



# D SUBMINIATURE KH SERIES

Right angle through-hole socket

RIGHT ANGLE THROUGH-HOLE SOCKET



(with hexagonal lock screw blocks)



(without lock screw blocks, but with grounding adapters having a No.4-40UNC inch thread)

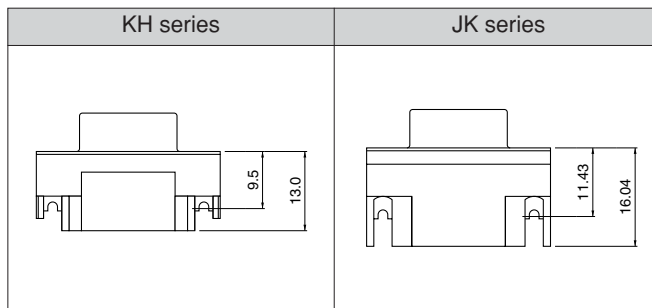
## Features

- The depth is trimmed to 13.0mm, reducing the surface mounting area by 20% compared with our JK series subminiature connectors.

- \* 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

| Right angle through-hole socket  |                                |                                     | Type A   |
|--|--------------------------------|-------------------------------------|--|
|  |                                |                                     | <p>With hexagonal lock screw blocks(H:6.3mm) having a No.4-40UNC inch thread</p> |
| <p>H: Height of the lock screw block (for Types A, B &amp; J)</p>  |                                |                                     |  |
| Circuits   | Model No.                      |                                     | Q'ty / box   |
|  | Gold-plated (flash) receptacle | Gold-plated (0.76micron) receptacle |  |
| 15   | <b>KHEY-15S-1A**</b>           | <b>KHEY-15S-1A**14</b>              | 100  |
| <p><b>RoHS compliance</b> This product displays (LF)(SN) A on a label.<br/>           Note: ** shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 15-circuit gold-plated (flash) socket with hexagonal lock screw blocks having a No.4-40UNC inch thread and with grounding adapters having a spring lock device is required, specify the model number as KHEY-15S-1A3A.</p> |                                |                                     |  |
| <p>With grounding adapters with a spring lock device</p>   |                                |                                     | <p>3A</p>  |

# D SUBMINIATURE CONNECTOR KH SERIES

## Specifications

### Materials

| Part name                                 | Material and Finish  |
|---|--|
| Contact                                   | Phosphor bronze, nickel-undercoated,<br>Mating part: gold-plated<br>Solder tail: tin-plated (reflow treatment) |
| Insulator                                 | Glass-filled PBT, UL94-0, black  |
| Shell                                     | Steel, copper-undercoated, nickel-plated   |
| Grounding adapter with spring lock device | Brass, nickel-undercoated, tin/copper alloy-plated   |

### Characteristics

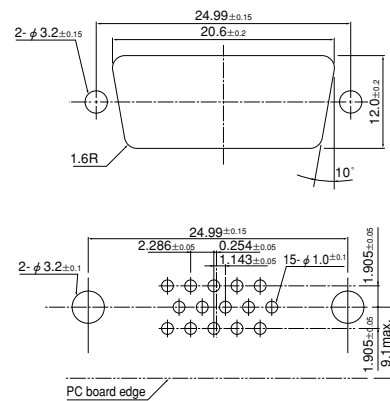
|                               |  |
|-------------------------------|--|
| Current rating                | 1.0A,AC,DC   |
| Voltage rating                | 250V,AC,DC   |
| Temperature range             | -40°C to +85°C (including temperature rise in applying electrical current) |
| Contact resistance            | Initial value/15mΩ max.<br>After environmental testing/30mΩ max.           |
| Insulation resistance         | 5,000MΩ min.   |
| Withstanding voltage          | AC1,000V/minute  |
| Applicable PC board thickness | 1.6mm  |

\*Contact JST for details.

