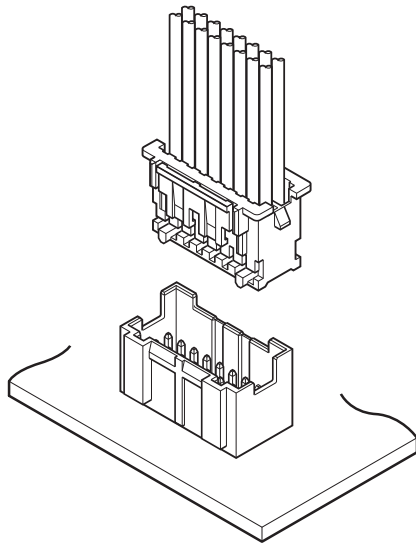# PAD CONNECTOR

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

This is a 2.0 mm pitch wire-to-board connector with dual-row structure and secure locking mechanism.

- Secure lock mechanism
- High reliability contact
- Insertion guide structure
- Polarity bosses are available.
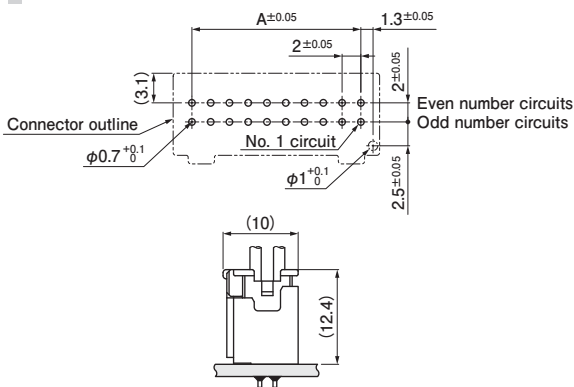
■ Standards
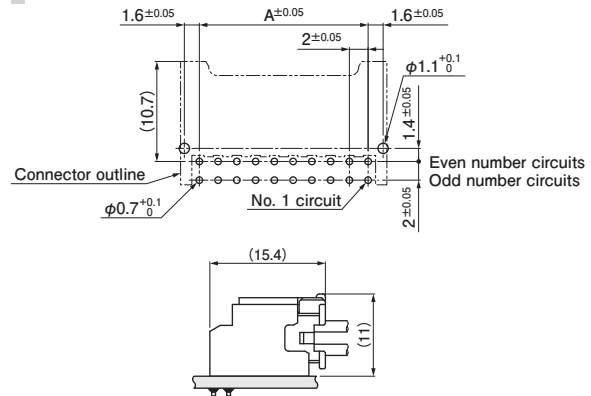
U®:Recognized E 60389
△ :R50053749

■ Specifications

- Current rating: 3 A AC/DC （AWG #22）
- Voltage rating: 250 V AC/DC
- Temperature range: −25℃ to +85℃
  （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:
  There shall be no breakdown or flashover while applying 800 VAC for one minute.
- Applicable wire range:
  Conductor size/ AWG #28 to AWG #22
  Insulation O.D./ ϕ0.76 mm to ϕ1.5 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.

PC board layout and Assembly layout

Top entry type

A±0.05 1.3±0.05
2±0.05
2±0.05
(3.1)
Connector outline
Even number circuits
Odd number circuits
ϕ0.7$^{+0.1}_{0}$
No. 1 circuit
ϕ1$^{+0.1}_{0}$
2.5±0.05
(10)
(12.4)

Side entry type

1.6±0.05 A±0.05 1.6±0.05
2±0.05
(10.7)
ϕ1.1$^{+0.1}_{0}$
1.4±0.05
Connector outline
Even number circuits
Odd number circuits
ϕ0.7$^{+0.1}_{0}$
No. 1 circuit
2±0.05
(15.4)
(11)

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 ± 0.05, and shall not accumulate more than ± 0.05.
   4. Hole dimensions differ according to the type of PC board and piercing method.
   5. Please contact JST for details as the dimensions shown in the above figure are reference values.
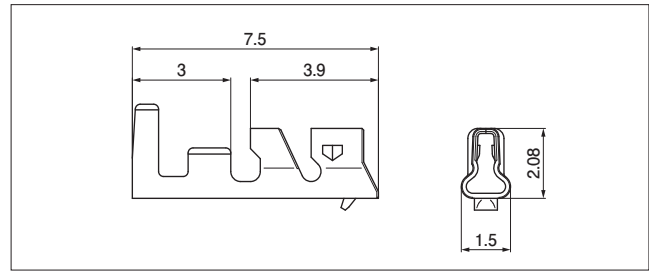
JST

