

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [1050270001](#)  
**Status:** **Active**  
**Overview:** [microsd](#)  
**Description:** 1.10mm(.043"), 0.75mm(.030"), 0.70mm(.028") Pitch microSD Card Header with Detect Switch, Height 1.70mm (.067"), Lead Free

**Documents:**

[3D Model](#) [Product Specification PS-105027-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

|                |  |
|----------------|--|
| Product Family | Memory Card Sockets                        |
| Series         | <a href="#">105027</a>                     |
| Button Type    | Push-Pull                                  |
| Comments       | <LI>Ground Pin located between Pin 4 and 5 |
| Component Type | I/O Header (Card)                          |
| Overview       | <a href="#">microsd</a>                    |
| Product Name   | microSD Card, TransFlash                   |
| Type           | N/A  |

**Physical**

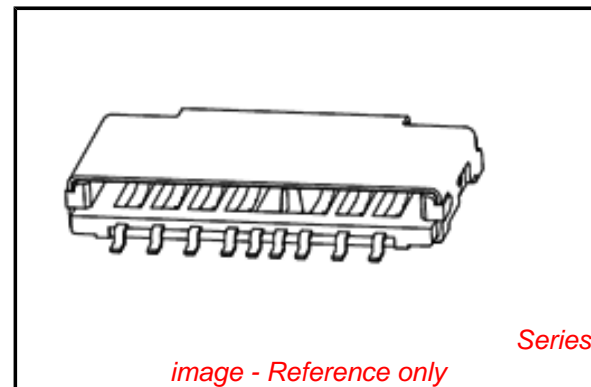
|                                |                                |
|--------------------------------|--------------------------------|
| Card Detection Switch          | Yes                            |
| Circuits (Loaded)              | 8                              |
| Circuits (maximum)             | 8                              |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 10,000                         |
| Ejector Button Side            | No Ejector Button Present      |
| Entry Angle                    | Horizontal                     |
| Keying to Mating Part          | Yes                            |
| Material - Metal               | Phosphor Bronze                |
| Material - Plating Mating      | Gold                           |
| Material - Plating Termination | Nickel                         |
| Material - Resin               | High Temperature Thermoplastic |
| PCB Locator                    | No                             |
| PCB Mounting Side              | Normal                         |
| PCB Retention                  | Yes                            |
| Packaging Type                 | Embossed Tape on Reel          |
| Pitch - Mating Interface (in)  | 0.043 In                       |
| Pitch - Mating Interface (mm)  | 1.10 mm                        |
| Pitch - Term. Interface (in)   | 0.043 In                       |
| Pitch - Term. Interface (mm)   | 1.10 mm                        |
| Plating min: Mating (µin)      | 29.5                           |
| Plating min: Mating (µm)       | 0.75                           |
| Plating min: Termination (µin) | 49.2                           |
| Plating min: Termination (µm)  | 1.25                           |
| Ports                          | 1                              |
| Temperature Range - Operating  | -40°C to +85°C                 |
| Termination Interface: Style   | Surface Mount                  |

**Electrical**

|                               |       |
|-------------------------------|-------|
| Current - Maximum per Contact | 0.5A  |
| Shielded                      | Yes   |
| Voltage - Maximum             | 5V DC |

**Material Info**

**Reference - Drawing Numbers**



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
Status**  
 Not Reviewed

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[105027Series](#)

**Mates With**  
 Standard SIM Card

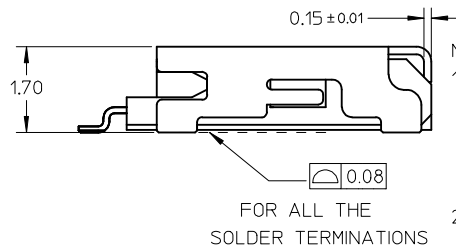
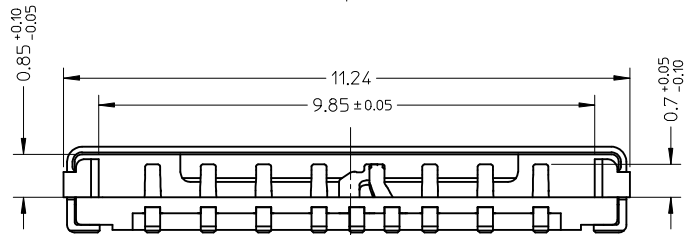
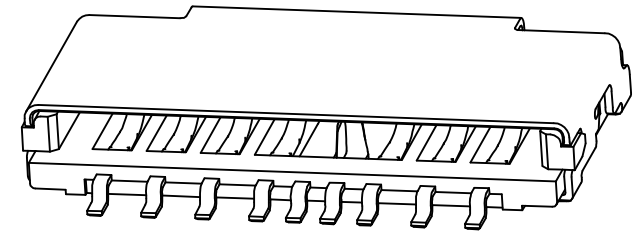
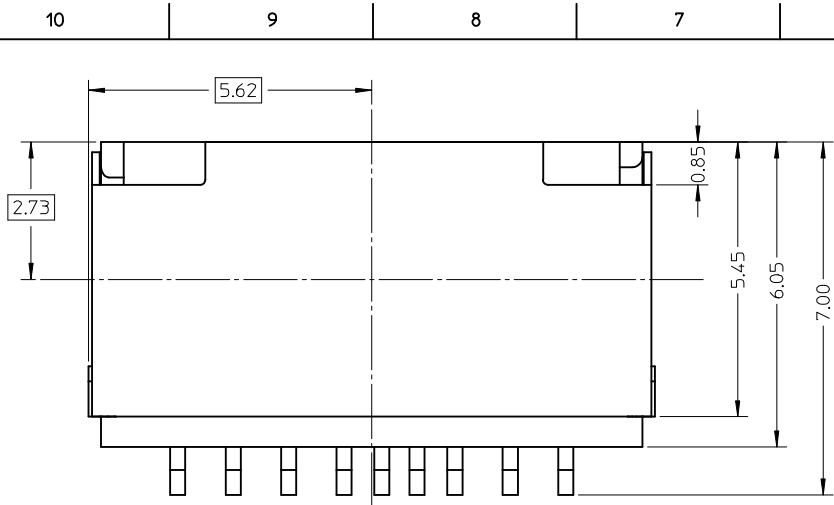
**Use With**  
 microSD Card

