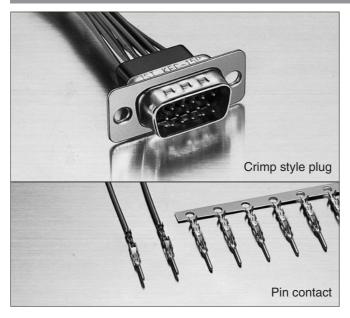


# DSUBMINIATURE JK SERIES Crimp style plug and socket

#### CRIMP STYLE PLUG AND SOCKET

**FL** 





#### Features -

- The dimples in the shell provide the ground connection and are an The contact has a retention lance that makes assembly to the important factor in preventing electromagnetic interference.
- Standards ----
- Recognized E60389 Certified LR20812

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

#### Specifications -

#### **Materials**

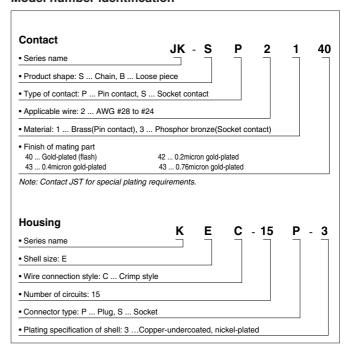
Connector	Part name	Material and Finish
Plug	Contact	Brass, nickel-undercoated, Mating part; gpld-plated Crimping part; tin-plated (reflow treatment)
riug	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Steel, copper-undercoated, nickel-plated
Socket	Contact	Phosphor bronze, nickel-undercoated, Mating part; gpld-plated Crimping part; tin-plated (reflow treatment)
COCKET	Insulator	Glass-filled PBT, UL94-0, black
	Shell	Steel, copper-undercoated, nickel-plated

#### **Characteristics**

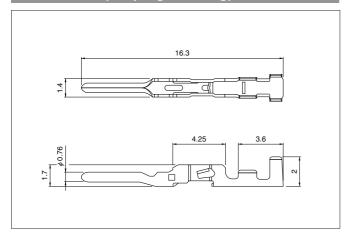
Current rating	1.0A, AC, DC(AWG #24)
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15m $\Omega$ max. After environmental testing/30m $\Omega$ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1.000V AC/minute

Note: Contact JST for details.

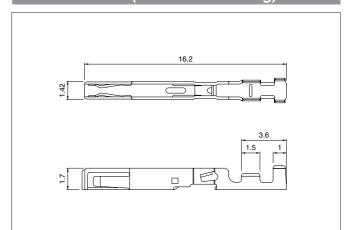
#### Model number identification



#### Pin contact (for plug housing)



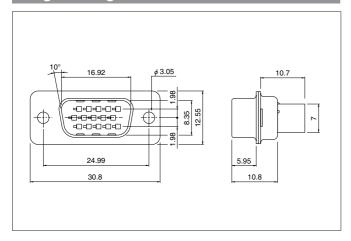
#### Socket contact (for socket housing)



Model No.		Finish at mating part	App	O'ty / hay	
Pin contact	Socket contact	Finish at mating part	AWG #	Insulation O.D. (mm)	Q´ty / box
JK-SP2140	JK-SS2340	Gold-plated (flash)	28~24	0.9~1.4	40.000
JK-SP2144	JK-SS2344	Gold-plated (0.76micron)	207~24	0.9~1.4	10,000

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

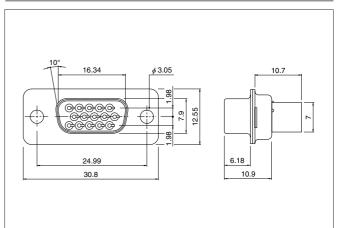
#### Plug housing



Circuits	Model No.	Q'ty / box
15	KEC-15P-3	100

RoHS compliance

#### Receptacle housing



Circuits	Model No.	Q´ty / box
15	KEC-15S-3	100

RoHS compliance

#### Crimping machine, Applicator

Contact	Crimping	Applicator		
Contact	machine	Crimp applicator	Dies	Crimp applicator with dies
J-SP2***	AP-K2N	MKS-L	MK/JK-SP/SS2	APLMK JK-SP/SS2
J-5P2		*MKS-SC-JK	SC/JK-SP/SS2	APLSC JK-SP/SS2
J-SS2***	AF-NZIN	MKS-L	MK/JK-SP/SS2	APLMK JK-SP/SS2
		*MKS-SC-JK	SC/JK-SP/SS2	APLSC JK-SP/SS2

