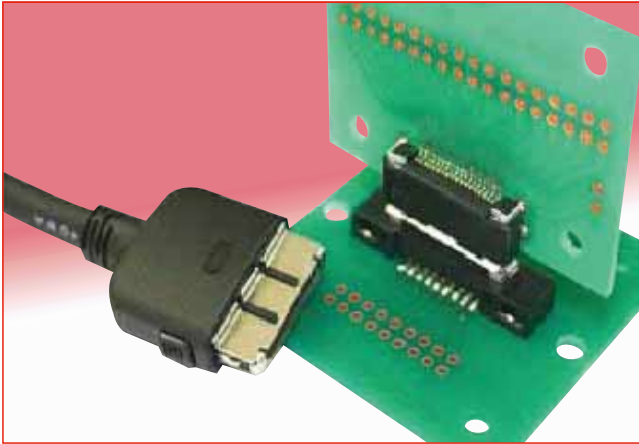


High Life Cycle Interface Connectors

3800 Series



Hirose's Unique Contact Structure with High Durability

- 1) Minimum contact shaving due to a rolled surface on the bellows contact side
- 2) The spring contact design prevents buckling.
- 3) Stable contact design provides the support needed to endure 20,000 mating cycles. Provides ideal long term contact force.

Rolled surface

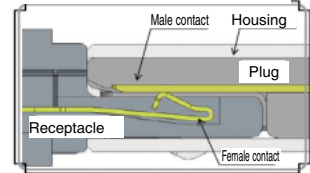
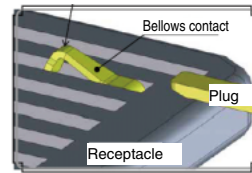


Fig.①

■Features

1. 20,000 mating/unmating life cycle with unique Hirose contact structure.

2. The structure utilizes a metal shell that is 0.35 mm thick. The shell is designed to cover the housing and protect against rough mechanical operation.

The addition of reinforced metal fittings increases the PCB retention force and allows these connectors to be mounted with commercially available screws for the cradle type. (Please refer to Fig.②)

3. Sequential mating, that features a 0.5 mm range (Please refer to Fig.③)

4. Its small size and light weight design are helpful for use in compact devices

5. Simple mating process with a tactile click that assures proper mating completion.

The pushbutton locking system leads to a simplified mating process that delivers a tactile click to ensure that the mating process was correctly completed.

6. One piece plug cover

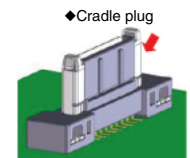
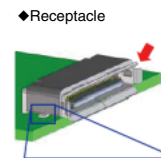
The assembly of this connector is simplified due to its one-piece plug cover.

7. RoHS compliant

All materials and substances used to produce this product comply with the RoHS free standards.

Robust Structure

- 1) The 0.35 mm thick metal shell protects the housing.



- 2) Protected Guide Posts

The metal shell on the cradle provides protection and cover to the guide posts on the cradle plug.

- 3) Optional screw fastening

The cradle can be secured to the PCB with the use of commercially available screws (M2 x 0.4 x 5) to provide additional retention force.

- 4) Reinforcing metal fittings

Solder is allowed to flow into the through hole and onto the reinforcing metal fittings to increase the PCB retention force.

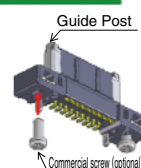


Fig.②

Sequential Mating Structure

The No.1 and 18 contacts are the first contacts to mate, with the remaining contacts mating thereafter.

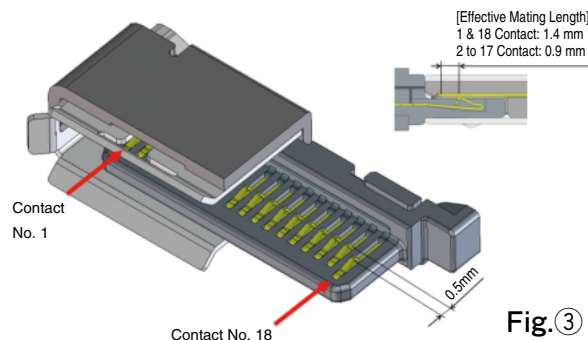


Fig.③

■Product Specifications

Ratings	Rated Current	No.2 ~ No.17 ⇒ 0.5 A No.1, No.18 ⇒ 1.5 A	Rated Voltage	AC 125 V
			Operating Temperature Range	−40 ~ +85°C
Items	Specifications		Conditions	
1. Insulation Resistance	Minimum of 1,000 MΩ		Measured with DC 250 V.	
2. Withstanding Voltage	No flashover or breakdown		Apply 350 V AC for 1 minute	
3. Contact Resistance	Maximum of 70 mΩ		Measured with 100 mA (DC or 1,000 Hz) or below	
4. Durability	1) Maximum of 20 mΩ of deflection from its initial state 2) No damaged, cracked or loose parts		20,000 mating cycles	

