

Solder pot plug and receptacle

#### SOLDER POT PLUG AND RECEPTACLE -

**BLR**.







Solder pot Receptacle

#### **Features**

- The receptacle contacts are formed by high-speed stamping presses to obtain the advantages of cold working. They are therefore highly elastic, which in turn ensures reliable connection even after many mating cycles.
- The dimples in the plug shell ensure continuity between it and the receptacle shell, thus providing complete shielding.
- Costs are kept low by selective gold plating the contacts.
- The solder cup portions of the contacts are tin-plated for easy soldering.
- Insulator housings are made of a heat-resistant glass-filled PBT resin.

## Specifications -

#### **Materials**

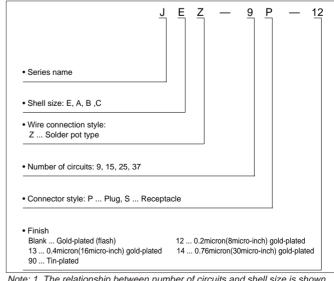
Connector	Part name	Material and Finish	
	Contact	Brass, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated	
Plug	Insulator	Glass-filled PBT, UL94V-0, black	
	Shell	Mild steel, copper-undercoated, tin-plated	
Receptacle	Contact	Phosphor bronze, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated	
	Insulator	Glass-filled PBT, UL94V-0, black	
	Shell	Mild steel, copper-undercoated, tin-plated	

#### Characteristics

Current rating	3.0A, AC, DC (2A for 37-circuits)
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	5,000M $\Omega$ min.
Withstanding voltage	1,000V AC/minute

Note: Contact JST for details.

#### Model number identification

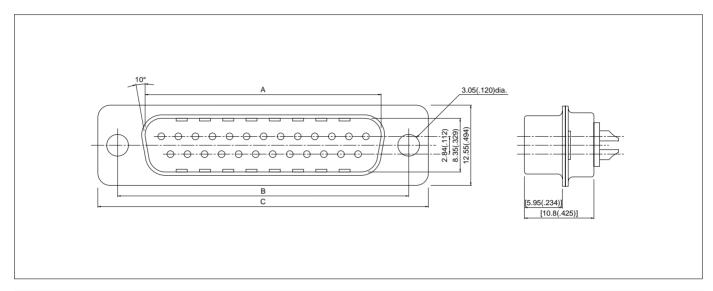


Note: 1. The relationship between number of circuits and shell size is shown below

9: E,15: A, 25: B, 37: C

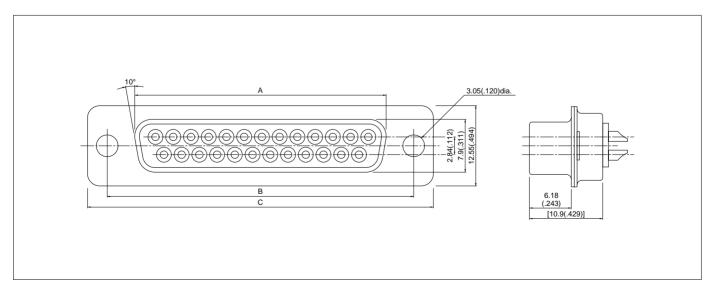
2. Contact JST for special plating requirements.

### Plug -



Circuits	Model No.			Q´ty / box		
Circuits	Gold-plated	Tin-plated	A	В	С	Q ty / box
9	JEZ- 9P	JEZ- 9P-90	16.92( .666)	24.99( .984)	30.81(1.213)	100
15	JAZ-15P	JAZ-15P-90	25.25( .994)	33.32(1.321)	39.14(1.541)	100
25	JBZ-25P	JBZ-25P-90	38.97(1.534)	47.04(1.852)	53.04(2.088)	50
37	JCZ-37P	JCZ-37P-90	55.43(2.182)	63.50(2.500)	69.32(2.729)	50

## Receptacle-



Circuits	Circuite Model No.			Q'ty / box		
Circuits	Gold-plated	Tin-plated	A	В	С	Q ty / box
9	JEZ- 9S	JEZ- 9S-90	16.34( .643)	24.99( .984)	30.81(1.213)	100
15	JAZ-15S	JAZ-15S-90	24.67( .971)	33.32(1.312)	39.14(1.541)	100
25	JBZ-25S	JBZ-25S-90	38.38(1.511)	47.04(1.852)	53.04(2.088)	50
37	JCZ-37S	JCZ-37S-90	54.84(2.159)	63.50(2.500)	69.32(2.729)	50



