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When placing orders with us, minimum order quantities are set for every product.

Be sure to contact us before starting preliminary design of PCBs using our connectors.

The specifications and information shown in the catalog are subject to change without notice.

# Reflow temperature profile (for reference purposes)



The reflow temperature profile shown in this drawing is for reference purposes. This profile depends on requirements such as reflow equipment, soldering paste, and PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own reflow temperature profile.

Applicable products

PCS-XE()SLFYTU()+

# Flow temperature profile (for reference purposes)



The flow temperature profile as shown above is for reference purposes. This profile depends on requirements such as the PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own flow temperature profile.

#### Applicable products

PCS series through hole type connector

The profile shown in this drawing is applicable only for those products shown above.

#### Dimensions of connector mounting for reference purposes

#### Board-to-board connector dimensions for reference purposes



Board-to-cable connector dimensions for reference purposes (In the case of spring-locked type)



Number of contacts	Α	В	С
20	35 or more	35.5 or more	46.2 or more
28	40 or more		
36	45.1 or more		
50	54 or more		
68	65.4 or more		
80	73 or more		
96	83.2 or more	40.5 or more	51.2 or more

# Panel mounting-hole dimensions for reference purposes

(In the case of PCS-E type)

7.5



Number of contacts	Α	В	с
20	27.4	23.7	11.3
28	32.5	28.8	16.3
36	37.6	33.9	20.3
50	46.5	42.8	30.3
68	57.9	54.2	40.3
80	65.5	61.8	50.3
96	75.69	72.0	_

In the case of using a mating guide

#### **Product List**



Straight through hole type male connector for PCB PCS-( )MD+

B-10 PCS series...8



Right-angle through hole type male connector for PCB PCS-128LMDT-GP+

**B-14** PCS series...12



IDC type female connector for cable PCS-E(\_)F(\_)

**B-18** PCS series...16



IDC type female connector for cable PCS-D68()FA1()+

**B-22** PCS series...20



Right-angle through hole type female connector for PCB PCS-XE68LFDT()N()+

**B-26** PCS series...24



Straight through hole type female connector for PCB PCS-( )FD+

B-11 PCS series...9



Right-angle through hole type female connector for PCB PCS-128LFDT-GP+

**B-15** PCS series...13



Soldering type female connector for cable PCS-E()FS+

**B-19** PCS series...17



Straight through hole type female connector for PCB PCS-XE()SFD()+

**B-23** PCS series...21



Right-angle through hole type female connector for PCB PCS-XE100LFD()-()+

**B-27** PCS series...25



Right-angle through hole type male connector for PCB PCS-( )LMD+

**B-12** PCS series...10



Straight through hole type male connector for PCB PCS-E()MD+

**B-16** PCS series...14



IDC type male connector for panel PCS-E( )PM( )-( )

**B-20** PCS series...18



Straight through hole type female connector for PCB PCS-XE(\_)SFD(\_)N+

**B-24** PCS series...22



Right-angle through hole type female connector for PCB PCS-XE()SLFD()+

**B-28** PCS series...26



Right-angle through hole type female connector for PCB PCS-( )LFD+

**B-13** PCS series...11



Right-angle through hole type male connector for PCB PCS-E()LMD+

**B-17** PCS series...15



IDC type male connector for cable PCS-D( )( )MA1( )+

**B-21** PCS series...19



Right-angle through hole type female connector for PCB PCS-XE()LFD()()+

**B-25** PCS series...23



Right-angle through hole type female connector for PCB PCS-XE()SLFDT()+

**B-29** PCS series...27



Right-angle through hole type female connector for PCB PCS-XE()SLFD()N+

**B-30** PCS series...28



IDC type male connector for cable PCS-XE()M()()+

**B-34** PCS series...32



IDC type female connector for panel PCS-XED( )( )FA( )( )+

**B-38** PCS series...36



Mating guide structure vertical type die-cast material backshell for standard cable PCS-E(\_)LG(\_) **B-42** PCS series...40



Vertical type die-cast material backshell for standard cable with provision for preventing misinsertion PCS-E(\_)LP(\_)-(\_)+R **B-46** PCS series...44



Right-angle through hole type female connector for PCB PCS-XE()SLFDT()N+

**B-31** PCS series...29



Soldering type male connector for cable PCS-XES68MS+

**B-35** PCS series...33



IDC type female connector for panel PCS-XED68()FAUN()+

**B-39** PCS series...37



Horizontal type die-cast material backshell for standard cable PCS-E(\_)W **B-43** PCS series...41



