

# ULH CONNECTOR

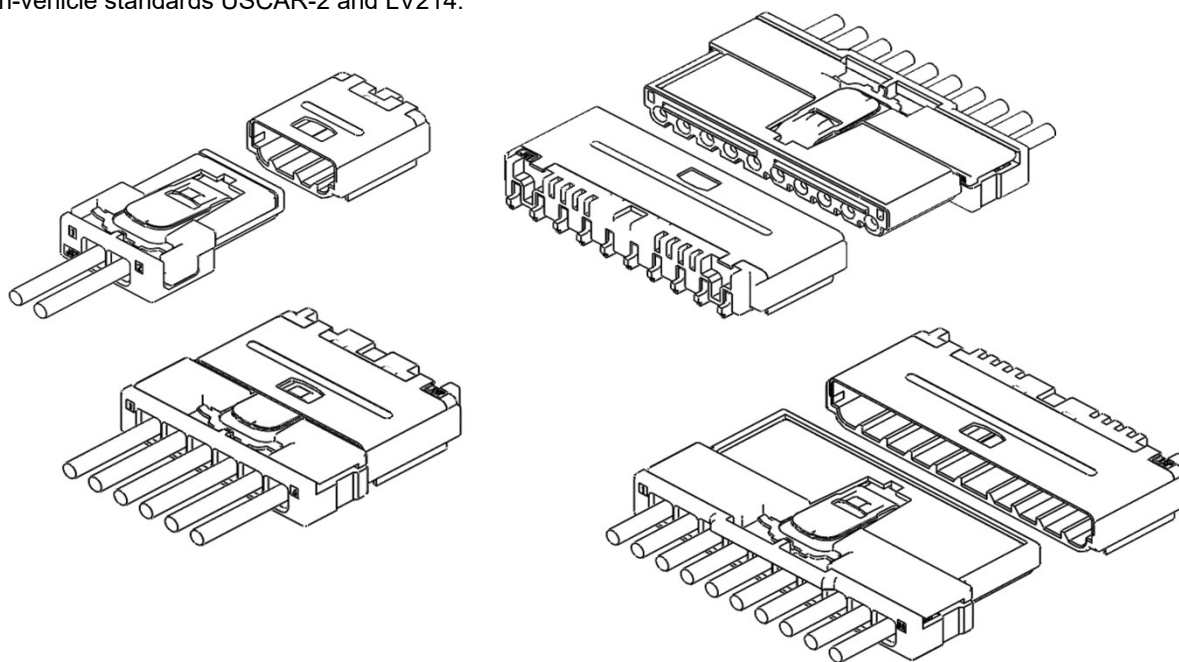
Board-to-wire



## ■ 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.



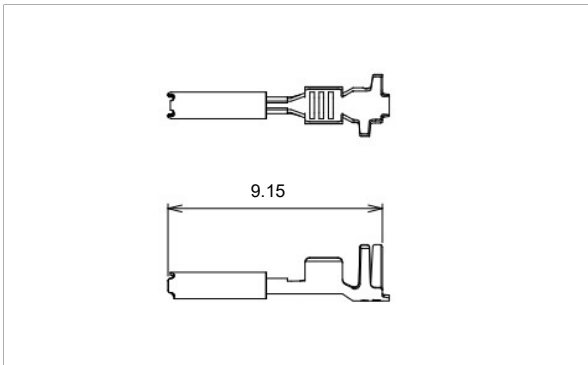
## ■ Specifications

| Item                    | Standard                 | Condition  |
|-------------------------|--------------------------|--|
| ● Current rating        | 5A AC·DC                 | Wire for more than 125°C·<br>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<br>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<br>IEC61249-2-21              |

\*Compliant with ELV/RoHS2.

