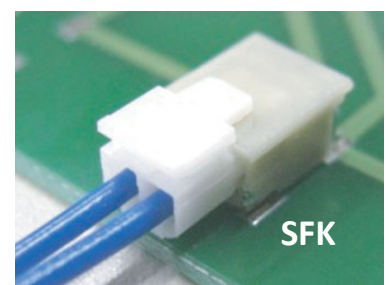
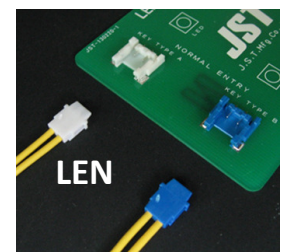
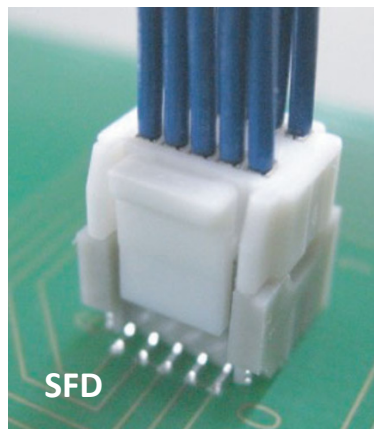
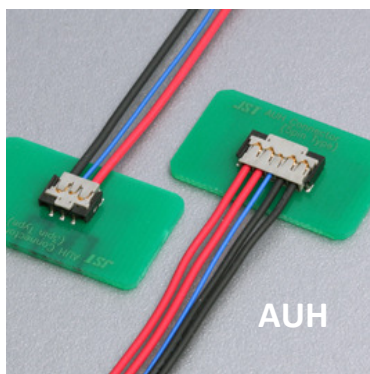
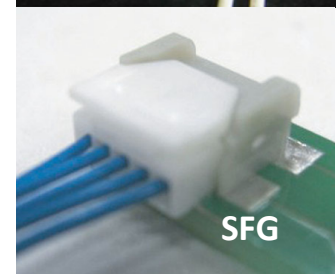
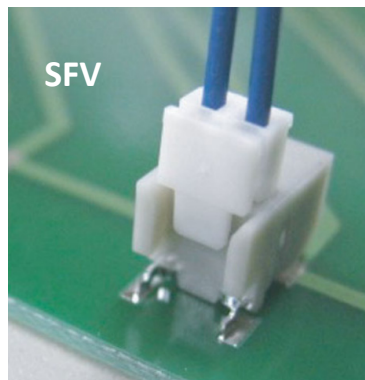
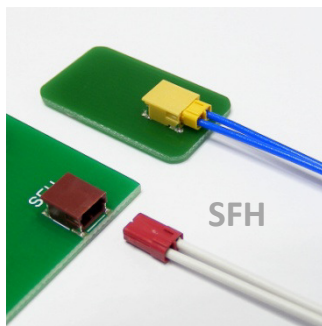
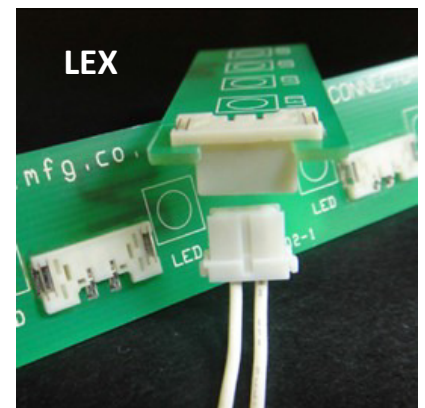
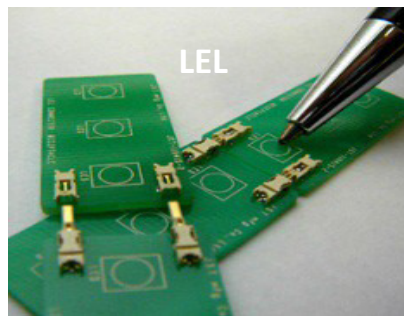
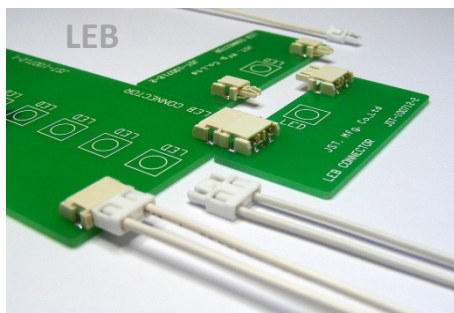
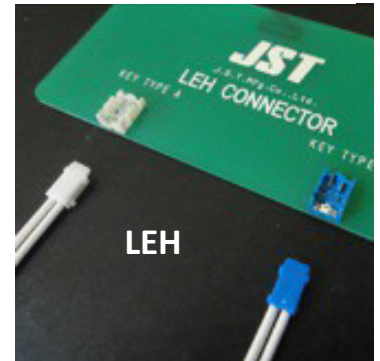
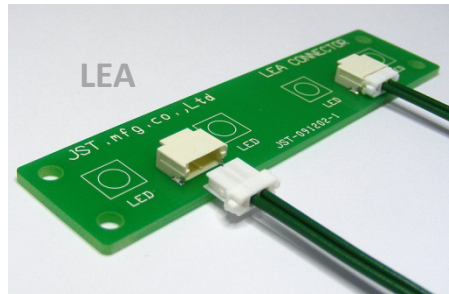
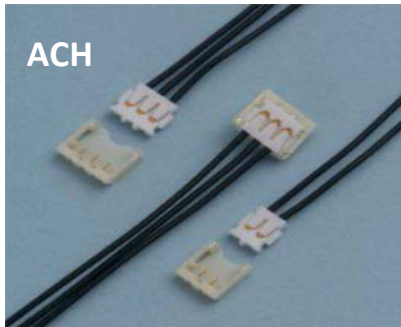


JST Products for LED Lighting



JD0813

Table of Contents

| series name | pitch | number of circuits | current rating* | voltage rating | applicable wire range | BtB | WtB | WtW | page |
|-------------|---------|--------------------|-----------------|----------------|-----------------------|-----|-----|-----|----------------|
| SFD | 1.1 mm | 10 | 1A | 50V AC, DC | AWG 32-28 | | x | | 3 |
| SFG | 1.1 mm | 5 | 1A | 200V AC, DC | AWG 30-28 | | x | | 4 |
| ACH | 1.2 mm | 1 - 4 | 2A/1.5A | 50V AC, DC | AWG 30-28 | | x | x | 5 - 8 |
| LEA | 1.8 mm | 2 | 3A | 300V AC, DC | AWG 30-22 | | x | | 9 - 10 |
| LEH | 1.8 mm | 2 | 3A | 300V AC, DC | AWG 26-22 | | x | | 11 - 12 |
| SFH | 1.8 mm | 2 | 4A | 350V AC, DC | AWG 30-22 | | x | | 13 - 14 |
| SFK | 1.8 mm | 2 | 3.2A | 350V AC, DC | AWG 30-22 | | x | | 15 |
| AUH | 1.85 mm | 3 + 5 | 1A/5A | 30V AC, DC | AWG 30-22 | | x | | 16 - 17 |
| SFV | 2.0 mm | 2 | 1A | 300V AC, DC | AWG 30-28 | | x | | 18 |
| LEX | 2.5 mm | 2 | 3A | 300V AC, DC | AWG 30-22 | | x | | 19 |
| LEN | 3.0 mm | 2 + 3 | 3A | 300V AC, DC | AWG 26-22 | | x | | 20 |
| LEB | 4.0 mm | 1 + 2 | 3A | 300V AC, DC | AWG 26-22 | x | x | | 21-23 |
| LEL | | 1 | 1.6A | 100V AC, DC | | x | | | 24-25 |

*depends on wire range / circuit no.

For W to B connection

SFD CONNECTOR

1.1 mm Pitch

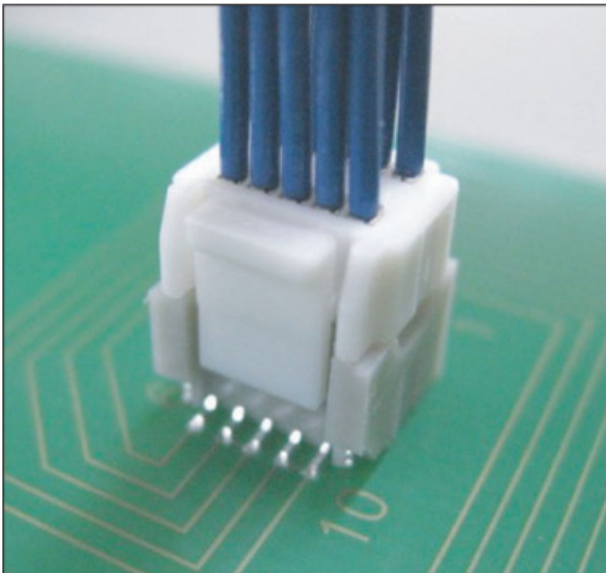
This SFD connector is a wire to board connector used for power supply of LED backlight LCD television set and multiple mounting enables.



■ Features

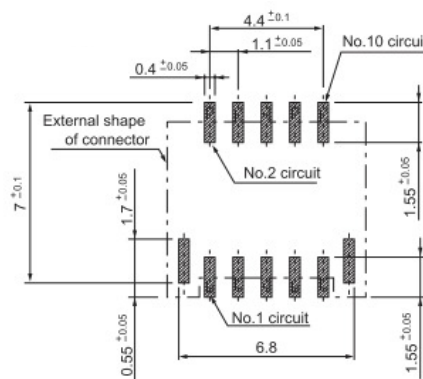
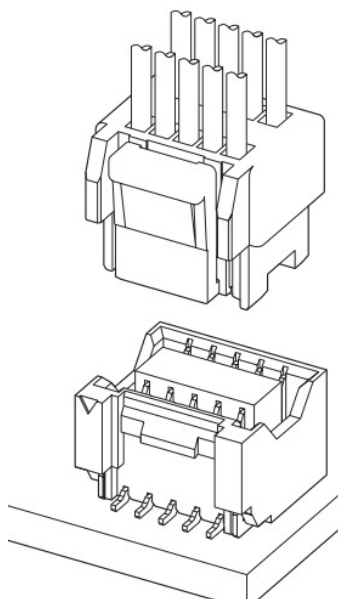
● **Secure lock**

● **Halogen free**



■ Specifications

- Current rating : 1.0 A AC, DC (AWG#28)
- Voltage rating : 50 V AC, DC
- Temperature range : -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance : Initial value / 10 mΩ max.
After environmental testing / 20 mΩ max.
- Insulation resistance : 100 MΩ min.
- Withstanding voltage : AC 500 V / 1 minute
- Applicable wire : Wire range / AWG #32 to AWG #28
- No. of Circuits : 10 - circuit
- Part number: : SSFD-003T-P0.2
: BM10B-SFDH (HF)
: SFDR-10V-S (HF)



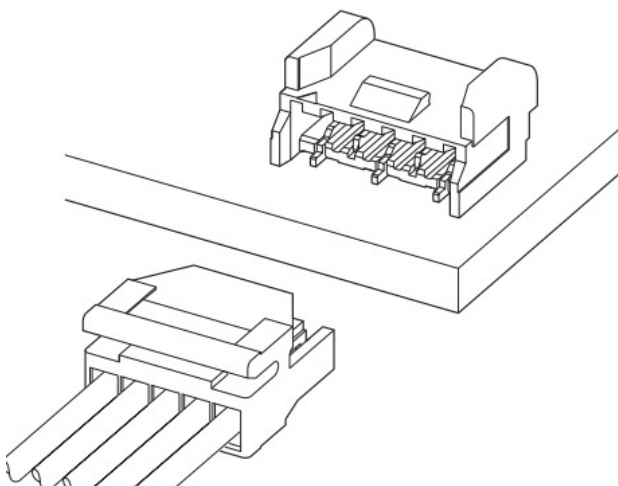
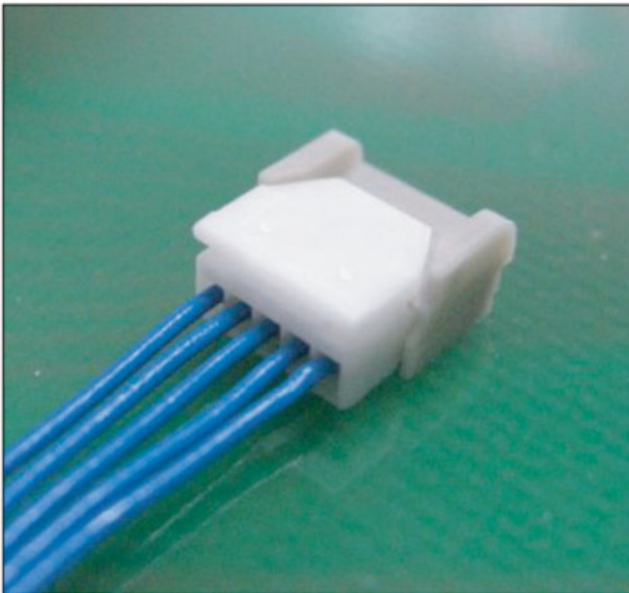
P.C.B Layout

For W to B connection

SFG CONNECTOR

1.1 mm Pitch

This SFG connector is a wire to board connector for connecting power supply and PCB and withstands high voltage. It is used for power supply of LED backlight in Liquid Crystal Display Television set.

