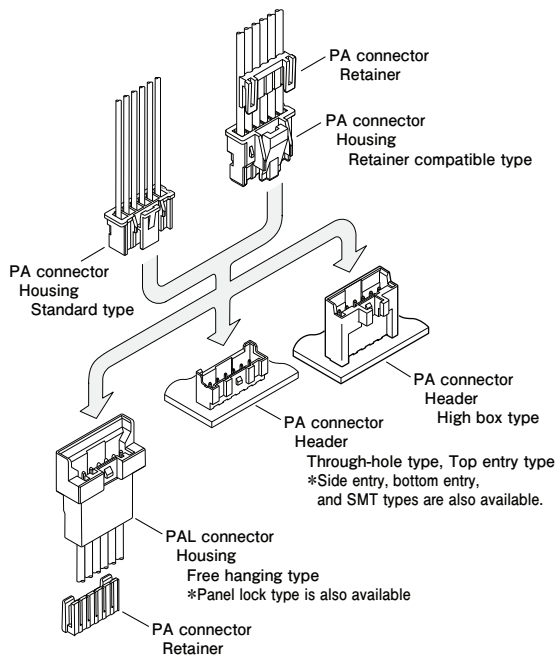


# PA FAMILY/PA·PAL CONNECTOR

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



The 2.0 mm pitch PA family is a versatile product line consisting of two series: PA connectors for wire-to-board connections and PAL connectors for wire-to-wire connections that mate with PA connectors. This product family contributes to expanding equipment design flexibility.

- Secure lock mechanism
- Retainers can be used, depending on the application.
- Extensive product lineup

## PA connector

- High reliability contact
- Keyed housing structure to guide mating process
- Header post with reinforced retention base (Top entry, through-hole type)

## PAL connector

- Keyed housing structure to guide mating process
- Both free-hanging and panel-lock types are available, depending on your application.

## Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

- \* Specifications registered to overseas standards may differ from the general specifications listed on the next page.

## Specifications

### PA connector/ Standard type

#### (Retainer non-compatible type)

- Current rating: 3 A AC/DC (AWG #22)
- Voltage rating: 250 V AC/DC
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10 mΩ max.  
After test/ 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. /  $\phi$  0.76 mm to  $\phi$  1.5 mm
- Applicable PC board thickness: 1.6 mm

### PA connector/ Retainer compatible type

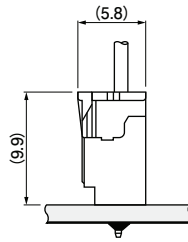
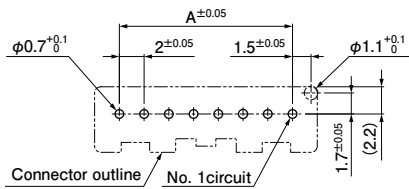
- Current rating: 3 A AC/DC (AWG #22)
- Voltage rating: 100 V AC/DC
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 15 mΩ max.  
After test/ 25 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage:  
There shall be no breakdown or flashover while applying 800 VAC for one minute.
- Applicable wire range:  
Conductor size/ AWG #26 to AWG #22  
Insulation O.D. /  $\phi$  0.9 mm to  $\phi$  1.5 mm
- Applicable PC board thickness: 1.6 mm

### PAL connector

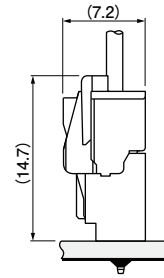
- Current rating: 3 A AC/DC (AWG #22)
  - Voltage rating: 100 V AC/DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/ 15 mΩ max.  
After test/ 25 mΩ max.
  - Insulation resistance: 1,000 MΩ min.
  - Withstanding 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. /  $\phi$  0.9 mm to  $\phi$  1.5 mm
  - Applicable Panel thickness: 0.5 mm to 2.0 mm
- \* Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
- \* RoHS2 compliance
  - \* Dimensional unit: mm
  - \* Contact JST for details.

## PC board layout and Assembly layout/ PA connector Header (Through-hole type)

### Top entry type

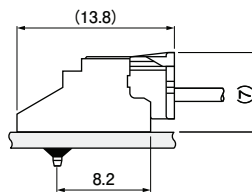
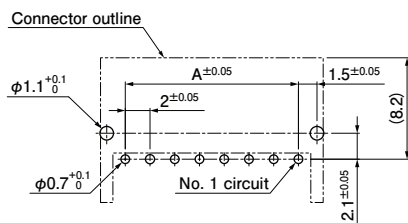


When mating with a standard type

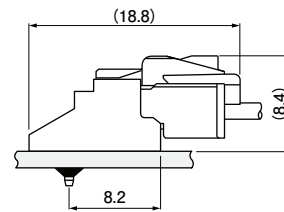


When mating with a retainer compatible type

### Side entry type

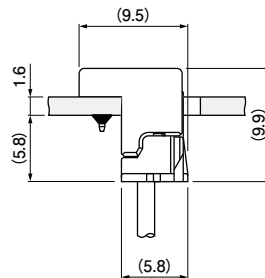
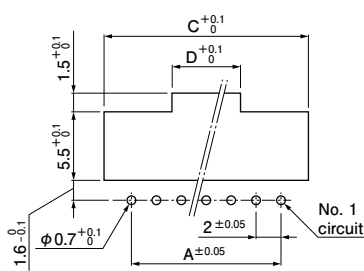


When mating with a standard type

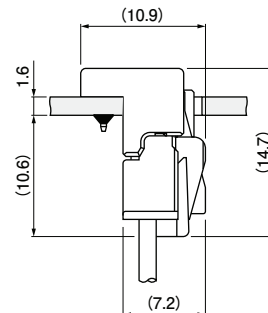


When mating with a retainer compatible type

### Bottom entry type, Standard type

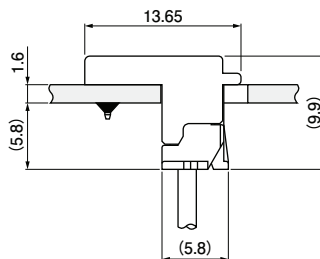
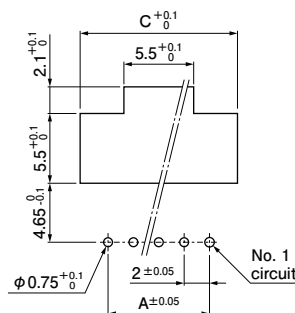


