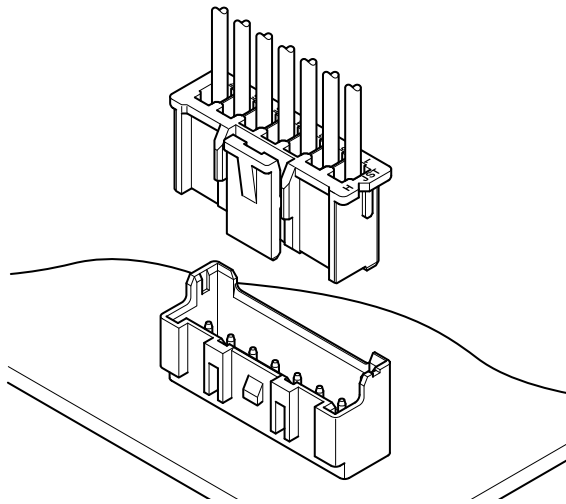


# XA CONNECTOR

2.5 mm pitch/Disconnectable Crimp style connectors



- Secure locking device
- Solder crack preventive material
- Low insertion force
- Insertion guide mechanism
- Applicable to automatic board mounting machine
- Polarizing boss

## Specifications

- Current rating: 3 A AC/DC (AWG #22, #20)
  - Voltage rating: 250 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 tests/ 20 mΩ max.
  - Insulation resistance: 1,000 MΩ min.
  - Withstanding voltage: 1,000 VAC/minute
  - Applicable wire: AWG #28 to #20
  - Applicable PC board thickness: 1.6 mm
- \* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).
- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

## Standards

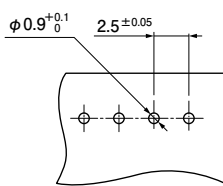
- Ⓜ Recognized E 60389
- Ⓢ Certified LR 20812
- Ⓡ R9851220

## PC board layout and Assembly layout

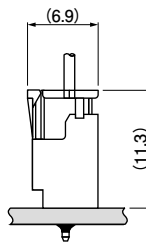
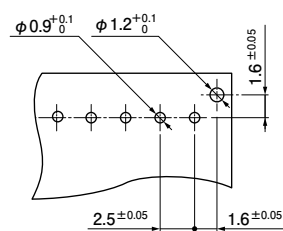
### <Through-hole type>

#### Top entry type

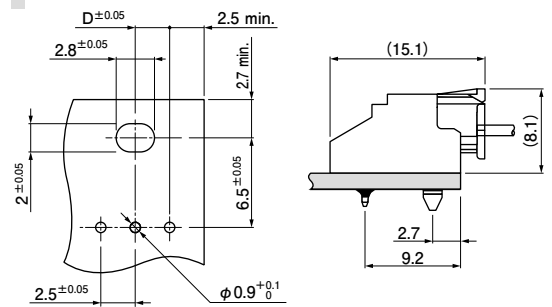
without a boss



with a boss



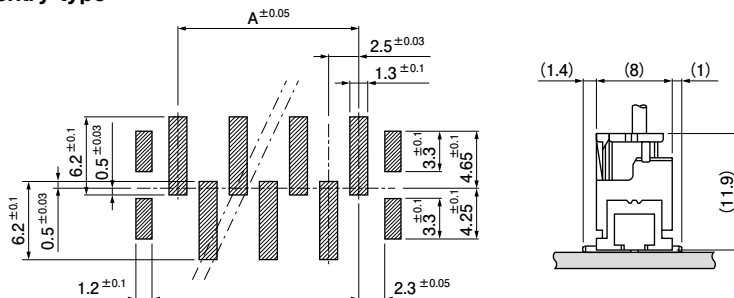
#### Side entry type



Dimension D: Refer to the Model No. chart of header side entry type.

### <SMT type>

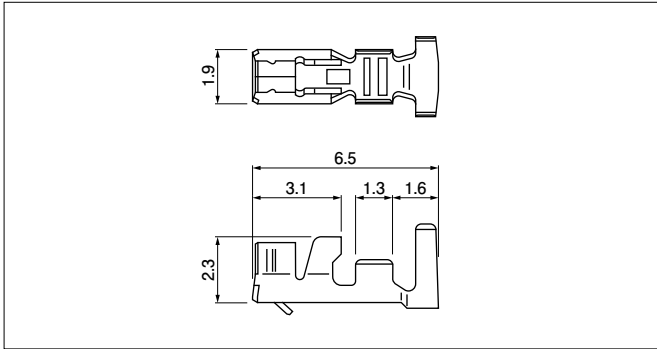
#### Top entry type



- Note: 1. The above figure is the figure viewed from the connector mounting side .
2. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.
3. Hole dimensions differ according to the type of PC board and piercing method.  
The dimensions above should serve as a guideline. Contact JST for details.