Note: \*Strip-crimp applicator



# DSUBMINIATURE JK SERIES Right angle through-hole plug and socket

#### RIGHT ANGLE THROUGH-HOLE SOCKET

**FL** 



(with hexagonal lock screw blocks)



(with rectangular lock screw blocks)

#### **Features**

• The mating section of the contact has a twin-contact style construction with uniform elasticity to ensure a reliable contact even when repeatedly mated and unmated.

#### Standards —

Recognized E60389 Certified LR20812

- A wide variety of grounding adapters are available so that the receptacle can be grounded to the circuitry of a printed circuit board to prevent electromagnetic interference.
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

#### Specifications -

#### **Materials**

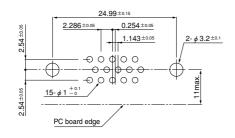
Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Steel, copper-undercoated, nickel-plated
Grounding adapter having a 3.2mm dia. hole	Steel, copper-undercoated, nickel-plated
Grounding adapter having an M3 tapped hole	Steel, copper-undercoated, nickel-plated
Grounding adapter having a 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/15m $\Omega$ max. After environmental testing/30m $\Omega$ max.
Insulation resistance	5,000MΩ min.
Withstandhing voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

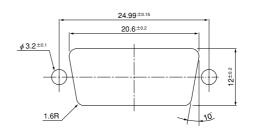
Note: Contact JST for details.

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

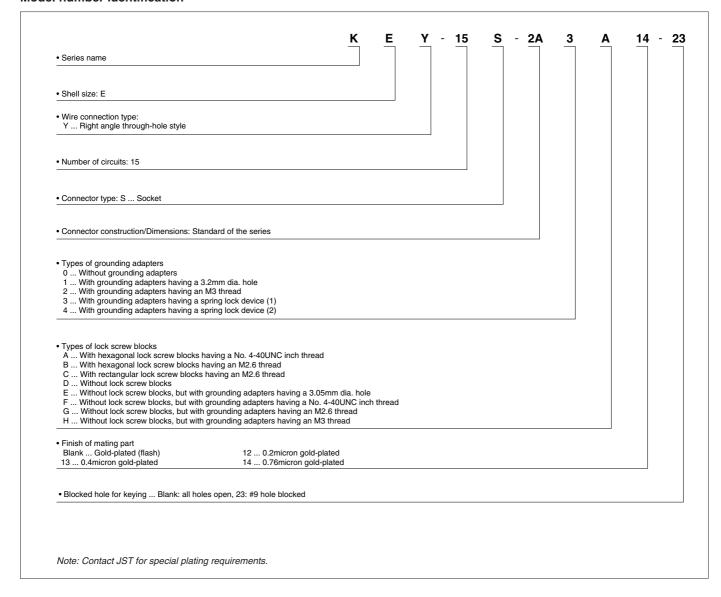


Note: 1 Tolerances are non-cumulative: +0.05mm for all centers

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.



