

# ULH CONNECTOR

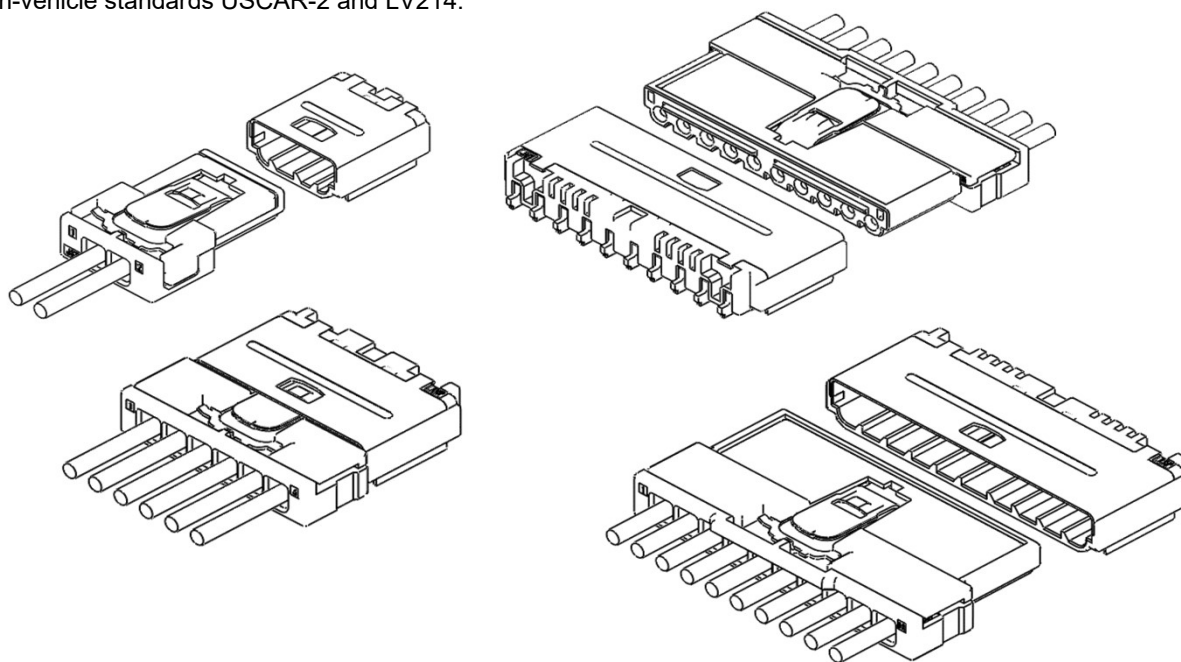
Board-to-wire



## ■ Features

- Conforming the Automotive Standards; USCAR-2 and LV214
- Low Height and Short Mating Length despite crimped specification  
Height: 3.5mm, Mating Length: 14.1mm
- Space-saving Design
- Maintains electrical and mechanical properties even at temperatures up to 125°C
- UL94 V-0, Halogen-free

This SMT connector that achieves the world's smallest class connector height of 3.5 mm as a crimp terminal while having performance that meets the in-vehicle standards USCAR-2 and LV214.



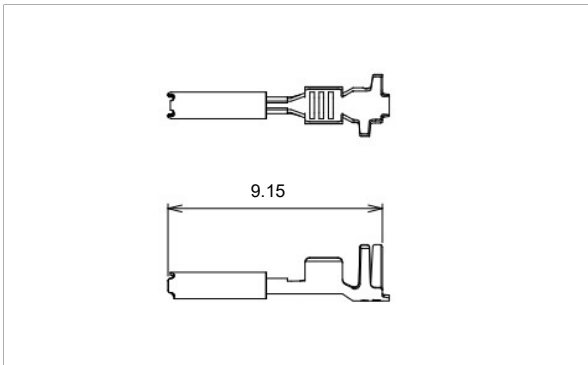
## ■ Specifications

Item	Standard	Condition
● Current rating	5A AC·DC	Wire for more than 125°C· Applying AWG#22, All circuits
● Operating voltage	100V AC·DC	IEC60664-1, Pollution degree2
● Temperature range	-40°C~ +125°C	Including temperature rise in applying
● Applicable wire	AWG#22	Coating OD: Φ1.5mm 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 USCAR-2 V2(10G)
● Heat resistance	After endurance 15mΩ max	Under 125°C, Abandoned for 3,000 hours
● Locking force	110N 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



