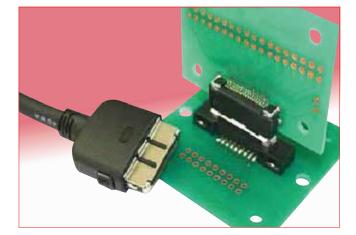
# High Life Cycle Interface Connectors

3800 Series



# 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. (Fig.2)

- 3. Sequential mating, that features a 0.5 mm range (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

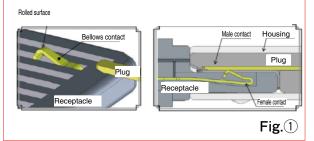
The assembly of this connector is simplified due to its one-piece plug cover.

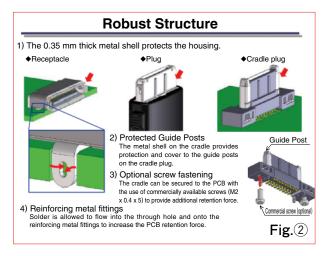
#### 7. RoHS compliant

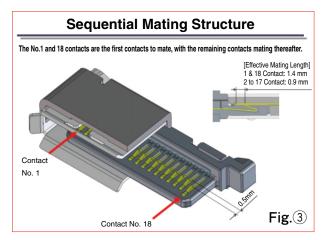
All materials and substances used to produce this product comply with the RoHS free standards.

#### Hirose's Unique Contact Structure with High Durability

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









## Product Specifications

Ratings Rated Current	Dated Current	$No.2 \sim N0.17 \Rightarrow 0.5A$		Rated Voltage	AC 125V
	No.1, No.18 ⇒ 1.5A		erating Temperature Range	$-40 \sim +85^\circ C$	
Items	ems Specifications		Conditions		
1. Insulation	Opecifications		Conditions		
Resistance	Minimum of 1,000MΩ		Measured with DC 250V.		
2. Withstanding	No flashover or breakdown		Apply 350V AC for 1 minute		
Voltage					
3. Contact	Maximum of 70mΩ		Measured with 100mA (DC or 1,000 Hz) or		
Resistance			below		
	<ol> <li>Maximum of 20mΩ of deflection from its initial state</li> <li>No damaged, cracked or loose parts</li> </ol>		ate	e 20,000 mating cycles	
4. Durability					

# Materials / Finish

#### 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	_	-

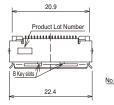
### Product Number Structure

Refer to 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.

Series Number : 38	8 Mating Key Type	
2 Termination style	4 No. of Contacts	
40 : Soldering Type	5 Type of Connector	
60 : Right Angle SMT Type	P : Plug	
80 : Cradle Type SMT Type	S : Receptacle	

# Receptacle Connector





22.3

Juning minut

20.55

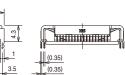
22.25

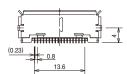
No.2-17

No.1

No.18





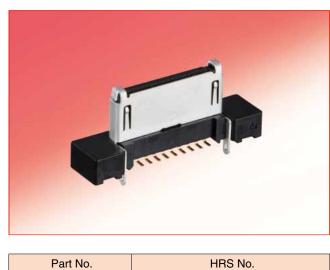


# Cradle Plug Connector

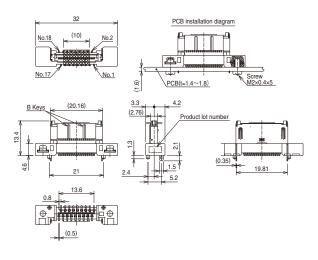
238-2006-7 00

600 pcs/reel

3860-B-18S



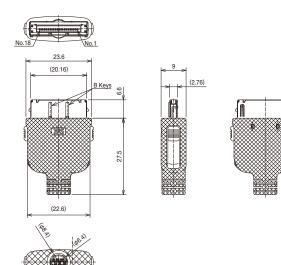
238-2008-2 00



# Plug Connector

3880-B-18P





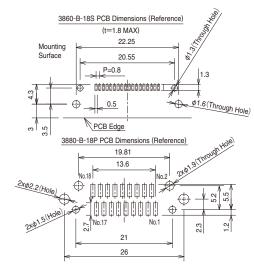
**HS** 3

# Applicable Cable

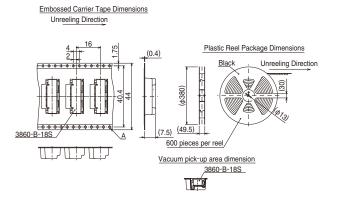
	Cross Section	0.08mm <sup>2</sup>	
Conductor Size	Configuration	7 / 0.127mm	
	Outer Diameter	<b>¢</b> 0.38mm	
Outer Diameter of Insulation	¢0.58mm		
Wire Size	28 AWG		

UL STYLE OF APPLICABLE CABLE : 20620, 20276

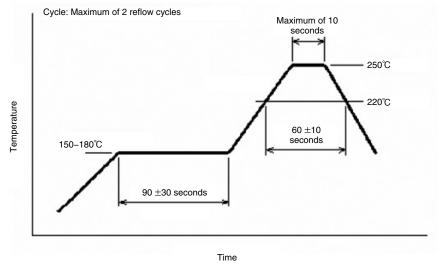
# Recommended PCB Layout



### 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.



5 The characteristics and the specifications contained herein are for reference purpose. Please refer to the latest customer drawings prior to use. The contents of this catalog are current as of date of 07/2016. Contents are subject to change without notice for the purpose of improvements.

# **Mouser Electronics**

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