Sockets for SD Memory Cards

Applicable for UHS-II

Features

> With the both-side metal shell structure, improves noise reduction, connector robustness, and reduces heat radiation.

> Since its structure is not easily affected by reflow heat, it maintains SMD contact coplanarity after reflow.

> SMD-type and Through Hole type shell structures are in production.

> Compatible with the SDIO standard.

> Optimal SD Card socket for the next-generation SD memory card standard, "UHS-II."

Item Name

AXA5 ■ 3 0 6 ■ P

1. Board mounting type  7: Standard mount  6: Reverse mount
2. Ejecting method  3: Push-push method
3. Standoff  0: None
4. Card pop-out prevention function  6: Provided
5. Shell structure  2: SMD  1: Through Hole
6. Packing condition  P: Emboss 450 pc/ reel x 2 reels per carton included

Both-side metal shell structure with superior “EMI resistance,” “robustness,” and “SMD contact Coplanarity.”

Noise generation accompanied by high speed data transmission has been reduced by 20% when compared to our conventional one-side metal shell products (hereinafter called, “conventional product”).

Binding between top and bottom shells is very strong: more than six times the robustness of conventional products has been achieved.

It releases heat generated by high speed and high density operations and prevents performance deterioration (internal temperature of the card: 8°C cooler than conventional products).
## Specification

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CHARACTERISTIC</th>
<th>TEST CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electric Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Rating</td>
<td>0.5A/Pin</td>
<td></td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>Signal contact: 100mΩ MAX. (initial)</td>
<td>Measure in JIS C5402 measurement method. (Open circuit voltage: 20mV MAX. Closed circuit current: 10mV MAX.)</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>Over 1,000MΩ (initial)</td>
<td>Measure with a D.C. 500V megger for a minute.</td>
</tr>
<tr>
<td>Breakdown Voltage</td>
<td>At A.C. 500V for a minute.</td>
<td>Apply the standard voltage for a minute, and there must be no short circuit and damage at detection current 1mA.</td>
</tr>
<tr>
<td><strong>Mechanical Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibration Resistance</td>
<td>There must be no contact opening more than 0.1μs. (Signal contact)</td>
<td>Frequency 10Hz ~ 2,000Hz Acceleration: 20.0m/S²</td>
</tr>
<tr>
<td>Insertion Force</td>
<td>Less than 40N</td>
<td></td>
</tr>
<tr>
<td>Removal Force</td>
<td>1N or more, less than 40N</td>
<td></td>
</tr>
<tr>
<td><strong>Insertion and Removal Life</strong></td>
<td>Card Insertion and Removal Life</td>
<td>Mechanical life: 5,000 times (UHS-II Card) 3,000 times (non UHS-II Card) Contact resistance after the test: Signal contact: 40mΩ MAX. change Detection contact: 150mΩ MAX. Insulation resistance after the test: 100MΩ MIN.</td>
</tr>
<tr>
<td><strong>Environmental Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-25℃ to +90℃</td>
<td>There must be no freezing and condensation in low temperature.</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40℃ to +90℃</td>
<td>There must be no freezing and condensation in low temperature.</td>
</tr>
<tr>
<td>Resistant to Soldering Heat</td>
<td>Reflow soldering Maximum temperature is below +250℃. Manual soldering Soldering tip temperature is below +300℃ and 5 seconds.</td>
<td>It is conducted the soldering with an infrared reflow soldering equipment. The surface temperature of a printed circuit board.</td>
</tr>
<tr>
<td>Resistant to Humidity (In mated state)</td>
<td>Contact resistance after the test: Signal contact: 40mΩ MAX. change Detection contact: 150mΩ MAX. Insulation resistance after the test: 100MΩ MIN.</td>
<td>MIL-STD-1344A, METHOD1002 Temperature +40℃ Humidity 90%RH ~ 95% Rh Time of test 500 hours</td>
</tr>
<tr>
<td>Applicable Memory Card</td>
<td>SD memory card*1</td>
<td></td>
</tr>
<tr>
<td>Weight of Product</td>
<td>3.9 g</td>
<td></td>
</tr>
</tbody>
</table>

*1 When a card outside the specification is used, contents described under the specification outline cannot be warranted.

