Conforms to IEC 61076-4-101 Standard
2mm Pitch Hard Metric 2 Piece Connector

CP SERIES
CP SERIES
2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

FEATURES
- Conforms to IEC 61076-4-101 standard
- Connectors for CompactPCI bus
- High density connection
- High speed transmission and EMI protection
- Applicable to "Hot Plug" (Sequenced mating)
- Highly reliable press-fit mounting
- A computer telephony support connector is available
- Highly reliable contacts with 2 mating points for Receptacles
- Available backplane assemblies and rack systems
- RoHS compliance

ORDER CODE

CP0 - [ ] - [ ] - [ ] - F
- F: RoHS Compliance
- Plating of contact area
  Om (t) : Au 0.1um min. (Standard)
  H (t) : Au 0.76um min.
- Shield plate
  1: With shield plate
  95 pin : 19 shield contacts
  110 pin : 22 shield contacts
- Number of contacts
  095 : 95 pin
  110 : 110 pin
- Variation
  09 : Receptacle Without guide lug and space for key (Type B)
  01 : Receptacle With guide and space for key (Type A, 110 pin only)
- Series name
  CP: 2mm pitch hard metric 2 piece connector

SPECIFICATIONS
- Insulator material: Glass-filled PBT
  (UL 94V-0), Gray
- Contact material: Copper alloy
- Contact plating:
  Contact area; Gold over Nickel
  Terminal area; Gold over Nickel
- Shield plate material: Copper alloy
- Shield plate plating:
  Contact area; Gold over Nickel
  Terminal area; Gold over Nickel
- Shroud material: Glass-filled PBT(UL 94V-0), Gray
- Current rating: 1A per contact
- Contact resistance: 30mΩ max.
- Dielectric withstanding voltage: 750V AC for 1 minute
- Insulation resistance: 10,000MΩ min. at 100V DC
- Operating temperature: -55°C to +125°C

APPLICATIONS
- Process controllers, Power plant systems, Industrial computing, Semiconductor processing units, Telecommunications, Measuring equipment, Medical equipment, Aerospace, Other industrial equipment, etc.

KEL’S SPECIAL FEATURES
- KEL is able to provide backplane assembly products (Connectors are pre-mounted on board) to decrease the customer’s assembly processes, as KEL operates a backpanel business. Please contact your local sales office for more information.
- KEL also can supply optional connector installation tools, please refer to page I-16.
**CP SERIES**

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

---

**CP00-□□□-1□□-F (Receptacle, Type B)**

**Mating Connector : CP10-□□□-P2-1□□-F**

---

**Unit:mm(inch)**

* The indication of the terminal number is according to IEC61076-4-101, it does not match with PICMG(Compact PCI) specified indication.

---

**Printed Circuit Board Layout**

(Component Side View)

Recommended PCB thickness t=1.4—4.2 (0.055—0.165)

---

**Product Table / Dimensions**

<table>
<thead>
<tr>
<th>No.of contacts</th>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>Number of Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>CP00-095-□□-F</td>
<td>39.00</td>
<td>37.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.417</td>
<td>1.492</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>CP00-110-□□-F</td>
<td>42.00</td>
<td>43.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.854</td>
<td>1.728</td>
<td></td>
</tr>
</tbody>
</table>

---

Row "f" odd numbers : For upper ground return shield
Row "f" even numbers : For lower ground return shield (future option)
CP SERIES
2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

CP01-110-1-F (Receptacle, Type A)
Mating Connector : CP11-110-P2-1-F

Unit:mm(inch)

*1 The indication of the terminal number is according to IEC61076-4-101. It does not match with PICMG(Compact PCI) specified indication.

Row "f" odd numbers : For upper ground return shield
Row "f" even numbers : For lower ground return shield (future option)
### CP10-□□□-P2-1□□-F (Plug, Type B)

**Mating Connector:** CP00-□□□-1□□-F

#### Contact Dimension

- **Unit:** mm (inch)

#### X-X' Cross Section

#### Layout for Different Contact Levels

- **Rows "z" and "f":** For ground return shield contacts

#### Printed Circuit Board Layout (Component Side View)

- **Finished hole diameter:** 7Xn\(-0.60.015(0.241\pm0.002))
- **Drilled hole diameter:** 4Xn\(-0.710.028(0.028\pm0.001))

#### Product Table / Dimensions

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>CP10-095-P2-1□□-F</td>
<td>36.00</td>
<td>37.85</td>
<td>38.25</td>
<td>13</td>
</tr>
<tr>
<td>110</td>
<td>CP10-110-P2-1□□-F</td>
<td>42.00</td>
<td>43.85</td>
<td>44.25</td>
<td>11</td>
</tr>
<tr>
<td>125</td>
<td>CP10-125-P2-1□□-F</td>
<td>48.00</td>
<td>49.85</td>
<td>50.25</td>
<td>10</td>
</tr>
</tbody>
</table>

#### Notes

* For B and C contact levels, please refer to "Contact Dimension".