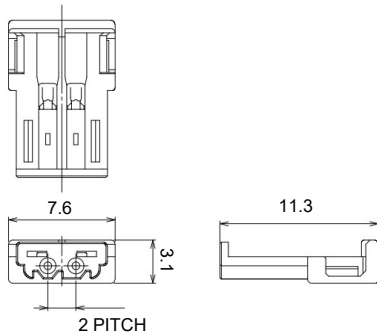
Size	Model No.	Applicable wire size		Q'ty/Reel
		Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
M	① SULH-A021GF-0.5	0.35	1.5 MAX	9,000
	② SULH-A021T-0.5			

### Material and Finish

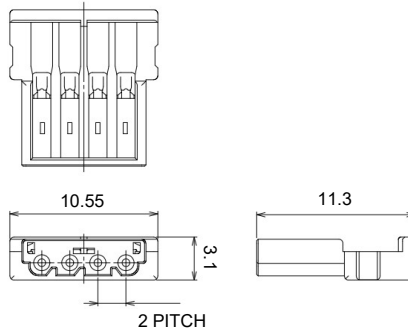
- ① Copper alloy, Nickel-undercoated, Contact area; Gold-plated  
Barrel area; Tin-plated (Reflow treatment)
- ② Copper alloy, Tin-plated (Reflow treatment)

## Female connector

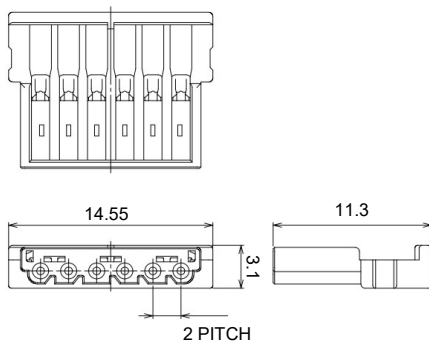
### ● 2 circuits



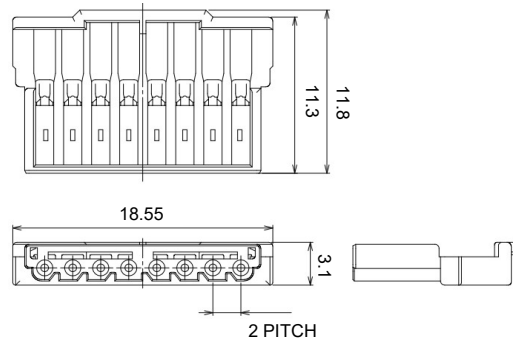
### ● 4 circuits



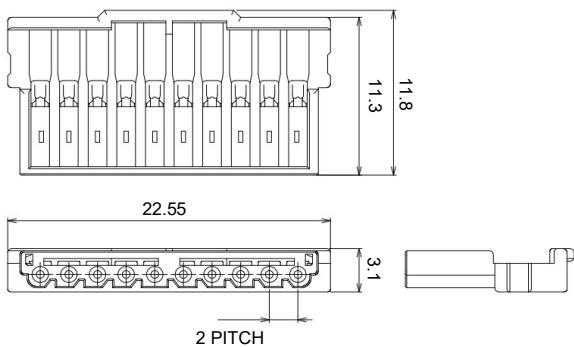
### ● 6 circuits



### ● 8 circuits



### ● 10 circuits



Circuits	Model No.	Q'ty/box
2	ULHRR-02V-1A1-K(HF)	20,000
4	ULHRR-04V-1A1-K(HF)	18,000
6	ULHRR-06V-1A1-K(HF)	16,000
8	ULHRR-08V-1A1-K(HF)	14,000
10	ULHRR-10V-1A1-K(HF)	12,000

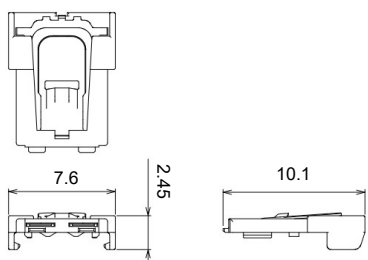
### Material and Finish

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

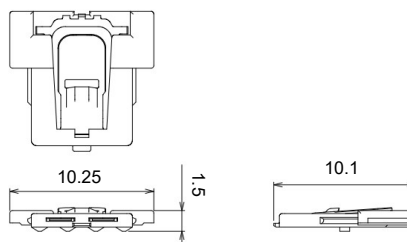
Note: Color/Key codes other than above-mentioned housing are also available.  
Contact JST for details.