Right angle through-hole plug and receptacle

#### RIGHT ANGLE THROUGH-HOLE PLUG AND RECEPTACLE -

**10/17** 



Right angle through-hole plug (with hexagonal lock screw blocks)



Right angle through-hole receptacle (with rectangular lock screw blocks)



Right angle through-hole receptacle (with spring lock devices)

#### **Features**

- The receptacle contacts are made by high-speed stamping presses. This promotes the uniform elasticity of the twin-contact mating sections and therefore ensures reliable contact even after repeated mating cycles. The solder tails are U-shaped for extra strength.
- Costs are minimized by selective gold plating, high speed stamping presses, and completely automated assembly.
- To ensure complete shielding, a wide variety of grounding adapters are available so that the receptacles can be grounded to different kinds of supporting structures.
- Metric, inch or other lock screw blocks are available for fastening mating plugs.

### Specifications -

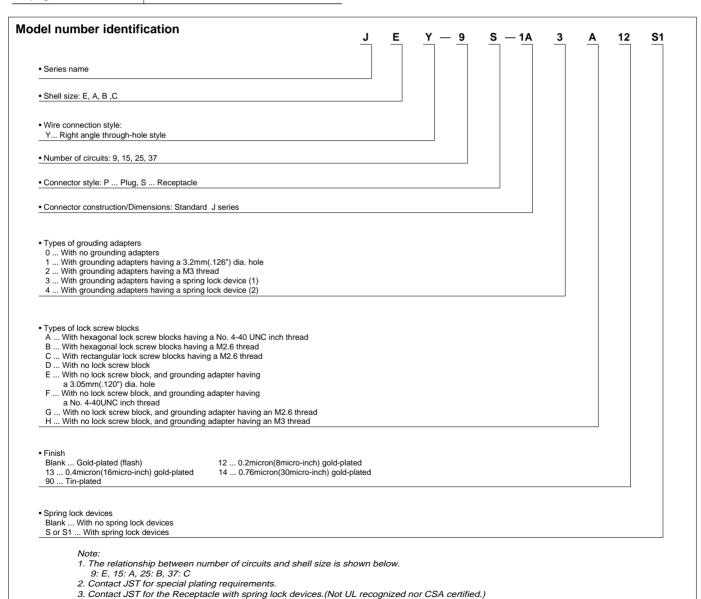
#### **Materials**

Part name	Material and Finish
Contact of plug	Brass, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated
Contact of receptacle	Phosphor bronze, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated
Insulator	Glass-filled PBT, UL94V-0, black
Shell	Mild steel, copper-undercoated, nickel-plated
Hexagonal lock screw block	Mild steel, copper-undercoated, nickel-plated
Rectangular lock screw block	Zinc, copper-undercoated, nickel-plated
Grounding adapter having a 3.2mm(.126") dia. hole	Mild steel connection described winted plated
Grounding adapter having an M3 tapped hole	Mild steel, copper-undercoated, nickel-plated
Grounding adapter having a spring lock lever	Brass, copper-undercoated, tin-plated

#### Characteristics

Current rating	3.0A, 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(.063)

Note: Contact JST for details.



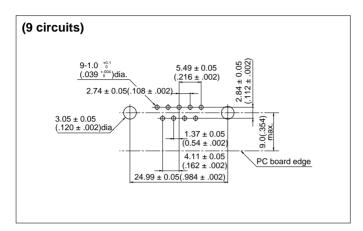
Right angle through-hole plug	Type A	Type B
H: Height of the lock screw block (for Types A, B & C)    Circuits   Gold-plated plug   tin-plated plug   A   B   C   D   E   box     9	With hexagonal lock screw blocks (H: 6.3mm (.248")) having a No.4-40UNC inch thread	With hexagonal lock screw blocks (H: 6.3mm (.248")) having a M2.6 thread
25 JBY-25P-1A** JBY-25P-1A**90 38.97(1.534) 47.04(1.852) 53.04(2.088) 8.2(.323) 9.62(.379) 40  Note:  ** shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a 9-circuit gold-plated plug with hexagonal lock screw blocks having a No.4-40UNC inch thread and without grounding adapter is required, specify the model number as JEY-9P-1A0A.	No.4-40UNC	M2.6
Without grounding adapter	0A	0B
With grounding adapter with a 3.2mm (.126") dia. hole	1A	1B
With grounding adapter with a M3 thread	2A	2B
With grounding adapter with a spring lock device (1)	3A	3B
With grounding adapter with a spring lock device (2)	_	_