# XA CONNECTOR

## Contact



| Model No.      | Applicable wire |       |                      | Q'ty/reel |
|----------------|-----------------|-------|----------------------|-----------|
|                | mm <sup>2</sup> | AWG # | Insulation O.D. (mm) |           |
| SXA-001T-P0.6  | 0.08~0.33       | 28~22 | 0.8~1.9              | 8,000     |
| SXA-01T-P0.6   | 0.22~0.5        | 24~20 | 1.5~1.9              | 8,000     |
| SXA-001T-P0.6L | 0.13~0.33       | 26~22 | 1.3~1.7              | 8,000     |

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

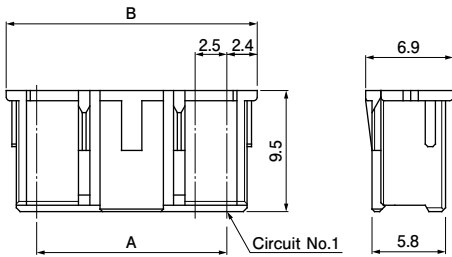
Note :1. SXA-001T-P0.6L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard contact.  
2. Contact JST for gold-plated products.

| Contact        | Crimping machine | Applicator       |                  |                            |
|----------------|------------------|------------------|------------------|----------------------------|
|                |                  | Crimp applicator | Dies             | Crimp applicator with dies |
| SXA-001T-P0.6  | AP-K2N           | MKS-L            | MK/SXA/M-001-06  | APLMK SXA/M001-06          |
| SXA-01T-P0.6   |                  |                  | MK/SXA/M-01-06   | APLMK SXA/M01-06           |
| SXA-001T-P0.6L |                  |                  | MK/SXA/M-001-06L | APLMK SXA/M001-06L         |

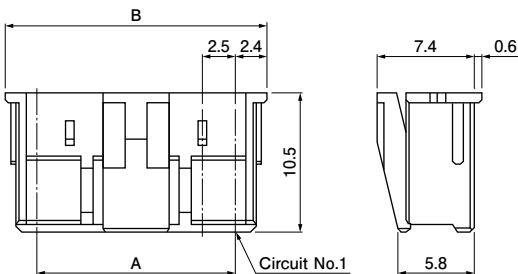
Note: Contact JST for fully automatic crimping applicator.

## Housing

### Standard type



### Retainer mountable type



| No. of circuits | Model No.     |                         | Dimensions (mm) |      | Q'ty/bag      |                         |
|-----------------|---------------|-------------------------|-----------------|------|---------------|-------------------------|
|                 | Standard type | Retainer mountable type | A               | B    | Standard type | Retainer mountable type |
| 2               | XAP-02V-1     | XARP-02V                | 2.5             | 7.3  | 1,000         | 1,000                   |
| 3               | XAP-03V-1     | XARP-03V                | 5.0             | 9.8  | 1,000         | 1,000                   |
| 4               | XAP-04V-1     | XARP-04V                | 7.5             | 12.3 | 1,000         | 1,000                   |
| 5               | XAP-05V-1     | XARP-05V                | 10.0            | 14.8 | 1,000         | 1,000                   |
| 6               | XAP-06V-1     | XARP-06V                | 12.5            | 17.3 | 1,000         | 1,000                   |
| 7               | XAP-07V-1     | XARP-07V                | 15.0            | 19.8 | 1,000         | 1,000                   |
| 8               | XAP-08V-1     | XARP-08V                | 17.5            | 22.3 | 1,000         | 1,000                   |
| 9               | XAP-09V-1     | XARP-09V                | 20.0            | 24.8 | 1,000         | 1,000                   |
| 10              | XAP-10V-1     | XARP-10V                | 22.5            | 27.3 | 1,000         | 1,000                   |
| 11              | XAP-11V-1     | XARP-11V                | 25.0            | 29.8 | 1,000         | 1,000                   |
| 12              | XAP-12V-1     | XARP-12V                | 27.5            | 32.3 | 1,000         | 1,000                   |
| 13              | XAP-13V-1     | XARP-13V                | 30.0            | 34.8 | 1,000         | 1,000                   |
| 14              | XAP-14V-1     | XARP-14V                | 32.5            | 37.3 | 500           | 1,000                   |
| 15              | XAP-15V-1     | XARP-15V                | 35.0            | 39.8 | 500           | 1,000                   |
| 18              | —             | XARP-18V                | 42.5            | 47.3 | —             | 500                     |
| 20              | XAP-20V-1     | —                       | 47.5            | 52.3 | 500           | —                       |