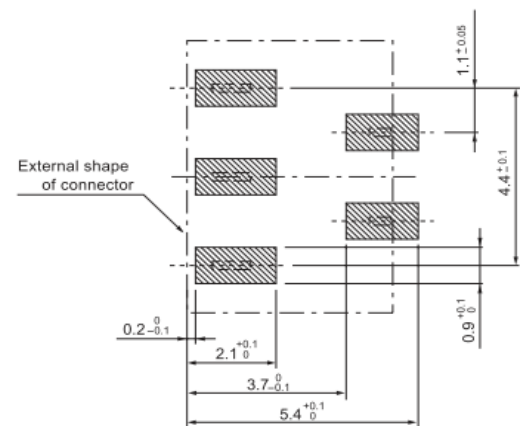


■ Features

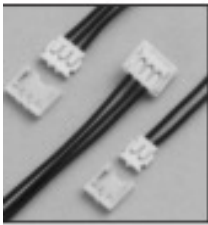
- **Withstand high voltage**
- **Secure lock**
- **Halogen free**

■ Specifications

- Current rating : 1.0A AC,DC (AWG#28)
- Voltage rating : 200V AC,DC
- Temperature range : -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance : Initial value /20mΩ max.
After environmental testing /40mΩ max.
- Insulation resistance: 100MΩ min.
- Withstanding voltage: AC600V/ 1minute
- Applicable wire : Wire range /AWG#30 to AWG#28
- No.of Circuits : 5-circuit
- Part number : SSFG-003T-P0.2
: SM05B-SFGH (HF)
: SFGR-05V-S

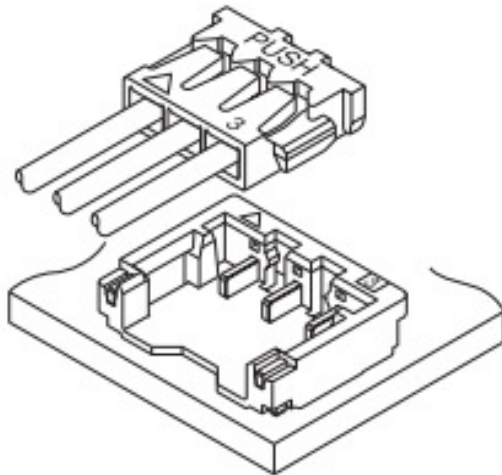


P.C.B Layout



ACH CONNECTOR

1.2mm pitch/Disconnectable Crimp style connectors



This ACH connector is compact and low profile type, height: 1.4mm and width 4.3mm, 1.2mm pitch wire-to-board connector.

- Top entry but side feed type
- Connector for DC power supply
- Corresponding to sucking nozzle of pick and place machine

Specifications

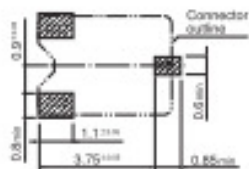
- Current rating: 2A/1 to 3 circuits AC, DC (AWG #28)
1.5A/4 circuits AC, DC (AWG #28)
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.
After environmental testing/20m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/AWG #30 to #28
Insulation O.D./0.5 to 0.63mm
- Compliant with RoHS.
- Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- Contact JST for details.

Standards

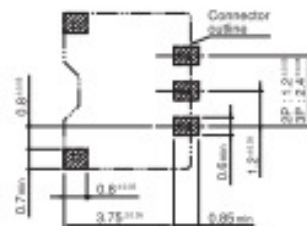
Recognized E60389

PC board layout (viewed from component side) and Assembly layout

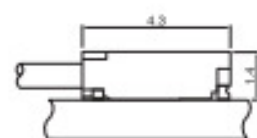
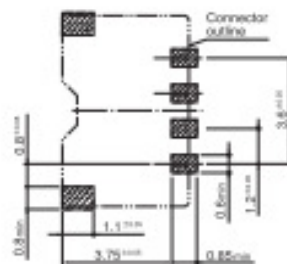
<Single circuit>



<2, 3 circuits>

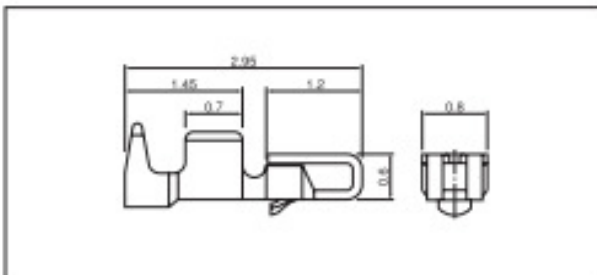


<4 circuits>



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.
2. The dimensions above should serve as a guideline. Contact JST for details.

Contact



| Model No. | Applicable wire | | Insulation O.D. (mm) | Qty / reel |
|----------------|-----------------|-------|----------------------|------------|
| | mm ² | AWG# | | |
| SACH-003G-P0.2 | 0.05-0.08 | 30-28 | 0.5-0.63 | 30,000 |

Material and Finish

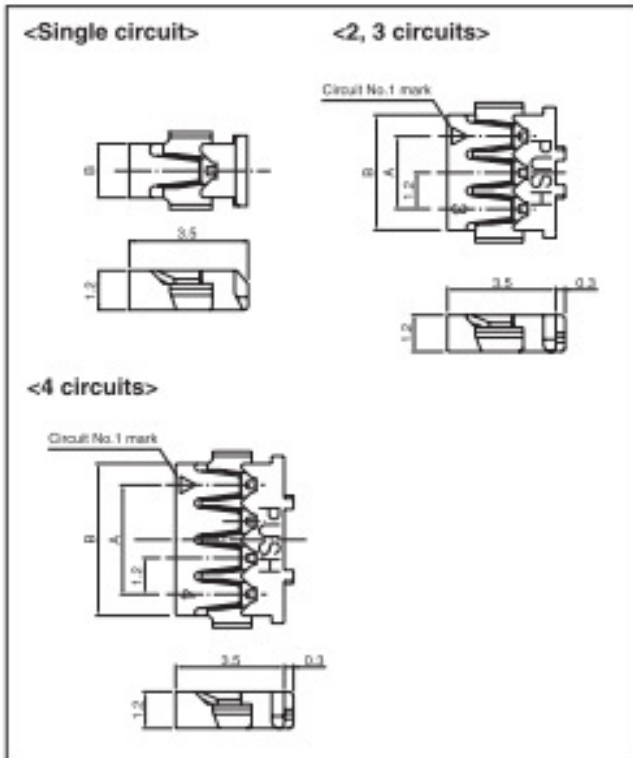
Copper alloy, nickel-undercoated, gold-plated

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|----------------|------------------|------------------|----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SACH-003G-P0.2 | AP-K2N | MKS-L-10-3 | MK/SACH-003-02 | APL/MK SACH003-02 |

ACH CONNECTOR

Housing



| Circuits | Model No. | Dimensions (mm) | | Qty / bag |
|----------|---------------------|-----------------|-----|-----------|
| | | A | B | |
| 1 | ACHR-01V-A-S | — | 1.6 | 2,000 |
| 2 | ACHR-02V-S | 1.2 | 2.6 | 1,000 |
| 3 | ACHR-03V-S | 2.4 | 3.8 | 1,000 |
| 4 | ACHR-04V-A-S | 3.6 | 5.0 | 1,000 |

Material

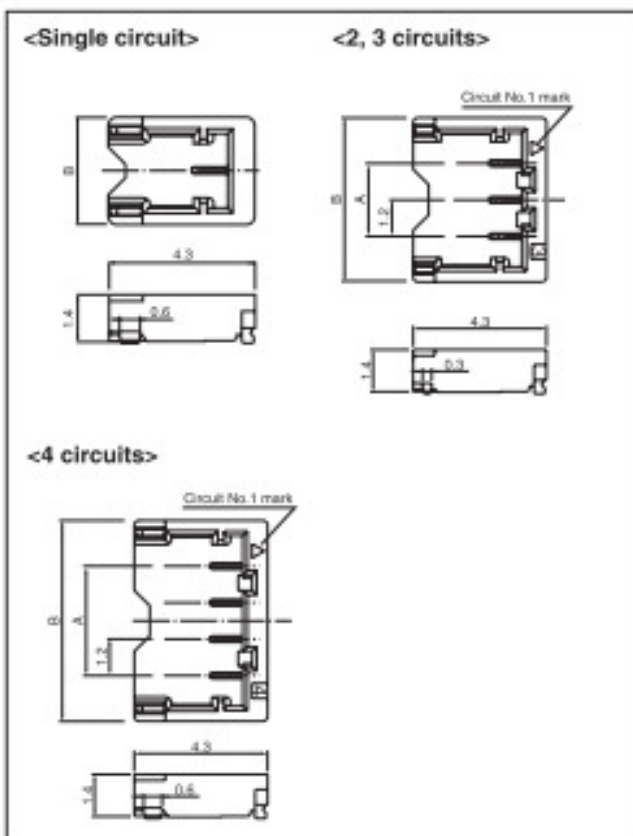
PBT, UL94V-0, natural (white)

RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **ACHR-02V-00**
S...natural (white)
K...black

Shrouded header



| Circuits | Model No. | Dimensions (mm) | | Qty / reel |
|----------|------------------------------|-----------------|-----|------------|
| | | A | B | |
| 1 | BM01B-ACHSS-A-GAN-ETF | — | 3.2 | 4,500 |
| 2 | BM02B-ACHSS-GAN-TF | 1.2 | 4.2 | 4,500 |
| 3 | BM03B-ACHSS-GAN-TF | 2.4 | 5.4 | 4,500 |
| 4 | BM04B-ACHSS-A-GAN-TF | 3.6 | 6.6 | 4,500 |

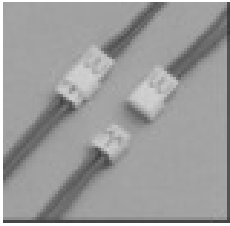
Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated (nickel-stripe)
Housing: Heat resisting resin, UL94V-0, natural (ivory)
Solder tab: Copper alloy, copper-undercoated, tin-plated (yellow treatment)

RoHS compliance

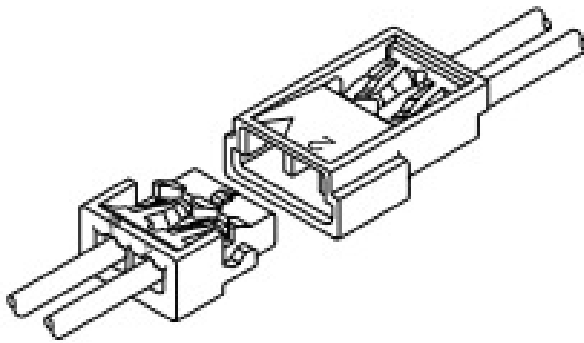
This product displays (LF)(SN) on a label. <For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **BM02B-ACHSS-GAN-TF**
S...natural (ivory)
K...black



ACH CONNECTOR

1.2mm pitch/Disconnectable Crimp style Wire-to-wire connectors



This is the wire-to-wire connector for DC power supply compatible with the ACH connector for PC board.