Packaging Specification  
Product Specification  
Sales Drawing  
Test Summary

PK-105027-001  
PS-105027-001  
SD-105027-001  
TS-105027-001

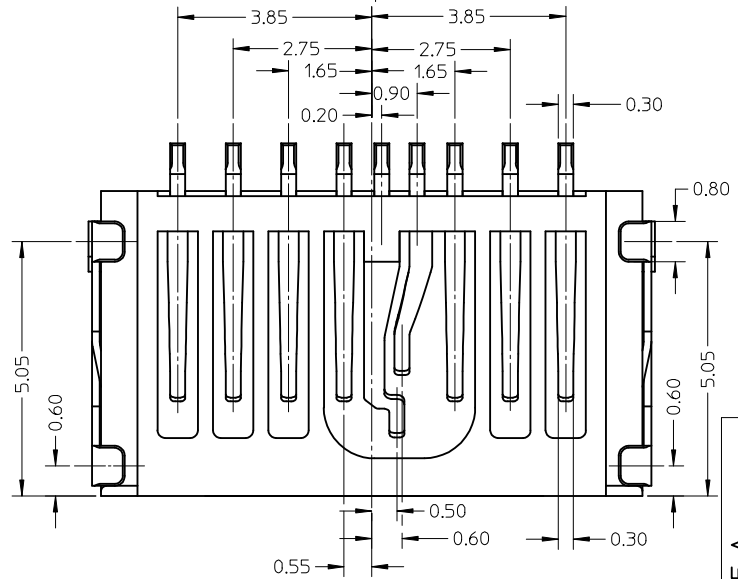
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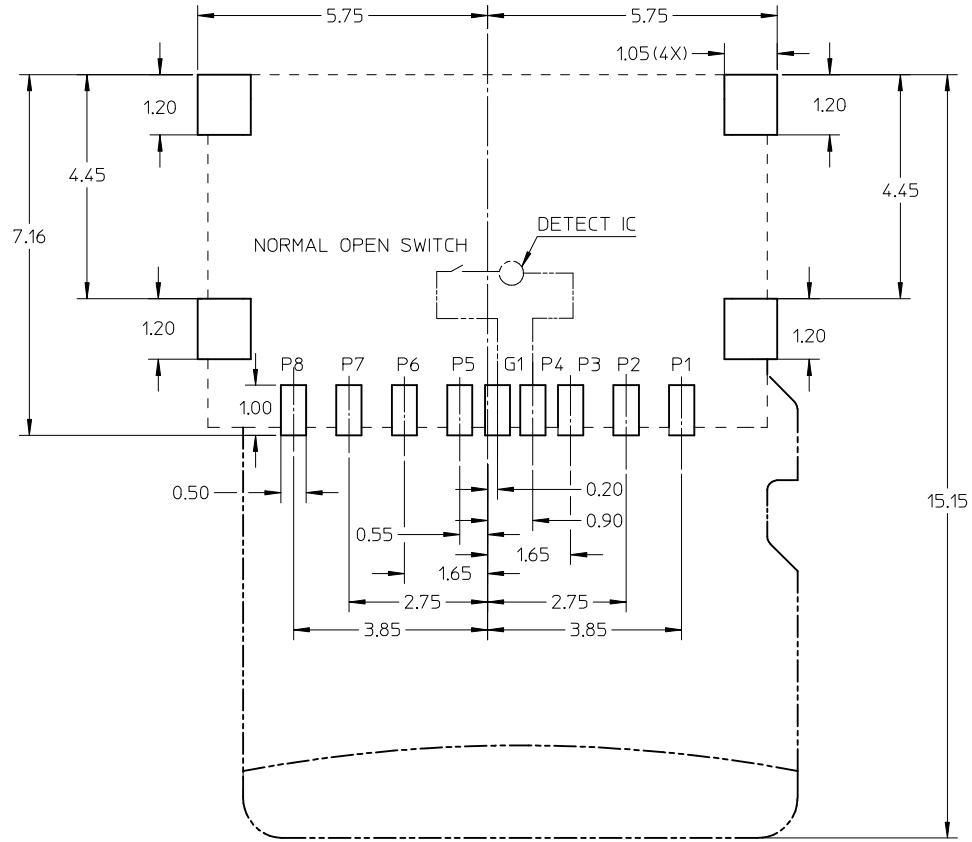


