

# Connector for SD Memory Card

SCDA Series



Compact low-profile type with a width of 27mm features high reliability contact structure.

For SD Memory Card

For miniSD™ Card

For microSD™ Card

For W-SIM

For Memory Stick Micro™

For Memory Stick™

Combine Type

For Compact Flash™

For PC cards supporting CardBus

For Express Card™

For CMOS Camera Module



## Features

- Media half-lock structure stops media from flying out during ejection, preventing the dropping and loss of media.
- Media detection switch adopts a highly reliable structure where the contact slides at ON/OFF to ensure detection of media insertion timing.
- Also compatible to MultiMediaCard™.
- Compact size and low-profile.

## Applications

- For digital still cameras, digital camcorders, mobile phones, PCs and personal digital assistants
- For home audio equipment (TVs, set top boxes, etc.)
- For stereo systems
- For portable memory players

## Typical Specifications

| Items       |                                 |                    | Specifications                          |
|-------------|---------------------------------|--------------------|-----------------------------------------|
| Structure   | Applicable media                |                    | SD Memory Card/MultiMediaCard™          |
|             | Mounting type                   |                    | Surface mounting type                   |
|             | Mounting style                  |                    | Standard mount/Reverse mount            |
|             | Media ejection structure        |                    | Push-push type/Manual insertion/removal |
| Performance | Operating temperature range     |                    | −25℃ to +60℃                            |
|             | Voltage proof                   |                    | 100V AC 1minute/500V AC 1minute (SCDA3) |
|             | Insulation resistance (Initial) |                    | 1,000MΩ min.                            |
|             | Contact resistance (Initial)    | Connector contacts | 100mΩ max.                              |
|             |                                 | Detection switch   | 500mΩ max.                              |
|             | Insertion and removal cycle     |                    | 10,000cycles                            |

## Product Line

| Media ejection structure          | Mounting style | Features                      | Stand-off (mm) | Packing system | Product No. | Drawing No. |
|-----------------------------------|----------------|-------------------------------|----------------|----------------|-------------|-------------|
| Push-push type                    | Standard mount | Inner tail without frame legs | 0              | Taping         | SCDA3A0102  | 1           |
|                                   |                | Inner tail with frame legs    |                | Tray           | SCDA3A0202  | 2           |
|                                   |                | Inner tail with shutter       |                | Taping         | SCDA3B0201  | 3           |
|                                   |                | Slim type With boss           |                |                | SCDA4A0200  | 4           |
|                                   |                | Slim type Without boss        |                |                | SCDA4A0301  | 5           |
|                                   | Reverse mount  | Slim type                     | 1.8            | Tray           | SCDA4A0400  | 6           |
| Manual insertion and removal type | Standard mount | Header type                   | 0              | Taping         | SCDA5A0201  | 7           |
|                                   |                |                               |                |                | SCDA6A0101  | 8           |
|                                   |                |                               |                |                | SCDA3C0102  | 9           |

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## Dimensions

Standard mount (Inner tail)

Unit:mm

| No. | Style                            | PC board mounting hole dimensions (Viewed from the mounting face side)                                                                                                 |
|-----|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | <p><b>Without frame legs</b></p> | <p> <input type="checkbox"/> No part mounting<br/> <input checked="" type="checkbox"/> Land area<br/> <input checked="" type="checkbox"/> No pattern area         </p> |
| 2   | <p><b>With frame legs</b></p>    | <p> <input type="checkbox"/> No part mounting<br/> <input checked="" type="checkbox"/> Land area<br/> <input checked="" type="checkbox"/> No pattern area         </p> |

## ■ Dimensions

### Standard mount (Inner tail)

Unit:mm

| No. | Style        | PC board mounting hole dimensions<br>(Viewed from the mounting face side)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3   | With shutter | <p>Technical drawing showing the PC board mounting hole dimensions for Style 3 (With shutter). The drawing includes a top view, a side view, and a detailed view of the card insertion entrance. Dimensions are in millimeters.</p> <p>Key dimensions and features:</p> <ul style="list-style-type: none"> <li>Card center: 0.65</li> <li>Connector center</li> <li>Card inserting: 33.9</li> <li>Over travel: 1</li> <li>Effect travel: 5</li> <li>Card detect switch: No. 10</li> <li>Write protect detect switch: No. 12</li> <li>GND: No. 13</li> <li>Common: No. 11</li> <li>Dimensions: 27.5, 28.05, 32.45, 18.1, 0.6, 28.1, 29.5, 0.4, 4.15, 23.9, 8.6, 1, 2.9, 14.1, 2.1, 18.5, 0.3, 25.6, 2.1, 0.4, 2, 1.2, 2.8, 12-0.4, 3.6, 4.4, 5.2, 6, 6.8, 7.6, 8.4, 9.2, 9.5, 10.3, 10.8 min., 3.6 max., 1.6 min., 0.3 max., 27.65 min., 9.9 min., 11.1 min., 7.4 min., 14.1, 2-1.6 min., 5.9 max., 12.8 min., 17.7, 19.1 min., 25.9, 1.6 min., 0.4, 2, 3.6, 12-1 min., 6, 5.2, 7.6, 6.8, 9.2, 8.4, 10 max., 9.2 max., 11.5 min., 10.7 min.</li> </ul> <p>Recommended card insertion entrance</p> |