## Components Structure

<table>
<thead>
<tr>
<th>PART NAME</th>
<th>MATERIAL</th>
<th>FINISH REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Heat resistant plastic resin</td>
<td>Color: Black</td>
</tr>
<tr>
<td>Contact</td>
<td>Copper alloy</td>
<td>Contact part: Nickel ground/ Palladium-Nickel plating + Gold flash plating SMD/ Thruhole Soldered part: Nickel ground/ Gold flash plating</td>
</tr>
<tr>
<td>Slider</td>
<td>Heat resistant plastic resin</td>
<td>Color: Black</td>
</tr>
<tr>
<td>COM contact</td>
<td>Copper alloy</td>
<td></td>
</tr>
<tr>
<td>NO contact (Card detection)</td>
<td>Copper alloy</td>
<td>Contact part: Nickel ground/ Gold plating SMD/ Thruhole Soldered part: Nickel ground/ Gold flash plating</td>
</tr>
<tr>
<td>NO contact (WP detection)</td>
<td>Copper alloy</td>
<td></td>
</tr>
<tr>
<td>Compression coil spring</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>Base shell</td>
<td>Stainless steel</td>
<td>Soldered part: Nickel-Strike/ Gold flash plating (Partial plating)</td>
</tr>
<tr>
<td>Cover plate</td>
<td>Stainless steel</td>
<td>Soldered part: Nickel-Strike/ Gold flash plating (Partial plating) (Standard mount only)</td>
</tr>
<tr>
<td>Lock pin</td>
<td>Stainless steel</td>
<td></td>
</tr>
</tbody>
</table>
Sockets for SD Memory Cards  Standard Mount  SMD Type

AXA573062 P

① Board mounting type  7: Standard mount
② Shell structure  2: SMD
③ Packing condition  P: Emboss 450 pc/ reel x 2 reels per carton included

Contact state list by a detection switch

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Open</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td></td>
<td>Close</td>
<td>Open</td>
</tr>
</tbody>
</table>

Component number ①―② ①―③

※1 Due to variations in card widths, contacts may be protruded from the sides of the socket.
Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.

※2 The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.
Sockets for SD Memory Cards
Reverse Mount SMD Type
AXA563062P

1. Board mounting type 6: Reverse mount
2. Shell structure 2: SMD
3. Packing condition P: Emboss 450 pc/ reel x 2 reels per carton included

Contact state list by a detection switch

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Impracticable to write</td>
<td>Practicable to write</td>
<td></td>
</tr>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Open</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td>Component number</td>
<td>①→②</td>
<td>①→③</td>
</tr>
</tbody>
</table>

1. Due to variations in card widths, contacts may be protruded from the sides of the socket.
   Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.
2. The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.

Figure of when a card is set

Area which is insulated with the pattern recommendation: (Whole area)

Metal mask recommended machining drawing
Metal mask opening area ratio: 100%
Metal mask thickness: 120μm
Sockets for SD Memory Cards

**AXA573061 P**

1. Board mounting type: Standard mount
2. Shell structure: Through Hole
3. Packing condition: Emboss 450 pc/ reel x 2 reels per carton included

Contact state list by a detection switch:

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Open</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td></td>
<td>Close</td>
<td>①-②</td>
</tr>
</tbody>
</table>

Component number: ①―② ①―③

※1 Due to variations in card widths, contacts may be protruded from the sides of the socket. Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.

※2 The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.

Figure of when a card is set:

1. Due to variations in card widths, contacts may be protruded from the sides of the socket.
2. The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.
Sockets for SD Memory Cards   Reverse Mount   Through Hole Type

AXA563061P

① Board mounting type ⑥ Reverse mount
② Shell structure ① Through Hole
③ Packing condition ⑦ Emboss 450 pc/ reel x 2 reels per carton included

Contact state list by a detection switch

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Open</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td>Component number</td>
<td>①-②</td>
<td>①-③</td>
</tr>
</tbody>
</table>

※1 Due to variations in card widths, contacts may be protruded from the sides of the socket.
Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.
※2 The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B.
and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension
from the P.C.B. surface to the socket bottom surface.

Metal mask recommended machining drawing
Metal mask thickness: 120μm
With the both-side metal shell structure, noise reduction, improvement in robustness, and improvement in heat radiation have been achieved.

Since its structure is not easily affected by reflow heat, it maintains SMD terminal coplanarity after reflow.

SMD-type and Through Hole type shell structures are in production.

Compatible with the SDIO standard.

Optimal socket for the next-generation SD memory card standard, “UHS-I.”