*1 The indication of the terminal number is according to IEC61076-4-101. It does not match with PICMG (Compact PCI) specified indication.
**CP SERIES**

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

---

**CP11-110-P2-1-F (Plug, Type A)**

**Mating Connector:** CP01-110-1-F

---

**Column Indication**

<table>
<thead>
<tr>
<th>G</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4(0.016) max.</td>
<td>49.85(1.963)</td>
<td></td>
</tr>
</tbody>
</table>

---

**X-X' Cross Section**

---

**Y-Y' Cross Section**

---

**Contact Dimension**

---

**Printed Circuit Board Layout**

(Ingredient Side View)

---

**Layout for Different Contact Levels**

---

**Product Table**

<table>
<thead>
<tr>
<th>No.of contacts</th>
<th>Part Number</th>
<th>No.of packaging</th>
<th>Terminal length</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>CP11-110-P2-1-F</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Rows "z" and "f": For ground return shield contacts

---

* For A, B and C contact levels, please refer to “Contact Dimension”.

---

* The indication of the terminal number is according to IEC61076-4-101. It does not match with PICMG(Compact PCI) specified indication.

---

Recommended PCB thickness t=1.4~5.6(0.055~0.220)
CP12-055-P2-1-F (Plug, Type C)

**Unit:** mm (inch)

"*" Pin No.

Column indication

Column indication

Layout for Different Contact Levels

For B and C contact levels, please refer to “Contact Dimension”.

Recommended PCB thickness t=1.4 ~ 5.6 (0.055 ~ 0.220)

Rows "z" and "f": For ground return shield contacts

**Product Table**

<table>
<thead>
<tr>
<th>No.of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
<th>Terminal length</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>CP12-055-P2-1-F</td>
<td>20</td>
<td>P2</td>
<td>3.7</td>
</tr>
</tbody>
</table>
CP SERIES
2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

CP10-xxxx-R-1 (Plug, Tail Length 16mm, Type B)

Plug, Type B (Long Tail)

X-X' Cross Section

Contact Dimension

Printed Circuit Board Layout (Component Side View)

Layout for Different Contact Levels

* For S and T contact levels, please refer to “Contact Dimension”.

Product Table / Dimensions

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>CP10-095-R-1</td>
<td>36.00</td>
<td>37.82</td>
<td>38.25</td>
<td>13</td>
</tr>
<tr>
<td>110</td>
<td>CP10-110-R-1</td>
<td>42.00</td>
<td>43.85</td>
<td>44.25</td>
<td>11</td>
</tr>
<tr>
<td>125</td>
<td>CP10-125-R-1</td>
<td>48.00</td>
<td>49.85</td>
<td>50.25</td>
<td>10</td>
</tr>
</tbody>
</table>

Rows "z" and "f": For ground return shield contacts
CP SERIES
2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

CP12-055-R-1 (Plug, Tail Length 16mm, Type C)

* The indication of the terminal number is according to IEC61076-4-101, it does not match with PICMG(Compact PCI) specified indication.

Printed Circuit Board Layout (Component Side View)

Rows "z" and "f" : For ground return shield contacts

<table>
<thead>
<tr>
<th>Packaging style</th>
<th>No of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe</td>
<td>55</td>
<td>CP12-055-R-1</td>
<td>20</td>
</tr>
</tbody>
</table>
**CP SERIES**

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

---

### CP10-110-R-4 (Plug, Tail Length 16mm, Computer Telephony, Type B)

**Plug, Type B (Long Tail, Computer Telephony)**

---

**X-X' Cross Section**

---

**Contact Dimension**

---

**Printed Circuit Board Layout (Component Side View)**

*For R, S and T contact levels, please refer to “Contact Dimension”.*

---

**Layout for Different Contact Levels**

---

**Product Table**

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>CP10-110-R-4</td>
<td>11</td>
</tr>
</tbody>
</table>

---
**CP SERIES**

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

---

**CP11-110-R-1 (Plug, Tail Length 16mm, Type A)**

![Plug, Type A (Long Tail)]