When mating with a standard type

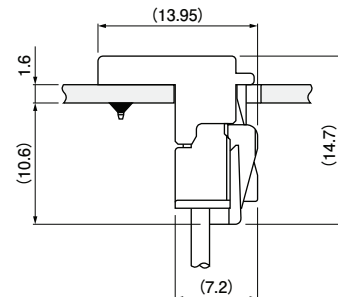


When mating with a retainer compatible type

### Bottom-entry type with extended length



When mating with a standard type

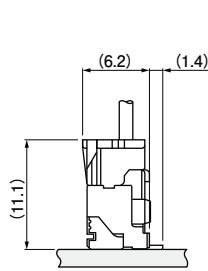
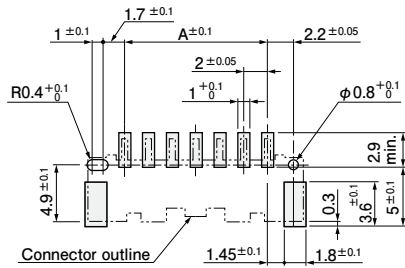


When mating with a retainer compatible type

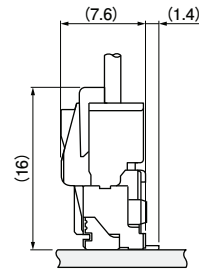
- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.05$ .  
 3. Dimensions A, C and D: See "PA connector/ Header (Through-hole type)" section on pages 9 and 10.  
 4. Hole dimensions differ depending on the type of PCB and PCB drilling method.  
 The above dimensions are for reference only. Please contact JST for further details.  
 5. The dimensions for mating direction of the retainer compatible type also include the retainer.

## PC board layout and Assembly layout/ PA connector Header (SMT type)

### Top entry type

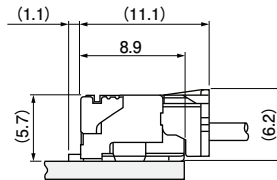
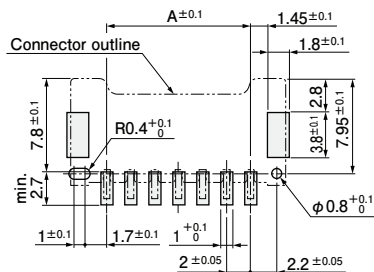


When mating with a standard type

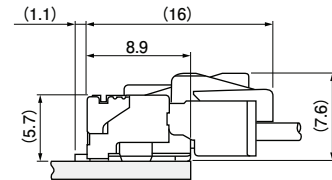


When mating with a retainer compatible type

### Side entry type



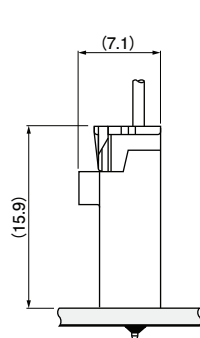
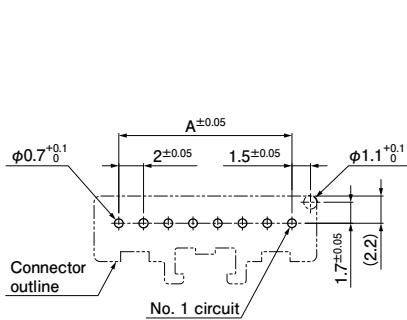
When mating with a standard type



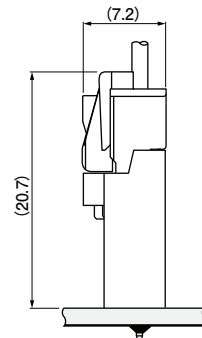
When mating with a retainer compatible type

- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB pattern pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.1$ .  
 3. Dimension A: See "PA connector/ Header (SMT type)" section on page 11.  
 4. The dimensions for mating direction of the retainer compatible type also include the retainer.  
 5. The above dimensions are for reference only. Please contact JST for further details.

## PC board layout and Assembly layout/ PA connector Header (High box type)



When mating with a standard type

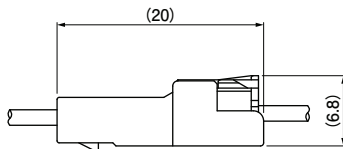


When mating with a retainer compatible type

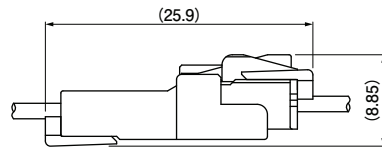
- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.05$ .  
 3. Dimension A: See "PA connector/ Header (High box type)" section on page 12.  
 4. Hole dimensions differ depending on the type of PCB and PCB drilling method.  
 The above dimensions are for reference only. Please contact JST for further details.  
 5. The dimensions for mating direction of the retainer compatible type also include the retainer.

## Assembly layout and Panel layout/ PAL connector (Wire-to-Wire connector)

### Free hanging type

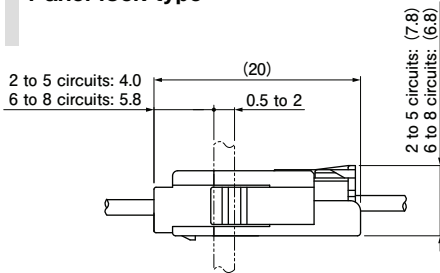


When mating with a standard type



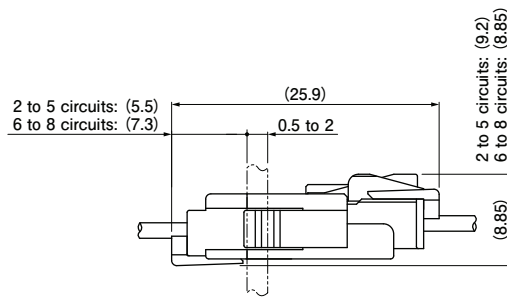
When mating with a retainer compatible type

### Panel lock type



2 to 5 circuits: 4.0  
6 to 8 circuits: 5.8

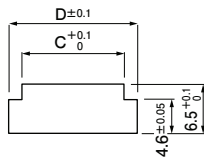
When mating with a standard type



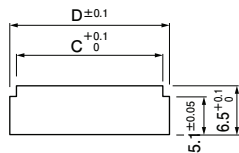
2 to 5 circuits: (5.5)  
6 to 8 circuits: (7.3)