### Material and Finish

PA 66, UL94V-0, natural (white)

### RoHS2 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.

<Standard type>

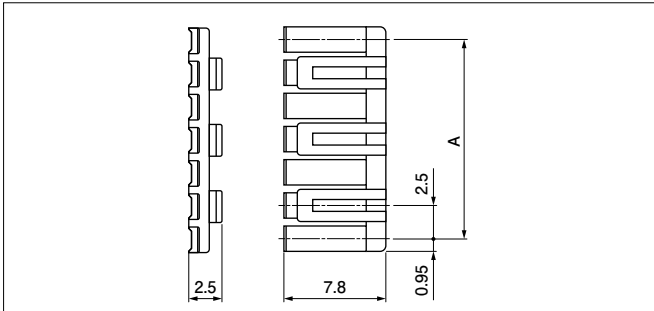
ex. **XAP-02V-1-oo**  
(blank) ...natural (white)  
K...black R...red E...blue Y...yellow L...lemon yellow  
M...green O...orange N...brown H...gray P...purple  
LE...light blue PK...pink FY...vivid yellow Z...ivory

<Retainer mountable type>

ex. **XARP-02V-oo**  
(blank) ...natural (white)  
K...black R...red E...blue L...lemon yellow

# XA CONNECTOR

## Retainer



### Material and Finish

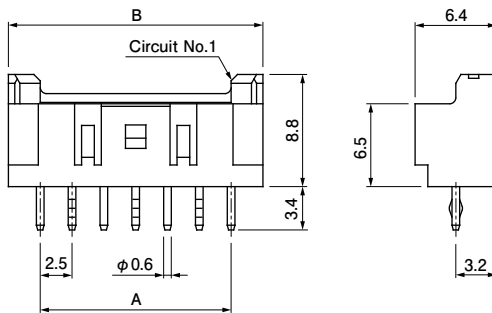
Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS2 compliance

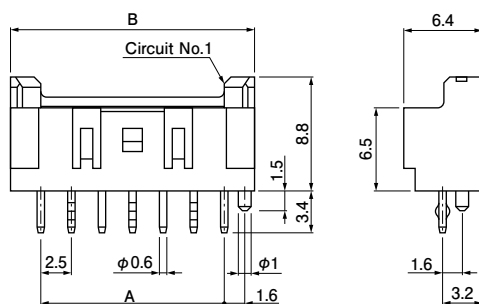
| No. of circuits | Model No. | A    | Q'ty/bag |
|-----------------|-----------|------|----------|
| 2               | XMS-02V   | 2.5  | 1,000    |
| 3               | XMS-03V   | 5.0  | 1,000    |
| 4               | XMS-04V   | 7.5  | 1,000    |
| 5               | XMS-05V   | 10.0 | 1,000    |
| 6               | XMS-06V   | 12.5 | 1,000    |
| 7               | XMS-07V   | 15.0 | 1,000    |
| 8               | XMS-08V   | 17.5 | 1,000    |
| 9               | XMS-09V   | 20.0 | 1,000    |
| 10              | XMS-10V   | 22.5 | 1,000    |
| 11              | XMS-11V   | 25.0 | 1,000    |
| 12              | XMS-12V   | 27.5 | 1,000    |
| 13              | XMS-13V   | 30.0 | 1,000    |
| 14              | XMS-14V   | 32.5 | 1,000    |
| 15              | XMS-15V   | 35.0 | 1,000    |