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**Item Name**

**AXA2S 3 0 2 P-M**

1. Board mounting type 7: Standard mount 6: Reverse mount
2. Ejecting method 3: Push-push method
3. Standoff 0: None
4. Card pop-out prevention function 6: Provided 2: Not provided
5. Shell structure 2: SMD
6. Packing condition P: Emboss 450 pc/ reel x 2 reels per carton included

---

**Item Name**

**AXA2R 3 1 P-M**

1. Board mounting type 7: Standard mount 6: Reverse mount
2. Ejecting method 3: Push-push method
3. Standoff 0: None 3: 1.5mm type
4. Card pop-out prevention function 6: Provided 2: Not provided
5. Shell structure 1: Through Hole
6. Packing condition P: Emboss 350 pc/ reel x 2 reels per carton included T: Tray 35 pc/ tray x 20 trays

Both-side metal shell structure with superior “EMI resistance,” “robustness,” and “terminal flatness.”

Robustness and shielding performance are secured by the structure using welding for binding upper and lower metal shells. Providing a ground pattern when mounting the socket is effective for EMI protection.

Since its structure is not easily affected by reflow heat, it maintains SMD Contact terminal coplanarity after reflow.
### Component Structure

<table>
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<tr>
<th>PART NAME</th>
<th>MATERIAL</th>
<th>FINISH REMARK</th>
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<tr>
<td>Body</td>
<td>Heat resistant plastic resin</td>
<td>Color: Black</td>
</tr>
<tr>
<td>Contact</td>
<td>Copper alloy</td>
<td>Contact part: Nickel ground/ Palladium-Nickel plating + Gold flash plating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMD/ Thruhole Soldered part: Nickel ground/ Gold flash plating</td>
</tr>
<tr>
<td>Slider</td>
<td>Heat resistant plastic resin</td>
<td>With the function of card pop-out prevention: Black</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without the function of card pop-out prevention: Natural color (white)</td>
</tr>
<tr>
<td>COM contact</td>
<td>Copper alloy</td>
<td></td>
</tr>
<tr>
<td>NO contact (Card detection)</td>
<td>Copper alloy</td>
<td>Contact part: Nickel ground/ Gold plating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMD/ Thruhole Soldered part: Nickel ground/ Gold flash plating</td>
</tr>
<tr>
<td>NO contact (WP detection)</td>
<td>Copper alloy</td>
<td></td>
</tr>
<tr>
<td>Compression coil spring</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>Base shell</td>
<td>Stainless steel</td>
<td>Soldered part: Nickel-Strike/ Gold flash plating (Partial plating)</td>
</tr>
<tr>
<td>Cover plate</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>Lock pin</td>
<td>Stainless steel</td>
<td></td>
</tr>
</tbody>
</table>
Sockets for SD Memory Cards  Standard Mount  SMD Type

**AXA2S730**  P-M

1. Board mounting type  7: Standard mount
2. Card pop-out prevention function  6: Provided  2: Not Provided
3. Shell structure  2: SMD
4. Packing condition  P: Emboss 500 pc/ reel x 2 reels per carton included

### Contact state list by a detection switch

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Impracticable to write</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Practicable to write</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td></td>
<td>Open</td>
<td>Close</td>
</tr>
</tbody>
</table>

#### Component number
①—② ①—③

### Notes

1. Due to variations in card widths, contacts may be protruded from the sides of the socket. Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.
2. The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.
Sockets for SD Memory Cards

**AXA2S 630 ▱ 2 P-M**

1. Board mounting type  6. Reverse mount
3. Shell structure  2. SMD
4. Packing condition  7. Emboss 500 pc/ reel x 2 reels per carton included

---

**Contact state list by a detection switch**

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.①</td>
<td>Card not inserted</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.②</td>
<td>Card inserted</td>
<td>Open</td>
<td>Close</td>
</tr>
<tr>
<td>No.③</td>
<td></td>
<td>Close</td>
<td>Open</td>
</tr>
</tbody>
</table>

---

**Figure of when a card is set**

※1 Due to variations in card widths, contacts may be protruded from the sides of the socket. Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.

※2 The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.
### Sockets for SD Memory Cards

**AXA2R 73 ■■■ 1 ■■■ M**

1. Board mounting type  7: Standard mount
2. Stand off  0: None  3: 1.5mm type
3. Card pop-out prevention function  6: Provided  2: Not provided
4. Shell structure  1: Through Hole
5. Packing condition  P: Emboss 350 pc/ reel x 2 reels per carton included  T: Tray 35 pc/ tray x 20 trays

#### Contact state list by a detection switch

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.1</td>
<td>Impracticable to write</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>No.2</td>
<td>Practicable to write</td>
<td>Close</td>
<td>Close</td>
</tr>
<tr>
<td>No.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Due to variations in card widths, contacts may be protruded from the sides of the socket. Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.
2. The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.