■Materials

●Receptacle

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	—
Dust cover	Polyamide resin	Black	UL94V-0
Metal shell	Stainless Steel	Tin plating	—

●Cradle Type Plug

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	—
Metal shell	Stainless steel	Tin plating	—
Fastening screw metal	Steel	Nickel under plating	—

●Plug

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	—
Cover	Polycarbonate	Black	UL94V-0
Metal shell	Stainless steel	—	—

■Product Number Structure

Refer to this page when determining product specifications by model types. Please place orders with part numbers listed in this catalog. The characteristics and specifications of the product described in this catalog are reference values. Please make sure to check the latest delivery specifications at the time of product use.

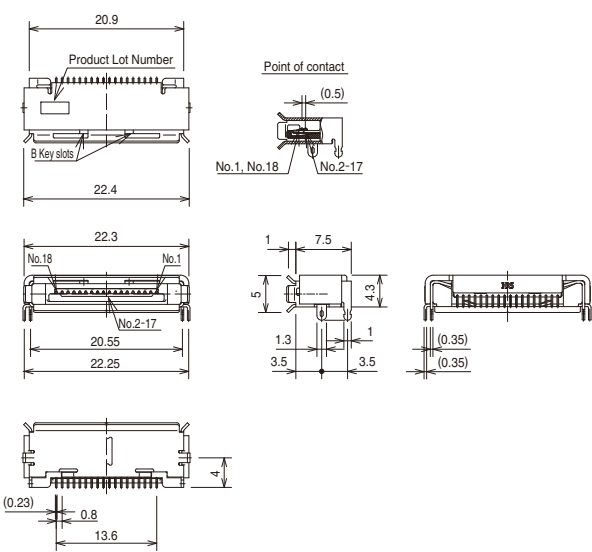
38 40 - B - 18 P
① ② ③ ④ ⑤

① Series Number: 38	③ Mating Key Type
② Termination style 40: Soldering Type 60: Right Angle DIP Type 80: Cradle Type DIP Type	④ No. of Contacts
	⑤ Type of Connector P: Plug S: Receptacle

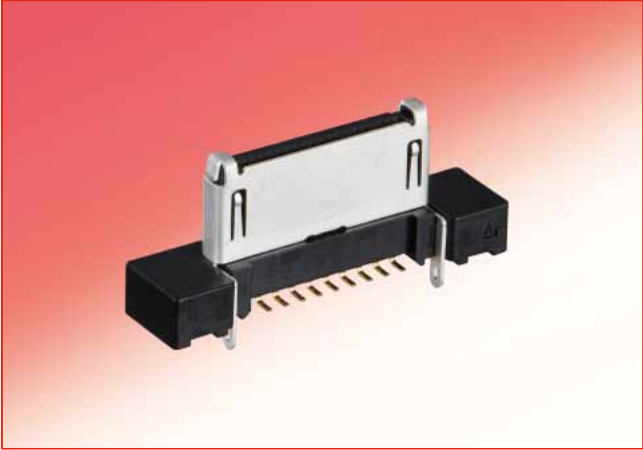
■Receptacle Connector



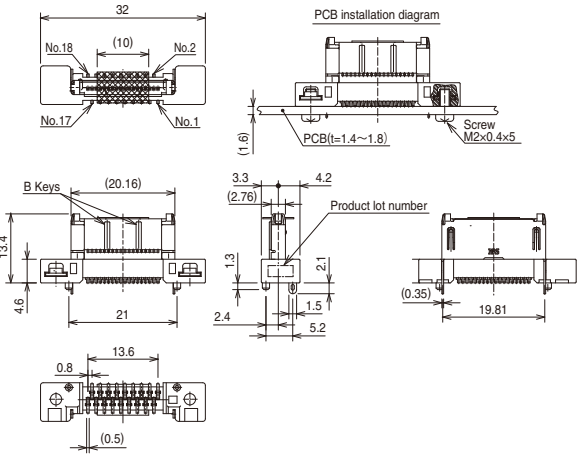
Part No.	HRS No.	Quantity
3860-B-18S	CL238-2006-7-00	600 pieces per reel