When mating with a retainer compatible type

#### <2 to 5 circuits>



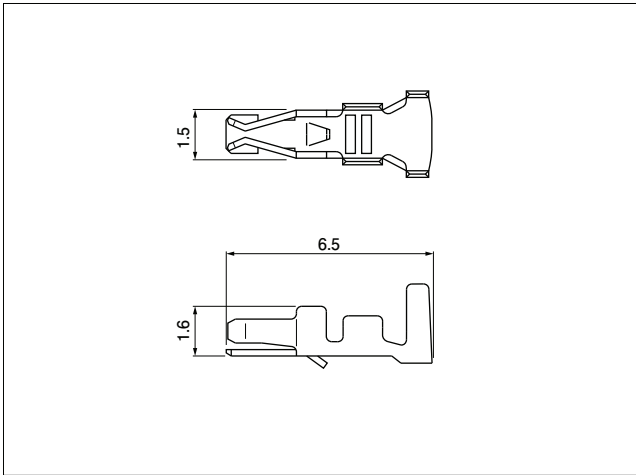
#### <6 to 8 circuits>



- Note: 1. The dimensions for mating direction of the retainer compatible type also include the retainer.  
 2. Dimensions C and D: See "PAL connector/ Housing" section on page 13.  
 3. Drill holes correspond to panel layout dimensions to prevent the formation of burrs, etc.  
 4. When drilling multiple holes adjacent to each other on a panel, please be aware that there will likely be a reduction in panel strength.  
 5. Please ensure that the panel cutout is oriented to match the connector mounting direction.  
 6. The above dimensions are for reference only. Please contact JST for further details.

# PA FAMILY/PA · PAL CONNECTOR

## PA connector/ Contact (Standard type)



Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm <sup>2</sup> )	Insulation O.D. (mm)	
SPHD-002T-P0.5	#28 to #24 (0.08 to 0.21)	0.76 to 1.5	8,000
SPHD-001T-P0.5	#26 to #22 (0.13 to 0.33)	1.0 to 1.5	8,000

Material and Surface finish, etc.

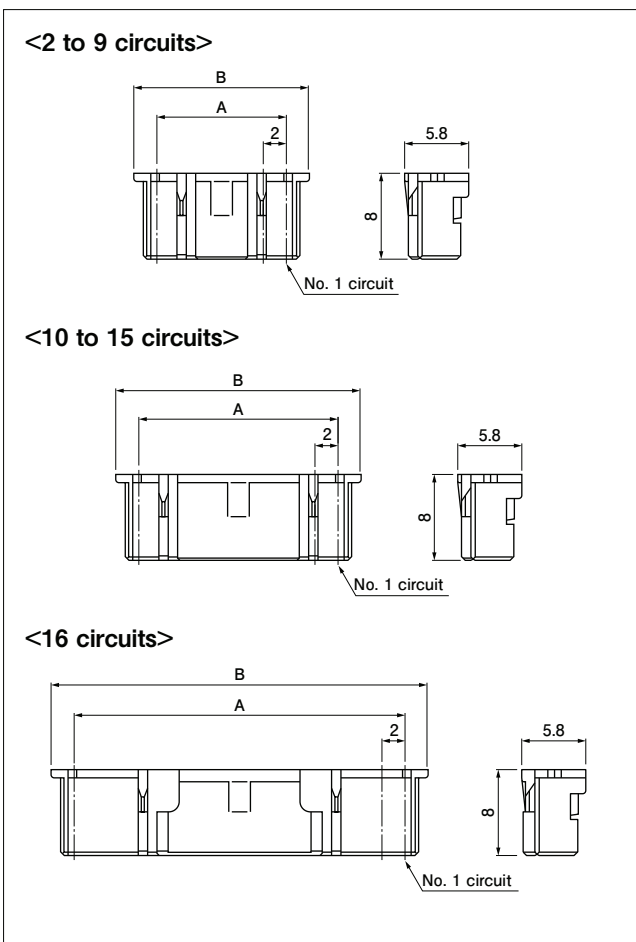
Copper alloy, tin-plated

### Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SPHD-002T-P0.5	AP-K2N	MKS-L-10	APLMK SPHD002-05
SPHD-001T-P0.5			APLMK SPHD001-05

Note: Contact JST for fully automatic crimping applicator.

## PA connector/ Housing (Standard type)



No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	PAP-02V-S	2.0	6.0	1,000
3	PAP-03V-S	4.0	8.0	1,000
4	PAP-04V-S	6.0	10.0	1,000
5	PAP-05V-S	8.0	12.0	1,000
6	PAP-06V-S	10.0	14.0	1,000
7	PAP-07V-S	12.0	16.0	1,000
8	PAP-08V-S	14.0	18.0	1,000
9	PAP-09V-S	16.0	20.0	1,000
10	PAP-10V-S	18.0	22.0	1,000
11	PAP-11V-S	20.0	24.0	1,000
12	PAP-12V-S	22.0	26.0	1,000
13	PAP-13V-S	24.0	28.0	1,000
14	PAP-14V-S	26.0	30.0	1,000
15	PAP-15V-S	28.0	32.0	1,000
16	PAP-16V-S	30.0	34.0	1,000

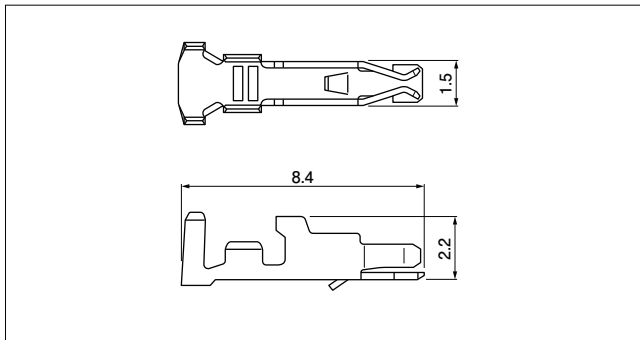
Material and Surface finish, etc.

PA, natural

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

# PA FAMILY/PA · PAL CONNECTOR

## PA connector/ Contact (Retainer compatible type)



Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm <sup>2</sup> )	Insulation O.D.(mm)	
SPA-001T-P0.5	#26 to #22 (0.13 to 0.33)	0.9 to 1.5	10,000

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

### Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SPA-001T-P0.5	AP-K2N	MKS-L	APLMK SPA001-05

Note: Contact JST for fully automatic crimping applicator.