### Model number identification

| K H E Y - 15 S - 1 A 3 A 14   |                               |
|---|-------------------------------|
| • Series name   | K H E                         |
| • Shell size: E   | E                             |
| • Wire connection type:<br>Y ... Right angle through-hole type                                | Y                             |
| • Number of circuits: 15  | 15                            |
| • Connector type: S ... Socket  | S                             |
| • Connector construction/dimensions:<br>Standard KH series right angle through-hole type      |                               |
| • Types of grounding adapter:<br>3 ... With grounding adapters having a spring lock device    | 3                             |
| • Type of lock screw block:   |                               |
| A ... With hexagonal lock screw blocks having a No. 4-40UNC inch thread                       |                               |
| B ... With hexagonal lock screw blocks having an M2.6 thread                                  |                               |
| F ... Without lock screw blocks, but with grounding adapters having a No. 4-40UNC inch thread |                               |
| G ... Without lock screw blocks, but with grounding adapters having an M2.6 thread            |                               |
| H ... Without lock screw blocks, but with grounding adapters having an M3 thread              |                               |
| J ... With hexagonal lock screw blocks having an M3 thread                                    |                               |
| • Finish of mating part   |                               |
| Blank ... Gold-plated (flash)   | 12 ... 0.2micron gold-plated  |
| 13 ... 0.4micron gold-plated  | 14 ... 0.76micron gold-plated |

### PC board layout (viewed from component side) and Panel layout



Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

| Type B  | Type D   | Type F   | Type G   | Type H  |
|---|--|--|--|---|
|   |  |  |  |   |
| With hexagonal lock screw blocks(H:6.3mm) having an M2.6 thread | Without lock screw blocks<br>F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2) |  |  | With hexagonal lock screw blocks(H:6.3mm) having an M3 thread |
|   | *1: No.4-40UNC inch thread<br>*2: Model number<br>HFS-4S-( )1W(M)  | *1: M2.6 thread<br>*2: Model number<br>HFS-2.6S-( )1W(M) | *1: M3 thread<br>*2: Model number<br>HFS-3S-( )1W(M) |   |
|   |  |  |  |   |
| 3B  | 3F   | 3G   | 3H   | 3J  |




# D SUBMINIATURE CONNECTOR J·JH·JK & KH SERIES

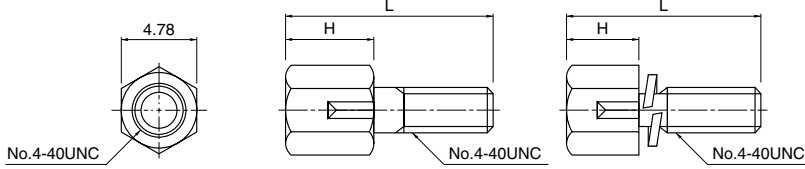
## Accessories/Lock screw block

A variety of accessories are available for the D subminiature connectors.

### LOCK SCREW BLOCK




**Hexagonal lock screw block  
(inch thread: No.4-40UNC)**



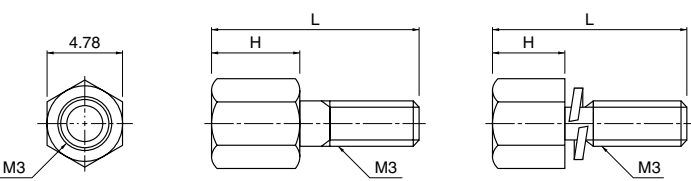
Type A
Type B

| Applicable series | J series right angle through-hole type<br>JK series straight through-hole type | JK series right angle through-hole type | J series straight through-hole type | JH series right angle through-hole type<br>KH series right angle through-hole type | Dimension H (mm) | Type | Attachment  | Q'ty / box |
|-------------------|--|---|-------------------------------------|--|------------------|------|---|------------|
| Dimension L (mm)  | 13.1   | 15.0                                    | 10.0                                | 11.8   |                  |      |   |            |
| Model No.         | JFS-4S-C1N   | KFS-4S-C1N                              | —                                   | —  | 5.5              | A    | Spring washer .. 1 pc.<br>Nut ..... 1 pc.           | 2,000      |
|                   | JFS-4S-B1W   | KFS-4S-B1W                              | SFS-4S-B1W                          | HFS-4S-B1W   | 4.8              |      | Spring washer .. 1 pc.                              |            |
|                   | JFS-4S-C1W   | KFS-4S-C1W                              | SFS-4S-C1W                          | HFS-4S-C1W   | 5.5              | B    | Hexagonal lock screw & spring washer are integrated |            |
|                   | JFS-4S-B1WM  | KFS-4S-B1WM                             | SFS-4S-B1WM                         | HFS-4S-B1WM  | 4.8              |      |   |            |
|                   | JFS-4S-C1WM  | KFS-4S-C1WM                             | SFS-4S-C1WM                         | HFS-4S-C1WM  | 5.5              |      |   |            |