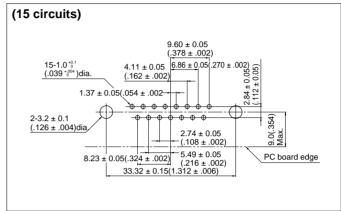
Type C	Type D	Type E	Type F	Type G	Type H
With rectangular lock screw blocks	With no lock screw block, and a bolt/	Without lock screv	has no thread.		(*0)
(H: 6.2mm (.244")) having a M2.6 threads	nut	Used a lock screw block [model number JFS-( )S-C1N]	apter has threads (*1) for s  *1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)		*1: M3 thread *2: Model number JFS-3S-( )1W(M)
M2.6	3.05mm (.120")dia. hole (0D only)	3.05mm (.120")dia. hole	No.4-40UNC	M2.6	M3
0C	0D	_	_	_	_
1C	1D	1E	1F	1G	_
2C	2D	2E	2F	2G	_
3C	3D	3E	3F	3G	_
_	_	_	_	_	4H

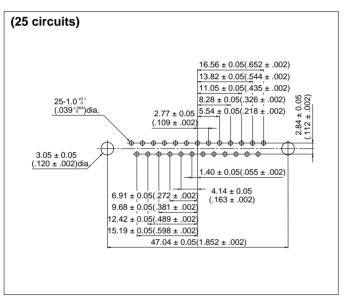
Righ	t angle thro	ugh-hole rece	eptacle					Type A	Type B
	A H D (.112)  A H D (.112)								
H: Heig	ght of the lock scr	B C rew block (for Type	(.028)	7.50 6.1 (.24 (.24	18 13) E [18.8(.740)]	0.6 (.024)		With hexagonal lock screw blocks (H: 6.3mm (.248")) having a	With hexagonal lock screw blocks (H: 6.3mm (.248")) having a
Cir- cuits	gold-plated receptacle	el No. tin-plated receptacle	A B	Dimensions m	m(in.)	E	Q'ty / box	No.4-40UNC inch thread	M2.6 thread
exampl	JEY- 9S-1A** JAY-15S-1A** JBY-25S-1A** JCY-37S-1A**  vs the location whe, if a 9-circuit go	JEY- 9S-1A**90 JAY-15S-1A**90 JBY-25S-1A**90 JCY-37S-1A**90 nere a two-digit coold-plated plug with ding adapter is requ	le (see the table hexagonal lock s	12) 39.14(1.541) 52) 53.04(2.088) 00) 69.32(2.729) below for coscrew blocks	8.1(.319) 8.2(.323) 8.2(.323) edes) should a having a	No.4-40L		No.4-40UNC	M2.6
Witho	out grounding	g adapter						0A	0B
	grounding ac a 3.2mm (.12					(Too)		1A	1B
With with	grounding ac an M3 thread	dapter d				(Co)		2A	2B
With with a	grounding ac a spring lock	dapter device (1)				(Pa)		3A	3B
	grounding ac a spring lock		ST.					_	_