## Female cover

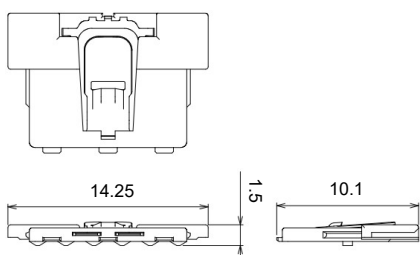
### ● 2 circuits



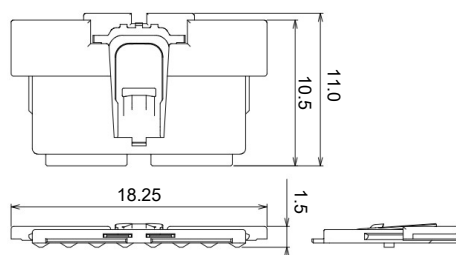
### ● 4 circuits



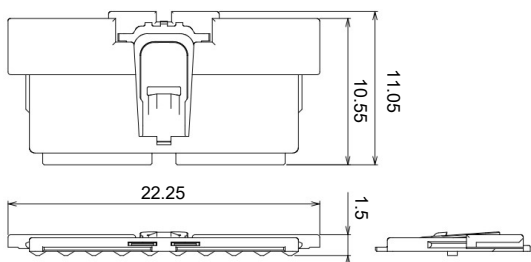
### ● 6 circuits



### ● 8 circuits



### ● 10 circuits



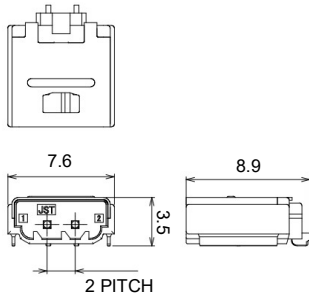
Circuits	Model No.	Q'ty/box
2	<b>ULHCB-02V-A-K(HF)</b>	3,712
4	<b>ULHCB-04V-A-K(HF)</b>	2,784
6	<b>ULHCB-06V-A-K(HF)</b>	2,784
8	<b>ULHCB-08V-A-K(HF)</b>	1,856
10	<b>ULHCB-10V-A-K(HF)</b>	1,856

#### Material and Finish

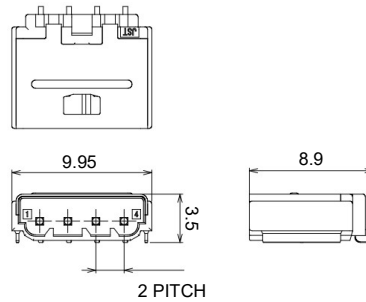
Housing: Poly-amide, UL94V-0, Halogen-free, Black  
 Metal lock: Stainless