RoHS compliance



**Hexagonal lock screw block  
(metric thread: M3)**

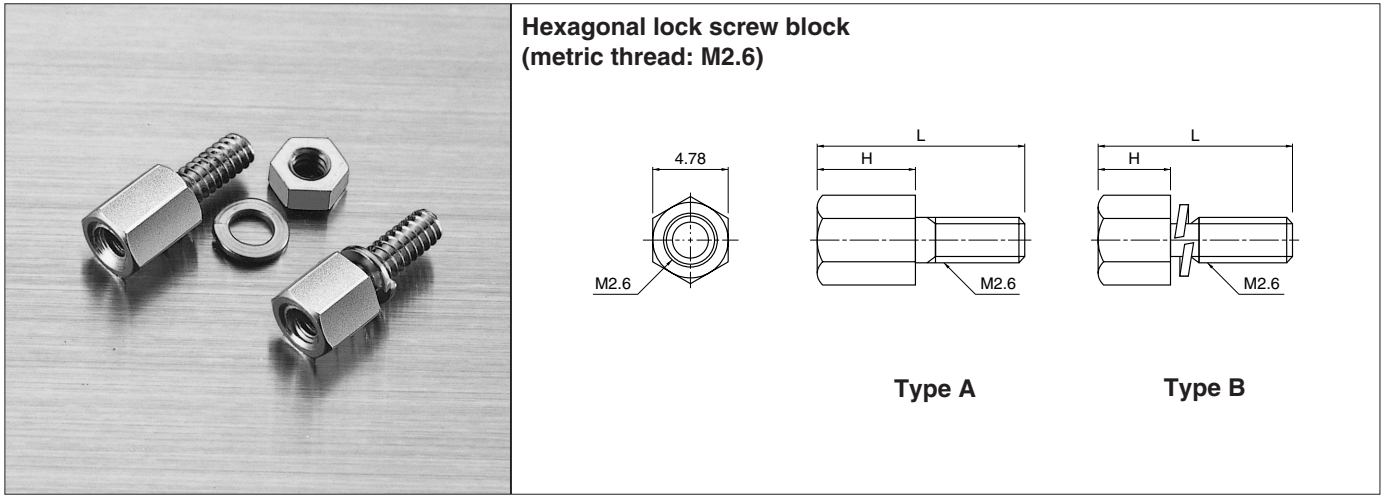


Type A
Type B

| Applicable series | J series right angle through-hole type<br>JK series straight through-hole type | JK series right angle through-hole type | J series straight through-hole type | JH series right angle through-hole type<br>KH series right angle through-hole type | Dimension H (mm) | Type | Attachment  | Q'ty / box |
|-------------------|--|---|-------------------------------------|--|------------------|------|---|------------|
| Dimension L (mm)  | 13.1   | 15.0                                    | 10.0                                | 11.8   |                  |      |   |            |
| Model No.         | JFS-3S-C1N   | KFS-3S-C1N                              | —                                   | —  | 5.5              | A    | Spring washer .. 1 pc.<br>Nut ..... 1 pc.           | 2,000      |
|                   | JFS-3S-B1W   | KFS-3S-B1W                              | SFS-3S-B1W                          | HFS-3S-B1W   | 4.8              |      | Spring washer .. 1 pc.                              |            |
|                   | JFS-3S-C1W   | KFS-3S-C1W                              | SFS-3S-C1W                          | HFS-3S-C1W   | 5.5              | B    | Hexagonal lock screw & spring washer are integrated |            |
|                   | JFS-3S-B1WM  | KFS-3S-B1WM                             | SFS-3S-B1WM                         | HFS-3S-B1WM  | 4.8              |      |   |            |
|                   | JFS-3S-C1WM  | KFS-3S-C1WM                             | SFS-3S-C1WM                         | HFS-3S-C1WM  | 5.5              |      |   |            |