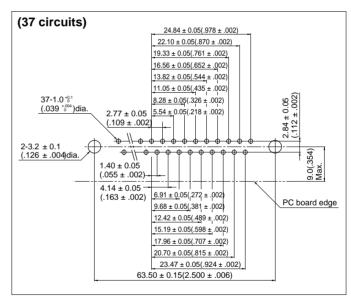
Type C	Type D	Type E	Type F	Type G	Type H
With rectangular lock screw blocks	With no lock screw block, and a bolt/	Without lock screv	has no thread.		
(H: 6.2mm (.244")) having a M2.6 threads		F, G, H: Grounding ad Used a lock screw block [model number JFS-( )S-C1N]	apter has threads (*1) for s  *1: No.4-40UNC inch thread *2: Model number JFS-4S-( )1W(M)	ecuring a separately-purchate:  *1: M2.6 thread  *2: Model number  JFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number
M2.6	3.05mm (.120")dia. hole (0D only)	3.05mm (.120")dia. hole	No.4-40UNC	M2.6	M3
0C	0D	_	_	_	_
1C	1D	1E	1F	1G	_
2C	2D	2E	2F	2G	_
3C	3D	3E	3F	3G	_
_	_	_	_	_	4H

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

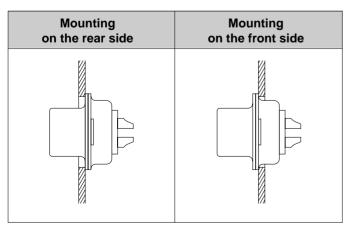






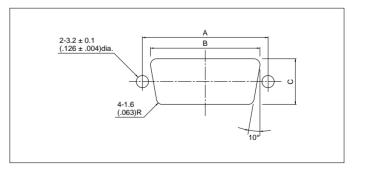


#### Panel layout

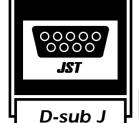


The connector can be mounted either on the front side or on the rear side of the panel as shown above.

Use M2.5 or M2.6 screws for installation.

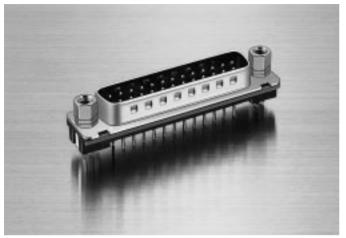


Circuits	A ± 0.15(±.006)	B ± 0.2(±.008)	C ± 0.2(±.008)
9	24.99( .984)	20.6( .811)	12.0(.472)
15	33.32(1.312)	28.8(1.134)	12.0(.472)
25	47.04(1.852)	42.6(1.677)	12.0(.472)
37	63.50(2.500)	59.0(2.323)	12.0(.472)



Straight through-hole plug and receptacle

#### STRAIGHT THROUGH-HOLE PLUG AND RECEPTACLE -



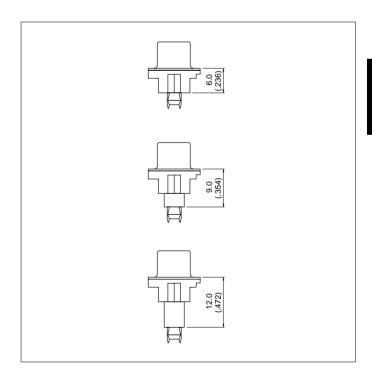
Straight through-hole plug (with hexagonal lock screw blocs)



Straight through-hole receptacle (with no lock screw block, and a grounding adapter having a No.4-40UNC inch thread)

#### **Features**

- Three standard types are available with different dimensions between the flange and solder tail: 6mm (.236"), 9mm (.354"), and 12mm (.472").
- The roots of the contact leads are covered to prevent flux from rising into the connector during soldering.
- A grounding adapter with a spring lock device allows the connector to be temporarily secured onto the printed circuit board so that the connector can be soldered easily.



### Specifications -

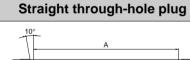
#### **Materials**

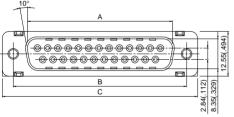
Part	name	Material and Finish	
Contact	Plug	Brass, nickel-undercoated, selective gold-plated	
Contact	Receptacle	Phosphor bronze, nickel-undercoated, selective gold-plated	
Insulator		Glass-filled PBT, UL94V-0, black	
Shell		Mild steel, copper-undercoated, nickel-plated	
Heaxagonal lock screw bock		Mild steel, copper-undercoated, nickel-plated	
Grounding adapter with spring lock device		Brass, copper-undercoated, tin-plated	

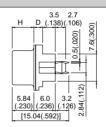
#### Characteristics

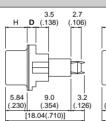
Current rating	3.0A AC, DC
Voltage rating	250V AC, DC
Temperature range	-40°C to +85°C (including temperature rise in applying electrical current)
Contact resistance	Initial value/15m $\Omega$ max. After environmental testing/30m $\Omega$ max.
Insulation resistance	5,000MΩmin.
Withstanding voltage	1,000V AC/minute
Applicable PC board thickness	1.6mm(.063")

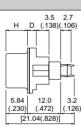
<sup>\*</sup>Contact JST for details.