Vertical type die-cast material backshell for larger diameter cable with provision for preventing misinsertion PCS-E()LKP()-()+R **B-47** PCS series...45



Right-angle SMT type female connector for PCB PCS-XE()SLFYTU()+

**B-32** PCS series...30



Straight Press-in type female connector for PCB PCS-XE50SFP()()

**B-33** PCS series...31



IDC type female connector for panel PCS-XE()SPF()()()

**B-37** PCS series...35



EMI-filtered vertical type die-cast material backshell for standard cable PCS-E()L() **B-40** PCS series...38



Vertical type plastic backshell for flat cable PCS-E( )LT+

B-44 PCS series...42



Vertical type die-cast material backshell for larger diameter cable with mating guide for preventing misinsertion PCS-E96LKP()-()+R **B-48** PCS series...46



Vertical type die-cast material backshell for cable extension PCS-E()PML() **B-45** PCS series...43



Vertical type die-cast material backshell for larger diameter cable with provision for preventing misinsertion PCS-E96LKP1A-()+R **B-49** PCS series...47



Vertical type die-cast material backshell for standard cable with mating guide for preventing misinsertion PCS-E(\_)LGP(\_)-(\_)+R **B-50** PCS series...48



Vertical type die-cast material backshell for flat cable with provision for preventing misinsertion PCS-E()LTP-()+R **B-54** PCS series...52



Vertical type die-cast material backshell for daisy chain connection PCS-SE68LDAU2N **B-58** PCS series...56



1.6 mm panel-thickness mating guide PCS-E( )G

**B-62** PCS series...60



Key rivet for preventing misinsertion PCS-E-PK+R

**B-66** PCS series...64



Horizontal type die-cast material backshell for standard cable with provision for preventing misinsertion PCS-E(\_)WSP-(\_)+R **B-51** PCS series...49



Vertical type die-cast material backshell for larger diameter cable PCS-E68LKAU2N **B-55** 

PCS series...53



Horizontal type die-cast material backshell for larger diameter cable with provision for preventing misinsertion PCS-E(\_)WKP(\_)-(\_)+R **B-52** PCS series...50



Vertical type over-molded backshell PCS-XEM()DL()()N

**B-56** PCS series...54



Horizontal type die-cast material backshell for larger diameter cable with provision for preventing misinsertion PCS-E96WKP()-()+R B**-53** PCS series...51



Vertical type over-molded backshell PCS-XEM100L()()

**B-57** PCS series...55



1.0 mm panel-thickness mating guide PCS-E( )G1

**B-63** PCS series...61



Misinsertion prevention guide PCS-E()PG-()

**B-67** PCS series...65



Metallic mating guide PCS-E( )G3( )

**B-64** PCS series...62



Misinsertion prevention guide PCS-E96PG-( )

**B-68** PCS series...66



Spacer hardware for male connector PCS-E()M-SP

**B-69** PCS series...67



Screw lock PCS-XE50SJ( )U2

**B-70** PCS series...68

### Straight through hole type male connector for PCB PCS-( )MD+

1.27 mm pitch connector

For PCB

**Straight Through hole** 



#### Straight through hole type female connector for PCB PCS-( )FD+





# Right-angle through hole type male connector for PCB PCS-( )LMD+

1.27 mm pitch connector For PCB Right-angle Through hole

RoHS



• Configuration of product Part No.

# $\frac{\text{PCS-}}{\text{\tiny (1)}} \underbrace{(1)}_{\text{\tiny (2)}} \underbrace{\text{LMD}}_{\text{\tiny (3)}} +$

① Series name

<sup>(1)</sup> 2 No. of contacts: 34, 48, 68 or 96

- Type of connector
- LMD: Right-angle through hole type, male



# Right-angle through hole type female connector for PCB PCS-( )LFD+

1.27 mm pitch connector

For PCB

**Right-angle Through hole** 

RoHS





#### **PCS-()** LFD+

- 1 2 3
- 1) Series name
- 2 No. of contacts: 34, 48, 68 or 96
- ③ Type of connector
- LFD: Right-angle through hole type, female



Wire

Others

Crimping

Soldering

IDC

SMT

Press-in

#### Right-angle through hole type male connector for PCB PCS-128LMDT-GP+





# Right-angle through hole type female connector for PCB PCS-128LFDT-GP+



For PCB

Right-angle Through hole

(RoHS)



# Straight through hole type male connector for PCB PCS-E( )MD+

1.27 mm pitch connector

For PCB

**Straight Through hole** 



 Mating connectors: PCS-E series cable-side IDC type female connector

 PCS-E series cable-side soldering type female connector

 Accessories: Dust-proof cap, PCS-( )C( )