### Standard mount

Unit:mm

[illegible]

## Dimensions Standard mount

Unit:mm

| No. | Style                                      | PC board mounting hole dimensions<br>(Viewed from the mounting face side) |
|-----|--------------------------------------------|---------------------------------------------------------------------------|
| 5   | <b>Without boss</b><br><b>Slim type</b>    |                                                                           |
| 6   | <b>Stand-off 1.8mm</b><br><b>Slim type</b> |                                                                           |

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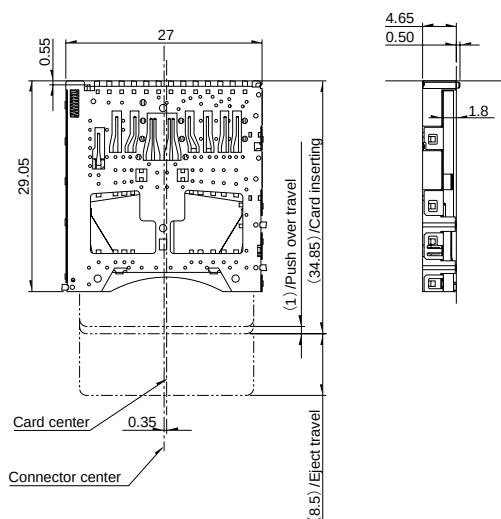
For PC cards  
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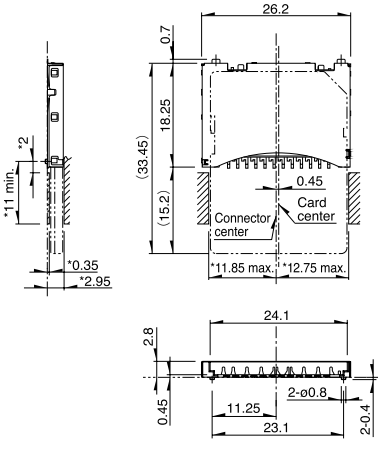
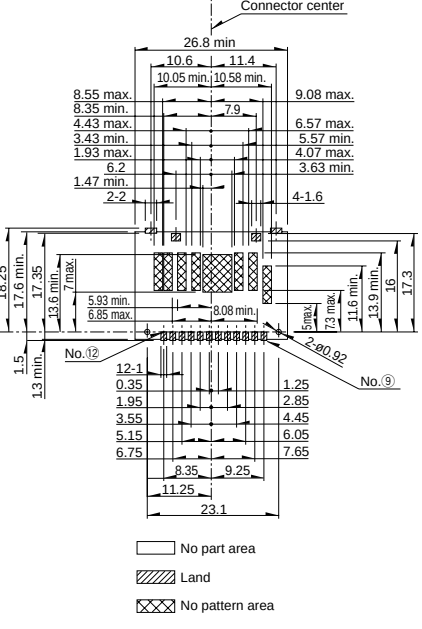
**■ Dimensions**  
**Reverse mount**

Unit:mm

| No. | Style                                                                                                                      | PC board mounting hole dimensions<br>(Viewed from the mounting face side) |
|-----|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 7   | <p><b>Stand-off 1.8mm Slim type</b></p>  |                                                                           |