#### Model number identification



Right a	angle through-hole	socket		Type A	Type B
	10° 16.34	·	22.22	VE TO	
No.9 hole  24.99  30.8  No.9 hole  254  11.43			With hexagonal lock screw blocks(H: 6.3mm) having a No.4-40UNC inch thread	With hexagonal lock screw blocks(H: 6.3mm) having an M2.6 thread	
	ie lock screw block (for Types A, B	& C)  Model No.	Q´ty /		
Circuits	Gold-plated (flash) socket		socket with No.9 hole blocked box		
15 KEY-15S-2A** KEY-15S-2A**14-23 100 ⟨☆⟩  RoHS compliance This product displays (LF)(SN) on a label.  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 without grounding adapters is required, specify the model number as  KEY-15S-2A0A. (☆) Type C60				No.4-40UNC	M2.6
Without g	grounding adapters			0A	0B
_	unding adapters 2mm dia. hole			1A	1B
_	unding adapters 13 thread			2A	2B
_	unding adapters ring lock lever (1)			3A	3B
_	unding adapters ring lock device (2)			_	_

Type C	Type D	Type E	Type F	Type G	Type H
	4000				
With rectangular lock screw blocks (H: 6.2mm)	Without lock screw blocks	Without lock screw blocks  E: Grounding adapter has no thread.  F, G, H: Grounding adapters have a thread (*1) for securing separately-purchased lock screw blocks (*2)			
having an M2.6 thread		Used a lock screw block [model number KFS-()S-C1N]	*1: No.4-40UNC inch thread *2: Model number KFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number KFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number KFS-3S-( )1W(M)
M2.6		#3.05	No.4-40UNC	M2.6	M3
0C	0D		—		
1C	1D	1E	1F	1G	
2C	2D	2E	2F	2G	
3C	3D	3E	3F	3G	
					4H

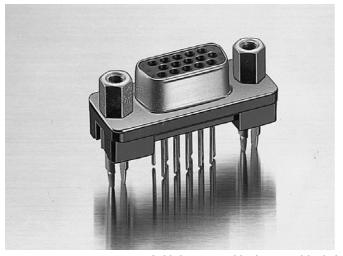


## DSUBMINIATURE JK SERIES

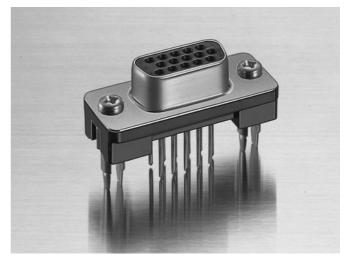
Straight through-hole socket

#### STRAIGHT THROUGH-HOLE SOCKET

**71** (1)







(without lock screw blocks)

#### Features -

- The mating section of the contact has a twin-contact style construction with uniform elasticity to ensure a reliable contact even when repeatedly mated and unmated.
- A grounding adapter with a spring lock device allows the connector to be temporarily secured on the printed circuit board so that the connector can be soldered easily.

#### Straight through-hole socket Type A With hexagonal lock screw blocks (H: 6.3mm) 24.99 having a No.4-40UNC No.9 hole inch thread H: Height of the lock screw block (for Types A & B) Model No. Circuits Gold-plated (flash) socket Gold-plated (0.76micron)socket with No.9 hole blocked KES-15S-2A\*\* KES-15S-2A\*\*14-23 15 RoHS compliance This product displays (LF)(SN) A on a label. Note: \*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 15circuits gold-plated (flash) socket with hexagonal lock screw blocks having a No. 4-40UNC inch thread and with grounding No.4-40UNC adapters having a spring lock device is required, specify the model number as KES-15S-2A3A. With grounding adapters **3A**

with a spring lock device

#### Standards -

Recognized E60389 Certified LR20812

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

#### Specifications -

#### **Materials**

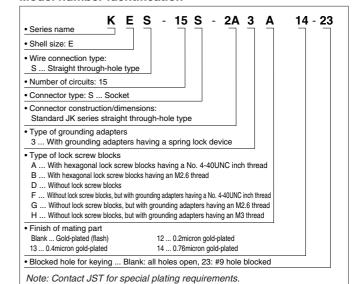
Part name	Material and Finish
Contact	Phosphor bronze, nickel-undercoated, Mating part; gold-plated Solder tail; tin-plated (reflow treatment)
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Steel, copper-undercoated, nickel-plated
Grounding adapter	Brass, nickel-undercoated, tin/copper alloy-plated

#### Characteristics

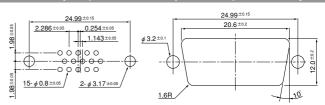
Current rating	1.0A, AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15m $\Omega$ max. After environmental testing/30m $\Omega$ max.
Insulation resistance	5,000MΩ min.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm

Note: Contact JST for details.