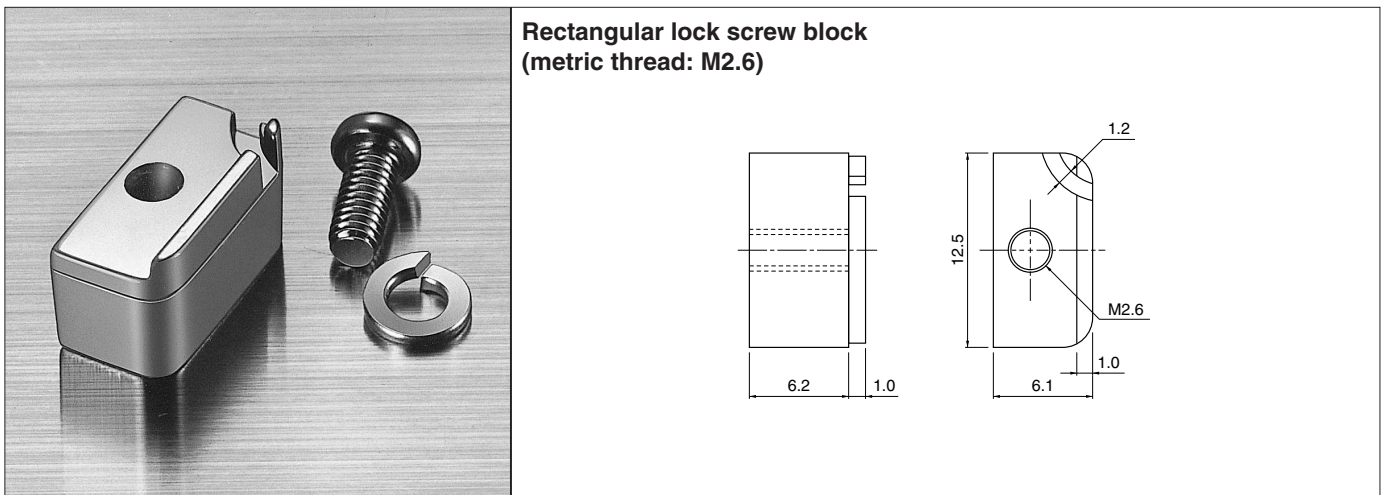
RoHS compliance

# D SUBMINIATURE CONNECTOR J·JH·JK&KH SERIES



| Applicable series | J series right angle through-hole type<br>JK series straight through-hole type | JK series right angle through-hole type | J series straight through-hole type | JH series right angle through-hole type<br>KH series right angle through-hole type | Dimension H (mm) | Type | Attachment  | Q'ty / box |
|-------------------|--|---|-------------------------------------|--|------------------|------|---|------------|
| Dimension L (mm)  | 13.1   | 15.0                                    | 10.0                                | 11.8   |                  |      |   |            |
| Model No.         | JFS-2.6S-C1N   | KFS-2.6S-C1N                            | —                                   | —  | 5.5              | A    | Spring washer .. 1 pc.<br>Nut ..... 1 pc.           | 2,000      |
|                   | JFS-2.6S-B1W   | KFS-2.6S-B1W                            | SFS-2.6S-B1W                        | HFS-2.6S-B1W   | 4.8              |      | Spring washer .. 1 pc.                              |            |
|                   | JFS-2.6S-C1W   | KFS-2.6S-C1W                            | SFS-2.6S-C1W                        | HFS-2.6S-C1W   | 5.5              | B    | Hexagonal lock screw & spring washer are integrated |            |
|                   | JFS-2.6S-B1WM  | KFS-2.6S-B1WM                           | SFS-2.6S-B1WM                       | HFS-2.6S-B1WM  | 4.8              |      |   |            |
|                   | JFS-2.6S-C1WM  | KFS-2.6S-C1WM                           | SFS-2.6S-C1WM                       | HFS-2.6S-C1WM  | 5.5              |      |   |            |