## Dimensions Header mount

Unit:mm

| No. | Style                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PC board mounting hole dimensions<br>(Viewed from the mounting face side)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9   |  <p>             Connector center<br/>             Card center<br/>             *11 min.<br/>             *2<br/>             *0.35<br/>             *2.95<br/>             26.2<br/>             0.7<br/>             18.25<br/>             (33.45)<br/>             (15.2)<br/>             0.45<br/>             *11.85 max.<br/>             *12.75 max.<br/>             24.1<br/>             2.8<br/>             0.45<br/>             11.25<br/>             23.1<br/>             2-0.8<br/>             2-0.4<br/>             No.11 Common<br/>             No.13 GND<br/>             No.3<br/>             No.2<br/>             No.1<br/>             No.9<br/>             No.10 Card detect switch<br/>             No.14 GND<br/>             No.4<br/>             No.5<br/>             No.6<br/>             No.7<br/>             No.8<br/>             No.12 Write protect detect switch<br/>             12-0.4<br/>             1.25<br/>             2.85<br/>             4.45<br/>             6.05<br/>             7.65<br/>             0.35<br/>             1.95<br/>             3.55<br/>             5.15<br/>             6.75<br/>             9.25<br/>             8.35<br/>             2-1.4<br/>             2-1<br/>             11.4<br/>             7.9<br/>             6.2<br/>             10.6<br/>             Recommended card guide layout<br/>             * Card guide dimension           </p> |  <p>             Connector center<br/>             26.8 min.<br/>             10.6<br/>             11.4<br/>             10.05 min.<br/>             10.58 min.<br/>             7.9<br/>             9.08 max.<br/>             8.55 max.<br/>             8.35 min.<br/>             4.43 max.<br/>             3.43 min.<br/>             1.93 max.<br/>             6.2<br/>             1.47 min.<br/>             2-2<br/>             4-1.6<br/>             18.25<br/>             17.35<br/>             7 max.<br/>             5.93 min.<br/>             6.85 max.<br/>             8.08 min.<br/>             5 max.<br/>             7.3 min.<br/>             11.6 min.<br/>             13.9 min.<br/>             16<br/>             17.3<br/>             1.5<br/>             1.3 min.<br/>             12-1<br/>             0.35<br/>             1.95<br/>             3.55<br/>             5.15<br/>             6.75<br/>             8.35<br/>             9.25<br/>             11.25<br/>             23.1<br/>             2-0.92<br/>             No.9<br/>             No.12<br/>             No part area<br/>             Land<br/>             No pattern area           </p> |

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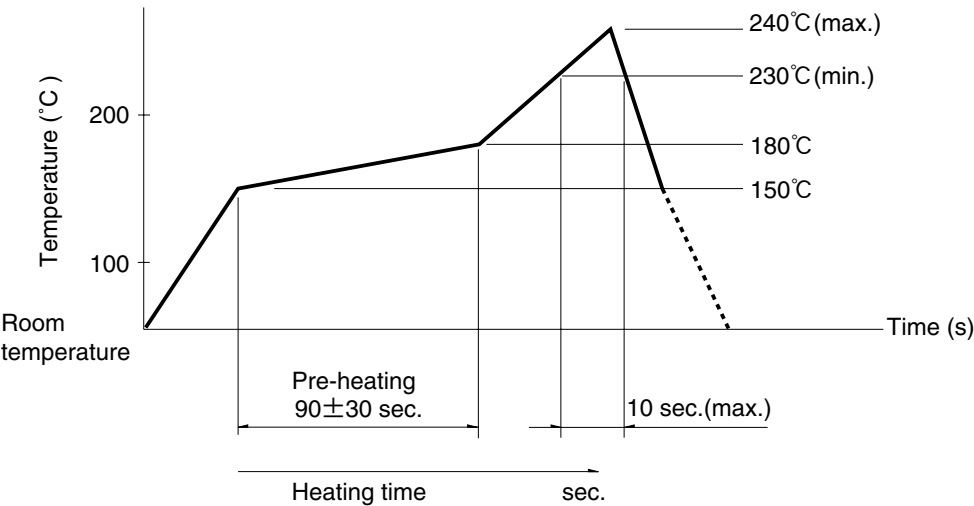
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## Soldering Conditions

### Example of Reflow Soldering Condition (Reference)

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple 0.1 to 0.2 ϕ CA (K) or CC (T) .
- 3. Temperature profile (Surface of products) .



## Cautions

- 1. When soldering terminals, there is a danger that load placed on the terminals may cause rattle, deformation or electrical degradation to occur depending on the conditions. Caution is therefore required.
- 2. Avoid use of water-soluble soldering flux, since it may corrode the product.
- 3. Check and conform to reflow soldering requirements under actual mass production conditions.
- 4. PC board warping may alter the characteristics. Please take this into consideration when designing patterns and layout.
- 5. This product has been designed and manufactured for use in ordinary electronic equipment, such as AV equipment, electric home appliances, office machines and communication equipment. In case of using the products for highly sensitive applications such as medical, aviation, aerospace and security, the set makers shall require to include measures necessary to meet product safety requirements of such specific applications. Such measure may include additional protection circuits and redundant circuits, for example.
- 6. The card specifications are provided by the above manufactures. Products by other manufactures may not be compliant with these specifications and are subject to change without prior notice.