■Cradle Plug Connector



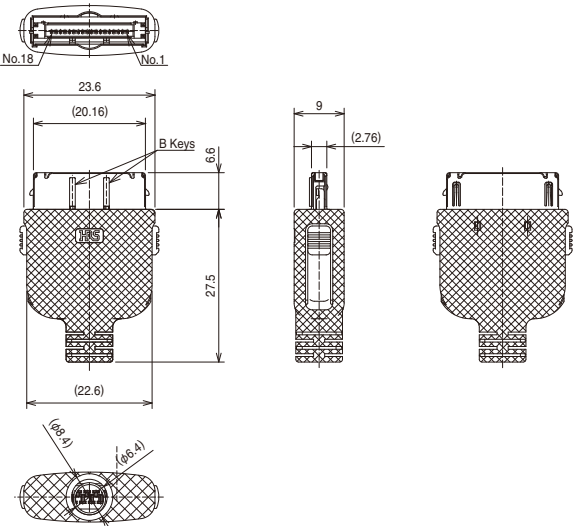
Part No.	HRS No.
3880-B-18P	CL238-2008-2-00



■Plug Connector



Part No.	HRS No.
3840-B-18P	CL238-2007-0-00

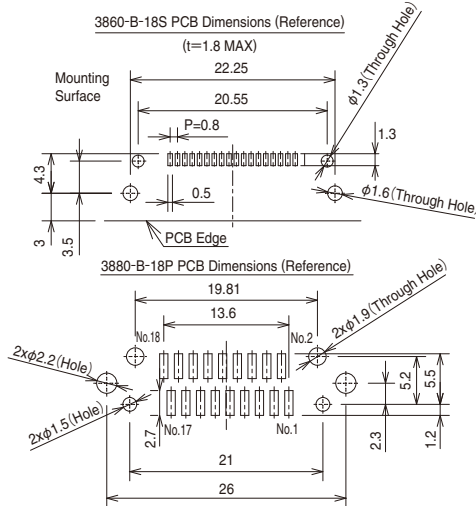


◆ Applicable Cable

Conductor Size	Cross Section	0.08mm ²
	Configuration	7 / 0.127mm
	Outer Diameter	φ0.38mm
Outer Diameter of Insulation	φ0.58mm	
Wire Size	AWG28	

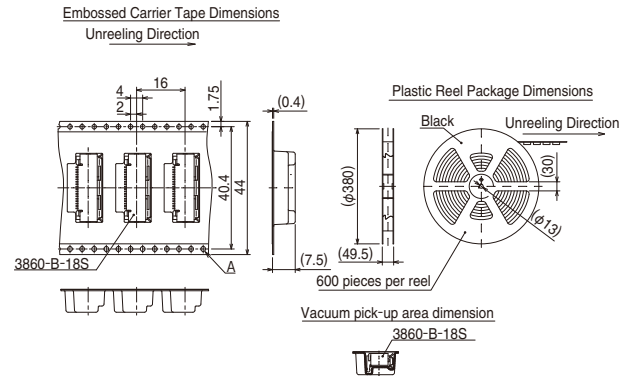
UL STYLE OF APPLICABLE CABLE : 20620、20276

◆ Recommended PCB Layout

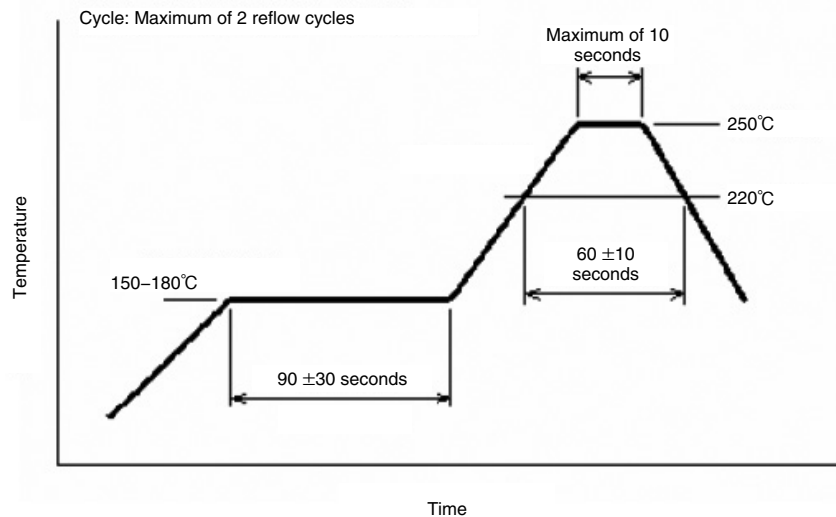


◆ Receptacle

Reel packaging dimensions (JIS C 0806-3)



◆ Recommended Reflow Temperature Profile



Please check the mounting conditions before use, conditions such as solder paste types, manufacturer, PCB size and any other soldering materials may alter the performance of such materials.



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