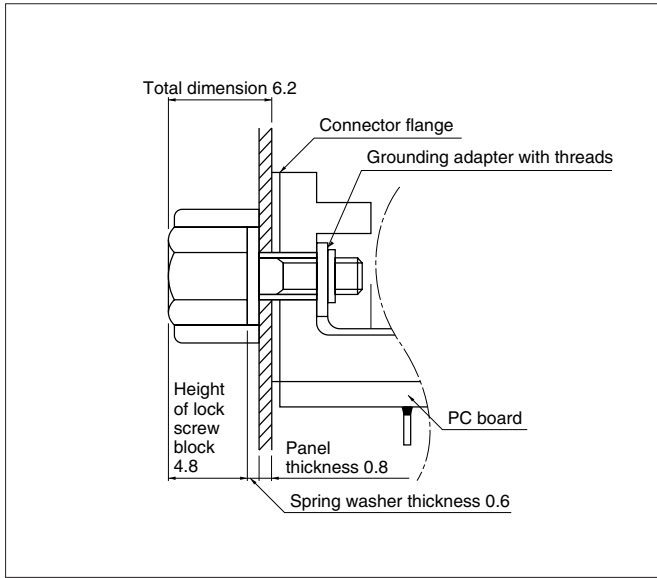
RoHS compliance



| Model No.  | Attachment                                 | Q'ty / box |
|------------|--|------------|
| JFS-2.6R-N | Spring washer – 1 pc.<br>Set screw – 1 pc. | 1,000      |

RoHS compliance

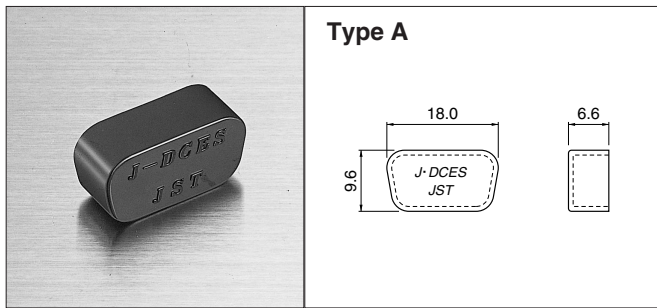
# D SUBMINIATURE CONNECTOR J·JH·JK&KH SERIES



## Application examples of hexagonal lock screw blocks

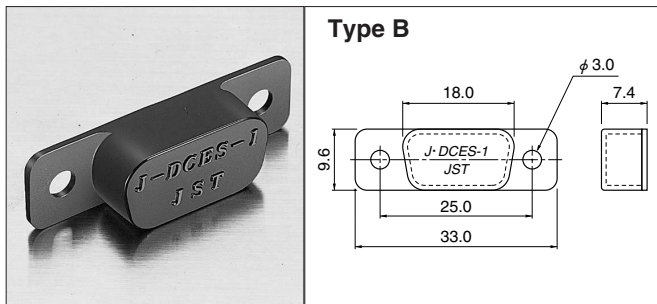
- The resulting total dimension from the connector flange to the top of the hexagonal lock screw block must be 6.2mm after assembly.
- The D subminiature connector can be installed on the Panel by simply tightening the hexagonal lock screw block together with grounding adapter, which has an identical thread to that of the F, G, and H types.

## DUST COVER (for receptacles)



| Type               | Circuits |           | Model No.       | Q'ty / box |
|--------------------|----------|-----------|-----------------|------------|
|                    | J series | JK series |                 |            |
| A                  | 9        | 15        | <b>J-DCES</b>   | 1,000      |
| B                  |          |           | <b>J-DCES-1</b> |            |
| Material           |          |           |                 |            |
| PA, UL94V-0, black |          |           |                 |            |

**RoHS compliance**



## EXTRACTION TOOL



With this tool, contacts (connected to wires by crimping) can be easily removed if they are improperly inserted into plug and receptacle housings.

| Applicable Connector |            | Model No.      |
|----------------------|------------|----------------|
| J series             |            | <b>DEJ-0.3</b> |
| JK series            | Plug       | <b>KEJ-0.7</b> |
|                      | Receptacle | <b>KEJ-0.4</b> |