Card Connectors

3 in 1 Card Connector

■ Features
1. Accepts 3 types of memory card (Memory Stick™, SD memory Card and Multi Media Card).
2. With an exclusion function of one-slot structure. *Exclusion function: No more than one card can be inserted at a time.
3. Low profile of 4.95mm height when mounted.
4. Sliding system for card insertion and removal (manual card insertion/withdrawal system).
5. Resistant to ESD which is possible to develop during the card insertion process.
6. Featuring a measure to prevent reverse insertion for every type of card, a card detection function (SD Memory Card and Multi Media Card) and a write-protection switch (SD Memory Card).

■ Specification
1. Rating : 0.5A, 5V AC/DC
2. Contact Resistance : 100mΩ max.
3. Insulation Resistance : 1,000MΩ min.
4. Withstanding Voltage : 250V AC (for one minute)
5. Operating Life : 10,000 cycles (Memory Stick: 12,000 cycles)
6. Operating Temperature Range : –25˚C to +85˚C

■ Material and Plating
● Housing : Thermoplastic Resin, Black, 94V-0
● Contact : Cu Alloy
  Au Plating (contact section)
  Au Flash Plating (terminal section)
● Plate : Cu Alloy, Sn Plating (reflow treatment)

Types of Card | Detect the Card | Write Protect
--- | --- | ---
Memory Stick™ | X | X
SD | O | O
MMC | O | X

Memory Stick™ is trademark of Sony Corporation.
SD Memory Card is a small memory card is a joint development by Matsushita Electric Industrial Co., Ltd., SanDisk Corporation in the USA and Toshiba Corporation.
MMC (Multi Media Card) is trademark of Infineon Technologies in the Germany.
Card Connectors

4 in 1 Card Connectors

Features
1. Designed to accept a SmartMedia™ in the top slot and Memory Stick™ or SD Card or Multi Media Card in the bottom slot.
2. With a switch for card detection and write protection.
3. Reinforcement hardware provided for increased bonding strength to the PWB.
4. Reflow-solderable.
5. An ESD resistant version of grounding shell structure is also available.

Specification
1. Rating : 0.5A, 5V AC
2. Contact Resistance : 100mΩ max.
3. Insulation Resistance : 1000MΩ, min.
4. Withstanding Voltage : 500V AC (for one minute)
5. Operating Life : 12,000 cycles (Memory Stick™)
   10,000 cycles (SD cards, Multi Media Card, SmartMedia™)
6. Operating Temperature Range : –20˚C to +85˚C

Material and Plating
- Housing: Thermoplastic Resin, Black, 94V-0
- Contact: Cu Alloy, Au Plating (contact section)
  Sn-Pb Plating (terminal section)
- Plate: Cu Alloy, Sn-Pb Plating

Memory Stick™ is trademark of Sony Corporation.
SmartMedia™ is trademark of Toshiba Corporation.
SD Memory Card is a small memory card is a joint development by Matsushita Electric Industrial Co., Ltd., SanDisk Corporation in the USA and Toshiba Corporation.
MMC (Multi Media Card) is trademark of Infineon Technologies in the Germany.
Card Connector

**xD-4 in 1 Card Connector (1 Slot Type)**

**Features**
1. Designed to accept 4 types of memory cards. (xD-Picture Card™, MemoryStick™, SD Memory Card and MultiMedia Card™)
2. With an exclusion function through the use of a 1-slot structure. (Exclusion function: No more than 1 card can be accepted.)
3. Low profile of 4.95mm height when mounted. (26% lower than our previous equivalent product)
4. Sliding type for card insertion/withdrawal (manual operation)
5. Our exclusive terminal protection structure for prevention of wear, buckling and damage to terminal contacts due to insertion of memory cards of unintended design.
6. With an erroneous card insertion prevention mechanism (for all 4 card types), card detection (for xD-Picture Card™, SD Memory Card and MultiMedia Card™) and write-protect switch (for SD Memory Card)

**Specifications**
1. Rating : 0.5A, 5V AC/DC
2. Contact Resistance : $100 \text{m} \Omega$ max.
3. Insulation Resistance : 1,000M$ \Omega$ min.
4. Withstanding Voltage : 250V AC (for one minute)
5. Operating Life: 10,000 cycles (Memory Stick™, 12,000 cycles)
6. Operating Temperature Range : $-25˚C$ to $+85˚C$

**Material and Plating**
- Housing : Thermoplastic Resin, Black, 94V-0
- Contact : Cu Alloy, Au Plating (contact section)
- Au Flash Plating (terminal section)
- Plate : Cu Alloy, Sn Plating (reflow treatment)

**P.C. Board Dimension**

REFERENCE PCB LAYOUT (MOUNTING SIDE/TOL.:±0.05)