#### Model number identification



#### 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)	Without lock screw blocks	Without lock screw blocks F, G, H:Grounding adapters screw blocks (*2)	have a thread (*1) for securing so	eparately-purchased lock
having an M2.6 thread		*1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number JFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number JFS-3S-( )1W(M)
M2.6		No.4-40UNC	M2.6	M3
3B	3D	3F	3G	3H



# DSUBMINIATURE J&JK SERIES Accessories/EMI prevention shielding cover ( J cover)

J COVER

91



#### Features -

- This shielding cover is made of steel, formed by our advanced stamping technology, and nickel-plated.
- The box-shaped cover completely encloses such EMI radiating areas as the connections between the connector and wires. The result is a superior shielding effect.
- To install the shielding cover, simply align and press the upper and lower cover elements, then tighten the nuts. It then securely grips the round cables.
- This cover is so compact, light and sturdy, that it can be used to cover the connectors of any input/output cable. Moreover, it is attractive in appearance.
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

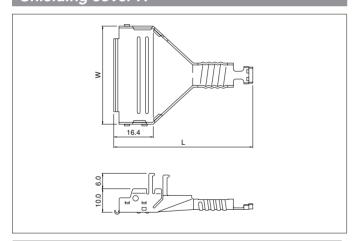
#### Standards -

Recognized E60389

#### Applicable cable dimensions

Circuits	J series	9	15	25	37
Circuits	JK series	15	_	-	_
Cable outer diameter (mm)		7.0	± 0.2	8.0 ± 0.2	10.0 ±0.2

#### Shielding cover A



J series		JK series		Dimensions (mm)		
Cir- cuits	Model No.	Cir- cuits	Model No.	W	L	Q'ty / box
9	J-SC9A	15	JK-SC15A	19.4	42.0	200
15	J-SC15A	_	_	27.6	46.9	150
25	J-SC25A	_	_	41.4	57.0	100
37	J-SC37A	_	-	57.8	70.6	125

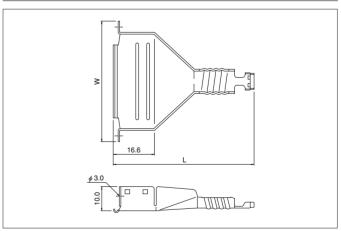
#### Material and Finish

Steel, copper- undercoated, nickel-plated

#### RoHS compliance

Note: The cover of the JK series 15-circuit connector is the same as that of the J series 9-circuit connector, except for the number of circuits indicated.

#### Shielding cover B



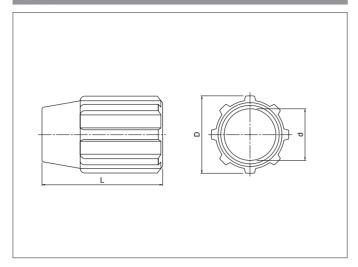
Circuits		Dimensi	Q'ty /	
JK series	woder No.	W	L	box
15	J-SC9B	30.0	(42.0)	200
_	J-SC15B	38.0	(46.9)	150
_	J-SC25B	52.0	(57.0)	150
_	J-SC37B	68.0	(70.6)	100
	JK series	Model No.     15   J-SC9B     - J-SC15B     - J-SC25B	Model No.   W	Model No.   W   L

Material and Finish Steel, copper-undercoated, nickel-plated

#### RoHS compliance

Note: The cover of the JK series 15-circuit connector is the same as that of the J series 9-circuit connector.