With hexagonal lock screw blocks (H: 6.3mm (.248")) having a No.4-40UNC inch thread

Type A

<del>000000</del> 000000 No.4-40UNC

H: Height of the lock screw block (for Types A, B & J)

Cir- cuits Dimension between flange and solder tail mm(in.)	Dimension between	Model No.		Dimensions mm (in.)				Oltre /
	Gold-plated (flash) Plug	Gold-plated 0.76micron(30micro-inch)	А	В	С	D	Q'ty / box	
	6 (.236)	JES- 9P-2A**	JES- 9P-2A**14					
9	9 (.354)	JES- 9P-3A**	JES- 9P-3A**14	16.90	24.99	30.8	2.4	100
	12 (.472)	JES- 9P-4A**	JES- 9P-4A**14	(.665)	(.984)	(1.213)	(.094)	
	6 (.236)	JBS-25P-2A**	JBS-25P-2A**14	00.07	47.04	50.0	0.5	
25	9 (.354)	JBS-25P-3A**	JBS-25P-3A**14	(1.534)	38.97 47.04 (1.534) (1.852)		2.5 (.098)	40
	12 (.472)	JBS-25P-4A**	JBS-25P-4A**14	(1.001)	(1.002)	(2.007)	(.000)	

\*\* shows the location where a two-digit code (see the table below for codes) should be entered. For example, if a gold-plated (flash) receptacle with hexagonal lock screw blocks having a No. 4-40UNC inch thread and without grounding adapter whose dimension between flange and solder tail is 6mm(.236") is required, specify the model number as JBS-25P-2A3A.

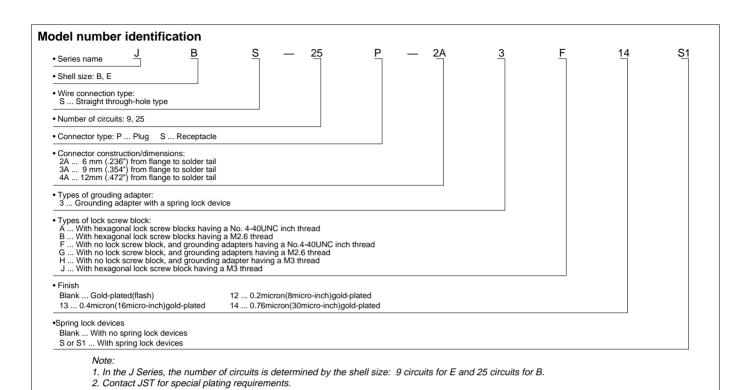
With grounding adapter with a spring lock device