## Through-hole type shrouded header

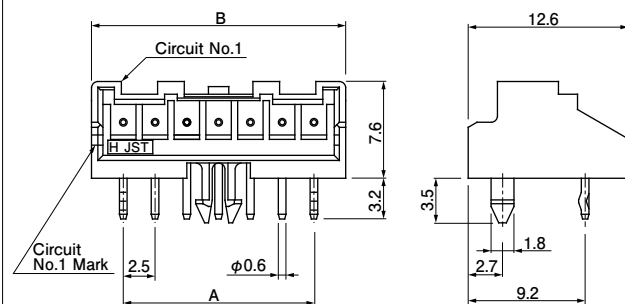
### Top entry type without a boss



### Top entry type with a boss



### Side entry type with a hook



| No. of circuits | Model No.      |               | Dimensions (mm) |      | Q'ty/box |
|-----------------|----------------|---------------|-----------------|------|----------|
|                 | Top entry type |               | A               | B    |          |
|                 | Without a boss | With a boss   |                 |      |          |
| 2               | B02B-XASK-1    | B02B-XASK-1-A | 2.5             | 7.5  | 1,000    |
| 3               | B03B-XASK-1    | B03B-XASK-1-A | 5.0             | 10.0 | 400      |
| 4               | B04B-XASK-1    | B04B-XASK-1-A | 7.5             | 12.5 | 400      |
| 5               | B05B-XASK-1    | B05B-XASK-1-A | 10.0            | 15.0 | 400      |
| 6               | B06B-XASK-1    | B06B-XASK-1-A | 12.5            | 17.5 | 400      |
| 7               | B07B-XASK-1    | B07B-XASK-1-A | 15.0            | 20.0 | 250      |
| 8               | B08B-XASK-1    | B08B-XASK-1-A | 17.5            | 22.5 | 250      |
| 9               | B09B-XASK-1    | B09B-XASK-1-A | 20.0            | 25.0 | 250      |
| 10              | B10B-XASK-1    | B10B-XASK-1-A | 22.5            | 27.5 | 250      |
| 11              | B11B-XASK-1    | B11B-XASK-1-A | 25.0            | 30.0 | 200      |
| 12              | B12B-XASK-1    | B12B-XASK-1-A | 27.5            | 32.5 | 200      |
| 13              | B13B-XASK-1    | B13B-XASK-1-A | 30.0            | 35.0 | 100      |
| 14              | B14B-XASK-1    | B14B-XASK-1-A | 32.5            | 37.5 | 100      |
| 15              | B15B-XASK-1    | B15B-XASK-1-A | 35.0            | 40.0 | 100      |
| 20              | B20B-XASK-1    | B20B-XASK-1-A | 47.5            | 52.5 | 100      |

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS2 compliance This product displays (LF)(SN) on a label.  
Note: Contact JST for gold-plated products.

| No. of circuits | Model No.   | Dimensions (mm) |      |       | Q'ty/box |
|-----------------|-------------|-----------------|------|-------|----------|
|                 |             | A               | B    | D     |          |
| 2               | S02B-XASS-1 | 2.5             | 7.5  | 1.25  | 250      |
| 3               | S03B-XASK-1 | 5.0             | 10.0 | 2.50  | 250      |
| 4               | S04B-XASK-1 | 7.5             | 12.5 | 3.75  | 200      |
| 5               | S05B-XASK-1 | 10.0            | 15.0 | 5.00  | 200      |
| 6               | S06B-XASK-1 | 12.5            | 17.5 | 6.25  | 200      |
| 7               | S07B-XASK-1 | 15.0            | 20.0 | 7.50  | 200      |
| 8               | S08B-XASK-1 | 17.5            | 22.5 | 8.75  | 100      |
| 9               | S09B-XASK-1 | 20.0            | 25.0 | 10.00 | 100      |
| 10              | S10B-XASK-1 | 22.5            | 27.5 | 11.25 | 100      |
| 11              | S11B-XASK-1 | 25.0            | 30.0 | 12.50 | 100      |
| 12              | S12B-XASK-1 | 27.5            | 32.5 | 13.75 | 100      |
| 13              | S13B-XASK-1 | 30.0            | 35.0 | 15.00 | 100      |
| 14              | S14B-XASK-1 | 32.5            | 37.5 | 16.25 | 100      |

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS2 compliance This product displays (LF)(SN) on a label.  
Note: 1. Dimension D...See PC board layout.