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**Figure of when a card is set**

- Without stand off
- With stand off

![Diagram of SD memory card socket](image.png)

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**P.C.B. mounting dimensional drawing**

- With stand off
- Without stand off

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**Metal mask recommended machining drawing**

- Metal mask opening area ratio: 80%
- Metal mask opening area ratio: 100%
- Metal mask opening area ratio: 75%

**Metal mask thickness:** 120μm

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**Technical Details:**

- SD memory card
- Without the function of card pop-out prevention.
- Card not inserted: Open
- Card inserted: Close
- Component number No.1~No.3

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**Pin No.**

- Pin No.1: SD memory card
- Pin No.2: Through hole
- Pin No.3: Card pop-out prevention function
- Pin No.4: Provided: Black, Not provided: Natural color (white)
- Pin No.5: Card not inserted: Open, Card inserted: Close
- Pin No.6: SD memory card
- Pin No.7: Through hole
- Pin No.8: Card pop-out prevention function
- Pin No.9: Provided: Black, Not provided: Natural color (white)

---

**Pin Numberings:**

- Pin No.1: SD memory card
- Pin No.2: Through hole
- Pin No.3: Card pop-out prevention function
- Pin No.4: Provided: Black, Not provided: Natural color (white)
- Pin No.5: Card not inserted: Open, Card inserted: Close
- Pin No.6: SD memory card
- Pin No.7: Through hole
- Pin No.8: Card pop-out prevention function
- Pin No.9: Provided: Black, Not provided: Natural color (white)
Sockets for SD Memory Cards

**AXA2R63 1 2 3 4 M**

1. Board mounting type 6: Reverse mount
2. Stand off 0: None 3: 1.5mm type
3. Card pop-out prevention function 6: Provided 2: Not provided
4. Shell structure 1: Through Hole
5. Packing condition P: Emboss 350 pc/ reel x 2 reels per carton included T: Tray 35 pc/ tray x 20 trays

**Contact state list by a detection switch**

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Card insertion condition</th>
<th>Write protect switch</th>
<th>Card detection switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>Card not inserted</td>
<td>Practical to write</td>
<td>Practical to write</td>
</tr>
<tr>
<td>No. 2</td>
<td>Card inserted</td>
<td>Practical to write</td>
<td>Open</td>
</tr>
<tr>
<td>No. 3</td>
<td>Card inserted</td>
<td>Practical to write</td>
<td>Close</td>
</tr>
</tbody>
</table>

**Figure of when a card is set**

※1 Due to variations in card widths, contacts may be protruded from the sides of the socket. Protrusion amount: 0.20 MAX. at card detection and write prevention detection contact.

※2 The standoff dimension of 0.08 is determined by considering the resist thickness on the P.C.B. and the thickness of silk printing, etc. which are 0.08 mm. This is to secure the dimension from the P.C.B. surface to the socket bottom surface.
**Designing P.C.B.**

Apply the recommended foot print pattern for designing the P.C.B. in order to secure the mechanical strength at the soldering section of terminals.

**When implementing the socket**

1. During the reflow soldering, if the slider (sliding section) is locked, the slider deforms by the heat, and operation of the slider becomes not possible. If the card is ejected and inserted before the soldering process, ensure that the slider lock is released before the implementation.
2. Ensure not to apply unintentional external force to the contacting section or terminal during an implementation to the P/C board. Otherwise, deformation may occur.
3. When automatic implementation is selected by using tray packaging, check the actual tray to be used for considering about implementation.

**Soldering**

1) Reflow soldering
   - When printing the creme soldering, screen printing method is recommended.
   - When printing the creme soldering, perform with the screen thickness of 0.12 mm with the recommended foot pattern.
   - Set the metal mask aperture rate of 75% for the COM contact (one section) and NO contacts (two sections).
   - When a thickness other than the recommended screen printing thickness is required, please contact us.
   - For the recommended condition, refer to “Reflow temperature profiles” on the following page.
   - Measure and set the temperature on a P.C.B. surface near the contact.
   - When the reflow soldering is conducted on the rear side after the socket reflow is conducted, the socket may fall. Fix the socket with a tape, adhesive, etc. Double reflow soldering is available.