3A

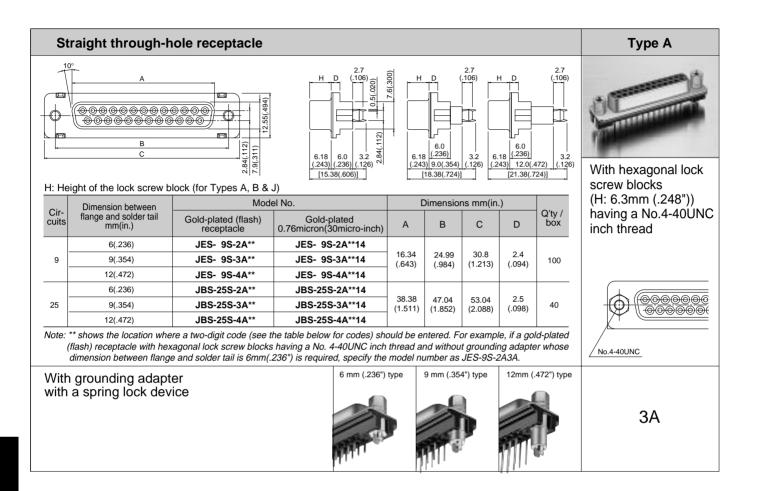


3. Contact JST for the dimensions between the flange and solder tail other than those listed above.

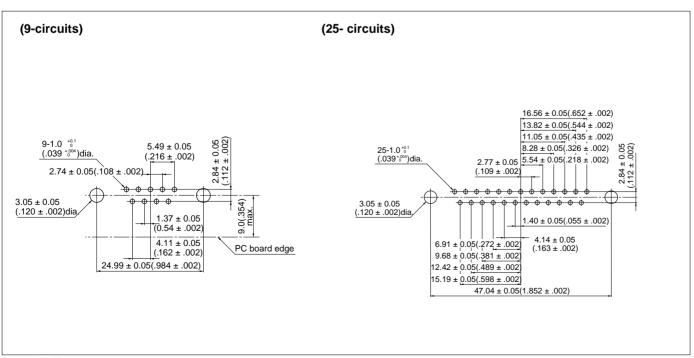
5. Contact JST for the Receptacle with spring lock devices.(Not UL recognized nor CSA certified.)

4. Grounding adapters that can secure printed circuit boards are also available.

Type B	Type F	Type G	Type H	Type J
	E TOTAL STATE OF	Traction of the second	1	
With hexagonal lock screw blocks (H: 6.3mm(.248"))	Without lock screw blo F, G, H: Grounding ac purchased lock screw	dapter has threads (*1) for	securing a separately-	With hexagonal lock screw block (H: 6.3mm (.248"))
having a M2.6 thread	*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number SFS-3S-( )1W(M)	having an M3 thread
M2.6	No.4-40UNC	M2.6	M3	M3
3B	3F	3G	3Н	3J

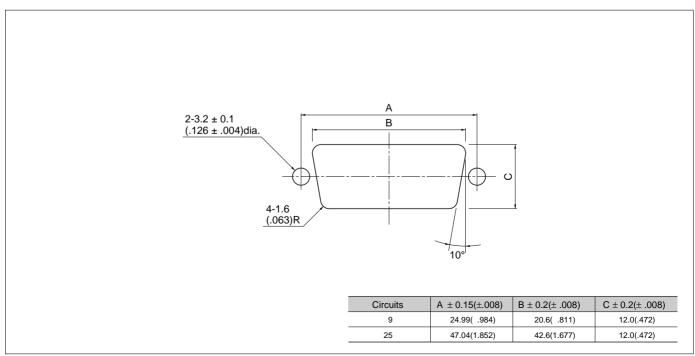


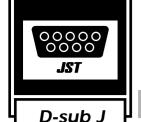
### PC board layout



Type B	Type F	Type G	Type H	Type J
With hexagonal lock screw blocks (H: 6.3mm (.248"))	Without lock screw blo F, G, H: Grounding ac purchased lo	With hexagonal lock screw blocks (H: 6.3mm (.248"))		
having a M2.6 thread	*1: No.4-40UNC inch thread *2: Model number SFS-4S-( )1W(M)	*1: M2.6 thread *2: Model number SFS-2.6S-( )1W(M)	*1: M3 thread *2: Model number SFS-3S-( )1W(M)	having a M3 thread
M2.6	No.4-40UNC	M2.6	M3	M3
3B	3F	3G	3H	3J

# Panel layout-





Crimp style plug and receptacle

#### CRIMP STYLE PLUG AND RECEPTACLE -

**BLR**.





Crimp style receptacle

#### **Features**

- The contacts of this plug are formed by high-speed stamping
  presses into continuous strips that can be automatically fed into
  our compact crimping machines. Much less time is required to
  assemble CRT and RS-232C round cables using this plug than
  when soldering connections.
- The contacts in this connector are selectively gold-plated. Moreover, JST's advanced technological knowledge and experience are fully utilized to significantly reduce production costs.
- The dimples in the connector shell provide the ground connection and are important factors in preventing electromagnetic interference. The contact has a lance that can be visually checked during assembly. This assures accurate assembly and reduces defects.

