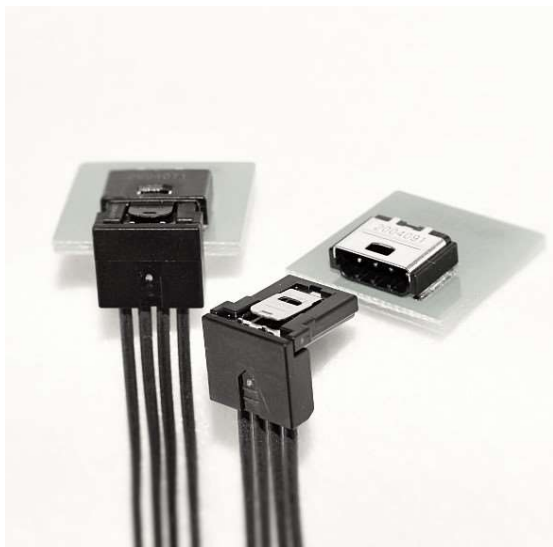


# CULH CONNECTOR

Board-to-wire



Smallest SMT connector in the world which can be used in automotive application (Height: 3.5mm)

## ■ Features

### ● Conforming to the Automotive Standard

It conforms to the automotive standard though it is small and low height. It is suitable for small space and high temperature environment.

### ● Low Height and Short Mating Length

Height: 3.5mm (Black SUS ver. is 3.8mm)

Mating Length: 12.8mm, Pitch 1.8mm

It is thin and reduces the occupied area.

### ● Right Angle type

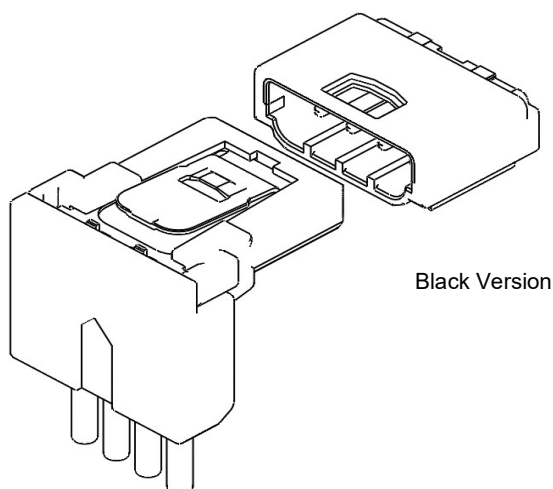
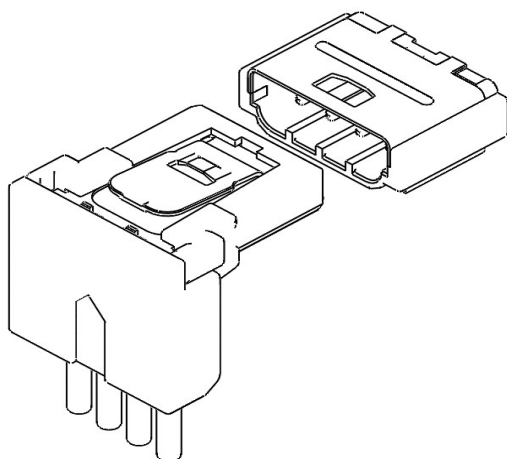
Structure which makes the wire to route under the product directly.

### ● Clear Lock Feeling

Using the metal lock, so it is possible to feel the click feeling in hand clearly though it is small.

### ● Crimp Terminal Structure

It applies 3 contact points and improves contact reliability.

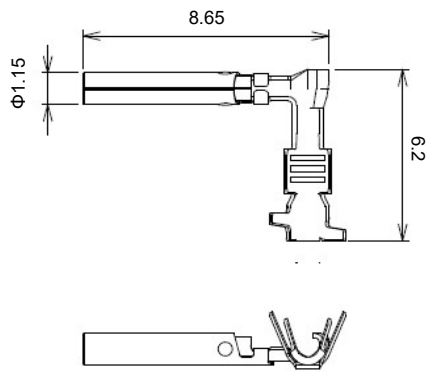


## ■ Specifications

Item	Standard	Condition
● Current rating	5A AC·DC	Wire for more than 125°C· Applying AWG#22, All circuits
● Operating voltage	150V AC·DC	IEC60664-1, Pollution degree2
● Temperature range	−40°C ~ +125°C	Including temperature rise in applying electrical current
● Applicable wire	AWG#22	Coating OD: Φ1.3mm max
● Frame resistance	V-0	UL94
● Contact resistance	Initial 10mΩ max	DC 100mA
● Insulation resistance	100MΩ min	DC 500V
● Withstand voltage	No dielectric breakdown	AC 1,000V / min.
● Vibration resistance	After endurance 15mΩ max	LV214 PG17 Severity 2
● Heat resistance	After endurance 15mΩ max	Under 125°C, Abandoned for 1,000 hours
● Locking force	130N min	In case pulling to mating direct
● Halogen	Halogen-free	Meet the definition based on IEC61249-2-21

\*Compliant with ELV/RoHS2.

