

## INTRODUCTION

Molex's ultra-low-profile microSD card connector saves nearly 30% of packaging space compared to industry standard versions, while ensuring reliable card insertion and extraction for compact mobile applications.

Molex developed its 503182 low profile microSD connector to meet the continuing downsizing needs and requests of mobile phone makers. The connector also addresses the need to prevent card fly-out, which can occur with micro-sized memory cards.

This new version also features an inner lead terminal design, which prevents terminal stubbing during card insertion while providing secure contact reliability. This inner lead terminal design also enables a lower profile design, as no ramp is needed to protect terminals as in outer terminal design versions.



## microSD Card Connector Push-Push, Top Mount 1.45mm (.057") Height

### Series 503182 Card Detect Switch

#### Specifications:

- Voltage: 10V
- Current: 0.50A
- Contact Resistance: 100 milliohms max.
- Dielectric Withstanding Voltage: 500V AC
- Insulation Resistance: 1000 Megohms min.
- Durability (min.): 10,000 cycles



#### Features

#### Benefits

- |   |  |
|---|--|
| • Ultra low profile (1.45mm) and compact design | • Space savings for mobile and other tight packaging applications              |
| • Inner lead terminal design                    | • Prevents terminal stubbing, and provides secure contact reliability          |
| • Anti card fly-out ramp and alignment guides   | • Control card ejection forces and enable smooth card insertion and extraction |
| • Safe zone near solder tail area               | • Enables easy re-work and provides protective space for solder tail joints    |
| • Card polarization feature                     | • Prevents card from being improperly inserted                                 |

## LOW-PROFILE DESIGN

Molex's 503182 microSD card connector offers one of the lowest profiles in the market.

- 30% overall space savings and 20% height reduction versus industry standard 1.80mm versions.
- 15% overall space savings and 5% height reduction versus Molex's 502702 series with 1.53mm height.

503182  
H=1.45mm

502702  
H=1.53mm

Industry Standard  
H=1.80mm



## MARKETS AND APPLICATIONS

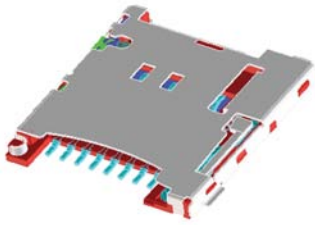
- Mobile phones
- Portable audio players
- Digital still cameras
- Digital video cameras
- Portable games
- Car navigation
- Personal navigators (PND)





# microSD Card Connector Push-Push, Top Mount 1.45mm (.057") Height

## Series **503182** Card Detect Switch



Order No.	Pitch	Description	Mounting Type	Packaging
503182-0892	1.10mm (.043")	Ultra-low profile height 1.45mm (.057")	Top (Normal)	Embossed Tape

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