## Specifications -

#### **Materials**

Connector	Part name	Material and Finish
	Pin contact	Brass, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated
Plug	Insulator	Glass-filled PBT, UL94V-0, black
	Shell	Mild steel, copper-undercoated, tin-plated
Receptacle	Socket contact	Phosphor bronze, nickel-undercoated, selective gold-plated or copper-undercoated, tin-plated
Receptacie	Insulator	Glass-filled PBT, UL94-0, black
	Shell	Mild steel, copper-undercoated, tin-plated

#### Characteristics

Current rating	3.0A, AC, DC (2A for 37-circuits)(AWG #20)
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

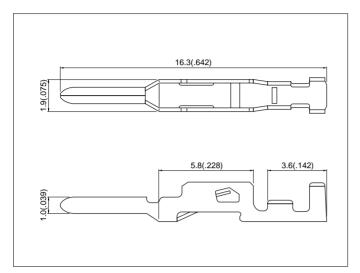
Series name	J		s	冎	2	1	4
Product shape: S Chain, B	Loose p	iece					
Type of contact: P Pin con	tact, S S	ocket co	ntact				
Applicable wire: 1 AWG #2	24-#20, 2	AWG #2	28-#24				
Material: 1 Brass, 3 Pho	sphor bron	ze					
<ul> <li>Finish</li> <li>40 Gold-plated (flash)</li> <li>43 0.4micron(16micro-incl</li> <li>90 Tin-plated</li> </ul>	h)gold-plate		0.2micı 0.76mi				
Note: Contact JST for special	plating requ	iirements	S.				
Housing							
Series name	<u>J</u>	트	<u>C</u>	_	9	<u>P</u>	
• Shell size: E, A, B ,C							
Wire connection style: C c	rimp style						
Number of circuits: 9, 15, 25,	37						
	Б	volo.			_		
• Connector style: P Plug, S	Recepta	icie					

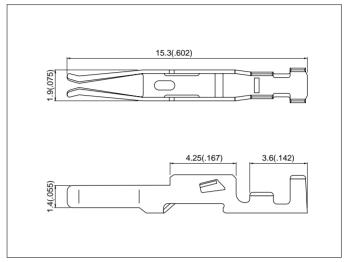
Note: The relationship between number of circuits and shell size is shown below.

9: E, 15: A, 25: B, 37: C

## Pin contact (for plug housing) ————

## Socket contact (for receptacle housing) -

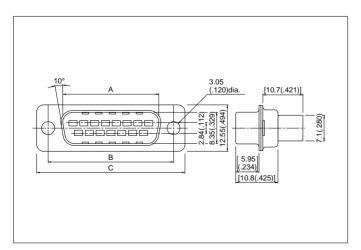




	Model No.	Applica			
Pin contact		Socket contact	A1MO #	Insulation O.D.	Q'ty / reel
Gold-plated	Tin-plated	Gold-plated	AWG#	mm(in.)	
*J-SP1140	*J-SP1190	*J-SS1340	#24 to #20	1.1 to1.8mm(.043" to .071")	40.000
J-SP2140	J-SP2190	J-SS2340	#28 to #24	0.9 to1.3mm(.035" to .051")	10,000

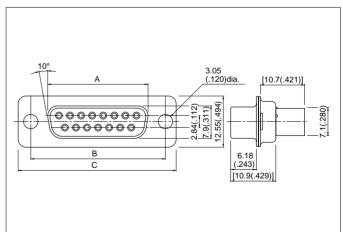
Note: Models marked \* are not CSA certified.

## Plug housing-



Cir- cuits Mod	Model No.		Dimensions mm	(in.)	Q'ty/
	iviodei ivo.	А	В	С	box
9	JEC- 9P	16.92( .666)	24.99( .984)	30.81(1.213)	100
15	JAC-15P	25.25( .994)	33.32(1.312)	39.14(1.541)	100
25	JBC-25P	38.97(1.534)	47.04(1.852)	53.04(2.088)	50
37	JCC-37P	55.43(2.182)	63.50(2.500)	69.32(2.729)	50

# Receptacle housing -



Cir-	Madal Na	Dimensions mm(in.)					
cuits Model No.		А	В	С	box		
9	JEC- 9S	16.34( .643)	24.99( .984)	30.81(1.213)	100		
15	JAC-15S	24.67( .971)	33.32(1.312)	39.14(1.541)	100		
25	JBC-25S	38.38(1.511)	47.04(1.852)	53.04(2.088)	50		