**X-X’ Cross Section**

- 13.4(0.528) x 160.630
- 11.3(0.445) x 90.0(3.543)
- 3(0.118)

**Contact Dimension**

- 11.3(0.445) x 90.0(3.543)
- 160.630

**Printed Circuit Board Layout (Component Side View)**

- Finished hole diameter: 154-±0.6(0.024±0.002)
- Drilled hole diameter: ø(0.7±0.02)(0.028±0.001)
- ø(0.7±0.05)(0.079±0.002)

Recommended PCB thickness: 1.4~5.6(0.055~0.220)

- Rows "z" and "f": For ground return shield contacts

**Unit:mm (inch)**

* The indication of the terminal number is according to IEC/61076-4-101. It does not match with PICMG (Compact PCI) specified indication.

**Layout for Different Contact Levels**

For S and T contact levels, please refer to “Contact Dimension”.

---

**Product Table**

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>CP11-110-R-1</td>
<td>10</td>
</tr>
</tbody>
</table>
CP SERIES
2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

CP11-110-P2-3-F (Plug, Hot Swap, Type A)

Unit:mm(inch)

* The indication of the terminal number is according to IEC61076-4-101. It does not match with PICMG(Compact PCI) specified indication.

Printed Circuit Board Layout
(Component Side View)

Recommended PCB thickness t=1.4~5.6(0.055~0.220)

Rows “z” and “f” : For ground return shield contacts

Contact Dimension

Layout for Different Contact Levels

* For A, B and C contact levels, please refer to “Contact Dimension”.

Product Table

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>CP11-110-P2-3-F</td>
<td>10</td>
</tr>
</tbody>
</table>
CP SERIES

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

CP11-084-P2-4-F (Plug, Computer Telephony, Type A)

Plug, Type A (Computer telephony)

X-X' Cross Section

Contact Dimension

Unit:mm(inch)

Printed Circuit Board Layout (Component Side View)

Recommended PCB thickness t=1.4~5.6(0.055~0.220)

Row “f”: For ground return shield contacts

* For A, B and C contact levels, please refer to “Contact Dimension”.

Product Table

<table>
<thead>
<tr>
<th>No.of contacts</th>
<th>Part Number</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>CP11-084-P2-4-F</td>
<td>10</td>
</tr>
</tbody>
</table>
CP10S-XXXX-41 (Shroud, Type B)

- **Order Code**
  - CP10S-XXXX-41

- **Spacers**
  - Height: 41 (1.61")

- **Number of Contacts**
  - 95: 95 pin
  - 110: 110 pin
  - 125: 125 pin

- **Series Name**
  - CP10S: Shroud without guide and space for key (Type B)

---

CP11S-110-41 (Shroud, Type A)

- **Order Code**
  - CP11S-110-41

- **Spacers**
  - Height: 41 (1.61")

- **Number of Contacts**
  - 110: 110 pin

- **Series Name**
  - CP11S: Shroud with guide and space for key (Type A, 110 pin only)
CP SERIES

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

**CP12S-055-41 (Shroud, 55 pin, Type C)**

- **Unit:** mm (inch)
- **Shroud, Type C**

**ORDER CODE**

**CP12S-055-41**

- **Spacer height:** 41 (1.614"")
- **Number of contacts:** 55
- **Series name:** CP12S: Shroud (Type C, 55 pin only)

**CP SERIES**

2mm Pitch Hard Metric 2 Piece Connector / CompactPCI Bus Connector

**CP0-K□ (Coding Key)**

- **Unit:** mm (inch)
- **Coding Key**

**ORDER CODE (Coding Key)**

**CP□-K□**

- **Coding key type:**
  - K1: 3.0V (Color: Brilliant blue)
  - K2: 2.5V (Color: Cadmium yellow)
  - K3: Computer telephony type, Plug only (Color: Strawberry red)
- **Applicable connector:**
  - 0: For Receptacle
  - 1: For Plug
- **Series name:**

**SPECIFICATIONS**

- **Insulator material:** Glass-filled PBT (UL 94V-0)
Connector Installation Tools

Outline for Press-Fit Installation Tool
For Plug Connector

This Product requires installation tools to mount on PCB as shown. Both Plug and receptacle connectors can be installed only by replacing "Seating platen and PCB support module" (Other parts are common to both applications). The figure is a composite illustration depicting use of a 3U board type. Please contact your local sales office for further information on the installation tools.

For Receptacle Connector

Specifications and dimensions are subject to change without notice.