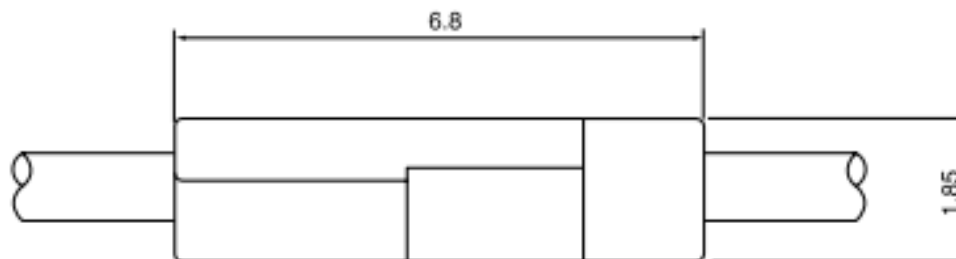
- Connector for DC power supply
- Common use with the existing socket contact of ACH connector

Specifications

- Current rating: 2A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10m Ω max.
After environmental testing/ 20m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 500V AC/minute
- Applicable wire: Conductor size/ AWG #30 to #28
Insulation O.D./ 0.5 to 0.63mm
- Compliant with RoHS.
- Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- Contact JST for details.

Standards

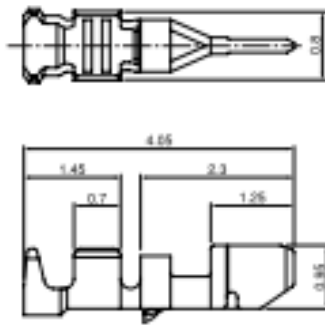
- Recognized E60389
- Certified LR20812



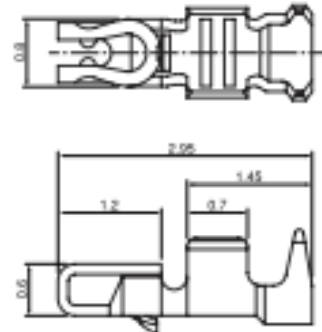
ACH CONNECTOR

Contact

Plug contact



Socket contact



| Model No. | | Applicable wire | | Insulation O.D. (mm) | Qty / reel |
|-----------------|----------------|-----------------|-------|----------------------|------------|
| Plug contact | Socket contact | mm | AWG # | | |
| SACHP-003G-P0.2 | SACH-003G-P0.2 | 0.05~0.08 | 30~28 | 0.5~0.63 | 30,000 |

Material and Finish

Copper alloy, nickel-undercoated, gold-plated

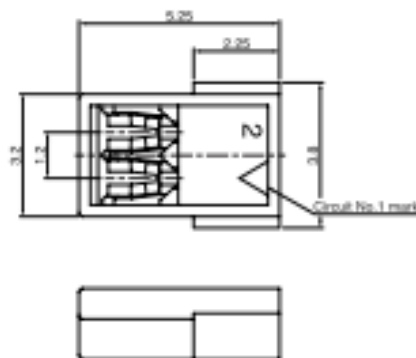
RoHS compliance

| Contact | Crimping machine | Applicator | | |
|-----------------|------------------|------------------|----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SACHP-003G-P0.2 | AP-K2N | MKS-L-10-3 | MK-SACH-003-02 | AFLMK-SACH003-02 |
| | | - | - | - |

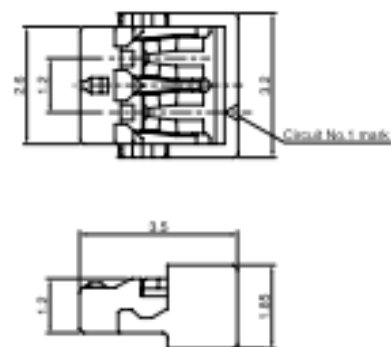
| Contact | Crimping machine | Applicator | | |
|----------------|------------------|------------------|----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SACH-003G-P0.2 | AP-K2N | MKS-L-10-3 | MK-SACH-003-02 | AFLMK-SACH003-02 |
| | | - | - | - |

Housing

Plug housing



Socket housing



| Model No. | | Qty / box |
|--------------|----------------|-----------|
| Plug housing | Socket housing | |
| ACHTP-02V-S | ACHTR-02V-S | 1,000 |

Material

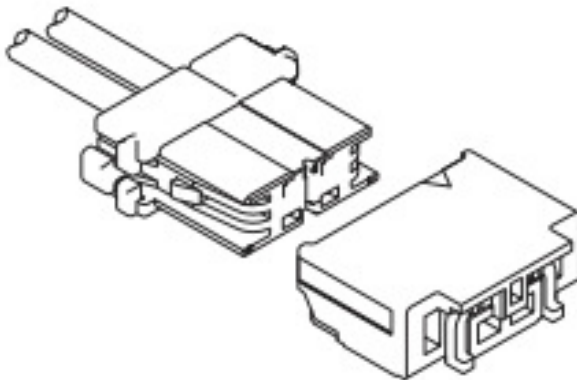
PBT, UL94V-0, natural (white)

RoHS compliance



LEA CONNECTOR

1.8mm pitch/For LED Lamp/Disconnectable Crimp style connectors



Considering that the connector does not affect the luminescence angle of LED chip, this low profile type connector (height: 3mm) is designed for connection to LED lamp and realized space saving. A secure locking mechanism is arranged to this connector in order to consider the handling of wire in actual use, although this is a low profile.

- Secure locking mechanism
- Mechanism for preventing inverse insertion
- Contact lance

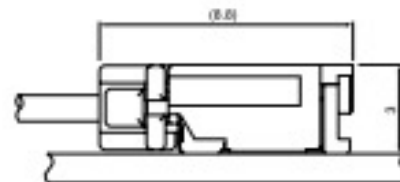
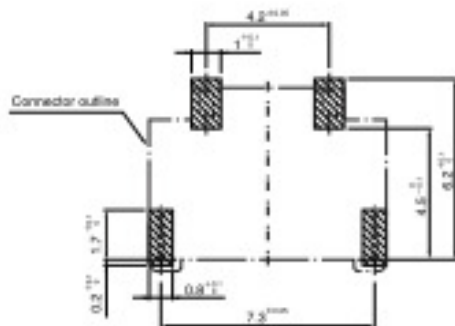
Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 300V AC, DC
- Temperature range: -55°C to +105°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10m Ω max.
After environmental testing/ 20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,700V AC/minute
- Applicable wire: Conductor size/ AWG #30 to #22
Insulation O.D./ 0.7 to 1.3mm

- * Compliant with RoHS.
- * Halogen-free products are also available.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.

Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

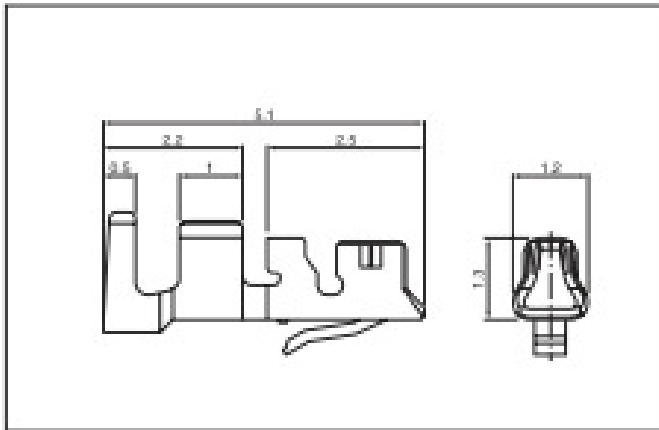


Note: 1. The above figure is the figure viewed from the connector mounting side.

2. Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above should serve as a guideline. Contact JST for details.

LEA CONNECTOR

Contact



| Model No. | Applicable wire | | | Qty / reel |
|----------------|-----------------|-------|---------------------|------------|
| | mm ² | AWG# | Insulator O.D. (mm) | |
| SSFH-001T-P0.5 | 0.13-0.33 | 26-22 | 0.95-1.3 | 15,000 |
| SSFH-002T-P0.5 | 0.05-0.13 | 36-28 | 0.7-1.25 | 15,000 |

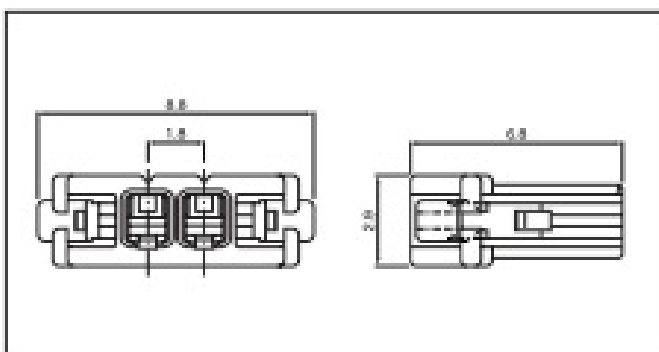
Material and Finish

Copper alloy, tin-plated (yellow treatment)

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|----------------|------------------|------------------|---------------|---------------------------|
| | | Crimp applicator | Die | Crimp applicator with die |
| SSFH-001T-P0.5 | AP-K2N | MKS-L | MKSSFH-001-05 | APLUMK SSFH001-05 |
| | | — | — | — |
| SSFH-002T-P0.5 | — | MKS-L | MKSSFH-002-05 | APLUMK SSFH002-05 |
| | | — | — | — |

Housing



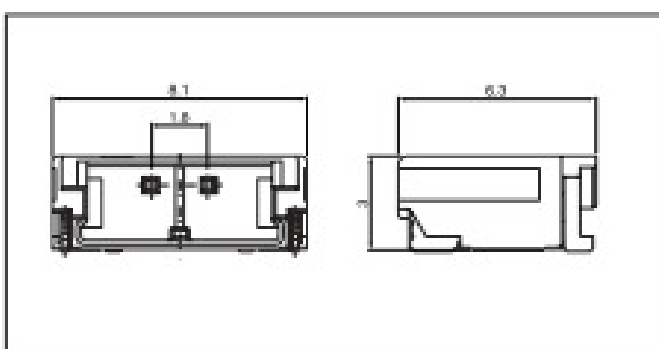
| Circuits | Model No. | Qty / bag |
|----------|------------|-----------|
| 2 | LEAR-02V-B | 2,000 |

Material

PBT, UL94V-0, natural

RoHS compliance

Shrouded header



| Circuits | Model No. | Qty / reel |
|----------|----------------|------------|
| 2 | SM030-LEASS-TF | 2,000 |

Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (yellow treatment)

Housing: PA 6T, UL94V-0, white

Solder tab: Copper alloy, copper-undercoated, tin-plated (yellow treatment)

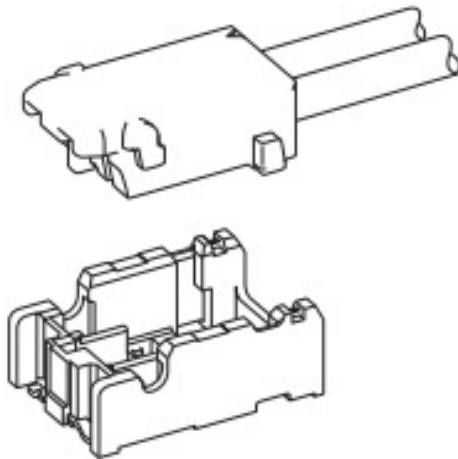
RoHS compliance This product displays (LF) (SN) on a label.

