/us/>

USA:

HIROSE ELECTRIC (U.S.A.), INC. SAN JOSE OFFICE
2841 Junction Ave, Suite 200
San Jose, CA. 95134
Phone : +1-408-253-9640
Fax : +1-408-253-9641
<http://www.hirose.com/us/>

USA:

HIROSE ELECTRIC (U.S.A.), INC. DETROIT OFFICE (AUTOMOTIVE)
17197 N. Laurel Park Drive, Suite 253,
Livonia, MI 48152
Phone : +1-734-542-9963
Fax : +1-734-542-9964
<http://www.hirose.com/us/>

THE NETHERLANDS:

HIROSE ELECTRIC EUROPE B.V.
Hogehillweg #8 1101 CC Amsterdam Z-0
Phone : +31-20-6557460
Fax : +31-20-6557469
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. GERMAN BRANCH
Schoenbergstr. 20, 73760 ostfildern
Phone : +49-711-456002-1
Fax : +49-711-456002-299
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. NUREMBERG OFFICE
Neumeyerstrasse 22-26, 90411 Nurnberg
Phone : +49-911 32 68 89 63
Fax : +49-911 32 68 89 69
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. HANOVER OFFICE
Bayernstr. 3, Haus C 30855 Langenhagen, Germany
Phone : +49-511 97 82 61 30
Fax : +49-511 97 82 61 35
<http://www.hirose.com/eu/>

FRANCE:

HIROSE ELECTRIC EUROPE B.V. PARIS OFFICE
Regus La Garenne Colombes, Place de La Belgique,
71 Boulevard National La Garenne Colombes, 92250, France
Phone : +33 (0) 1 7082 3170
Fax : +33 (1) 7082 3101
<http://www.hirose.com/eu/>

UNITED KINGDOM:

HIROSE ELECTRIC EUROPE BV (UK BRANCH)
4 Newton Court, Kelvin Drive, Knowlhill,
Milton Keynes, MK5 8NH
Phone : +44-1908 202050
Fax : +44-1908 202058
<http://www.hirose.com/eu/>

CHINA:

HIROSE ELECTRIC (SHANGHAI) CO., LTD.
1601, Henderson Metropolitan, NO.300, East Nanjing
Road, Huangpu District, Shanghai, China 200001
Phone : +86-21-6391-3355
Fax : +86-21-6391-3335
<http://www.hirose.com/cn/>

CHINA:

HIROSE ELECTRIC (SHANGHAI) CO.,LTD. BEIJING BRANCH
A1001, Ocean International Center, Building 56# East 4th
Ring Middle Road, ChaoYang District, Beijing, 100025
Phone : +86-10-5165-9332
Fax : +86-10-5908-1381
<http://www.hirose.com/cn/>

CHINA:

HIROSE ELECTRIC TECHNOLOGIES (SHENZHEN) CO., LTD.
Room 09-13, 19/F, Office Tower Shun Hing Square, Di Wang Commercial Centre,
5002 Shen Nan Dong Road, Shenzhen City, Guangdong Province, 518008
Phone : +86-755-8207-0851
Fax : +86-755-8207-0873
<http://www.hirose.com/cn/>

HONG KONG:

HIROSE ELECTRIC HONGKONG TRADING CO., LTD.
Room 1001, West Wing, Tsim Sha Tsui Centre, 66
Mody Road, Tsim Sha Tsui East, Kowloon, Hong Kong
Phone : +852-2803-5338
Fax : +852-2591-6560
<http://www.hirose.com/hk/>

TAIWAN:

HIROSE ELECTRIC TAIWAN CO., LTD.
103 8F, No.87, Zhengzhou Rd., Taipei
Phone : +886-2-2555-7377
Fax : +886-2-2555-7350
<http://www.hirose.com/tw/>

KOREA:

HIROSE KOREA CO.,LTD.
250, Huimanggongwon-ro, Siheung-si,
Gyeonggi-do, Korea, 15083
Phone : +82-31-496-7000 or 7124
Fax : +82-31-496-7100
<http://www.hirose.co.kr/>

SINGAPORE:

HIROSE ELECTRIC SINGAPORE PTE. LTD.
10 Anson Road #26-16, International Plaza
079903, Singapore
Phone : +65-6324-6113
Fax : +65-6324-6123
<http://www.hirose.com/sg/>

INDIA:

HIROSE ELECTRIC SINGAPORE PTE. LTD. DELHI LIAISON OFFICE
Office NO.552, Regus-Green Boulevard, Level5, Tower C,
Sec62, Plot B-9A, Block B, Noida, 201301, Uttar Pradesh, India
Phone : +91-12-660-8018
Fax : +91-120-4804949
<http://www.hirose.com/sg/>

INDIA:

HIROSE ELECTRIC SINGAPORE PTE. LTD. BANGALORE LIAISON OFFICE
Unit No-403, 4th Floor, No-84, Barton Centre, Mahatma
Gandhi (MG) Road, Bangalore 560 001, Karnataka, India
Phone : +91-80-4120 1907
Fax : +91-80-4120 9908
<http://www.hirose.com/sg/>

MALAYSIA:

PENANG REPRESENTATIVE OFFICE
1-21-01, Suntech @ Penang Cybercity (1164), Lintang
Mayang Pasir 3,11950, Bayan Baru, Penang, Malaysia.
Phone : +604-619-2564
Fax : +604-619-2574
<http://www.hirose.com/sg/>

THAILAND:

BANGKOK OFFICE (REPRESENTATIVE OFFICE)
Unit 4703, 47th FL., 1 Empire Tower, South Sathorn
Road, Yannawa, Sathorn, Bangkok 10120 Thailand
Phone : +66-2-686-1255
Fax : +66-2-686-3433
<http://www.hirose.com/sg/>



HIROSE ELECTRIC CO.,LTD.

2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN
TEL: +81-45-620-3526 Fax: +81-45-591-3726
<http://www.hirose.com>
<http://www.hirose-connectors.com>

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А