### Right-angle through hole type male connector for PCB PCS-E()LMD+



(RoHS)



Mating connectors: PCS-E series cable-side IDC type female connector

PCS-E series cable-side soldering type female connector

Accessories: Dust-proof cap, PCS-()C()

Others Wire

Crimping

Soldering

IDC Press-in

SMT

#### 1.27 mm pitch connector IDC type female connector for cable For cable PCS-E()F() IDC (1.2 mm) (RoHS) • Configuration of product Part No. PCS-E ( ) F ( ) 2 3 4 1 ① Series name 2 No. of contacts: 20, 28, 36, 50, 68, 80 or 96 3 Type of contact: Female ( Cable sizes for reference purposes (In case the cable sheath is made of PVC resin) Blank: AWG#28(7 / 0.127) or AWG#30(1 / 0.254). Outside diameter of insulation is 0.8-1.0 mm. For discrete wire. : AWG#28(7 / 0.127) or AWG#30(1 / 0.254). Outside diameter of insuration is A 0.5-0.65 mm. For discrete wire. : AWG#30(7 / 0.1). Outside diameter of wire is 0.5-0.65 mm. For discrete wire. В : AWG#28(7 / 0.127) For flat cable С : AWG#30(7 / 0.1) For flat cable (See Note #1) D в 1.27 POS.#2 POS.#1 00000 0000 5.5 2:54 00000 LAST POS 15° С 3 ß 3.2 4 Π ⇔ 1.27 ත LAST POS (Î JMMMU nmmu h П Note 1: This 96-contact connector is DUNUN D TUUUUU not available for flat cable. POS.#2 POS.#1 (5) Dimensions JYYYYY JANA A Part No. Α в С PCS-E20F() 21.65 15.4 11.43 Cable cover for discrete wire PCS-E28F() Components 26.7 16.51 20.48 (5 Contacts PCS-E36F() 31.8 21.59 25.56 1 2 Spacer PCS-E50F() 40.7 30.48 34.45 Shell PCS-E68F() 52.1 41.91 45.88 3 Cable cover for flat cable 4 Insulator PCS-E80F() 59.7 49.53 53.5 Because some combinations of "Configurations of Product Part No.", are under Cable cover 5 PCS-E96F() 69.9 59.69 63.66 consideration for development, please contact us for availability details.

Mating connectors: PCS-E series through hole type male connector for PCB PCS-E series IDC type male connector for panel Tool: (Refer to page Tool-11)

Soldering Crimping SMT Press-in IDC Others



Mating connectors: PCS-E series through hole type male connector for PCB PCS-E series IDC type male connector for panel Others Wire Crimping Soldering IDC Press-in SMT

#### IDC type male connector for panel PCS-É()PM()-()



For cable

IDC (1.27 mm)

• Configuration of product Part No.

③ ④

(5)

#### PCS-E ( ) P M ( )- ( )

- 2 1
- 1) Series name
- 2 No. of contacts: 20, 28, 36, 50 3 For panel
- ④ Type of contact: Male

В

н

- (5) Cable sizes for reference purposes (In case the cable insulation is made of PVC resin)
  - A : AWG#28(7 / 0.127). AWG#30(1 / 0.245). For flat cables A : AWG#28(7 / 0.127). AWG#30(1 / 0.245). Outside diameter of insulation is 0.8-1.0 mm. For discrete wire.

(RoHS)

- AWG#30(7 / 0.1). For flat cables. С
  - AWG#28(7 / 0.127) flat cable. AWG#30(1 / 0.245). Outside diameter of insulation is 0.5-0.65 mm. For discrete wire.
- AWG#30(7 / 0.1). Outside diameter of wire is 0.5–0.65 mm. For discrete wire. р 6 Holes on mounting flange
- Blank: M2.5×0.45
  - Diameter of hole: 2.7 mm (The connector is mounted on the Die-cast material vertical backshell of PCS-E()PML().)



Soldering Crimping Press-in SMT IDC







Others Wire wrapping Crimping

Soldering

IDC

Press-in

SMT



Through SMT Press-in IDC Soldering Crimping Wire Others

noio



Mating connectors: PCS-XE series IDC type male connector for cable

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Others Wire wrapping Crimpin SMT

Press-in

IDC

Soldering







IDC Press-in

Crimping Others



\_\_\_\_\_

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Others Wire Crimping

Soldering

IDC

Press-in

SMT





Others Wire wrapping Crimping Soldering

IDC

Press-in SMT





Others Wire Crimping

IDC Press-in

SMT

Soldering

#### IDC type male connector for cable PCS-XE( )M( )( )+

# 1.27 mm pitch connector For cable IDC (1.27 mm)

SCSI-II, SCSI-III

RoHS



Configuration of product Part No.