2. Contact JST for gold-plated products.

<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. **S02B-XASK-1**

S...natural (ivory)

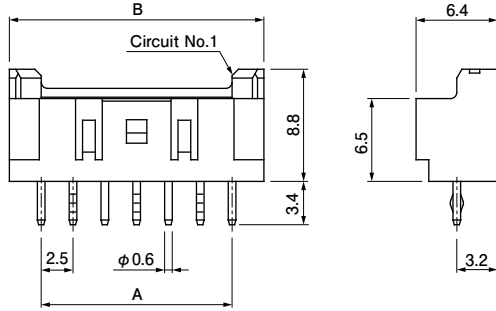
K...black R...red E...blue M...green Y...yellow

# XA CONNECTOR

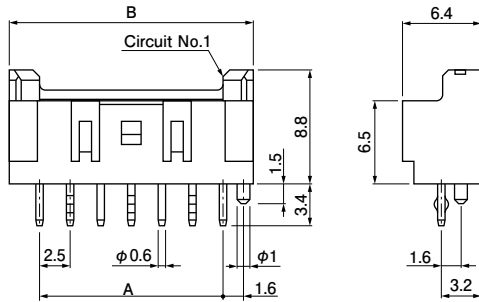
## Through-hole type shrouded header

### N type

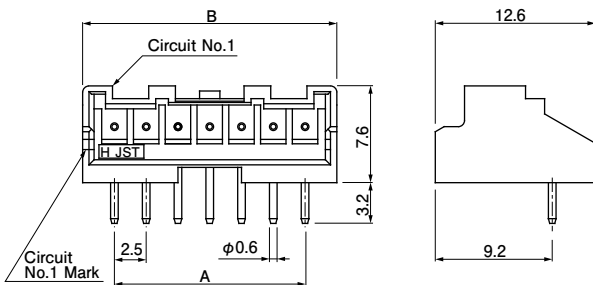
#### Top entry type without a boss



#### Top entry type with a boss



#### Side entry type without a hook



| No. of circuits | Model No.      |                | Dimensions (mm) |      | Q'ty/box |
|-----------------|----------------|----------------|-----------------|------|----------|
|                 | Top entry type |                | A               | B    |          |
|                 | Without a boss | With a boss    |                 |      |          |
| 2               | B02B-XASK-1N   | B02B-XASK-1N-A | 2.5             | 7.5  | 1,000    |
| 3               | B03B-XASK-1N   | B03B-XASK-1N-A | 5.0             | 10.0 | 400      |
| 4               | B04B-XASK-1N   | B04B-XASK-1N-A | 7.5             | 12.5 | 400      |
| 5               | B05B-XASK-1N   | B05B-XASK-1N-A | 10.0            | 15.0 | 400      |
| 6               | B06B-XASK-1N   | B06B-XASK-1N-A | 12.5            | 17.5 | 400      |
| 7               | B07B-XASK-1N   | B07B-XASK-1N-A | 15.0            | 20.0 | 250      |
| 8               | B08B-XASK-1N   | B08B-XASK-1N-A | 17.5            | 22.5 | 250      |
| 9               | B09B-XASK-1N   | B09B-XASK-1N-A | 20.0            | 25.0 | 250      |
| 10              | B10B-XASK-1N   | B10B-XASK-1N-A | 22.5            | 27.5 | 250      |
| 11              | B11B-XASK-1N   | B11B-XASK-1N-A | 25.0            | 30.0 | 200      |
| 12              | B12B-XASK-1N   | B12B-XASK-1N-A | 27.5            | 32.5 | 200      |
| 13              | B13B-XASK-1N   | B13B-XASK-1N-A | 30.0            | 35.0 | 100      |
| 14              | B14B-XASK-1N   | B14B-XASK-1N-A | 32.5            | 37.5 | 100      |
| 15              | B15B-XASK-1N   | B15B-XASK-1N-A | 35.0            | 40.0 | 100      |
| 18              | B18B-XASK-1N   | —              | 42.5            | 47.5 | 100      |

#### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (white)