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

## Female terminal



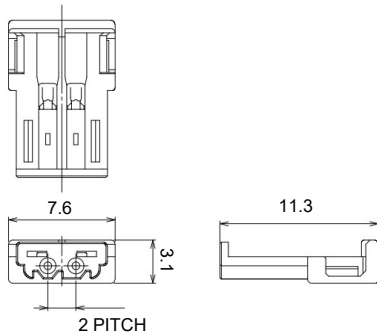
| Size | Model No.         | Applicable wire size         |                      | Q'ty/Reel |
|------|-------------------|------------------------------|----------------------|-----------|
|      |                   | Conductor (mm <sup>2</sup> ) | Insulation O.D. (mm) |           |
| M    | ① SULH-A021GF-0.5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

### Material and Finish

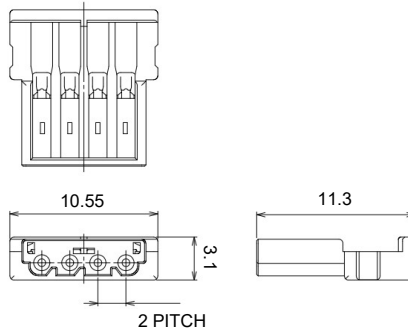
- ① Copper alloy, Nickel-undercoated, Contact area; Gold-plated  
Barrel area; Tin-plated (Reflow treatment)
- ② Copper alloy, Tin-plated (Reflow treatment)

## Female connector

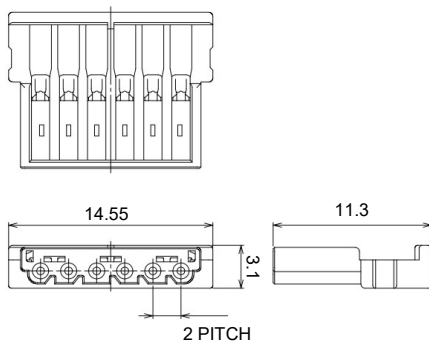
### ● 2 circuits



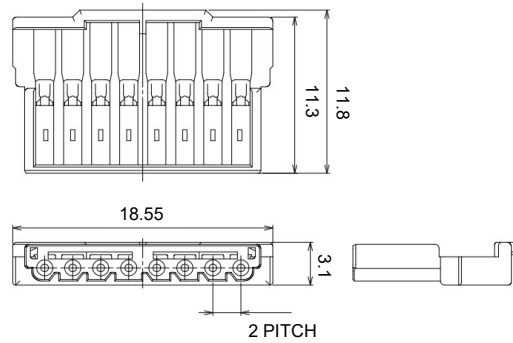
### ● 4 circuits



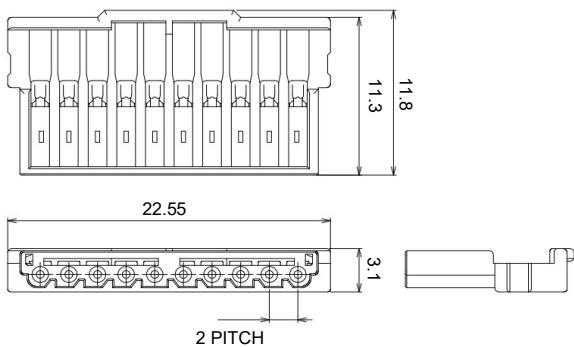
### ● 6 circuits



### ● 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   |

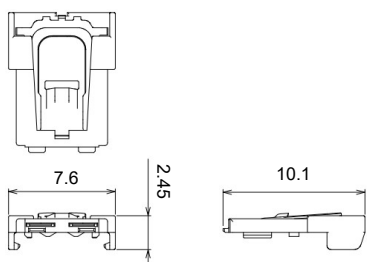
### Material and Finish

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

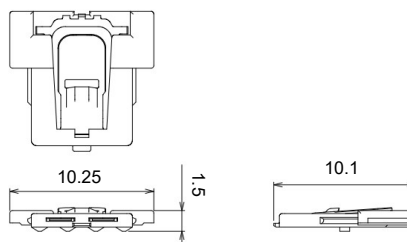
Note: Color/Key codes other than above-mentioned housing are also available.  
Contact JST for details.