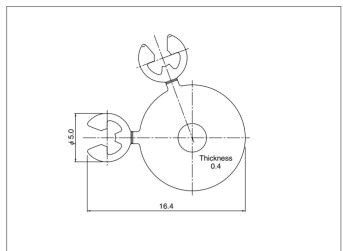
#### Cover nut



Cir- cuits	Model No.	D	d	L	Q'ty / box	
9	I CNO - 15	10.0	7.0	10.0	1 000	
15	J-CN9 · 15	J-CN9 - 15	13.6	7.2	19.0	1,000
25	J-CN25	16.4	8.4	25.0	1,000	
37	J-CN37	18.8	10.4	28.0	1,500	

Material
Glass-filled, PBT, UL94V-0, black

### E-ring

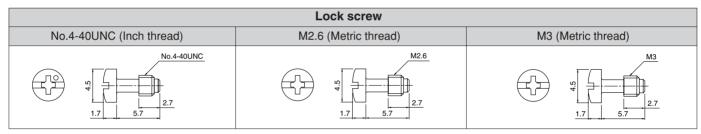


Model No.	Q'ty / box				
J-ER	5,000				
Material					
Stainless steel					

#### RoHS compliance

Note: The cover nuts, lock screws and E-rings are used with both the J and JK series connectors.

#### RoHS compliance



Type of screw	Model No.	Q'ty / box
No.4-40UNC (Inch thread)	J-SL-1C	5,000
M2.6 (Metric thread)	J-SL-2C	5,000
M3 (Metric thread)	J-SL-3C	5,000

Material and Finish

Steel, copper-undercoated, nickel-plated

#### RoHS compliance

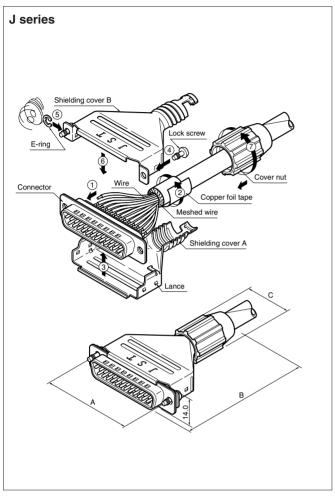
Use the following Model Nos. when ordering J-covers as a set

USE THE TOTION	se the following woder Nos. when ordering o-covers as a set.							
	J series	JK series						
Circuits	Model No.	Circuits	Model No.	Parts in one set	Q'ty / box			
9	J-C9-( )C	15	JK-C15-( )C	Shielding cover A · · · · · · · · 1 pc.	25			
15	J-C15-( )C	_	_	Shielding cover B	25			
25	J-C25-( )C	_	_	Lock screw ······2 pcs.	20			
37	J-C37-( )C	_	_	E-ring ······1 set	10			

#### RoHS compliance

Note: In the above lock screw model numbers, the number in parentheses indicates the type of screw-1: Inch thread (No.4-40UNC), 2: Metric thread (M2.6), 3: Metric thread (M3).

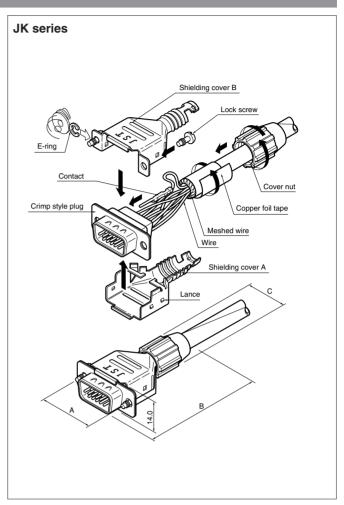
#### J-cover assembly procedure



#### Assembly procedure

- 1. Connect wires to the connector by soldering or crimping.
- 2. Fold back the braided shielding wire along the outside insulation and wind the copper foil tape around the shielding wire.
- 3. Install the connector into shielding cover A.
- 4. Screw the lock screws onto shielding cover B.
- 5. Install the E-rings.
- **6.** Align shielding cover B with shielding cover A and press shielding cover B until it engages the lances of shielding cover A.
- Tighten the cover nut until the predetermined position is reached.