## PA connector/ Housing (Retainer compatible type)

<2 circuits>

<3 circuits>

<4 circuits>

<5 circuits>

<6 to 9 circuits>

<10 to 13, 15 circuits>

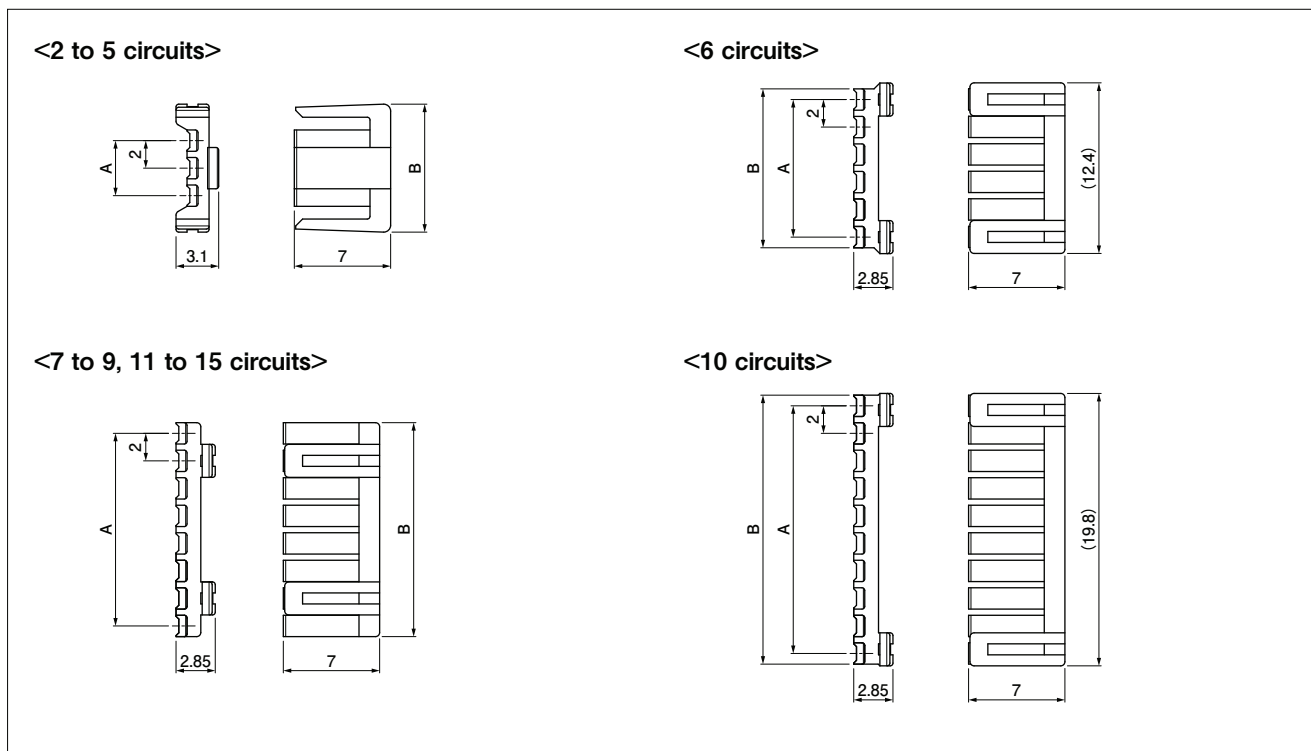
No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	PARP-02V	2.0	5.4	1,000
3	PARP-03V	4.0	7.4	1,000
4	PARP-04V	6.0	9.4	1,000
5	PARP-05V	8.0	11.4	1,000
6	PARP-06V	10.0	14.0	1,000
7	PARP-07V	12.0	16.0	1,000
8	PARP-08V	14.0	18.0	1,000
9	PARP-09V	16.0	20.0	1,000
10	PARP-10V	18.0	22.0	1,000
11	PARP-11V	20.0	24.0	500
12	PARP-12V	22.0	26.0	500
13	PARP-13V	24.0	28.0	500
15	PARP-15V	28.0	32.0	500

Material and Surface finish, etc.  
PA, natural

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

# PA FAMILY/PA · PAL CONNECTOR

## PA connector/ Retainer



No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	PMS-02V-S	2.0	7.3	1,000
3	PMS-03V-S	4.0	9.3	1,000
4	PMS-04V-S	6.0	11.3	1,000
5	PMS-05V-S	8.0	13.3	1,000
6	PMS-06V-S	10.0	11.55	1,000
7	PMS-07V-S	12.0	13.55	1,000
8	PMS-08V-S	14.0	15.55	1,000
9	PMS-09V-S	16.0	17.55	1,000
10	PMS-10V-S	18.0	19.55	1,000
11	PMS-11V-S	20.0	21.55	1,000
12	PMS-12V-S	22.0	23.55	1,000
13	PMS-13V-S	24.0	25.55	1,000
15	PMS-15V-S	28.0	29.55	1,000

Material and Surface finish, etc.

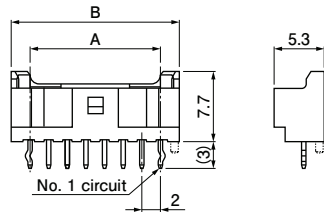
PA (GF), natural

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

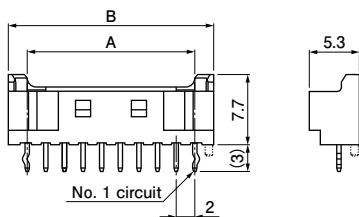
## PA connector/ Header (Through-hole type)

