

Low Profile SmartCard



Smart Plus-A Low Profile SmartCard C/W PCMCIA Interface



Description

The Smart Plus-A Interconnect System unites the technology of the SmartCard and CardBus interface solutions. This system solution enables both the reader and the PCMCIA to function independently. With the minimum real estate possible (full height dimensions: 94.5mm x 67.8mm x 9.2mm), the system allows the removal of either the Reader or the PCMCIA. The Reader connector is a double deck design utilizing two spring loaded ejector rods for the independent ejection of PCMCIA and SmartCard.

This connector reader has a FPC and can be directly mounted onto the board. It is most suitable for PC notebook applications and add-ons to electronic hand held devices.

Banking, business via the internet and cashless transactions have become very common. Thus, this connector concept is a must to have in such devices.

Target Applications

- Set-Top Box
- Card Readers
- PC notebook
- Digital television
- Gaming box / device
- Other electronic PDA devices

Available in Asia/Pacific only

Features

- Compliance on the electrical connection according to ISO 7816 and ISO 7811
- Current rating min. 10 μ A to max. 1A
- 30% GF UL-94 V-0 high temperature
- Thermoplastic material to withstand IR reflow

Benefits

- Space saving due to the low profile height
- Connector is shielded for better EMI protection
- Flexible printed cable allows possible variation in mounting height
- High temperature material allows the connector to withstand infrared and vapor phase reflow soldering temperatures
- Rugged design suitable for end products that need to meet drop test requirements
- Wipe blade type design limit switches have superior qualities compared to other designs in terms of reliability. This design sweeps away oxide or dirt upon applied force. This always produces a clean and reliable contact area
- Embedded microprocessor chip possibility

Target Markets

- Consumer: Home and office applications



<http://www.fciconnect.com>

Asia/Pacific Tel.: 65 549 6666

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Technical Features

Materials

- Housing: High-temperature thermoplastic (UL 94 V-0)
- Color:
 - Header: Beige corresponding to black ejector button
 - Cover: Purple corresponding to purple ejector button
- Applicable solder process: Infrared, vapor phase, or convection reflow
- Contact: Phosphor Bronze
- Contact plating: 2µmAu over 2.5µm Palladium Nickel in contact area

Mechanical Performance

- Insertion force: 400-600g
- Withdrawal force: 400-600g
- Contact normal force: 25g min.
- Durability (mating cycles): 10,000 cycle max.
- Temperature range: -40°C to 85°C (Under Environmental Exposure)
- FPC retention force: 8kg
- Pressure force: 15kg/diameter 30mm

Electrical Performance

- Insulation resistance: 1000 megaohms minimum

- Withstand voltage: 1000 Vrms maximum
- Current rating: min. 10 µA to max. 1 A
- Contact resistance: 100 mOhms maximum

Specifications

- Product specification: GES-12-175
- Normally closed blade switch part number: 52539-00LX-R
- Conforms to standard CardBus requirements

Packaging

- Tray packaging