## Male connector

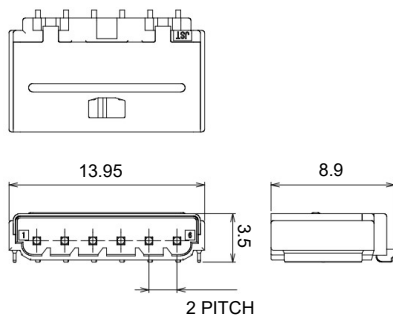
### ● 2 circuits



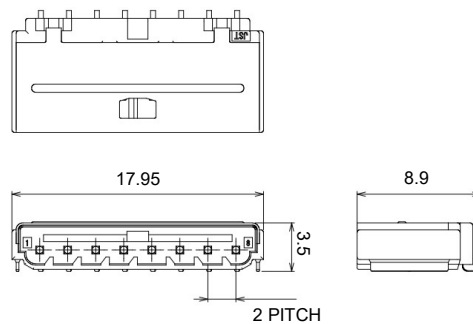
### ● 4 circuits



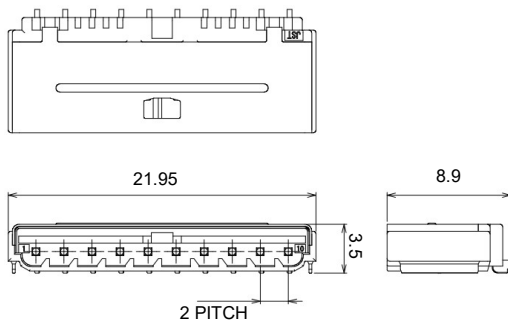
### ● 6 circuits



### ● 8 circuits



### ● 10 circuits



Plating	Circuits	Model No.	Q'ty/Box
Au	2	SM02B-ULHK-1GFA1-ETB(HF)	15,300
	4	SM04B-ULHK-1GFA1-ETB(HF)	10,200
	6	SM06B-ULHK-1GFA1-ETB(HF)	10,200
	8	SM08B-ULHK-1GFA1-ETB(HF)	8,500
	10	SM10B-ULHK-1GFA1-ETB(HF)	8,500
Sn	2	SM02B-ULHK-1TA1-ETB(HF)	15,300
	4	SM04B-ULHK-1TA1-ETB(HF)	10,200
	6	SM06B-ULHK-1TA1-ETB(HF)	10,200
	8	SM08B-ULHK-1TA1-ETB(HF)	8,500
	10	SM10B-ULHK-1TA1-ETB(HF)	8,500

#### Material and Finish

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

Metal shell: Copper alloy

Male terminal: Copper alloy, Nickel-undercoated

Au - Contact area / Selective gold-plated

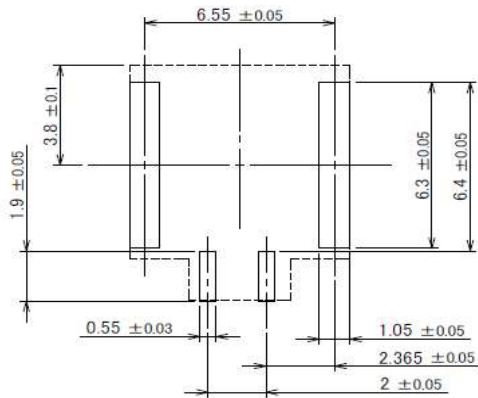
Mounting part / Tin-plated (Reflow treatment)

Sn / Tin-plated (Reflow treatment)

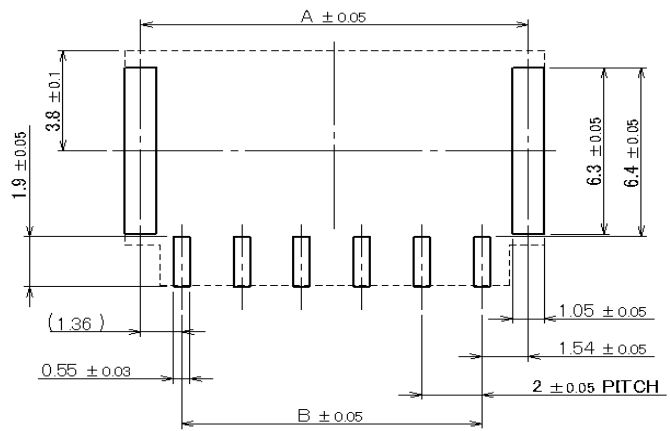
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**PC board layout, Assembly layout**

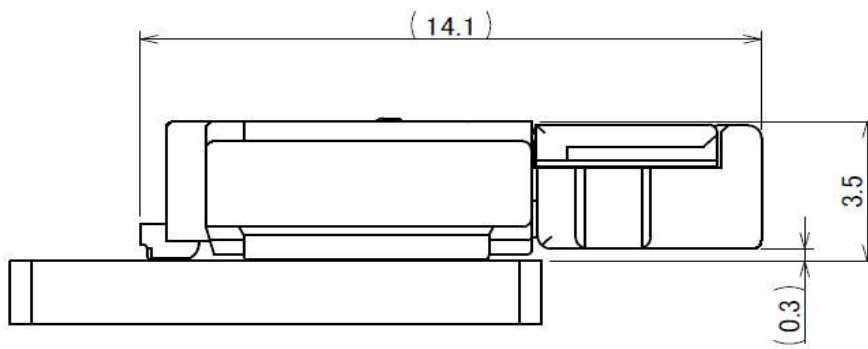
● 2 circuits



● 4 ~ 10 circuits



Circuits	A	B
4	8.9	6
6	12.9	10
8	16.9	14
10	20.9	18



**Crimping machine, Applicator**

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SULH-A021GF-0.5	AP-K2N	MK / SULH-A021-05	APLMK SULH-A021-05
SULH-A021T-0.5			

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.