### Top entry type

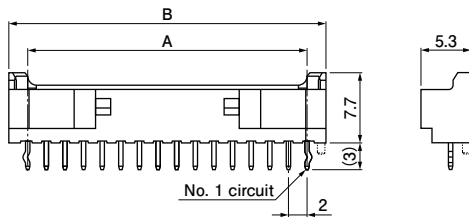
<2 to 9 circuits>



<10 to 15 circuits>

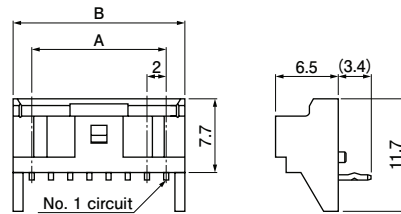


<16 circuits>

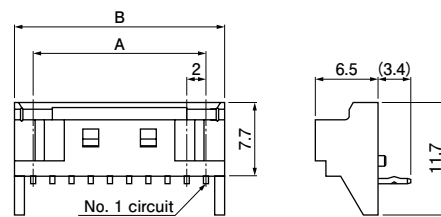


### Side entry type

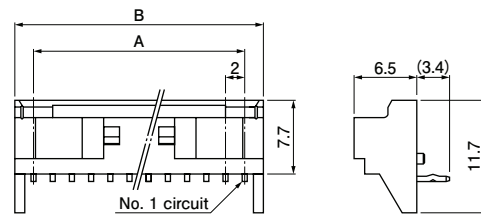
<2 to 9 circuits>



<10 to 15 circuits>



<16 circuits>



No. of circuits	Model No.		Side entry type	Dimensions (mm)		Q'ty/box	
	Top entry type			A	B	Top entry type	Side entry type
	Without boss	With boss					
2	B02B-PAFYK-A*)	B02B-PAFYK-1A*)	—	2.0	6.0	1,000	—
2	B02B-PASK	B02B-PASK-1	S02B-PASK-2	2.0	6.0	1,000	1,000
3	B03B-PASK	B03B-PASK-1	S03B-PASK-2	4.0	8.0	1,000	1,000
4	B04B-PASK	B04B-PASK-1	S04B-PASK-2	6.0	10.0	1,000	500
5	B05B-PASK	B05B-PASK-1	S05B-PASK-2	8.0	12.0	500	500
6	B06B-PASK	B06B-PASK-1	S06B-PASK-2	10.0	14.0	500	500
7	B07B-PASK	B07B-PASK-1	S07B-PASK-2	12.0	16.0	500	250
8	B08B-PASK	B08B-PASK-1	S08B-PASK-2	14.0	18.0	500	250
9	B09B-PASK	B09B-PASK-1	S09B-PASK-2	16.0	20.0	500	250
10	B10B-PASK	B10B-PASK-1	S10B-PASK-2	18.0	22.0	500	250
11	B11B-PASK	B11B-PASK-1	S11B-PASK-2	20.0	24.0	250	250
12	B12B-PASK	B12B-PASK-1	S12B-PASK-2	22.0	26.0	250	250
13	B13B-PASK	B13B-PASK-1	S13B-PASK-2	24.0	28.0	250	200
14	B14B-PASK	B14B-PASK-1	S14B-PASK-2	26.0	30.0	250	200
15	B15B-PASK	B15B-PASK-1	S15B-PASK-2	28.0	32.0	250	200
16	B16B-PASK	B16B-PASK-1	S16B-PASK-2	30.0	34.0	250	200

Material and Surface finish, etc.

Post: Copper alloy, tin-plated

Base housing: PBT (GF), natural

\*) PA, fluorescent yellow

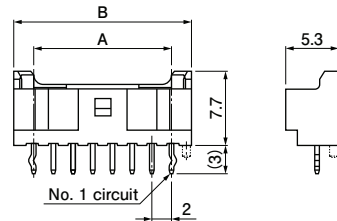
Note: 1. This product displays (LF)(SN) on a label.

2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

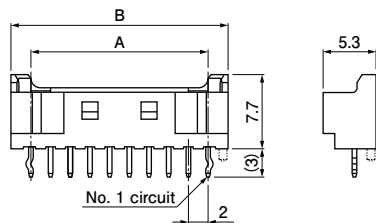
## PA connector/ Header (Through-hole type)

### Top entry type, N type

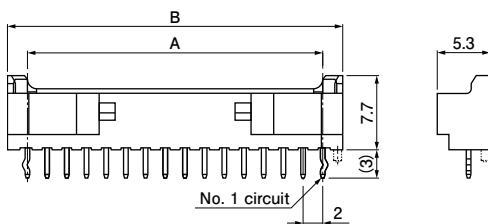
<2 to 9 circuits>



<10 to 15 circuits>

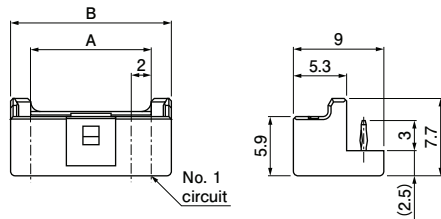


<16 circuits>

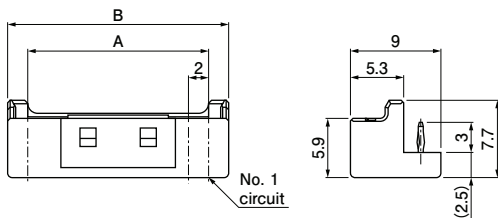


### Bottom entry type, Standard type

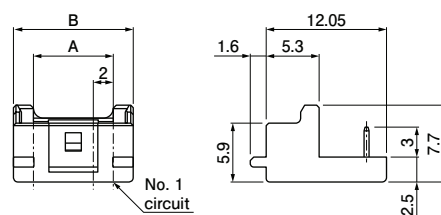
<5, 8 circuits>



<11, 12 circuits>



### Bottom-entry type with extended length



### Top entry type, N type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Without boss	With boss	A	B	
2	B02B-PASK-N	B02B-PASK-1N	2.0	6.0	1,000
3	B03B-PASK-N	B03B-PASK-1N	4.0	8.0	1,000
4	B04B-PASK-N	B04B-PASK-1N	6.0	10.0	1,000
5	B05B-PASK-N	B05B-PASK-1N	8.0	12.0	500
6	B06B-PASK-N	B06B-PASK-1N	10.0	14.0	500
7	B07B-PASK-N	B07B-PASK-1N	12.0	16.0	500
8	B08B-PASK-N	B08B-PASK-1N	14.0	18.0	500
9	B09B-PASK-N	B09B-PASK-1N	16.0	20.0	500
10	B10B-PASK-N	B10B-PASK-1N	18.0	22.0	500
11	B11B-PASK-N	B11B-PASK-1N	20.0	24.0	250
12	B12B-PASK-N	B12B-PASK-1N	22.0	26.0	250
13	B13B-PASK-N	B13B-PASK-1N	24.0	28.0	250
14	B14B-PASK-N	B14B-PASK-1N	26.0	30.0	250
15	B15B-PASK-N	B15B-PASK-1N	28.0	32.0	250
16	B16B-PASK-N	B16B-PASK-1N	30.0	34.0	250

Material and Surface finish, etc.