2) Manual soldering
   - Perform soldering by applying the soldering iron for five seconds or shorter with the soldering iron tip at +300°C.
   - When without stand off type is used, long duration of soldering and/or too much solder paste may lead creep-up of solder paste. Please be careful.

**Washing after soldering**

This product has a sliding section, card detecting contact, and a section corresponding a write protection. If the product is washed, residue such as flux may be left inside after washing, which disable card insertion/ejection or contact failure of the contact. Thus, please do not wash the product after soldering. (Partial washing of the P.C.B. and soldering terminal is possible.)

**After implementation of P.C.B.**

1) Control so the warpage of the P.C.B. is 0.03 mm or lower to the entire board length.
2) When storing the P.C.B. assemblies and blocks in progress, pay close attention not to apply excessive load on piled-up sockets.
3) When transferring the P.C.B. assemblies and blocks in progress, pay close attention not to apply external force on the sockets.

**Handling of each product**

1) Handle with care not to drop to a floor from a work desk, etc.

2) When an excessive force is applied to the terminal, the terminal may be deformed, and the terminal flatness will be lost. Pay close attention.
3) Repetitive bending of the terminal leads bending fault.

**Matching of cards**

1) The molded section of this product is partially thin with the purposes of downsizing and weight saving. Take sufficient consideration on the housing design so the forcible insertion/ejection can be avoided.
2) The product is adopting the structure preventing reverse insertions of the card. If reverse insertion is tried for many times, the socket and the card may be broken.
3) When a card is inserted/ejected at the socket when the soldering process is not completed, weakening of the fixing force at the matching section and a failure in flatness may be lead.
4) When a card is forcibly ejected while it is properly inserted, the locking performance against card dropping deteriorates. When ejecting a card, be sure to push in the card toward the card insertion direction to release the lock. Then, eject the card properly.
5) The compatible card is an SD memory card. Take appropriate measures such as calling for an attention with the following contents in the instruction manual.
   - When an MMC card is inserted, the No. 7 and 8 signal contacts of the socket may be short-circuited to the contacting section of No. 7 of MMC.
   - When an MMC card is inserted to the socket, the resistance at card insertion/ejection becomes larger due to difference in shapes with the SD cards. If a card is inserted unintentionally, incomplete ejection or damages on the socket and the card may be lead.

**Housing design**

1) The molded section of this product is partially thin with the purposes of downsizing and weight saving. Take sufficient consideration on the housing design so the forcible insertion/ejection can be avoided.
2) To smoothly insert/eject a card, take an appropriate measure for the housing design so excessive force is not applied on the metal shell on the top of the socket. When any force suppressing the metal shell is applied, the card is also suppressed and cannot be ejected.
3) In order to avoid a large force applied on the socket body when inserting/ejecting a card, hold the housing by using a guide or so.

**Unexpected pop-out of a card**

1) The socket has preventive functions against popping out of a card under certain conditions. However, it is strongly recommended to call for an attention of users from a viewpoint of product reliability, so accidents due to incorrect usage can be prevented in advance.
2) Due to the socket mechanism, the product lifetime is not warranted after (1) incomplete insertion of a card, (2) reverse insertion of a card, and (3) prevention of popping out of a card after reverse insertion.
3) This socket is applied with a resistance at the insertion and ejection of a card in order to prevent popping out of a card. Therefore, be aware that a certain resistance is felt when inserting/ejecting a card in normal circumstances.

**Others**

After soldering, when the P.C.B. is coated for prevention of insulation deterioration, take an appropriate measure not to accidentally apply the coating agent to the socket.
Embossed tape dimension drawing

Sockets for SD Memory Cards

- Applicable to UHS-II (AXA5-306-P)
- Applicable to UHS-I (AXA2-30-P-M)

Taping specification

Reel Specification

Reflow temperature profile (reference value)

The described temperature profile is only for reference. Conditions vary depending on the P.C.B. size or so, and the provided profile may not match. Ensure to evaluate the implementation check in advance.

- Precautions on this catalog
  Specifications are only for reference. The specifications do not warrant the performance of the product at the customer's site. Due to modifications or other reasons, the contents may be changed without prior notice. Contact our salesperson for details of the products. When reviewing for actual application of the product and designing a P.C.B., please contact our salesperson in advance.