RoHS2 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. **B02B-XASK-1N-A**  
S...natural (white)  
K...black R...red E...blue Y...yellow L...lemon yellow  
M...green O...orange N...brown H...gray P...purple  
LE...light blue PK...pink FY...vivid yellow

| No. of circuits | Model No.                      | Dimensions (mm) |      | Q'ty/box |
|-----------------|--------------------------------|-----------------|------|----------|
|                 | Side entry type without a hook | A               | B    |          |
| 2               | S02B-XASS-1N-BN                | 2.5             | 7.5  | 250      |
| 3               | S03B-XASS-1N-BN                | 5.0             | 10.0 | 250      |
| 4               | S04B-XASS-1N-BN                | 7.5             | 12.5 | 200      |
| 5               | S05B-XASS-1N-BN                | 10.0            | 15.0 | 200      |
| 6               | S06B-XASS-1N-BN                | 12.5            | 17.5 | 200      |
| 7               | S07B-XASS-1N-BN                | 15.0            | 20.0 | 200      |
| 8               | S08B-XASS-1N-BN                | 17.5            | 22.5 | 100      |
| 9               | S09B-XASS-1N-BN                | 20.0            | 25.0 | 100      |
| 10              | S10B-XASS-1N-BN                | 22.5            | 27.5 | 100      |
| 11              | S11B-XASS-1N-BN                | 25.0            | 30.0 | 100      |
| 12              | S12B-XASS-1N-BN                | 27.5            | 32.5 | 100      |
| 13              | S13B-XASS-1N-BN                | 30.0            | 35.0 | 100      |
| 14              | S14B-XASS-1N-BN                | 32.5            | 37.5 | 100      |

#### Material and Finish

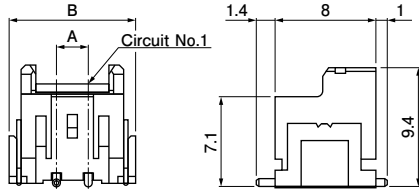
Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (white)

RoHS2 compliance This product displays (LF)(SN) on a label.

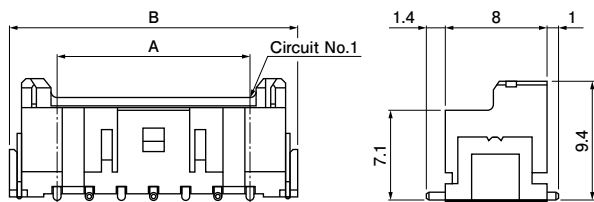
Note: 1. As for side entry type, we recommend to use a product with a boss (hook) because stress is applied directly to fillet part when handling the wire. When using the side entry type product without a boss (hook), please handle the wire with care.

## SMT type shrouded header

<2 circuits>



<3 to 9, 12, 13, 15 circuits>



| No. of circuits | Model No.     | Dimensions (mm) |      | Q'ty/reel |
|-----------------|---------------|-----------------|------|-----------|
|                 |               | A               | B    |           |
| 2               | BM02B-XASS-TF | 2.5             | 10.0 | 500       |
| 3               | BM03B-XASS-TF | 5.0             | 12.5 | 500       |
| 4               | BM04B-XASS-TF | 7.5             | 15.0 | 500       |
| 5               | BM05B-XASS-TF | 10.0            | 17.5 | 500       |
| 6               | BM06B-XASS-TF | 12.5            | 20.0 | 500       |
| 7               | BM07B-XASS-TF | 15.0            | 22.5 | 500       |
| 8               | BM08B-XASS-TF | 17.5            | 25.0 | 500       |
| 9               | BM09B-XASS-TF | 20.0            | 27.5 | 500       |
| 12              | BM12B-XASS-TF | 27.5            | 35.0 | 500       |
| 13              | BM13B-XASS-TF | 30.0            | 37.5 | 500       |
| 15              | BM15B-XASS-TF | 35.0            | 42.5 | 500       |

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA, UL94V-0, natural  
 Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS2 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.