Note: The products listed above are supplied on embossed-tape.



LEH CONNECTOR

1.8mm pitch/For LED Lamp/Disconnectable Crimp style connectors



Considering about the luminescence property of LED package and the mating operability, this LEH connector is designed as low profile type connector for LED lighting, and achieves the space saving. In consideration of connector mating operation to the LED mounting PCB that is integrated in the equipment, side-feed mechanism that provides to enable mating the connector from right above is adopted, and secure lock and mechanism for preventing wrong insertion are provided.

- Low profile and space saving design
Mounting height at connector mounting side : 3mm
- Secure locking mechanism
- Mechanism for preventing wrong insertion
- Halogen-free and RoHS compliant

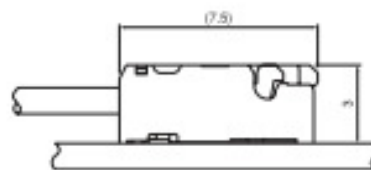
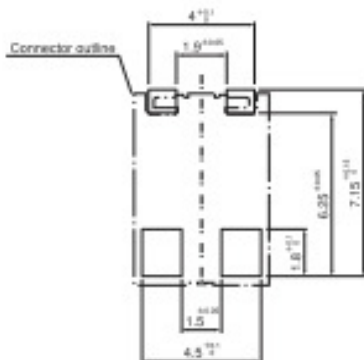
Specifications

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 300V AC, DC
- Temperature range: -55°C to +105°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10m Ω max.
After environmental testing/ 20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 800V AC/minute
- Applicable wire: Conductor size/ AWG #26 to #22
Insulation O.D./ 0.95 to 1.3mm

- * Compliant with RoHS.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.

Table of product combinations

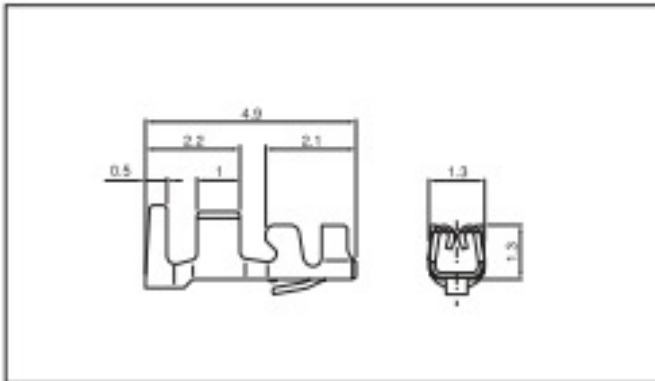
| Key pattern | | A | B |
|-----------------|-----------|---------------------|---------------------|
| Housing | Color | White | Blue |
| | Model No. | LEHR-02V-S-A(HF) | LEHR-02V-E-B(HF) |
| Shrouded header | Color | Natural | Blue |
| | Model No. | BW02B-LEHS-A-TB(HF) | BW02B-LEHS-B-TB(HF) |



Note: 1. The figure on the left side is the figure viewed from the connector mounting side.
2. Tolerances are non-cumulative: ±0.05mm for all centers.
The dimensions above should serve as a guideline. Contact JST for details.

LEH CONNECTOR

Contact



| Model No. | Applicable wire | | | Q'ty / reel |
|------------------------|-----------------|-------|----------------------|-------------|
| | mm ² | AWG# | Insulation O.D. (mm) | |
| SLEH-001T-P0.15 | 0.13~0.33 | 26~22 | 0.95~1.3 | 12,000 |

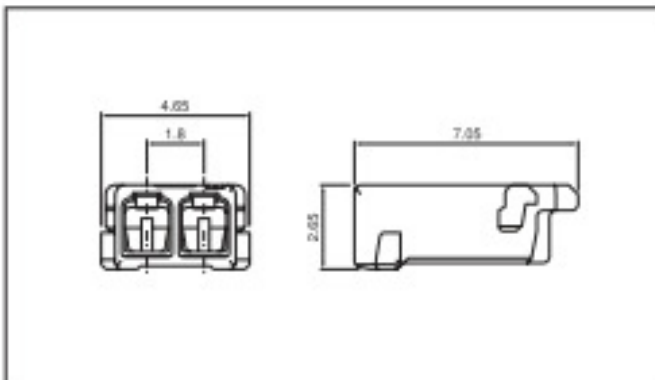
Material and Finish

Copper alloy, tin-plated (yellow treatment)

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|------------------------|------------------|------------------|-----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SLEH-001T-P0.15 | AP-K2N | MKS-L | MK/SLEH-001-015 | AP/MLK SLEH001-015 |

Housing



| Circuits | Key pattern | Color | Model No. | Qty / bag |
|----------|-------------|-------|-------------------------|-----------|
| 2 | A | White | LEHR-02V-S-A(HF) | 1,000 |
| | B | Blue | LEHR-02V-E-B(HF) | 1,000 |

Material

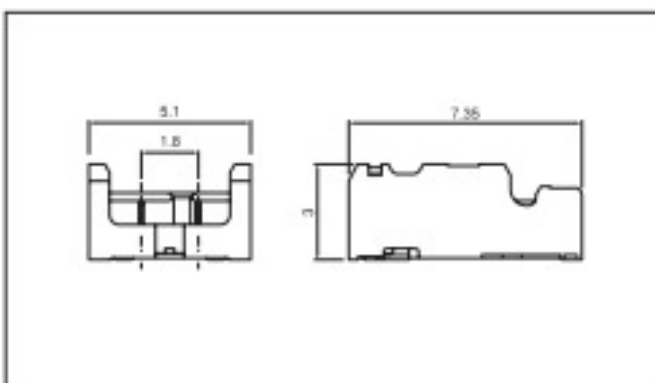
Glass-filled PA 66, UL94V-0

RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **LEHR-02V-S-A(HF)**
S...white E...blue

Shrouded header



| Circuits | Key pattern | Color | Model No. | Qty / reel |
|----------|-------------|---------|-----------------------------|------------|
| 2 | A | Natural | BM02B-LEHSS-A-TB(HF) | 3,400 |
| | B | Blue | BM02B-LEHES-B-TB(HF) | 3,400 |

Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (yellow treatment)
Housing: PA 9T, UL94V-0

RoHS compliance

Note: The products listed above are supplied on embossed-tape.

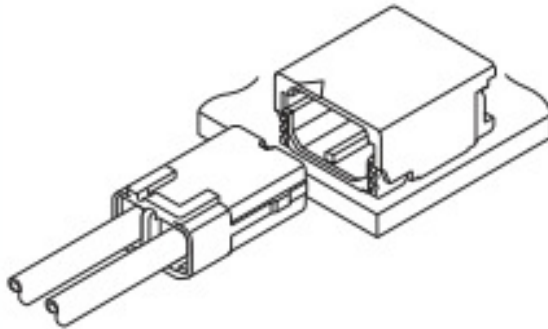
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **BM02B-LEHSS-A-TB(HF)**
S...natural E...blue



SFH CONNECTOR

1.8mm pitch/Disconnectable Crimp style connectors



This low profile type connector with height of 3.0mm is designed for connection to stroboscope flash and realized space saving.

- Contact lance
- Countermeasure for inverse insertion and locking feature

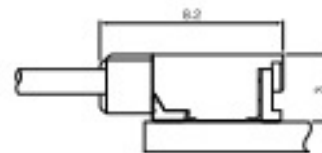
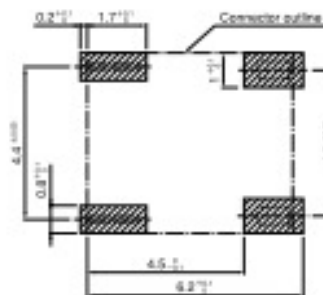
Specifications

- Current rating: 4A AC, DC (AWG #22)
- Voltage rating: 350V AC, DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10m Ω max.
After environmental testing/ 20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,700V AC/minute
- Applicable wire: Conductor size/ AWG #30 to #22
Insulation O.D./ 0.7 to 1.3mm

- * Compliant with RoHS.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.

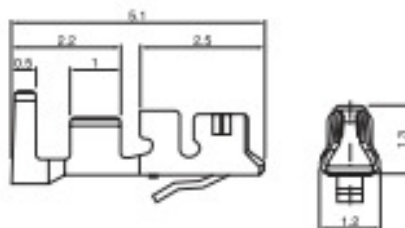
Standards

- Ⓜ Recognized E60389
- Ⓜ Certified LR20812



- Note: 1. The above figure is the figure viewed from the connector mounting side.
2. Tolerances are non-cumulative: +0.05mm for all centers.
3. The dimensions above should serve as a guideline. Contact JST for details.

Contact



| Model No. | Applicable wire | | | Qty / reel |
|----------------|-----------------|-------|----------------------|------------|
| | mm ² | AWG# | Insulation D.D. (mm) | |
| SSFH-001T-P0.5 | 0.13~0.33 | 26~22 | 0.95~1.3 | 15,000 |
| SSFH-002T-P0.5 | 0.06~0.13 | 30~28 | 0.7~1.25 | 15,000 |

Material and Finish

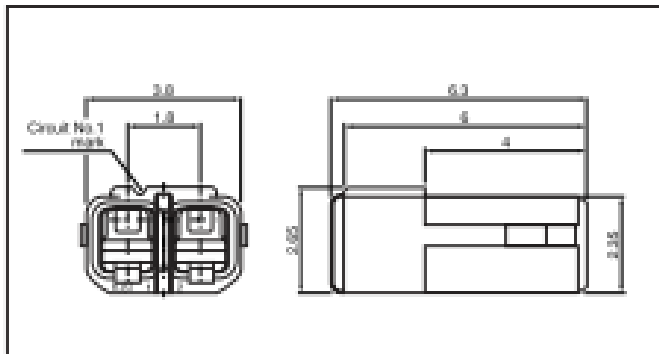
Copper alloy, tin-plated (yellow treatment)

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|----------------|------------------|------------------|----------------|---------------------------|
| | | Crimp applicator | Die | Crimp applicator with die |
| SSFH-001T-P0.5 | AP-K2N | MKS-L | MK-SSFH-001-05 | APLHK-SSF-001-05 |
| | | - | - | - |
| SSFH-002T-P0.5 | AP-K2N | MKS-L | MK-SSFH-002-05 | APLHK-SSF-002-05 |
| | | - | - | - |

SFH CONNECTOR

Housing



| Circuits | Model No. | Qty / bag |
|----------|-------------------|-----------|
| 2 | SFHR-02V-R | 1,000 |