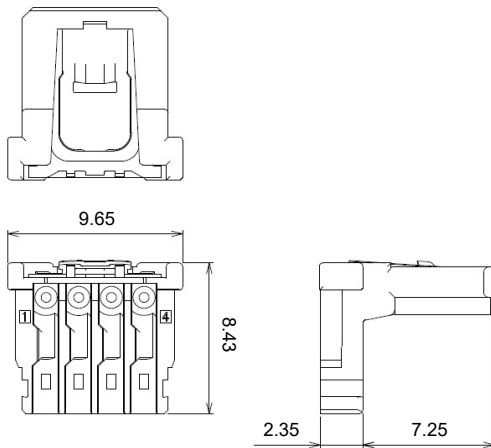
\*If you have any question, please contact JST.

**Female terminal**


Size	Model No.	Applicable wire size		Q'ty/Reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
M	<b>SRULH-A021GF-0.5</b>	0.35	1.3 MAX	8,000

**Material and Finish**

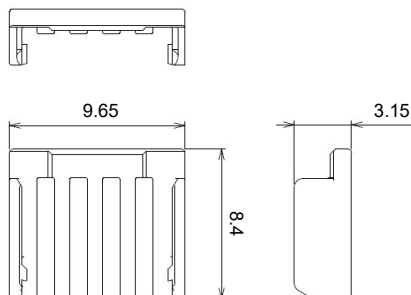
Copper alloy, Nickel-undercoated, Contact area; Gold-plated  
Barrel area; Tin-plated (Reflow treatment)

**Female connector**


Circuits	Model No.	Lock color	Q'ty/box
4	<b>CULHRB-04V-1A-K</b>	Metal stainless	1,560
	<b>CULHRB-04V-1A-KK</b>	Black stainless	

**Material and Finish**

Housing: Poly-amide, Black, UL94V-0, Halogen-free  
Metal lock: Stainless

**Female cover**


Circuits	Model No.	Housing color	Q'ty/box
4	<b>CULHCR-04V-A-K</b>	Black	20,000

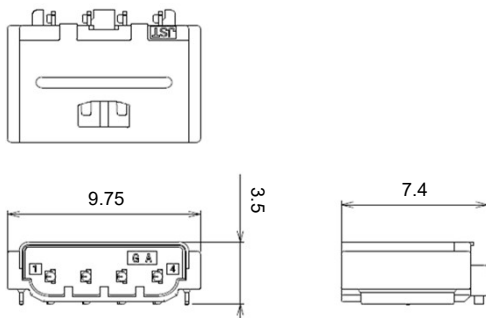
**Material and Finish**

Housing: Poly-amide, Black, UL94V-0, Halogen-free

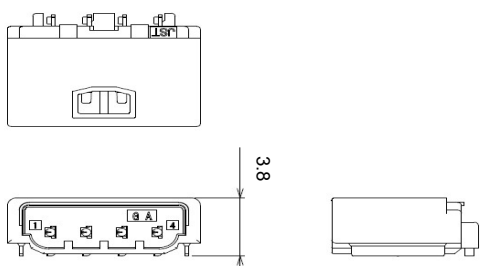
# CULH CONNECTOR

## Male connector

### ● SM04B-CULHK-1GFA-TB



### ● SM04B-CULHK-1GFB-TB



Circuits	Model No.	Connector Upper Side Color	Q'ty/Reel
4	<b>SM04B-CULHK-1GFA-TB</b>	Metal Stainless	1,700
	<b>SM04B-CULHK-1GFB-TB</b>	Black	

#### Material and Finish

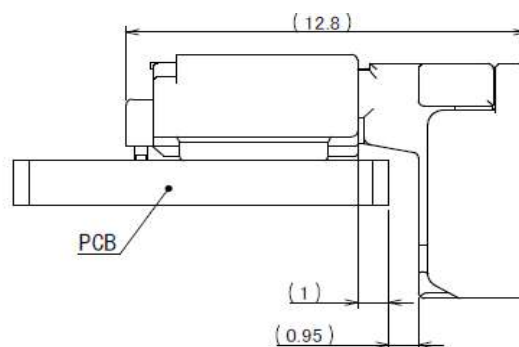
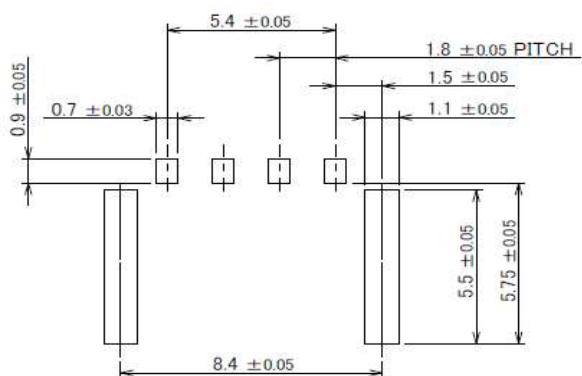
Housing: Poly-amide, Black, UL94V-0, Halogen-free

Metal shell: Stainless

Terminal: Brass, Nickel-undercoated, Contact area; Gold-plated

Solder tail; Tin-plated (Reflow treatment)

## PC board layout, Assembly layout



## Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
<b>SRULH-A021GF-0.5</b>	AP-K2N	MK / SRULH-A021-05-C	APLMK SRULH-A021-05-C

Note: 1. Contact JST for details.

2. When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.