Volume Reduced 20% (From Our Previous Product) Smallest-in-Class Size in the Industry, MicroSDTM Card Connector ST10 Series Has Been Developed



Mobile phones have been evolving with the inclusion of functions like cameras, audio players, one segment TV and various other applications such as GPS in addition to the original phone function. And devices incorporating both phone and computer functions, such as smart phones and tablet PCs, are now increasingly common. Data and software for these devices are mainly exchanged and distributed through small memory cards, so connectors to connect the cards and devices have become essential.

Leading the industry, JAE has developed the "ST* Series" connectors for the microSDTM card (Note 1), which holds a major share of the small memory card market. The ST* Series has expanded to include four types of mechanical variations (Note 2): hinge type, tray type, push-push type, and block type. Now with the development of the ST10 Series, which has a volume reduced by 20%, we further expand the available variations of small memory card connectors and make possible even more design freedom for customers.

Note 1) microSDTM: Trademark of SDATM (<u>SD</u> Card <u>A</u>ssociation)

Note 2)

Hinge type: Type with lid that is opened for insertion and closed for use.

Tray type: Type with card placed on tray drawer for insertion.

Push-push type: Type with card inserted and locked by pushing, and released by pushing again. B lock type: Type with only a mating area and without lock mechanism.

:: Features

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- Push-push structure, standard mounting type connector for the microSD TM card standardized by the SDA.
- 20% reduced volume compared to our existing push-push product (ST9 Series). (Reduced 14% in height and 6 % in base area.)
- Balanced EMI control through 4 hold-down grounding points.
- Slim design with 1.25mm height, 13.2mm width, 14.85mm depth. (Depth including card: 16.75mm)
- Supplied in embossed tape for automatic mounting. Compatible with second reflow (Note 3).
- Halogen free, for environmentally friendliness.
- Available with card insertion detection structure (D-SW), normally open.
- Available with lock.
- Easy card insertion and removal with 1mm push stroke and 3.1mm card ejection length.
- Card pop-out countermeasure to prevent loss of cards.

Note 3) Second reflow: Undergo soldering process twice for mounting on both sides of board.

:: Applicable market

Devices using microSDTM cards such as mobile phones, smart phones, digital still cameras, etc.

:: General specifications

- 1. No. of Contacts: 8pos. + 2 pos. (D-SW type)
- 2. Contact Resistance: 100 m ohm max.
- 3. Dielectric Withstanding Voltage: AC500 Vr.m.s. per minute
- 4. Operating Temperature: -25 Deg. C to +85 Deg. C
- 5. Storage Temperature: -10 Deg. C to +60 Deg. C
- 6. Rated Current: 0.5 A per terminal
- 7. Rated Voltage: 10V per terminal
- 8. Insulation Resistance: 1,000 M ohm min.
- 9. Durability: 10,000 times
- 10. Card Insertion Force: 40N max.

:: Materials and Finishes

Component	Material/ Finish
Signal Contacts	Copper alloy / Contact: 0.5u min. Au plating over Ni
	Terminal area: Au flash plating over Ni
Housing	Synthetic resin / N one
Cover Frame	Stainless steel / Terminal area: Au flash plating over Ni
Spring	Synthetic resin / None, halogen-free material
Eject Bar	Stainless steel / None
D-SW Contact	Conforms with signal contact
Lock	Stainless steel / None
Cam Follower	Stainless steel / None

Page Top

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