Material

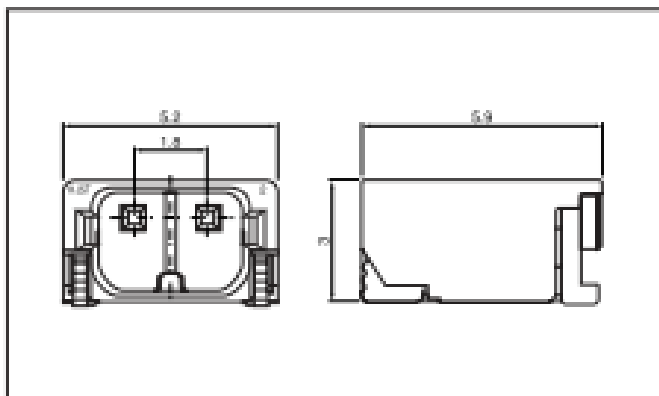
Thermoplastic resin, UL94V-0

RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

- ex. **SFHR-02V-R**
 R...red
 L...lemon yellow

Shrouded header



| Circuits | Model No. | Qty / reel |
|----------|-----------------------|------------|
| 2 | SM02B-SFHRS-TF | 2,000 |

Material and Finish

Press pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
 Water Heat resisting resin, UL94V-0
 Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

RoHS compliance

This product displays (LF)(SN) on a label.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

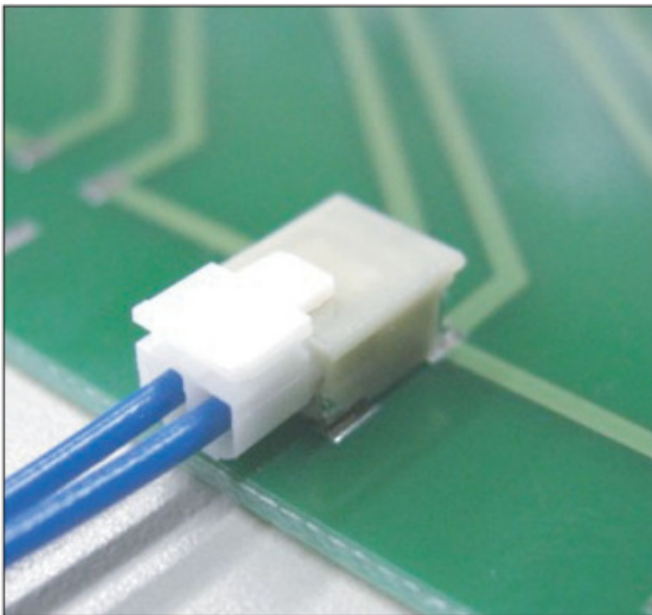
- ex. **SM02B-SFHRS-TF**
 R...red
 L...lemon yellow

For W to B connection

SFK CONNECTOR

1.8mm Pitch

This SFK connector is a wire to board connector for connecting power supply and PCB and withstands high voltage. It is used for power supply of LED backlight in Liquid Crystal Display Television set.



■ Features

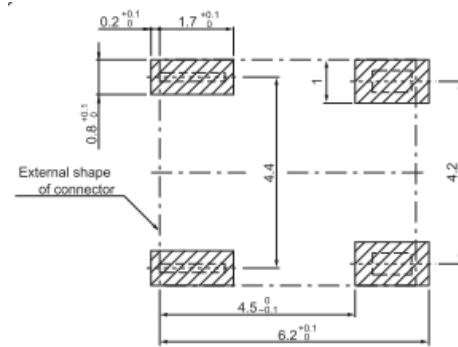
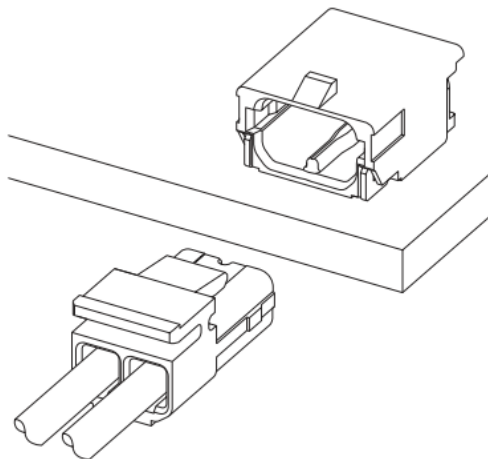
● **Withstand high voltage**

● **Secure lock**

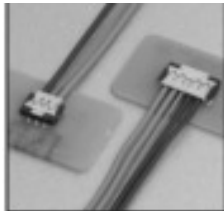
● **Halogen free**

■ Specifications

- Current rating : 3.2A AC,DC (AWG#22)
- Voltage rating : 350V AC,DC
- Temperature range : -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance : Initial value /10mΩ max.
After environmental testing /20mΩ max.
- Insulation resistance : 1,000MΩ min.
- Withstanding voltage: AC1,700V/1minute
- Applicable wire : Wire range /AWG#30 to AWG#22
- No. of Circuits : 2 -circuit
- Part number : SSFH-00()T-P0.5
: SM02B-SFKH
: SFKR-02V-S

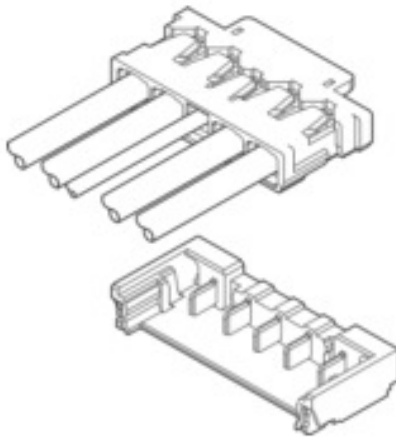


P.C.B Layout



AUH CONNECTOR

1.85mm pitch / Disconnectable Crimp style connector



The AUH connector is a compact and low profile, 5A rated, wire-to-board crimp connector system (1.85mm height, depth 5.2mm).

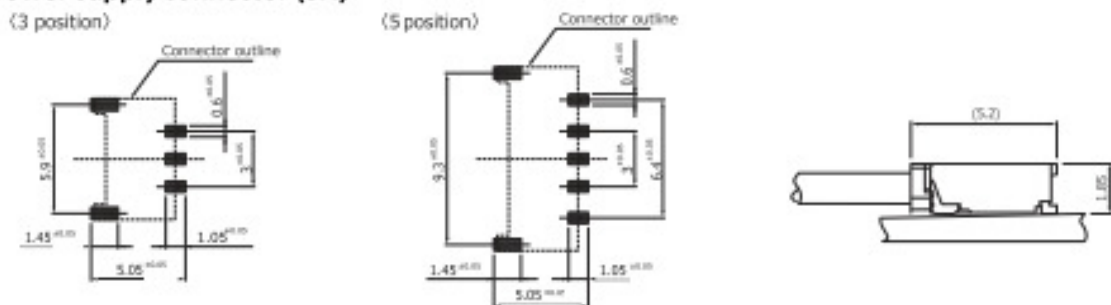
- Space-saving
- Top Entry-side feed type
- combo specification of power supply + signal
2-pole + signal 1-pole 3-pole power products ...
4-pole + signal 1-pole 5-pole power products ...
- DC power supply connector (5A)

Specifications

- Current rating: Signal - 1A AC·DC
Power - 5A AC·DC (using 22 AWG wire)
- Voltage rating: 30V AC·DC
- Temperature range: -25°C~+85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value / 10mΩ max.
After environmental testing / 20mΩ max.
- Insulation resistance: 100MΩ min.
- Withstanding voltage: AC 200V/1minute
- Applicable wire: Signal conductor size / 30~28 AWG
Insulation O.D. / 0.5~0.63mm
Power conductor size / 26~22 AWG
(22 AWG, Recommended UL3619)
Insulation O.D. / 0.98~1.16mm
- Before using, please refer to the notes of the use at the end of this catalog "Terminals and Connectors".
- Please contact JST for more information.
- RoHS Compatible

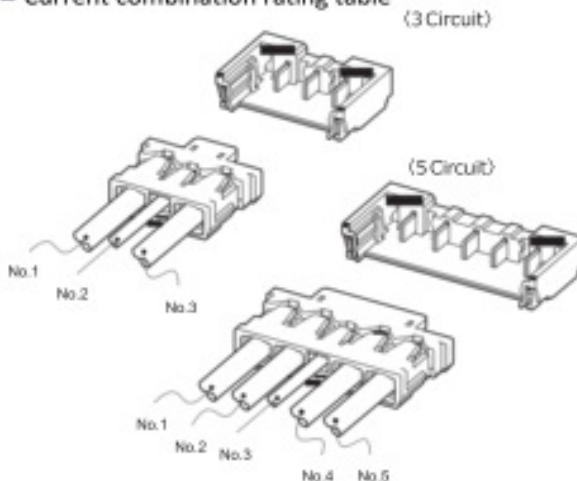
Standards

UL Recognized E 60389



Note: 1) The above figure is the figure viewed from the connector mounting.
2) Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above should serve as a guideline. Contact JST for details.

Current combination rating table



Current unit (A)

| Position | Power Wire sizes | Circuits | | |
|----------|------------------|----------|------|------|
| | | No.1 | No.2 | No.3 |
| 3 | AWG#22 | 5 | 1 | 5 |
| | AWG#24 | 4 | 1 | 4 |
| | AWG#26 | 3.5 | 1 | 3.5 |

■ Signal wire sizes: 30~28AWG

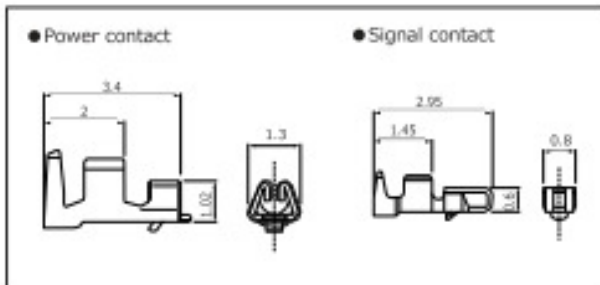
Current unit (A)

| Position | Power Wire sizes | Circuits | | | | |
|----------|------------------|----------|------|------|------|------|
| | | No.1 | No.2 | No.3 | No.4 | No.5 |
| 5 | AWG#22 | 5 | 1 | 1 | 1 | 5 |
| | | 4 | 4 | 1 | 4 | 4 |
| | AWG#24 | 4 | 1 | 1 | 1 | 4 |
| | | 3.5 | 3.5 | 1 | 3.5 | 3.5 |
| | AWG#26 | 3.5 | 1 | 1 | 1 | 3.5 |
| | | 3 | 3 | 1 | 3 | 3 |

■ Signal wire sizes: 30~28AWG

AUH CONNECTOR

Contact



| | Part | Applicable wire | | Insulation OD (mm) | Qty / reel |
|--------|----------------|-----------------|-------|--------------------|------------|
| | | mm ² | AWG# | | |
| Power | SAUH-001G-M0.2 | 0.13~0.33 | 26~22 | 0.98~1.16 | 18,000 |
| Signal | SACH-003G-P0.2 | 0.05~0.08 | 30~28 | 0.5~0.63 | 30,000 |