Post: Copper alloy, tin-plated  
Base housing: PA (GF), natural

Note: 1. This product displays (LF)(SN) on a label.

2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

### Bottom entry type, Standard type

No. of circuits	Model No.	Dimensions (mm)				Q'ty/bag
		A	B	C	D	
5	BE05B-PASK	8.0	12.0	12.4	5.5	300
8	BE08B-PASK	14.0	18.0	18.4	5.5	200
11	BE11B-PASK	20.0	24.0	24.4	12.0	150
12	BE12B-PASK	22.0	26.0	26.4	12.0	150

Material and Surface finish, etc.

Post: Copper alloy, tin-plated  
Base housing: PBT (GF), natural

Note: 1. This product displays (LF)(SN) on a label.

2. Dimensions C and D: See "PC board layout/ PA connector Header (Through-hole type)" section on page 3.

3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

### Bottom-entry type with extended length

No. of circuits	Model No.	Dimensions (mm)			Q'ty/box
		A	B	C	
4	BE04B-PASK-C	6.0	10.0	10.4	1,050
5	BE05B-PASK-C	8.0	12.0	12.4	875
6	BE06B-PASK-C	10.0	14.0	14.4	750

Material and Surface finish, etc.

Post: Copper alloy, tin-plated  
Base housing: PA (GF), natural

Note: 1. This product displays (LF)(SN) on a label.

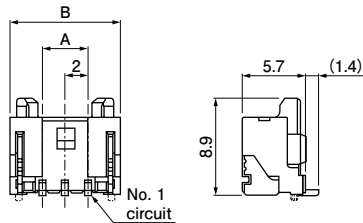
2. Dimension C: See "PC board layout/ PA connector Header (Through-hole type)" section on page 3.

3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

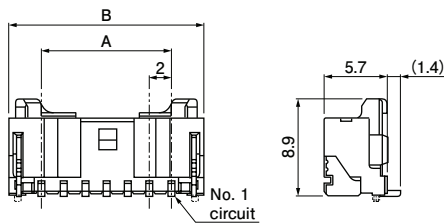
## PA connector/ Header (SMT type)

### Top entry type

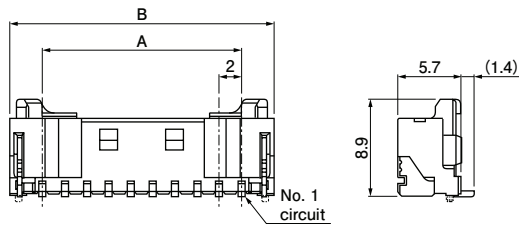
<2, 3 circuits>



<4 to 9 circuits>

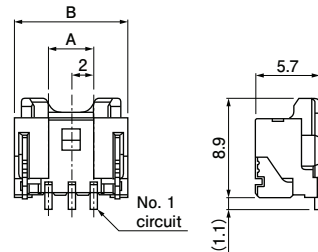


<10 to 13, 15 circuits>

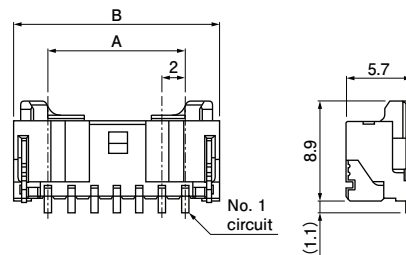


### Side entry type

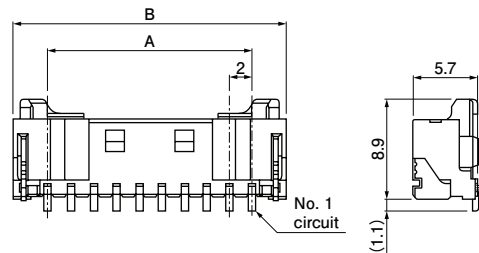
<2, 3 circuits>



<4 to 9 circuits>



<10 to 13, 15 circuits>



No. of circuits	Model No.				Dimensions (mm)		Q'ty/reel	
	Top entry type		Side entry type		A	B	Top entry type	Side entry type
	Without boss	With boss	Without boss	With boss				
2	BM02B-PASS-(*)1	BM02B-PASS-1-(*)1	SM02B-PASS-(*)2	SM02B-PASS-1-(*)2	2.0	8.0	500	1,000
3	BM03B-PASS-(*)1	BM03B-PASS-1-(*)1	SM03B-PASS-(*)2	SM03B-PASS-1-(*)2	4.0	10.0	500	1,000
4	BM04B-PASS-(*)1	BM04B-PASS-1-(*)1	SM04B-PASS-(*)2	SM04B-PASS-1-(*)2	6.0	12.0	500	1,000
5	BM05B-PASS-(*)1	BM05B-PASS-1-(*)1	SM05B-PASS-(*)2	SM05B-PASS-1-(*)2	8.0	14.0	500	1,000
6	BM06B-PASS-(*)1	BM06B-PASS-1-(*)1	SM06B-PASS-(*)2	SM06B-PASS-1-(*)2	10.0	16.0	500	1,000
7	BM07B-PASS-(*)1	BM07B-PASS-1-(*)1	SM07B-PASS-(*)2	SM07B-PASS-1-(*)2	12.0	18.0	500	1,000
8	BM08B-PASS-(*)1	BM08B-PASS-1-(*)1	SM08B-PASS-(*)2	SM08B-PASS-1-(*)2	14.0	20.0	500	1,000
9	BM09B-PASS-(*)1	BM09B-PASS-1-(*)1	SM09B-PASS-(*)2	SM09B-PASS-1-(*)2	16.0	22.0	500	1,000
10	BM10B-PASS-(*)1	BM10B-PASS-1-(*)1	SM10B-PASS-(*)2	SM10B-PASS-1-(*)2	18.0	24.0	500	1,000
11	BM11B-PASS-(*)1	BM11B-PASS-1-(*)1	SM11B-PASS-(*)2	SM11B-PASS-1-(*)2	20.0	26.0	500	1,000
12	BM12B-PASS-(*)1	BM12B-PASS-1-(*)1	SM12B-PASS-(*)2	SM12B-PASS-1-(*)2	22.0	28.0	500	1,000
13	BM13B-PASS-(*)1	BM13B-PASS-1-(*)1	SM13B-PASS-(*)2	SM13B-PASS-1-(*)2	24.0	30.0	500	1,000
15	BM15B-PASS-(*)1	BM15B-PASS-1-(*)1	SM15B-PASS-(*)2	SM15B-PASS-1-(*)2	28.0	34.0	500	1,000

Material and Surface finish, etc.