PAD CONNECTOR

Contact
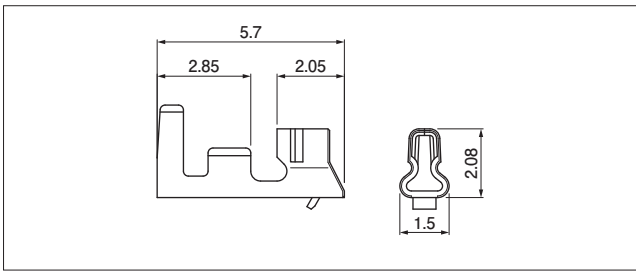
Model No.	Applicable wire range		Q'ty/reel
	Conductor size AWG (mm²)	Insulation O.D. (mm)	
SPH-002T-P0.5L	#28 to #24 (0.08 to 0.22)	0.8 to 1.5	8,000
SPH-001T-P0.5L	#26 to #22 (0.13 to 0.33)	1.0 to 1.5	

Material and Surface finish, etc.
Phosphor bronze, tin-plated

Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SPH-002T-P0.5L	AP-K2N	MKS-L	APLMK SPH002-05L
SPH-001T-P0.5L			APLMK SPH001-05L

Note: Contact JST for fully automatic crimping applicator.

Model No.	Applicable wire range		Q'ty/reel
	Conductor size AWG (mm²)	Insulation O.D. (mm)	
SPND-002T-C0.5	#28 to #24 (0.08 to 0.22)	0.76 to 1.5	8,000
SPND-001T-C0.5	#26 to #22 (0.13 to 0.33)	1.0 to 1.5	

Material and Surface finish, etc.
Copper alloy, tin-plated

Note: This product has improved insertion and extraction operations.

Crimping machine

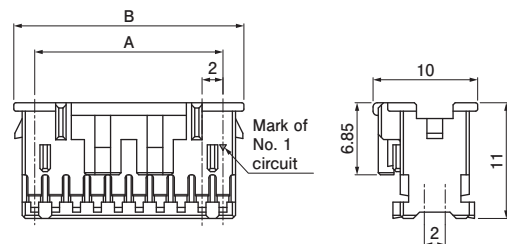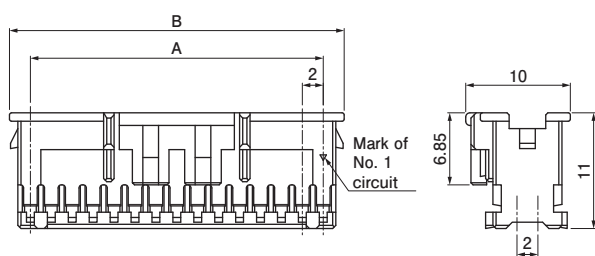| Contact	Crimping machine	Applicator	Crimp applicator with dies
SPND-002T-C0.5	AP-K2N	MKS-L	APLMK SPAD/ND002-05
SPND-001T-C0.5			APLMK SPND001-05

Note: Contact JST for fully automatic crimping applicator.

Housing

<10 to 14 circuits>
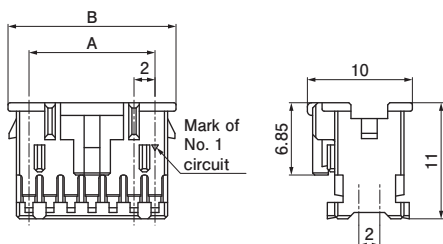
<16 to 24 circuits>

<40 circuits>

No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
10	PADP-10V-1-S	8.0	12.0	1,000
12	PADP-12V-1-S	10.0	14.0	1,000
14	PADP-14V-1-S	12.0	16.0	1,000
16	PADP-16V-1-S	14.0	18.0	1,000
20	PADP-20V-1-S	18.0	22.0	1,000
22	PADP-22V-1-S	20.0	24.0	1,000
24	PADP-24V-1-S	22.0	26.0	1,000
40	※PADP-40V-1-S	38.0	42.0	500

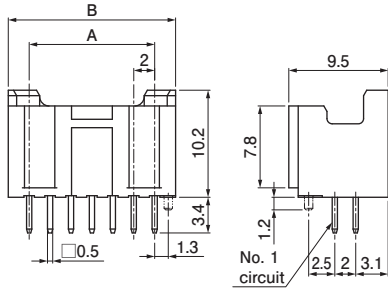| Material and Surface finish, etc. |
|---|
| PA 66, UL94V-0, natural (white) |

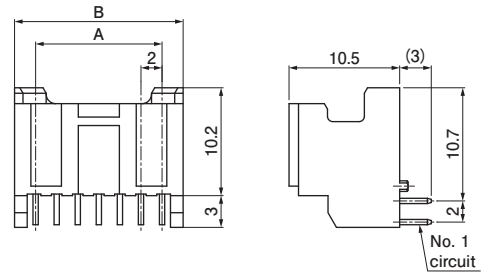Note: Product marked with an asterisk (*) is not TÜV-listed.
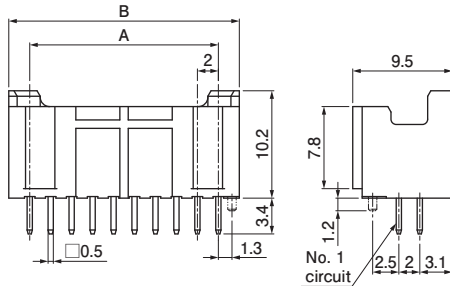
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PAD CONNECTOR

