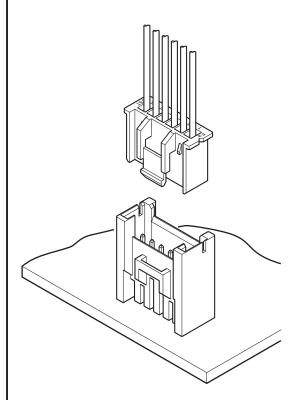


XM CONNECTOR (High box type)

2.5 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



This is XM connector high box type, with 20.0 mm mounting height and with 8.9 mm thickness. This connector exhibits the stable electric connection to the condition such as the vibration, the prying, the micro-current and micro-voltage circuit.

Features

Interchangeability

The housing is interchangeable with these of the XM receptacle housing.

Inner-housing lock

This inner-housing lock secures the plug to the receptacle and prevents accidental disconnection. The lock is protected and is not affected by external forces that might result from the routing of wires.

Retainer

Retainers enhance safety in case of partial insertion or accidental release of the contact. Even if a contact is inserted incompletely, the retainer guides the contact to the proper position and securely locks it in place.

Header suitable for potting process

This header is tall and fully shrouded so as to prevent the resin used to coat the PC board from coming into contact with the mating pins.

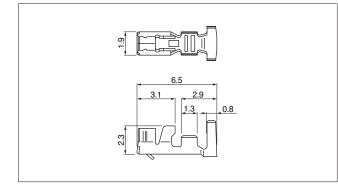
Specifications

- Current rating: 3 A AC/DC (AWG #22, AWG #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 m Ω max.

- After environmental tests/ 20 m Ω max.
- Insulation resistance: 500 $M\Omega\,$ min.
- Withstanding voltage:
 - There shall be no breakdown or flashover while applying 1,000 VAC for one minute.
- Applicable wire range: Conductor size/ AWG #28 to AWG #20 Insulation O.D. / φ0.8 mm to φ1.9 mm
- 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.

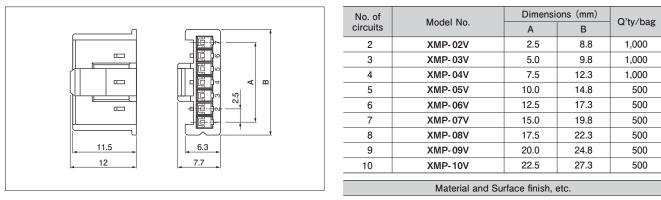
Contact



| | Applicable wire range | | | |
|-----------------------------------|---------------------------------------|----------------------|-------|--|
| Model No. | Conductor size AWG (mm ²) | Insulation O.D. (mm) | reel | |
| SXA-001T-P0.6 | #28 to #22 (0.08 to 0.33) | 0.8 to 1.9 | 8,000 | |
| SXA-01T-P0.6 | #24 to #20 (0.22 to 0.50) | 1.5 to 1.9 | 8,000 | |
| Material and Surface finish, etc. | | | | |