 $\underbrace{\operatorname{PCS-XE}}_{\bigcirc} (\underline{)} \underbrace{\operatorname{M}}_{\odot} (\underline{)}_{4} (\underline{)}_{5} +$ 

А

Е

- <sup>(2)</sup> No. of contacts: 26, 50, 68 or 100
- ③ Type of contact: Male
- ④ Cable sizes for reference purposes (In case the cable insulation is made of PVC resin) Blank : AWG#28(7 / 0.127) or AWG#30(1 / 0.254). Outside diameter of insulation is 0.8-1.0 mm. For discrete wire. (See Note #1)
  - : AWG#28(7 / 0.127) or AWG#30(1 / 0.254). Outside diameter of insulation is 0.5-0.65 mm. For discrete wire.
  - B : AWG#30(7 / 0.1). Outside diameter of insulation is 0.5-0.65 mm. For discrete wire.
     C : AWG#28(7 / 0.127) or AWG#30(1 / 0.254). For flat cable, t = 1.0 mm MAX.
    - (See Note #2)
    - : AWG#30(7 / 0.1). For flat cable, t = 1.0 mm MAX. (See Note #2) : AWG#28(7 / 0.127) or AWG#30(1 / 0.254). Outside diameter of insulation is
  - J : AWG#28(7 / 0.127) or AWG#30 0.65-0.8 mm. For discrete wire.
  - K : AWG#30(7 / 0.1). Outside diameter of insulation is 0.65-0.8 mm. For discrete wire.
  - Q : AWG#30(7 / 0.1). Outside diameter of insulation is 0.8-1.0 mm. For discrete wire.
- ⑤ Contact plating
  - Blank : Min. 0.2 µm Gold plating
  - G1 : Min. 0.76 µm Gold plating



Mating connectors: PCS-XE series straight or right-angle through hole type female connector for PCB.

PCS-XE series SMT type female connector. For use with housings: SCSI-II: PCS-E( )L( ). SCSI-III: PCS-XEM( )DL( )( )N Required tools: Discrete wire tool: PCS-K1 or FHAT-918B and FHPT-918A. Flat cable tool: PCS-K4

Through SMT Press-in IDC Soldering Crimping Wire Others

① Series name





#### \_\_\_\_\_

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Others Wire wrapping Crimping Press-in

SMT

IDC

Soldering




## EMI-filtered vertical type die-cast material backshell for standard cable PCS-E()L()



**EMI-filtered** 

Backshell Vertical

(RoHS)



### • Configuration of product Part No.



### ① Series name

- 2 No. of contacts: 20, 28, 36, 50 or 68
- 3 Type of backshell
- L: Vertical type backshell for standard cable ④ Identification mark (A, B or C) of cable-end-outlet dimension.
- Cable diameters for reference purposes are shown in the Dimension table as below.



### Mating guide structure vertical type die-cast material backshell for standard cable PCS-E()LG() (RoHS)



Vertical

EMI-filtered



• Configuration of product Part No.

#### **PCS-E ( ) LG ( )** 1 3 2 (4)

- ① Series name
- 2 No. of contacts: 28, 36 or 50
- 3 Type of backshell
- LG: Mating guide structure vertical type backshell for standard cable ④ Identification mark (A or B) of cable-end-outlet dimension.

Cable diameters for reference purposes are shown in the Dimension table below.





## Vertical type plastic backshell for flat cable PCS-E( )LT+

1.27 mm pitch connector

Backshell

Vertical





For use with connector: PCS-E( )PM( )-H

Others Wire Crimping Soldering IDC Press-in SMT Through

## Vertical type die-cast material backshell for standard cable with provision for preventing misinsertion PCS-E()LP()-()+R (RoHS)





## • Configuration of product Part No. $\underbrace{PCS-E}_{\bigcirc} \underbrace{\bigcirc}_{\textcircled{2}} \underbrace{LP}_{\textcircled{3}} \underbrace{\bigcirc}_{\textcircled{4}} \underbrace{\bigcirc}_{\textcircled{5}} + R$

- ① Series name
- 2 No. of contacts: 20, 28, 36, 50 or 68
  3 Type of backshell
  - LP: Vertical type backshell for standard cables with provision for preventing misinsertion
- ④ Identification mark (A, B or C) of cable-end-outlet dimension. Cable diameters for reference purposes are shown in the Dimension table as shown below.
- Key-riveted position (Refer to the Dimension table as shown below) for preventing misinsertion.