Post: Copper alloy, tin-plated  
 Base housing: PA (Heat Resistance), natural  
 Reinforcement: Copper alloy, tin-plated

Note: 1. This product displays (LF)(SN) on a label.

2. This product is supplied on embossed tape and reel packaging.

3. The following symbols will be entered in the (\*)1 and (\*)2 sections of the model number.

(\*)1 : TF...indicates tape & reel packaging without suction tape

(\*)2 : TB... indicates tape & reel packaging without suction tape

TFT...indicates tape & reel packaging with suction tape

TBT...indicates tape & reel packaging with suction tape

4. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## PA connector Header (High box type)

<2 circuits>

<3 circuits>

<4 circuits>

<5 circuits>

<6 circuits>

<7 to 9 circuits>

<10 to 12, 15 circuits>

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Without boss	With boss	A	B	
2	BH02B-PASK	BH02B-PASK-1	2.0	6.0	900
3	BH03B-PASK	BH03B-PASK-1	4.0	8.0	675
4	BH04B-PASK	BH04B-PASK-1	6.0	10.0	525
5	BH05B-PASK	BH05B-PASK-1	8.0	12.0	450
6	BH06B-PASK	BH06B-PASK-1	10.0	14.0	375
7	BH07B-PASK	BH07B-PASK-1	12.0	16.0	325
8	BH08B-PASK	BH08B-PASK-1	14.0	18.0	300
9	BH09B-PASK	BH09B-PASK-1	16.0	20.0	250
10	BH10B-PASK	BH10B-PASK-1	18.0	22.0	225
11	BH11B-PASK	BH11B-PASK-1	20.0	24.0	225
12	BH12B-PASK	BH12B-PASK-1	22.0	26.0	200
15	BH15B-PASK	BH15B-PASK-1	28.0	32.0	150

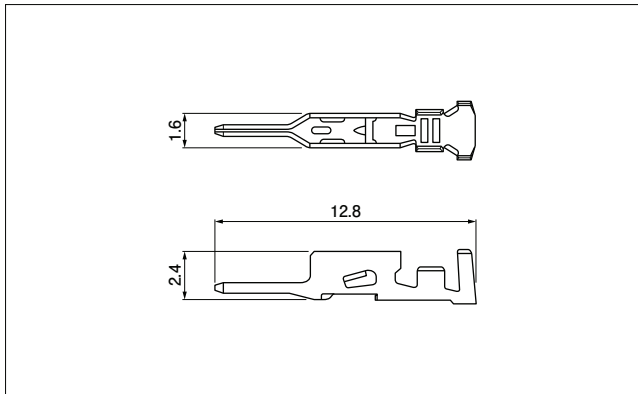
Material and Surface finish, etc.

Post: Copper alloy, tin-plated  
Base housing: PBT (GF), natural

Note: 1. This product displays (LF)(SN) on a label.  
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

# PA FAMILY/PA • PAL CONNECTOR

## PAL connector/ Contact



Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm <sup>2</sup> )	Insulation O.D.(mm)	
SPAL-002T-P0.5	#28 to #24 (0.08 to 0.21)	0.9 to 1.5	10,000
SPAL-001T-P0.5	#26 to #22 (0.13 to 0.33)	1.0 to 1.5	10,000

Material and Surface finish, etc.

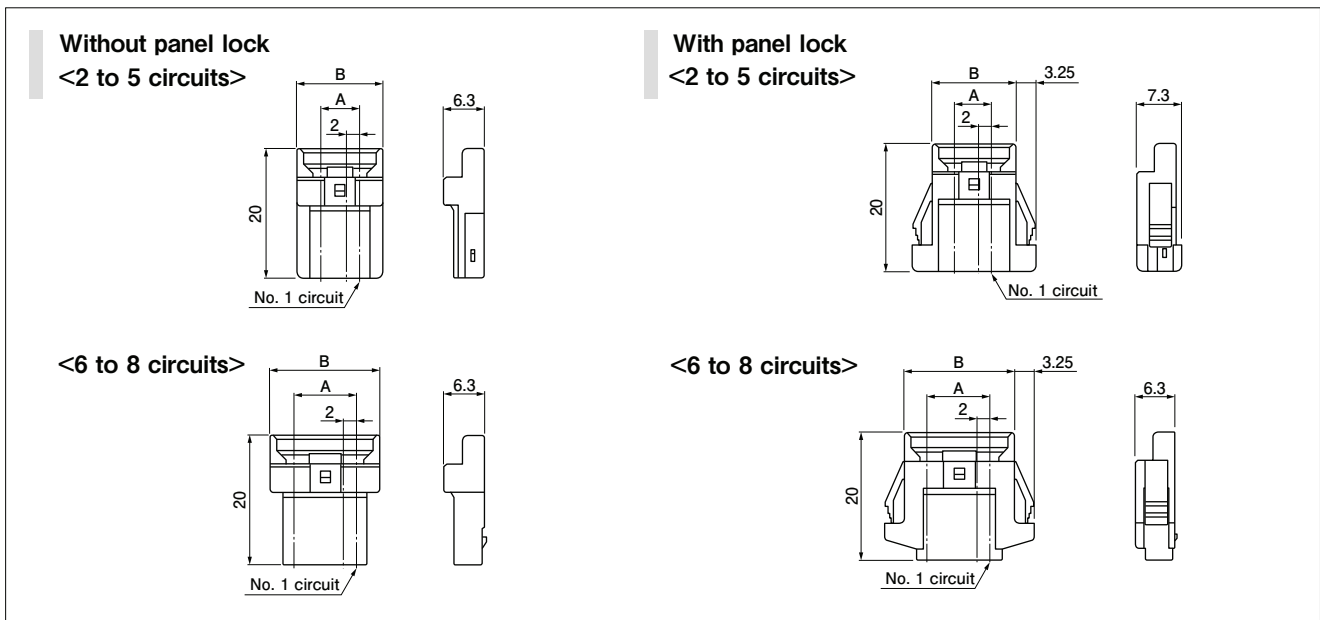
Copper alloy, tin-plated

### Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SPAL-002T-P0.5	AP-K2N	MKS-L	APLMK SPAL002-05
SPAL-001T-P0.5			APLMK SPAL001-05

Note: Contact JST for fully automatic crimping applicator.