Note: For details of the J-cover assembly procedure, please refer to the processing specifications separately available. The shielding effect of the J-cover is critically dependent on proper assembly.



#### **Dimensions after assembly**

Circuits		Dimensions (mm)		
JK series	Α	В	С	
15	24.99	(49.0)	13.6	
_	33.32	(53.0)	13.6	
_	47.04	(64.5)	16.4	
_	63.50	(78.5)	18.9	
	JK series	JK series A  15 24.99  - 33.32  - 47.04	JK series         A         B           15         24.99         (49.0)           -         33.32         (53.0)           -         47.04         (64.5)	



## DSUBMINIATURE J&JK SERIES

Accessories/EMI prevention overmolding cover

#### MOLD COVER



#### **Features**

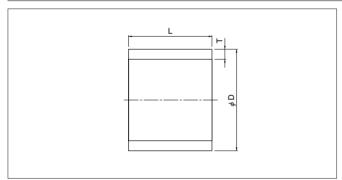
- This cover completely encloses all wire connections to the connector, and its braided wire crimp section ensures a reliable ground connection. The result is excellent shielding.
- This cover is sturdy enough to withstand the high pressure necessary during overmolding. It can thus be finish-molded directly.
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

#### Applicable cable diameter

Circ	cuits	Coble O.D. (mm)	
J series	JK series	Cable O.D.(mm)	
9	15	8.6 <sup>±0.2</sup>	
15	_	7.6 <sup>±0.2</sup>	
25	_	8.6 <sup>±0.2</sup>	

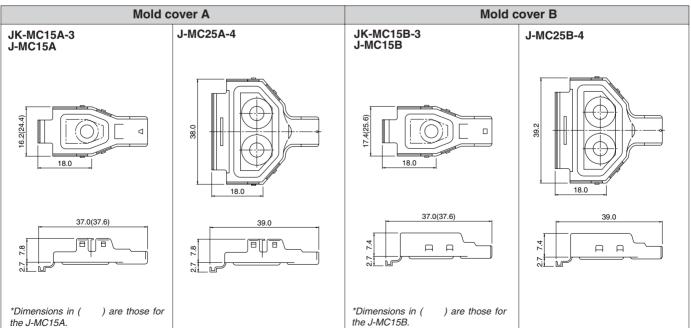
Note: Contact JST for cables other than those listed above.

#### Ferrule



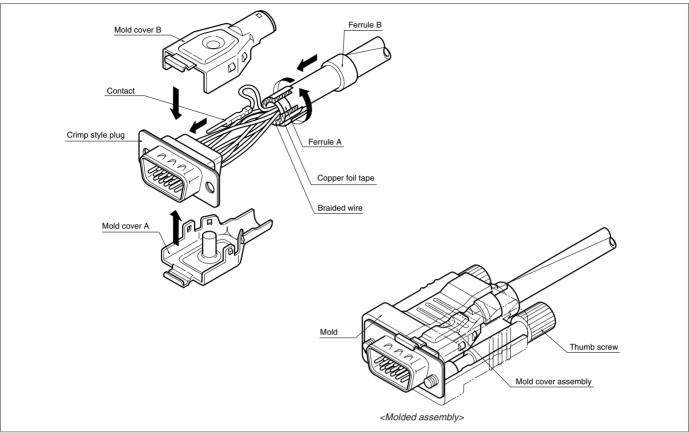
Circ	uits	Ferrule	Dimensions (mm)		)
J series	JK series	remule	φ D	T	L
9 • 25		Α	8.0	0.5	4.0
9 • 25	15	В	11.3	0.6	8.0
15		Α	7.0	0.5	4.0
15	_	В	10.5	0.6	8.0

RoHS compliance



RoHS compliance

#### Mold cover assembly procedure



Note: Contact JST for thumb screws.