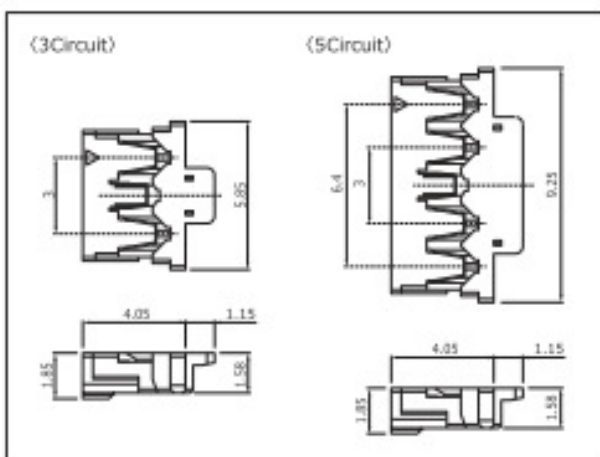
Material and finish

Copper alloy, nickel-undercoated, selective gold plating

● RoHS compliant

| Part number | Crimp machine | Applicable wire | | Insulation OD (mm) | Applicator | | |
|----------------|---------------|-----------------|-------|--------------------|------------------|------------------|-------------------------|
| | | mm ² | AWG# | | Crimp Applicator | Dies | Crimp applicator & dies |
| SAUH-001G-M0.2 | AP-K2N | 0.13~0.21 | 26~24 | 0.98~1.11 | MKS-L-10 | NK/SAUH-091-02 | APLMK SAUH001-02 |
| | | 0.21~0.33 | 24~22 | 0.98~1.16 | MKS-L-10 | NK/SAUH-091-02-K | APLMK SAUH001-02-K |
| SACH-003G-P0.2 | | 0.05~0.08 | 30~28 | 0.5~0.63 | MKS-L-10-3 | NK/SACH-093-02 | APLMK SACH003-02 |

Housing



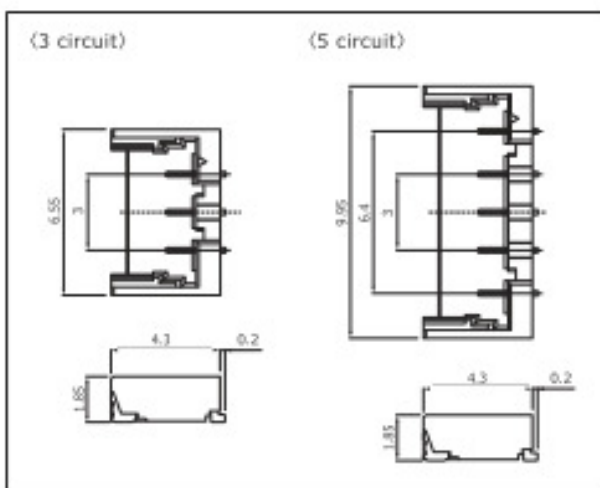
| Circuit number | Part number | Qty / box |
|----------------|-------------|-----------|
| 3 | AUHR-03V-H | 1,000 |
| 5 | AUHR-05V-H | 1,000 |

Material

PBT · UL94V-0, Gray

● RoHS compliant

Shrouded header



| Circuit number | Part number | Qty / reel |
|----------------|-------------------|------------|
| 3 | BM03B-AUHK5-GA-TB | 5,000 |
| 5 | BM05B-AUHK5-GA-TB | 5,000 |

Material and finish

Contact: Copper alloy, nickel-base, gold-plated (nickel-stripe)
Housing: heat-resistant resin · UL94V-0, black metal fittings:
Copper alloy, copper-undercoated, tin-plated (reflow treatment)

● RoHS compliant This product displays (LF)(SN) on the label.

For W to B connection

SFV CONNECTOR

2.0mm Pitch

This SFV connector is a wire to board connector for connecting power supply and PCB and withstands high voltage. It is used for power supply of LED backlight in Liquid Crystal Display Television set.



■ Features

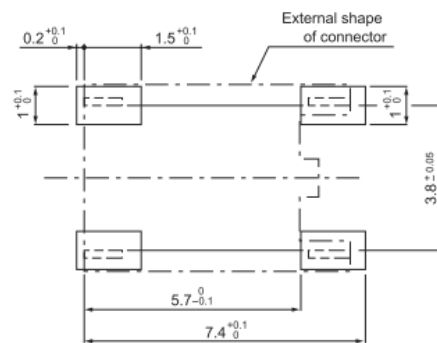
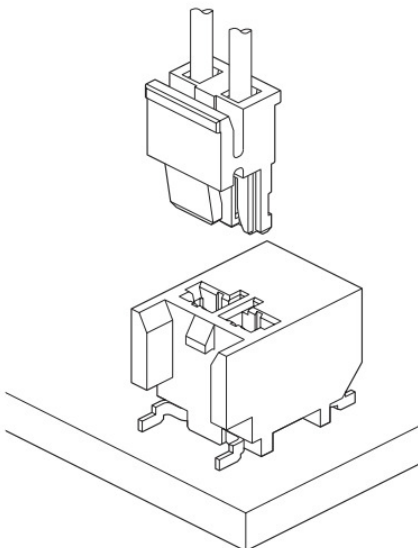
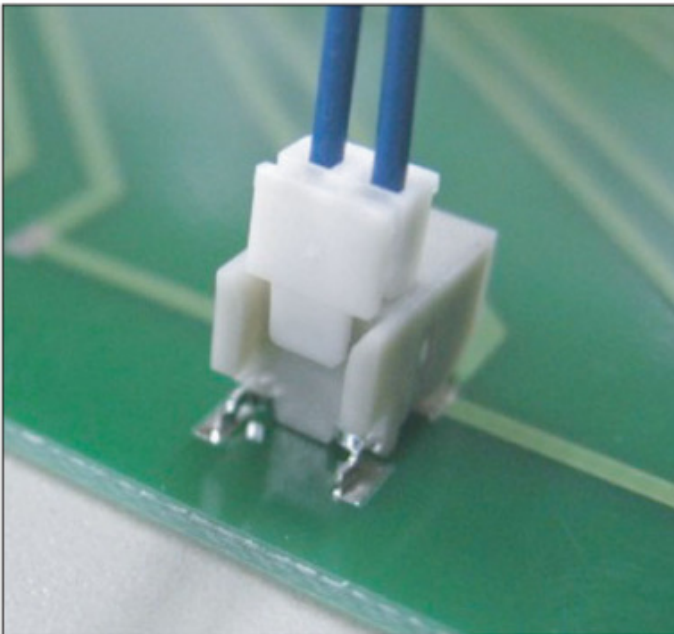
● *Withstand high voltage*

● *Secure lock*

● *Halogen free*

■ Specifications

- Current rating : 1.0 A AC,DC (AWG #28)
- Voltage rating : 300V AC,DC
- Temperature range : -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance : Initial value /10mΩ max.
After environmental testing /20mΩ max.
- Insulation resistance : 1,000MΩ min.
- Withstanding voltage: AC1,700V/1minute
- Applicable wire : Wire range /AWG#30 to AWG#28
- No.of Circuits : 2-circuit
- Part number : SGVH-002T-P0.2
: BM02B-SFVH (HF)
: SFVR-02V-S (HF)



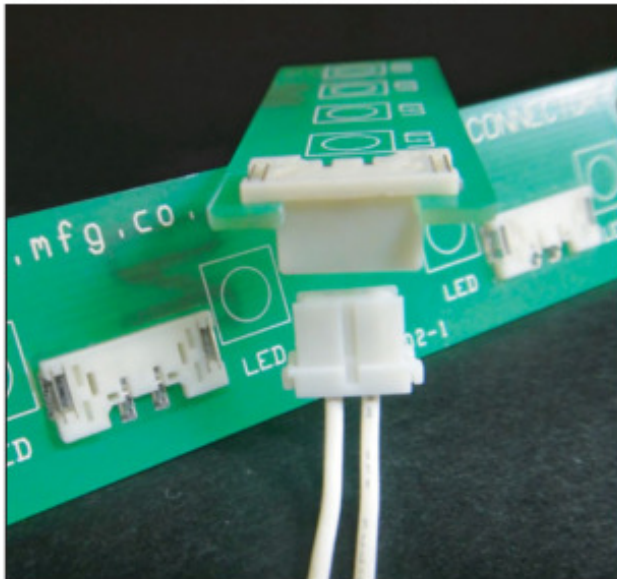
P.C.B Layout

For LED Lamp

LEX CONNECTOR

2.5mm Pitch

Considering about luminescence property of LED package, this LEX connector is designed as low profile bottom type connector for LED lighting equipment, and achieves the space saving at the connector mounting side. In consideration of connector mating operation, secure lock and mechanism for preventing wrong insertion are provided. With the assumption that the load may be applied to the soldering part when mating the connector, the strength of soldering part after mounting the connector on PCB has been largely improved.

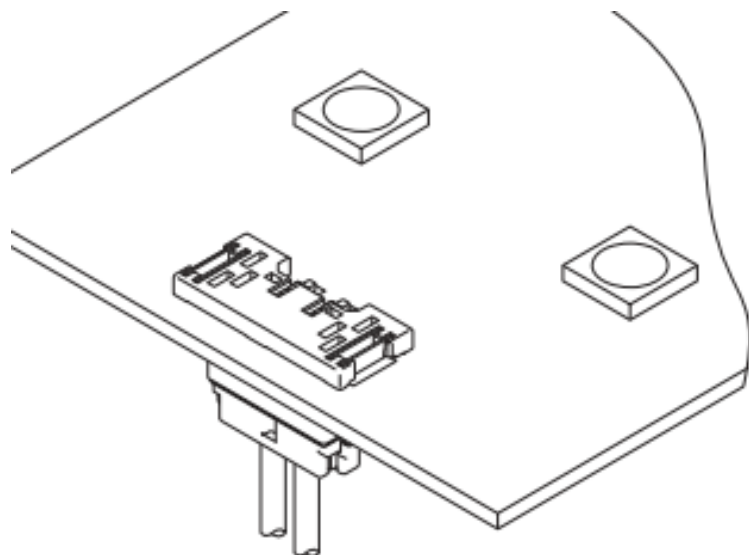
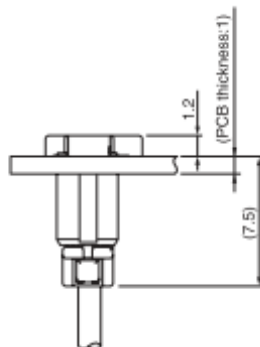
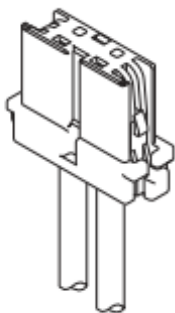
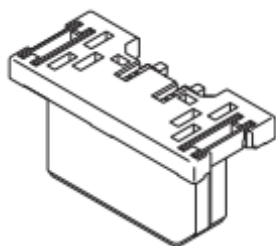


■ Features

- **Low profile and space saving design Mounting height at connector mounting side: 1.2mm**
- **Secure lock mechanism**
- **Mechanism for preventing wrong insertion**
- **Halogen-free and RoHS compliant**

■ Specifications

- Current rating: 3A AC, DC (AWG#22)
- Voltage rating: 300V AC,DC
- Temperature : -55°C to +105°C (including temperature range rise in applying electrical current)
- Contact : Initial value / 10 m Ω max.
resistance After environmental testing /20m Ω max.
- No.of Circuits : 2-circuit (scheduled to start mass-production from May,2013)
- Part number : Header/EM02B-LEXSS-TF(HF)
: Socket Housing/LEXR-02V-S(HF)
Number of circuit in two-digit figure is indicated in parentheses.
: Contact (Common use of existed contact for SFH connector)
SSFH-001T-P0.5
SSFH-002T-P0.5
- Applicable : Conductor size /AWG #30 to AWG #22
Insulation O.D./0.7 to 1.3mm dia

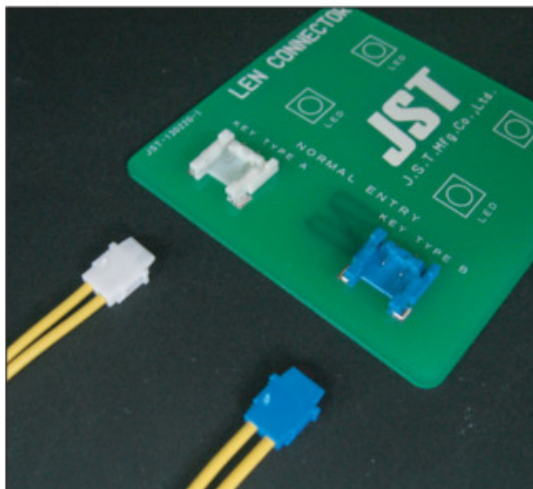


For LED Lamp

LEN CONNECTOR

3.0mm Pitch

Considering about the luminescence property of LED package, this LEN connector is designed as low profile type connector for LED lighting. In consideration of connector mating operation to the LED mounting PCB that is integrated in the equipment, side-feed mechanism that provides to enable mating the connector from above is adopted, and secure lock that considered handling and mechanism for preventing wrong insertion are provided.