Header

Top entry type

<10 to 14 circuits>

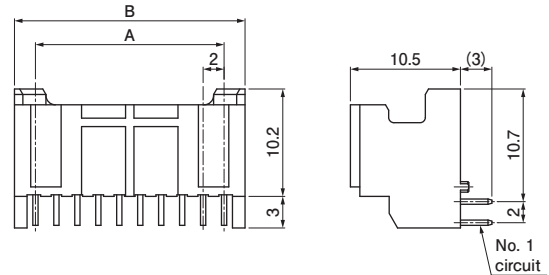**<16 to 24 circuits>**

<40 circuits>

Side entry type

<10 to 14 circuits>

<16 to 24 circuits>

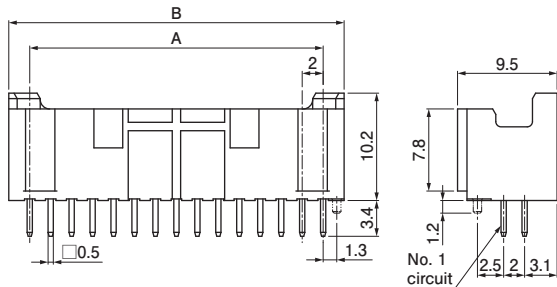| No. of circuits	Model No.			Dimensions (mm)		Q'ty/box	
	Top entry type		Side entry type	A	B	Top entry type	Side entry type
	Without a boss	With a boss					
10	B10B-PADSS-F	B10B-PADSS-1F	S10B-PADSS-1	8.0	12.0	400	504
12	B12B-PADSS-F	B12B-PADSS-1F	S12B-PADSS-1	10.0	14.0	300	420
14	B14B-PADSS-F	B14B-PADSS-1F	S14B-PADSS-1	12.0	16.0	300	364
16	B16B-PADSS-F	B16B-PADSS-1F	S16B-PADSS-1	14.0	18.0	200	336
20	B20B-PADSS-F	B20B-PADSS-1F	S20B-PADSS-1	18.0	22.0	150	280
22	B22B-PADSS-F	B22B-PADSS-1F	—	20.0	24.0	150	—
24	B24B-PADSS-F	B24B-PADSS-1F	S24B-PADSS-1	22.0	26.0	150	224
40	—	*B40B-PADSS-1F	—	38.0	42.0	100	—

Material and Surface finish, etc.

Post: Copper alloy, copper-undercoated, tin-plated
Wafer: Top entry type/PA 66 (Glass-filled), UL94V-0, natural (ivory)
   Side entry type/PBT (Glass-filled), UL94V-0, natural (white)

Note: 1. Product marked with an asterisk (*) is not TÜV-listed.
   2. This product displays (LF)(SN) on a label.

JST

PAD CONNECTOR

Model number allocation

Contact

S PH - 002 T - P 0.5 L

- Supply form: Strip form
- Series name
- Applicable wire range:
  - 002···AWG #28 to AWG #24
  - 001···AWG #26 to AWG #22
- Surface finish: Tin-plated
- Material: Phosphor bronze
- Applicable post size
- Auxiliary symbol

S PND - 002 T - C 0.5

- Supply form: Strip form
- Series name
- Applicable wire range:
  - 002···AWG #28 to AWG #24
  - 001···AWG #26 to AWG #22
- Surface finish: Tin-plated
- Material: Copper alloy
- Applicable post size

Housing

PAD P - 16 V - 1 - S

- Series name
- Type: Socket housing
- No. of circuits
- Flammability: UL94V-0
- Auxiliary symbol
- Color: S···Natural（White）, K···Black, R···Red, Y···Yellow,
  E···Blue, M···Green, L···Lemon yellow

Header（Top entry type）

B 16 B - PAD S S - 1 F

- Header type: Top entry type
- No. of circuits
- Assembly product
- Series name
- Color: S···Natural（Ivory）, K···Black, R···Red,
  Y···Yellow, E···Blue, M···Green,
  L···Lemon yellow
- Clinched（Kinked）/ Not clinched: Straight
- Presence of boss: Blank···Without boss, 1···With boss
- Auxiliary symbol

Header (Side entry type)

S 16 B - PAD S S - 1

- Header type: Side entry type
- No. of circuits
- Assembly product
- Series name
- Color: S···Natural（White）, K···Black, Y···Yellow,
  E···Blue, P···Purple
- Clinched（Kinked）/ Not clinched: Straight
- Presence of boss: With boss

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