#### Assembly procedure

#### 1. Processing braided shielding wire

Pass the cable through ferrule B and remove the insulation at the end of the cable. Install ferrule A and fold back the braided shielding wire along the outside insulation. Then wind the copper foil tape around the shielding wire.

#### 2. Connecting the wires to the contacts

Connect the wires to the contacts by crimping and insert the contacts into the housing.

#### 3. Assembling the mold covers

Align mold cover B with mold cover A and press mold cover B until it engages the lances of mold cover A. Install ferrule B over the cable holding section of the cover assembly and crimp ferrule B. This completes the assembly.

Circ	cuits	Parts name	Model No.	Material and Finish	Q'ty / box
J series	JK series	Paris name	Model No.	Material and Finish	or bag
		Mold cover A JK-MC15A-3		Steel, copper-undercoated, nickel-plated	500
۵	9 15	Mold cover B	JK-MC15B-3	Steel, copper-undercoated, filoker-plated	300
9	9 15	Ferrule A	JK-FL15A-8.0C	Copper tip plated	1,000
		Ferrule B	JK-FL15B-11.3	Copper, tin-plated	500
		Mold cover A	J-MC15A	Charl common underscated minical plated	200
15	_	Mold cover B	J-MC15B	Steel, copper-undercoated, nickel-plated	200
15		Ferrule A	J-FL15A-7.0C	Copper, tin-plated	1,000
		Ferrule B	J-FL15B-10.5	Copper, un-plated	500
		Mold cover A	J-MC25A-4	Steel, copper-undercoated, nickel-plated	250
25	_	Mold cover B	J-MC25B-4	Steel, copper-undercoated, nickel-plated	250
23		Ferrule A	JK-FL15A-8.0C	Copper tip plated	1,000
		Ferrule B	JK-FL15B-11.3	Copper, tin-plated	500

RoHS compliance

#### Crimping machine, Applicator

Contact	Crimping	Applicator			
Contact	machine	Crimp applicator	Dies	Crimp applicator with dies	
JK-FL15B-11.3	AP-K2N	N MKS-L-BG	MK/JK-MC15	APLMK JK-MC15	
J-FL15B-10.5	AP-NZIN	WINS-L-NG	MK/J-MC15	APLSC JK-MC15	



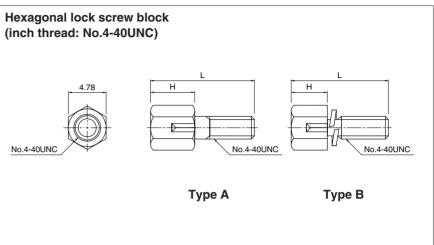
## DSUBMINIATURE J.JH.JK&KH SERIES

### Accessories/Lock screw block

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

#### LOCK SCREW BLOCK

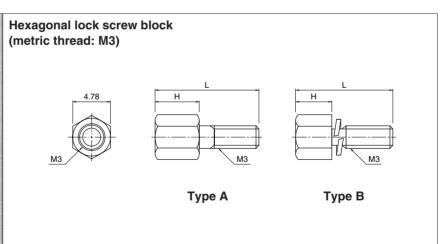




Applicable series  Dimension / Model No.	J series right angle through- hole type JK series straight through- hole type	JK series right angle through- hole type	J series straight through- hole type	JH series right angle through- hole type KH series right angle through- hole type	Dimension H (mm)	Туре	Attachment	Q'ty / box	
Dimension L (mm)	13.1	15.0	10.0	11.8					
	JFS-4S-C1N	KFS-4S-C1N	_	_	5.5		Spring washer 1 pc. Nut 1 pc.		
	JFS-4S-B1W	KFS-4S-B1W	SFS-4S-B1W	HFS-4S-B1W	4.8	Α [	Α	On the second second	
Model No.	JFS-4S-C1W	KFS-4S-C1W	SFS-4S-C1W	HFS-4S-C1W	5.5		Spring washer 1 pc.	2,000	
	JFS-4S-B1WM	KFS-4S-B1WM	SFS-4S-B1WM	HFS-4S-B1WM	4.8	Б	Hexagonal lock screw &		
	JFS-4S-C1WM	KFS-4S-C1WM	SFS-4S-C1WM	HFS-4S-C1WM	5.5	В	spring washer are integrated		