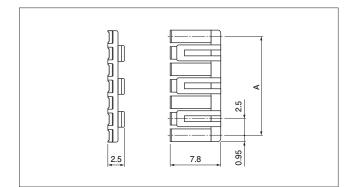
Phosphor bronze, tin-plated

Housing



PA 66, UL94V-0

Retainer

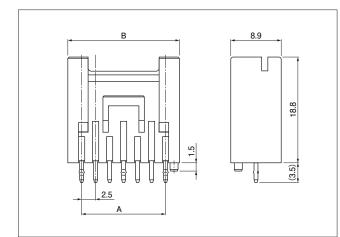


| Model No. | А | Q'ty/bag | |
|-----------------------------------|--|---|--|
| XMS-02V | 2.5 | 1,000 | |
| XMS-03V | 5.0 | 1,000 | |
| XMS-04V | 7.5 | 1,000 | |
| XMS-05V | 10.0 | 1,000 | |
| XMS-06V | 12.5 | 1,000 | |
| XMS-07V | 15.0 | 1,000 | |
| XMS-08V | 17.5 | 1,000 | |
| XMS-09V | 20.0 | 1,000 | |
| XMS-10V | 22.5 | 1,000 | |
| Material and Surface finish, etc. | | | |
| | XMS-02V XMS-03V XMS-04V XMS-05V XMS-06V XMS-07V XMS-07V XMS-08V XMS-09V XMS-10V | XMS-02V 2.5 XMS-03V 5.0 XMS-04V 7.5 XMS-05V 10.0 XMS-06V 12.5 XMS-07V 15.0 XMS-08V 17.5 XMS-09V 20.0 XMS-10V 22.5 | |

PA 66 (Glass-filled), UL94V-0

XM CONNECTOR (High box type)

Header



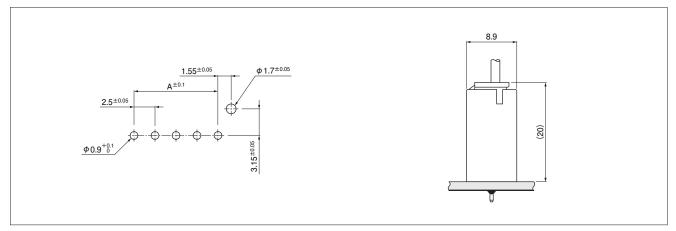
| No. of | Model No. | Dimensions (mm) | | O'hu/hog |
|----------|------------|-----------------|------|----------|
| circuits | | А | В | Q'ty/bag |
| 2 | BH02B-XMSK | 2.5 | 8.9 | 770 |
| 3 | BH03B-XMSK | 5.0 | 9.9 | 700 |
| 4 | BH04B-XMSK | 7.5 | 12.4 | 525 |
| 5 | BH05B-XMSK | 10.0 | 14.9 | 455 |
| 6 | BH06B-XMSK | 12.5 | 17.4 | 385 |
| 7 | BH07B-XMSK | 15.0 | 19.9 | 315 |
| 8 | BH08B-XMSK | 17.5 | 22.4 | 280 |
| 9 | BH09B-XMSK | 20.0 | 24.9 | 245 |
| 10 | BH10B-XMSK | 22.5 | 27.4 | 245 |
| - | | | | |

Material and Surface finish, etc.

Post: Copper alloy, copper-undercoated, tin-plated Wafer: PA 66 (Glass-filled), UL94V-0

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

PC board layout and Assembly layout

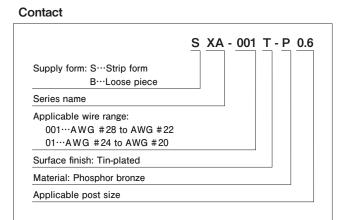


Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.

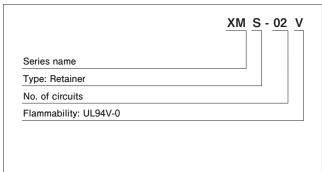
- 2. Dimension A: See "Header" section on page 3.
- 3. Tolerance for the PCB hole pitch shall be \pm 0.05, and shall not accumulate more than \pm 0.1.
- 4. Hole dimensions differ according to the type of PC board and piercing method.
- 5. The above dimensions are reference values. Please contact JST for details.

XM CONNECTOR (High box type)

Model number allocation



Retainer



Housing

| | <u>XM</u> P - <u>02</u> V |
|-----------------------|---------------------------|
| Series name | |
| Type: Plug | |
| No. of circuits | |
| Flammability: UL94V-0 | |
| | |
| | |
| | |
| | |
| | |

Header

| | BH 02 | B - X | |
|--|-------|-------|--|
| Header type: Top entry type High-box | | | |
| No. of circuits | | | |
| Assembly product | | | |
| Series name | | | |
| Color: Natural | | | |
| Clinched (Kinked) / Not clinched: Clir | ched | | |

Crimping machine, Applicator

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

Note: Contact JST for fully automatic crimping applicator.