■ Features

● Low profile design

Mounting height at connector mounting side: 3 mm

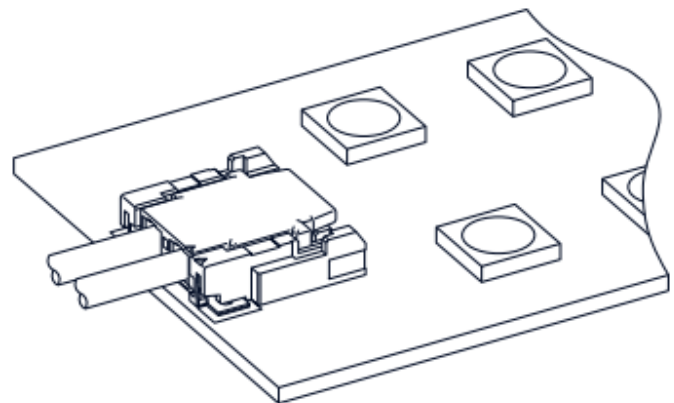
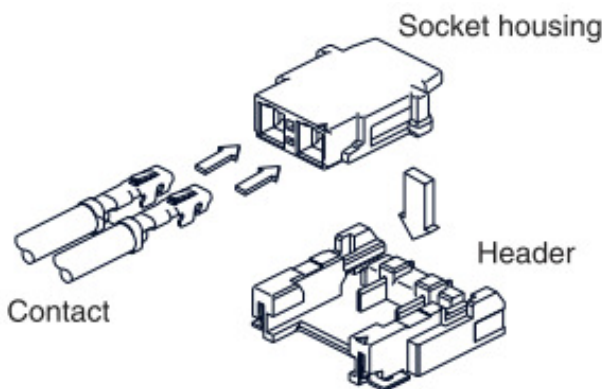
● Secure lock mechanism

● Mechanism for preventing wrong insertion

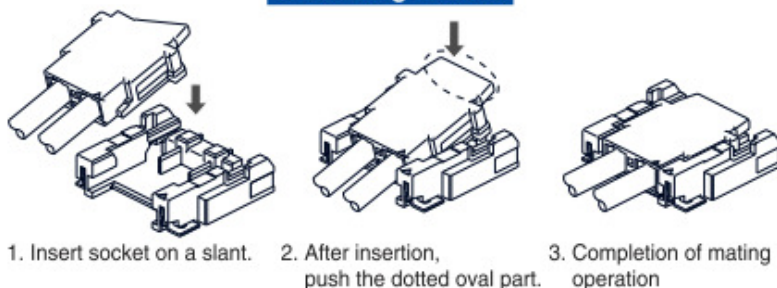
● Halogen-free and RoHS compliant

■ Specifications

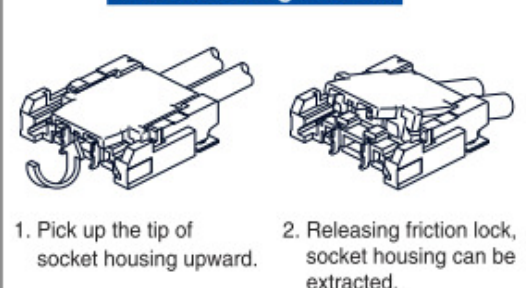
- Current rating : 3A AC, DC (AWG#22)
- Voltage rating : 300V AC,DC
- Temperature range : - 55°C to +105°C (including temperature rise in applying electrical current)
- Contact resistance : Initial value / 10mΩ max.
After environmental testing / 20mΩ max.
- Applicable wire : Conductor size / AWG #26 to AWG #22
Insulation O.D. / 0.95 to 1.7mm
- No. of Circuits : 2 & 3-circuit
- Part number : Header/BM()B-LEN()S-()-TB(HF)
: Socket housing/LENR-()V-()-() (HF)
: Contact/SLEN-001T-P0.2



● Inserting method



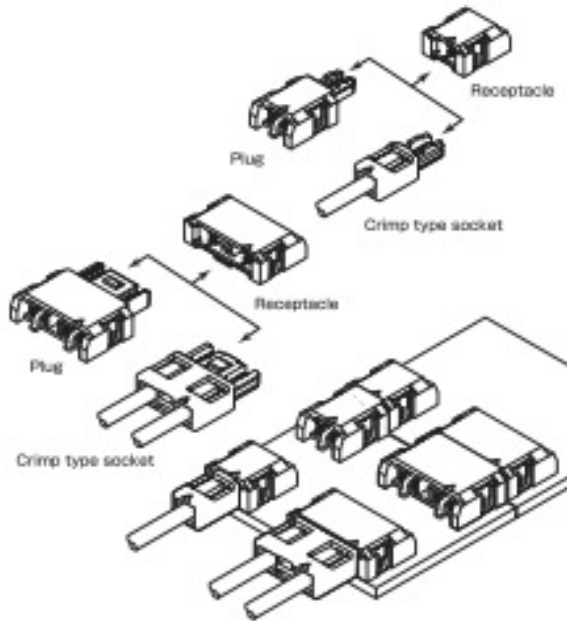
● Withdrawing method





LEB CONNECTOR

4.0mm pitch/For LED Lamp/Board-to-board, Disconnectable Crimp style connectors



Considering about luminescence property of LED device, this LEB connector is designed as low profile type connector (height: 2.7mm) for LED lighting, and achieves the space saving. The horizontal connection between PCBs enables and the mechanism of absorbing the PCB misalignment has been installed considering the parallel use for the connector. Fork type contact that has a high contact pressure (receptacle side) and enough mating stroke provide the stable contact performance even if the PCB expands and contracts due to heat.

- Absorption misalignment mechanism (only connector pitch direction)
- The PCB layout is in common with plug and receptacle connectors.
- Mechanism for preventing wrong insertion
- Crimp type socket that is mated with receptacle connector is available.

Specifications

<For board-to-board>

- Current rating: 3A AC, DC
- Voltage rating: 300V AC, DC
- Temperature range: -55°C to +105°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 20m Ω max.
After environmental testing/ 40m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,700V AC/minute

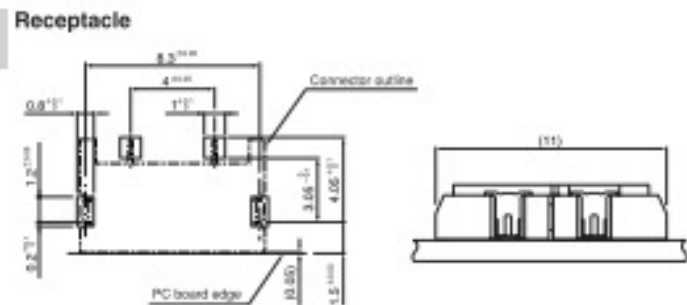
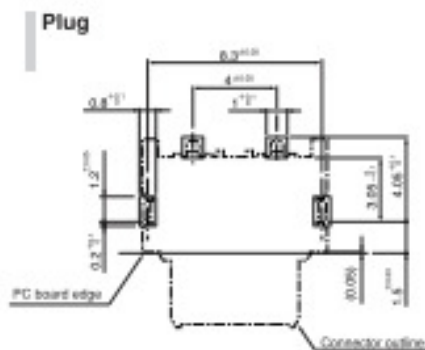
<For disconnectable crimp style>

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 300V AC, DC
- Temperature range: -55°C to +105°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 20m Ω max.
After environmental testing/ 40m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,700V AC/minute
- Applicable wire: Conductor size/ AWG #26 to #22
Insulation O.D./ 0.95 to 1.3mm

- * Compliant with RoHS.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.

Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

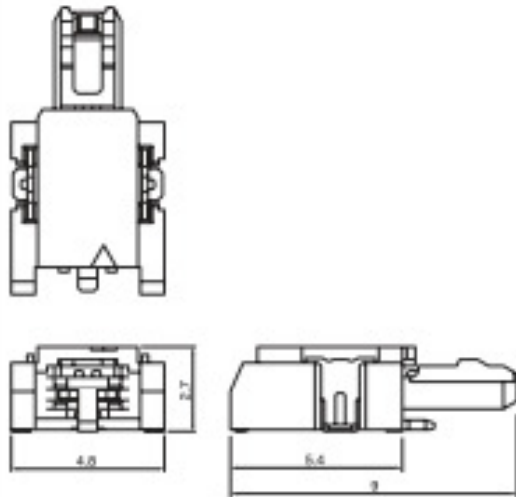


Note: 1. The above figure is the figure viewed from the connector mounting side.
2. Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above should serve as a guideline. Contact JST for details.

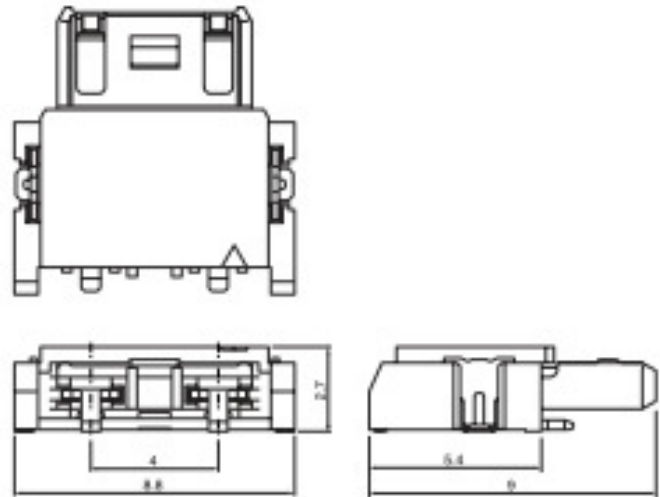
LEB CONNECTOR

Plug

<Single circuit>



<2 circuits>



| Circuits | Model No. | Qty / reel |
|----------|---------------------|------------|
| 1 | 01P-LEBSS-TF | 2,000 |
| 2 | 02P-LEBSS-TF | 2,000 |

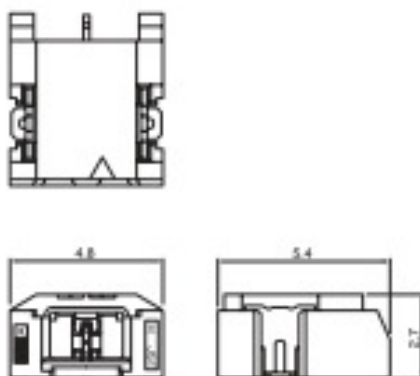
Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (yellow treatment)
Housing: PA 6T, UL94V-0, white
Solder tab: Copper alloy, tin-plated (yellow treatment)

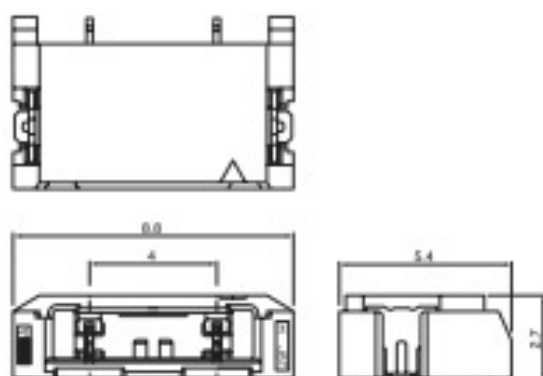
RoHS compliance This product displays (LF)(SN) on a label.
Note: The products listed above are supplied on embossed-tape.