## Female cover

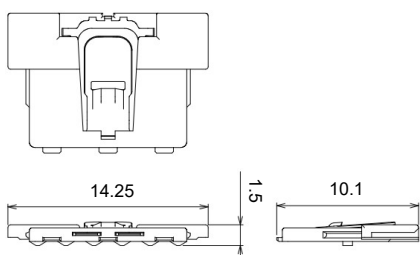
### ● 2 circuits



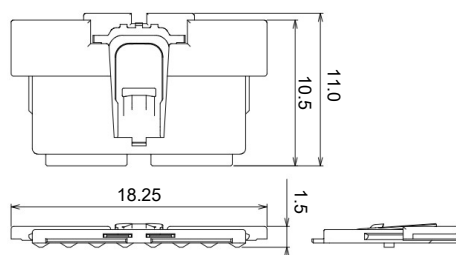
### ● 4 circuits



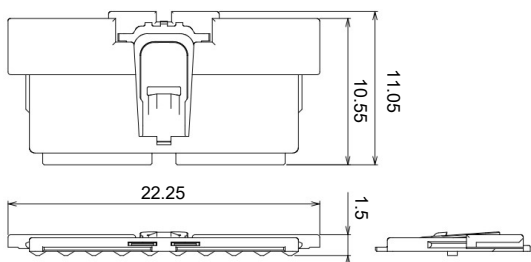
### ● 6 circuits



### ● 8 circuits



### ● 10 circuits



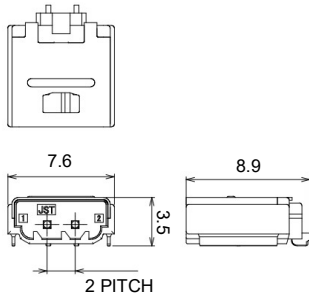
| Circuits | Model No.                | Q'ty/box |
|----------|--------------------------|----------|
| 2        | <b>ULHCB-02V-A-K(HF)</b> | 3,712    |
| 4        | <b>ULHCB-04V-A-K(HF)</b> | 2,784    |
| 6        | <b>ULHCB-06V-A-K(HF)</b> | 2,784    |
| 8        | <b>ULHCB-08V-A-K(HF)</b> | 1,856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

#### Material and Finish

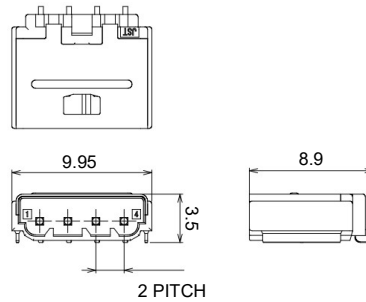
Housing: Poly-amide, UL94V-0, Halogen-free, Black  
 Metal lock: Stainless

## Male connector

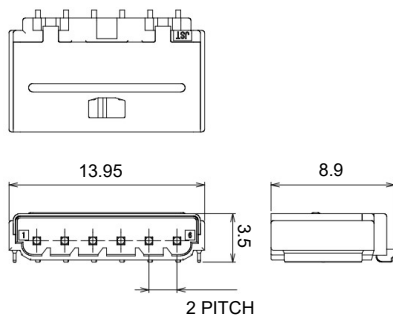
### ● 2 circuits



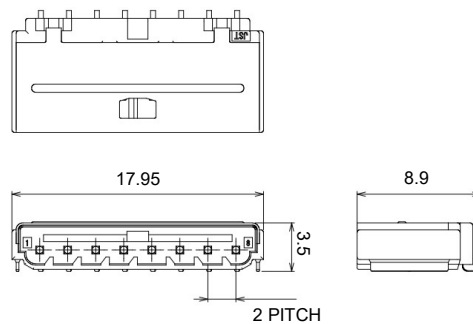
### ● 4 circuits



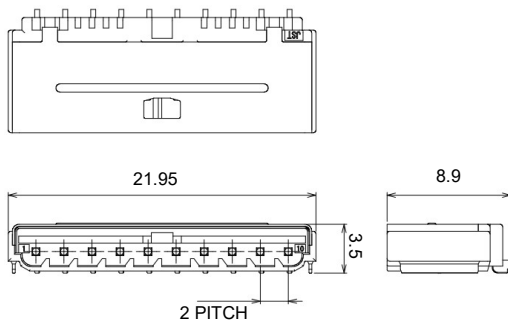
### ● 6 circuits



### ● 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)

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