

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

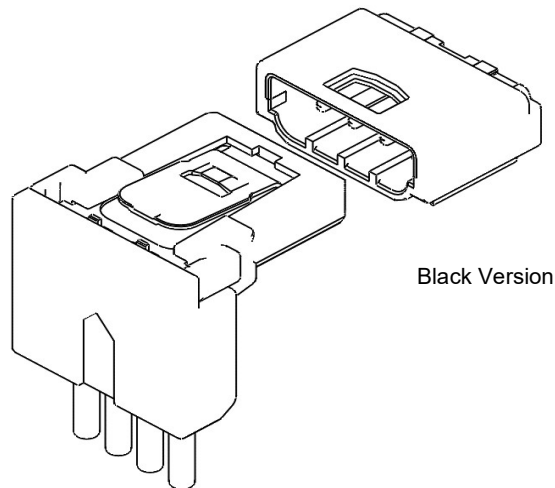
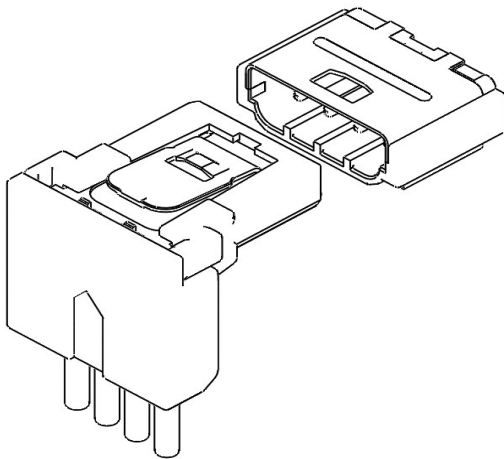
Structure which makes the wire to route under the product directly.

● 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.



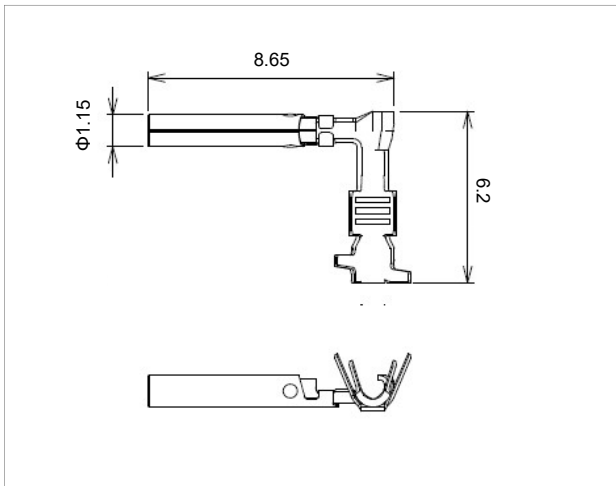
■ Specifications

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

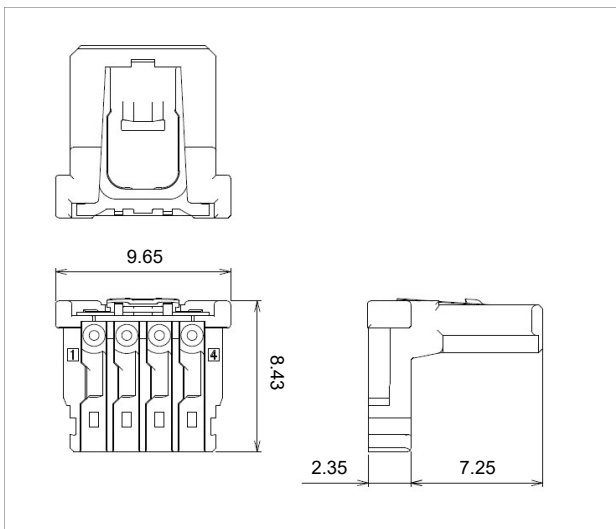


Size	Model No.	Applicable wire size		Q'ty/Reel
		Conductor (mm ²)	Insulation O.D. (mm)	
M	SRULH-A021GF-0.5	0.35	1.3 MAX	8,000

Material and Finish

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

Female connector

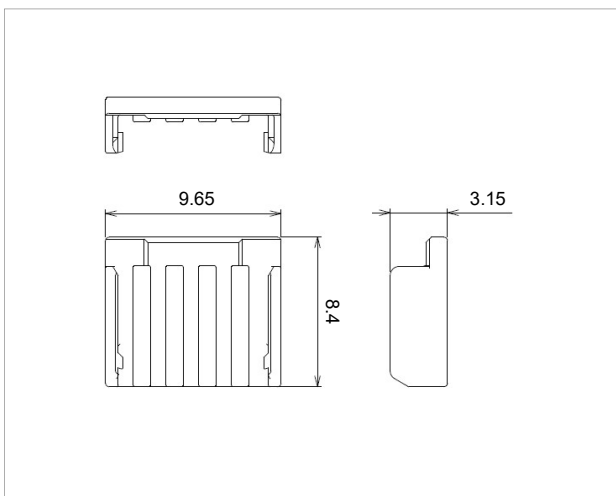


Circuits	Model No.	Lock color	Q'ty/box
4	CULHRB-04V-1A-K	Metal stainless	1,560
	CULHRB-04V-1A-KK	Black stainless	

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	CULHCR-04V-A-K	Black	20,000

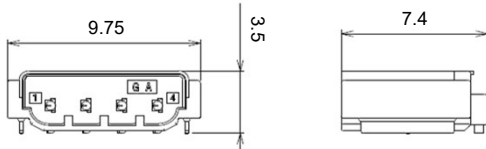
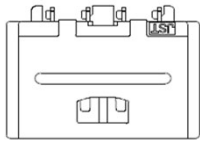
Material and Finish

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

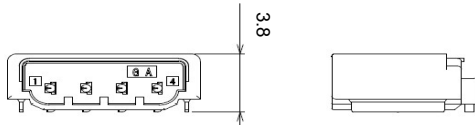
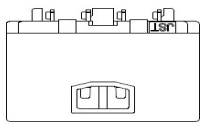
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Male connector

● SM04B-CULHK-1GFA-TB



● SM04B-CULHK-1GFB-TB



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

Material and Finish

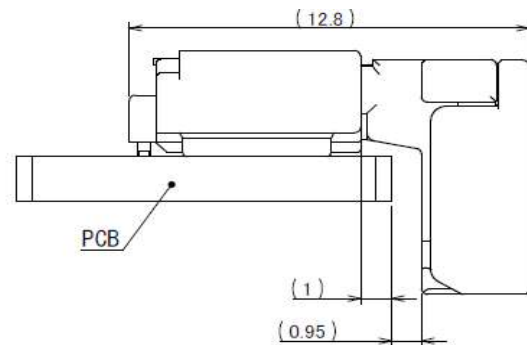
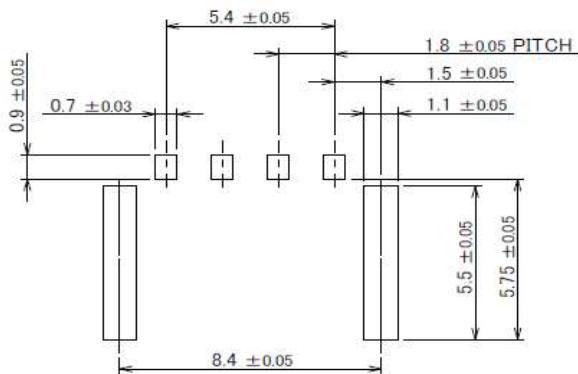
Housing: Poly-amide, Black, UL94V-0, Halogen-free

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
SRULH-A021GF-0.5	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.