Receptacle

<Single circuit>



<2 circuits>



| Circuits | Model No. | Qty / reel |
|----------|---------------------|------------|
| 1 | 01R-LEBSS-TB | 2,000 |
| 2 | 02R-LEBSS-TB | 2,000 |

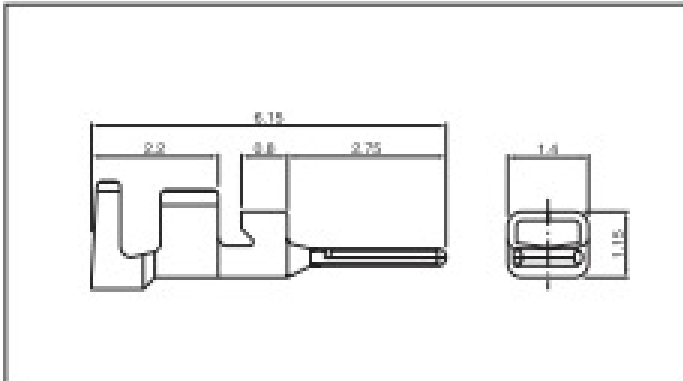
Material and Finish

Contact: Copper alloy, copper-undercoated, tin-plated (yellow treatment)
Housing: PA 6T, UL94V-0, white
Solder tab: Copper alloy, tin-plated (yellow treatment)

RoHS compliance This product displays (LF)(SN) on a label.
Note: The products listed above are supplied on embossed-tape.

LEB CONNECTOR

Contact



| Model No. | Applicable wire | | | Qty / reel |
|-----------------------|-----------------|-------|----------------------|------------|
| | mmφ | AWG# | Insulation O.D. (mm) | |
| SLEB-001T-P0.2 | 0.13~0.33 | 26~22 | 0.95~1.3 | 15,000 |

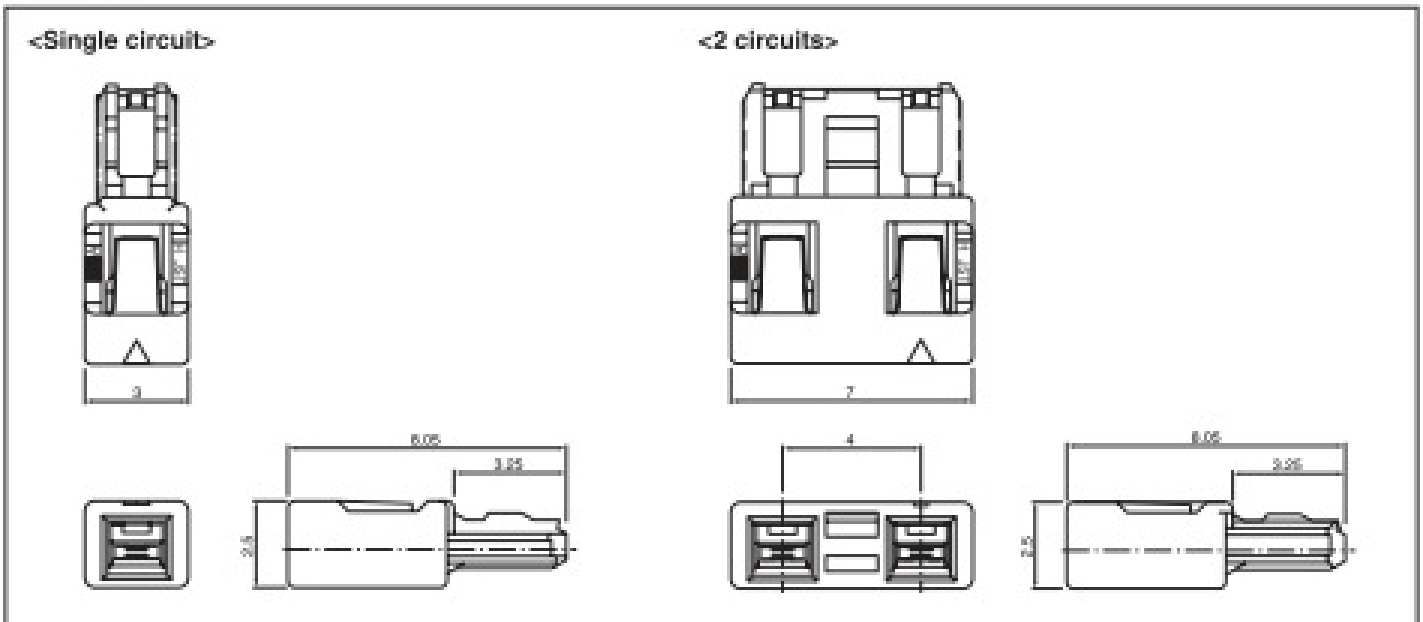
Material and Finish

Copper alloy, tin-plated (yellow treatment)

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|-----------------------|------------------|------------------|----------------|---------------------------|
| | | Crimp applicator | Die | Crimp applicator with die |
| SLEB-001T-P0.2 | AP-K2N | MKS-L | MK/SLEB-001-02 | APL/MK SLEB001-02 |

Housing

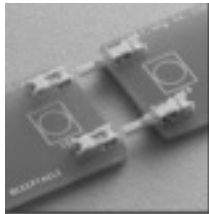


| Circuits | Model No. | Qty / bag |
|----------|--------------------|-----------|
| 1 | LEBRP-01V-S | 2,000 |
| 2 | LEBRP-02V-S | 2,000 |

Material

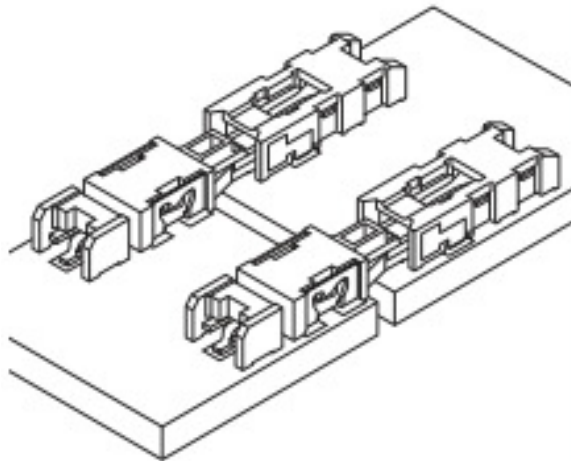
PBT, UL94V-0, natural

RoHS compliance



LEL CONNECTOR

For LED Lamp/Board-to-board connectors



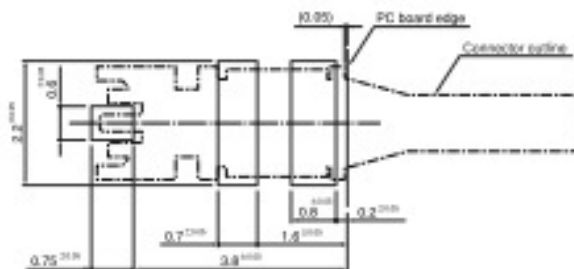
Considering about luminescence property of LED package, this LEL connector is designed as low profile type connector for LED lighting, and achieves the space saving. The horizontal connection between PCBs enables and the mechanism of absorbing the PCB misalignment has been installed considering the parallel use for the connector. Bellows type contact has a high contact pressure and a high durability performance (receptacle side) and enough mating stroke provides the stable contact performance even if the PCB expands and contracts due to heat.

- Absorption misalignment mechanism (X, Y, Z and θ directions)
- Low profile and space saving design
- Halogen-free and RoHS compliant
- The gold plating is conducted due to the long-life of LED lighting equipment.

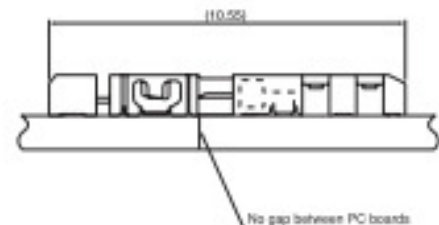
Specifications

- Current rating: 1.6A AC, DC
- Voltage rating: 100V AC, DC
- Temperature range: -55°C to +105°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.
After environmental testing/60m Ω max.
- Compliant with RoHS.
- Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- Contact JST for details.

Plug



Receptacle

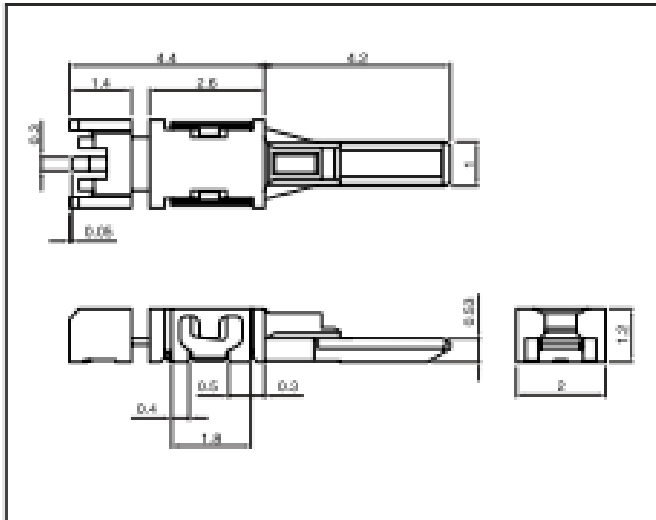


Note: 1. The above figure is the figure viewed from the connector mounting side.

2. Tolerances are non-cumulative: $\pm 0.05\text{mm}$ for all centers. The dimensions above should serve as a guideline. Contact JST for details.

LEL CONNECTOR

Plug



| Circuits | Model No. | Qty / reel |
|----------|----------------------------|------------|
| 1 | 01P-LELSS-GA-TF(HF) | 15,000 |

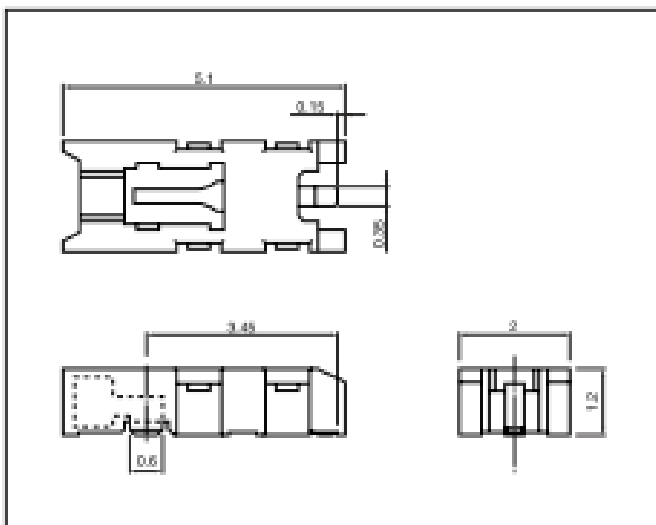
Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated
Housing: LCP, UL94V-0, natural
Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

RoHS compliance

Note: The products listed above are supplied on embossed-tape.

Receptacle



| Circuits | Model No. | Qty / reel |
|----------|----------------------------|------------|
| 1 | 01R-LELSS-GA-TF(HF) | 15,000 |

Material and Finish

Contact: Copper alloy, nickel-undercoated, selective gold-plated
Housing: LCP, UL94V-0, natural
Solder tab: Copper alloy, nickel-undercoated, selective gold-plated

RoHS compliance

Note: The products listed above are supplied on embossed-tape.