## PAL connector/ Housing



### Without panel lock

No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	PALR-02VF	2.0	9.4	1,000
3	PALR-03VF	4.0	11.4	1,000
4	PALR-04VF	6.0	13.4	1,000
5	PALR-05VF	8.0	15.4	1,000
6	PALR-06VF	10.0	17.4	1,000
7	PALR-07VF	12.0	19.4	1,000
8	PALR-08VF	14.0	21.4	1,000

Material and Surface finish, etc.

PA, natural

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

### With panel lock

No. of circuits	Model No.	Dimensions (mm)				Q'ty/bag
		A	B	C	D	
2	PALR-02V	2.0	9.4	9.8	13.4	1,000
3	PALR-03V	4.0	11.4	11.8	15.4	1,000
4	PALR-04V	6.0	13.4	13.8	17.4	1,000
5	PALR-05V	8.0	15.4	15.8	19.4	1,000
6	PALR-06V	10.0	17.4	19.8	21.4	1,000
7	PALR-07V	12.0	19.4	21.8	23.4	1,000
8	PALR-08V	14.0	21.4	23.8	25.4	1,000

Material and Surface finish, etc.

PA, natural

Note: 1. Dimensions C and D: See "Assembly layout and Panel layout/ PAL connector (Wire-to-Wire connector)" section on page 5.  
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## PAL connector/ Retainer

The PAL connector uses the PA connector retainer, so please refer to the PA connector/ Retainer section on page 8.

## Model number allocation

### PA connector/ Contact (Standard type)

**S PHD - 002 T - P 0.5**

Supply form: S··Strip form  
B··Loose piece

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

### PA connector/ Housing (Standard type)

**PA P - 02 V - S**

Series name

Type: Plug

No. of circuits

Sub model number

Color: S··Natural, K··Black, R··Red, E··Blue, M··Green,  
O··Orange, N··Brown, P··Purple, PK··Pink,  
Y··Yellow, L··Lemon yellow, FY··Fluorescent yellow,  
LE··Light blue, H··Gray, TR··Tomato red

### PA connector/ Contact (Retainer compatible type)

**S PA - 001 T - P 0.5**

Supply form: Strip form

Series name

Applicable wire range: AWG #26 to AWG #22

Surface finish: Tin-plated

Material: Copper alloy

Applicable post size

### PA connector/ Housing (Retainer compatible type)

**PA RP - 02 V - ■**

Series name

Type: Plug (Retainer compatible type)

No. of circuits

Sub model number

Color: No indication··Natural, R··Red, E··Blue,  
M··Green, Y··Yellow

### PA connector/ Retainer

**PM S - 02 V - S**

Series name

Type: Retainer

No. of circuits

Sub model number

Color: Natural

### PA connector/ Header (Through-hole type, Top entry type)

**B 02 B - PA S K - ■ ■**

Header type: Top entry type

No. of circuits

Assembly product

Series name

Color: S··Natural K··Black, R··Red, E··Blue,  
M··Green, O··Orange, N··Brown,  
P··Purple, PK··Pink, Y··Yellow,  
L··Lemon yellow, FY··Fluorescent yellow,  
LE··Light blue, H··Gray, TR··Tomato red

Clinched (Kinked)/ Not clinched: S··Straight  
K··Clinched

Polarizing boss: No indication··Without boss,  
1··With boss

Resin material: No indication··PBT (GF), A··PA

### PA connector/ Header (Through-hole type, Side entry type)

**S 02 B - PA S K - 2**

Header type: Side entry type

No. of circuits

Assembly product

Series name

Color: S··Natural K··Black, R··Red, E··Blue,  
M··Green, O··Orange, N··Brown,  
P··Purple, PK··Pink, Y··Yellow,  
L··Lemon yellow, LE··Light blue,  
H··Gray, TR··Tomato red

Clinched (Kinked)/ Not clinched: S··Straight  
K··Clinched

Polarizing boss: No indication··Without boss,  
2··With boss

## Model number allocation

### PA connector/ Header (Through-hole type, Top entry type, N type)

**B 02 B - PA S K - ■ N**

Header type: Top entry type

No. of circuits

Assembly product

Series name

Color: Natural

Clinched (Kinked) / Not clinched: Clinched

Polarizing boss: No indication...Without boss, 1...With boss

Resin material: PA (GF)

### PA connector/ Header (Through-hole type, Bottom entry type)

**BE 05 B - PA S K - C**

Header type: Bottom entry type

No. of circuits

Assembly product

Series name

Color: Natural

Sub model number

Shape: No indication...Standard type, C...With extended length

### PA connector/ Header (SMT type)

**BM 02 B - PA S S - ■ - TF**

Header type:  
BM...SMT top entry type  
SM...SMT side entry type

No. of circuits

Assembly product

Series name

Color: Natural

Sub model number

Polarizing boss: No indication...Without boss,  
1...With boss

Packaging style: Embossed taping  
TF...Top entry type without suction tape  
TFT...Top entry type with suction tape  
TB...Side entry type without suction tape  
TBT...Side entry type with suction tape

### PA connector/ Header (High box type)

**BH 02 B - PA S K - ■**

Header type:  
Top entry type, High box type

No. of circuits

Assembly product

Series name

Color: Natural

Clinched (Kinked) / Not clinched: Clinched

Polarizing boss: No indication...Without boss, 1...With boss

### PAL connector/ Contact

**S PAL - 002 T - P 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

Contact size

### PAL connector/ Housing

**PAL R - 02 V ■ - ■**

Series name

Type: Receptacle

No. of circuits



Sub model number

Panel lock: No indication...With panel lock  
F...Without panel lock

Color: No indication...Natural, R...Red, E...Blue,  
M...Green, Y...Yellow

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