#### RoHS compliance

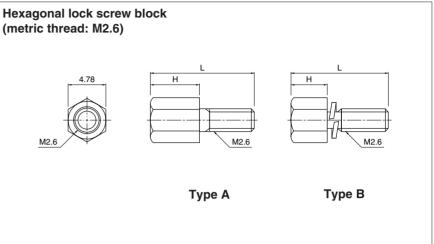




Applicable series  Dimension / Model No.	J series right angle through- hole type JK series straight through- hole type	JK series right angle through- hole type	J series straight through- hole type	JH series right angle through- hole type KH series right angle through- hole type	Dimension H (mm)	Туре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

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



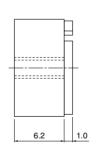


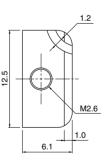
Applicable series  Dimension / Model No.	J series right angle through- hole type JK series straight through- hole type	JK series right angle through- hole type	J series straight through- hole type	JH series right angle through- hole type KH series right angle through- hole type	Dimension H (mm)	Туре	Attachment	Q´ty / box
Dimension L (mm)	13.1	15.0	10.0	11.8				
	JFS-2.6S-C1N	KFS-2.6S-C1N	_	_	5.5		Spring washer 1 pc. Nut 1 pc.	
	JFS-2.6S-B1W	KFS-2.6S-B1W	SFS-2.6S-B1W	HFS-2.6S-B1W	4.8	Α	0	
Model No.	JFS-2.6S-C1W	KFS-2.6S-C1W	SFS-2.6S-C1W	HFS-2.6S-C1W	5.5		Spring washer 1 pc.	2,000
	JFS-2.6S-B1WM	KFS-2.6S-B1WM	SFS-2.6S-B1WM	HFS-2.6S-B1WM	4.8	Б	Hexagonal lock screw &	
	JFS-2.6S-C1WM	KFS-2.6S-C1WM	SFS-2.6S-C1WM	HFS-2.6S-C1WM	5.5	В	spring washer are integrated	

#### RoHS compliance



## Rectangular lock screw block (metric thread: M2.6)

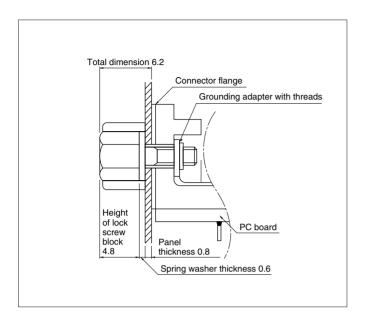




Model No.	Attachment	Q´ty / box
JFS-2.6R-N	Spring washer – 1 pc. Set screw – 1 pc.	1,000

RoHS compliance

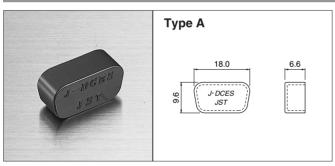
## D SUBMINIATURE CONNECTOR J.JH.JK&KH SERIES



#### 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.

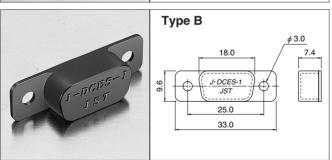
#### DUST COVER (for receptacles)



Type	Circuits		Model No.	Q´ty / box		
Type	J series	JK series	Model No.	Q ty / box		
Α	9	15	J-DCES	1 000		
В	9	15	J-DCES-1	1,000		
	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.

Applicat	Model No.	
J series	DEJ-0.3	
JK series	Plug	KEJ-0.7
JK series	Receptacle	KEJ-0.4