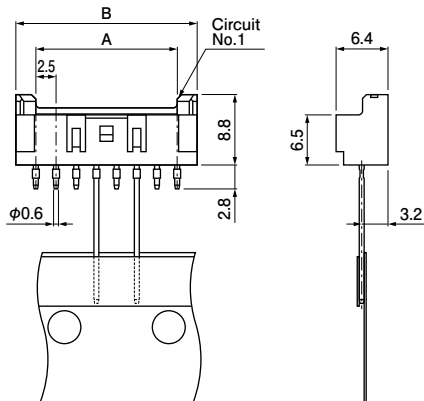
ex. **BM02B-XASS-TF**

S...natural

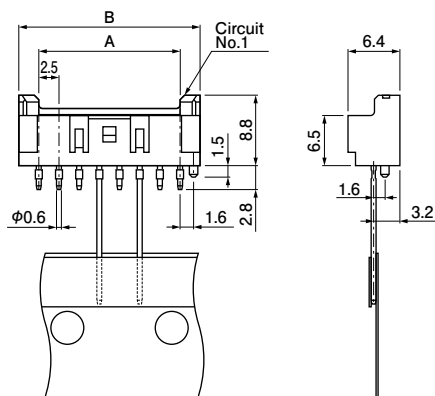
K...black R...red E...blue

## Through-hole type shrouded header on radial-tape

**Top entry type without a boss**



**Top entry type with a boss**



| No. of circuits | Model No.                     |                            | Dimensions (mm) |      | Q'ty/box |
|-----------------|-------------------------------|----------------------------|-----------------|------|----------|
|                 | Top entry type without a boss | Top entry type with a boss | A               | B    |          |
| 2               | B02B-XASS-1-T                 | —                          | 2.5             | 7.5  | 1,000    |
| 3               | B03B-XASS-1-T                 | B03B-XASS-1-A-T            | 5.0             | 10.0 | 1,000    |
| 4               | B04B-XASS-1-T                 | B04B-XASS-1-A-T            | 7.5             | 12.5 | 500      |
| 5               | B05B-XASS-1-T                 | B05B-XASS-1-A-T            | 10.0            | 15.0 | 500      |
| 6               | B06B-XASS-1-T                 | B06B-XASS-1-A-T            | 12.5            | 17.5 | 500      |
| 7               | B07B-XASS-1-T                 | B07B-XASS-1-A-T            | 15.0            | 20.0 | 500      |
| 8               | B08B-XASS-1-T                 | B08B-XASS-1-A-T            | 17.5            | 22.5 | 500      |

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS2 compliance** This product displays (LF)(SN) on a label.

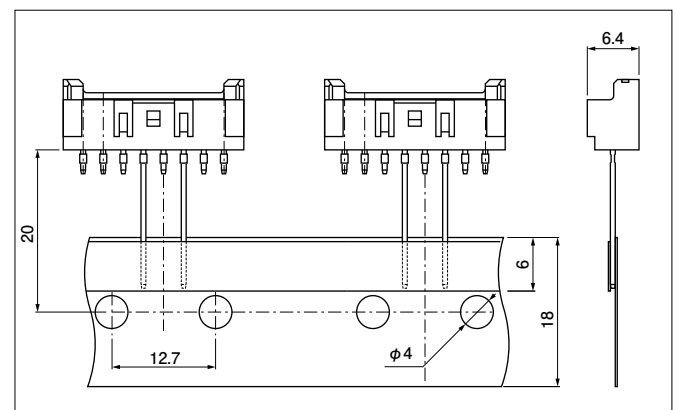
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B03B-XASS-1-A-T**

S...natural (ivory)

R...red E...blue M...green

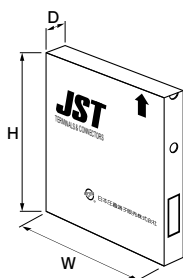
## Taping specifications



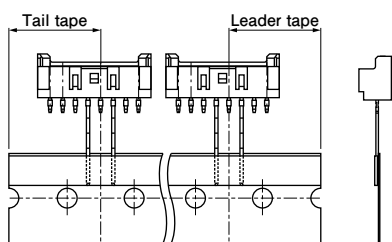
Note: Conforms to JIC C 0806 of "Tape packaging of components with unidirectional leads on continuous tapes".

# XA CONNECTOR

## Packaging specifications



Distance between the end of the tape and the first connector's center line (either end)



|   |                                       |                |
|---|---------------------------------------|----------------|
| Package type  | Flat pack (zigzag folded)             |                |
| Distance between folds  | 24 indexing holes per fold (304.8 mm) |                |
| Box size  | 316(W) × 45(D) × 330(H) mm            |                |
| Distance between the end of the tape and the first connector's center line (either end) | 19.05 mm                              |                |
| Quantity  | 2, 3 circuits                         | 1,000 pcs./box |
|   | 4 to 8 circuits                       | 500 pcs./box   |

Note: Products of different packaging specifications are also available. Contact JST for details.