For use with connector: PCS-E series IDC type or soldering type female connector for cable
PCS-XE series IDC type male connector for cable
Accessories: Key-rivets for preventing misinsertion, PCS-E-PK+R

Wire

Soldering Crimping

SMT

Press-in

IDC



For use with connector: PCS-E series IDC type or soldering type female connector for cable

PCS-XE series IDC type male connector for cable

Accessories: Key-rivets for preventing misinsertion, PCS-E-PK+R

Others Wire Crimping

Soldering

IDC Press-in

SMT

### Vertical type die-cast material backshell for larger diameter cable with mating guide for preventing misinsertion **PCS-E96LKP( )-( )+R**

1

① Series name

2

(3)

(4)

6





PCS-XE series IDC type male connector for cable Accessories: Key-rivets for preventing misinsertion, PCS-E-PK+R Soldering SMT Press-in IDC Crimping



### Vertical type die-cast material backshell for standard cable with mating guide for preventing misinsertion PCS-E()LGP()-()+R





 For use with connector: PCS-E series IDC type or soldering type female connector for cable

 PCS-XE series IDC type male connector for cable

 Accessories: Key-rivets for preventing misinsertion, PCS-E-PK+R

 Through Note

 SMT
 Press-in

 IDC
 Soldering

 Wirre wrapping
 Others



Accessories: Key-rivets for preventing misinsertion, PCS-E-PK+R

Wirę Crimping Soldering

IDC

Press-in

SMT

### Horizontal type die-cast material backshell for larger diameter cable with provision for preventing misinsertion PCS-E()WKP()-()+R (RoHS)





SMT

Press-in

IDC

Soldering

• Configuration of product Part No.  $\underbrace{PCS-E}_{(1)} \underbrace{()}_{(2)} \underbrace{WKP}_{(3)} \underbrace{()}_{(4)} \underbrace{()}_{(5)} + R$ 

- ① Series name
- 2 No. of contacts: 36, 50, 68, 80
- ③ Type of backshell
  - WKP: Horizontal type backshell for larger diameter cables with mating guide for preventing misinsertion
- ④ Identification mark (A or B) of cable-end-outlet dimension. Cable diameters for reference purposes are shown in the Dimension table as shown below.
- (5) Key-riveted position (Refer to the Dimension table as shown below) for preventing misinsertion.





### Vertical type die-cast material backshell for flat cable with provision for preventing misinsertion PCS-E()LTP-()+R





SMT

Press-in

IDC

Soldering

### • Configuration of product Part No.

## $\underline{\text{PCS-E}}_{\bigcirc} (\underline{)}_{\bigcirc} \underline{\text{LTP-}}_{\bigcirc} (\underline{)}_{\textcircled{4}} + \mathbf{R}$

- ① Series name
- 2 No. of contacts: 50 or 68
- ③ Type of backshell
  - LTP: Vertical type backshell for flat cables with mating guide for preventing misinsertion
- ④ Key-riveted position (Refer to the Dimension table as shown below) for preventing misinsertion.









Others Wire Wire Soldering IDC Press-in SMT Through

### Vertical type die-cast material backshell for daisy chain connection PCS-SE68LDAU2N

1.27 mm pitch connector Backshell Vertical SCSI-III



• Configuration of product Part No.

### PCS-SE 68 LD A U2 N

- 1 2 3 4 5 6
- ① Series name
- ② No. of contacts: 68
- ③ Type of backshell
- LD: Vertical type backshell

④ Identification mark (A) of cable-end-outlet dimension.

- ⑤ Screw size
- U2: #2-56UNC
- ⑥ Lock type
  - N: Screw lock



### 1.6 mm panel-thickness mating guide PCS-E()G

### 1.27 mm pitch connector

Accessories

Mating guide

RoHS



#### • Configuration of product Part No.

## $\frac{\text{PCS-E}}{1} \underbrace{()}_{2} \underbrace{G}_{3}$

① Series name ② No. of contacts: 20, 28, 36 or 50

- 3 1.6 mm panel-thickness mating guide
- (Color: Silver metallic)







## Metallic mating guide PCS-E()G3()



Accessories

Mating guide



## Key rivet for preventing misinsertion PCS-E-PK+R



Accessories

Key rivet





IDC

Press-ir

## Misinsertion prevention guide PCS-E96PG-( )

### 1.27 mm pitch connector

Accessories

**Misinsertion prevention guide** 

RoHS



# Spacer hardware for male connector PCS-E( )M-SP



Accessor<u>ies</u>

**Spacer hardware** 