NOTE:

- 1 MATERIAL:
  - 1-1 HOUSING : HIGH TEMPERATURE THERMOPLASTIC, UL 94V-0, BLACK
  - 1-2 SIGNAL TERMINAL AND DETECT TERMINAL : PHOSPHOR BRONZE, THICKNESS: 0.12MM.
  - 1-3 METAL SHELL : STAINLESS STEEL, THICKNESS: 0.15MM.
- 2 FINISH:
  - 2-1 SIGNAL TERMINAL : 1.25-6.25 MICRON NICKEL UNDER-PLATED, 0.75-1.25 MICRON GOLD PLATING ON CONTACT AREA, GOLD FLASH PLATED ON SOLDER AREA
  - 2-2 METAL SHELL : 1.25 MICRON MIN. NICKEL PLATING OVER ALL, GOLD FLASH PLATED ON SOLDER AREA
  - 2-3 DETECT PIN : 1.25-6.25 MICRON NICKEL UNDER-PLATED, 0.75-1.25 MICRON GOLD PLATED ON CONTACT AREA, GOLD FLASH PLATED ON SOLDER AREA
- 3 PRODUCT SPECIFICATION: PS-105027-001.
- 4 PACKAGE SPECIFICATION: PK-105027-001.
- 5 COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV 2000/53/EC.



|  |  |                               |                                       |  |                 |   |                                    |                        |  |  |
|--|--|-------------------------------|---------------------------------------|--|-----------------|---|------------------------------------|------------------------|--|--|
| RELEASE A<br>EC NO: SHZ009-0164<br>DRW: LLIU10<br>CHKD: YLZHU<br>APPR: HWANG | 2008/12/09<br>2008/12/10<br>2008/12/23 | QUALITY SYMBOLS<br>▽=0<br>◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |  | DIMENSION STYLE | SCALE   | DESIGN UNITS                       | THIRD ANGLE PROJECTION |  |  |
|  |  |                               |                                       |  | MM ONLY         | 10:1  | METRIC                             |                        |  |  |
|  |  |                               |                                       |  | DRAWN BY        | DATE  | TITLE                              |                        |  |  |
|  |  |                               |                                       |  | I VAN           | 2007/06/27  | 1.70H TFR HEADER W/DETECT PIN(VDD) |                        |  |  |
|  |  |                               |                                       | CHECKED BY   | DATE            | APPROVED BY   |                                    | DATE                   |  |  |
|  |  |                               |                                       |  |                 | MATERIAL NO.  |                                    | DOCUMENT NO.           |  |  |
|  |  |                               |                                       |  |                 | 1050270001  |                                    | SD-105027-001          |  |  |
|  |  |                               |                                       | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                 | SIZE  |                                    | SHEET NO.              |  |  |
|  |  |                               |                                       |  |                 | A3  |                                    | 1 OF 2                 |  |  |
|  |  |                               |                                       |  |                 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                    |                        |  |  |



----- CONNECTOR PROFILE  
 \_\_\_\_\_ CARD PROFILE  
 RECOMMEND TOLERANCE: +/-0.05 MM

|            |            |
|------------|------------|
| P8         | DAT1       |
| P7         | DAT0       |
| P6         | VSS        |
| P5         | CLK        |
| G1         | SWITCH     |
| P4         | VDD        |
| P3         | CMD        |
| P2         | CD/DAT3    |
| P1         | DAT2       |
| PIN NUMBER | PIN NUMBER |

| RELEASE A<br>EC NO: SH2009-0164<br>DRW: LLIU10<br>CHKD: YLZHU<br>APPR: HWANG | QUALITY SYMBOLS<br>▽=0<br>◻=0                              | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <thead> <tr><th></th><th>mm</th><th>INCH</th></tr> </thead> <tbody> <tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>2 PLACES</td><td>± 0.15</td><td>± ---</td></tr> <tr><td>1 PLACE</td><td>± 0.20</td><td>± ---</td></tr> </tbody> </table> |                    | mm  | INCH                       | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.15 | ± --- | 1 PLACE | ± 0.20 | ± --- | DIMENSION STYLE<br><b>MM ONLY</b> | SCALE<br><b>5:1</b> | DESIGN UNITS<br><b>METRIC</b> | THIRD ANGLE PROJECTION |
|--|--|--|--------------------|---|----------------------------|----------|-------|-------|----------|-------|-------|----------|--------|-------|---------|--------|-------|-----------------------------------|---------------------|-------------------------------|------------------------|
|  |  | mm   | INCH               |   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
|  | 4 PLACES   | ± ---  | ± ---              |   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
|  | 3 PLACES   | ± ---  | ± ---              |   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
| 2 PLACES   | ± 0.15   | ± ---  |                    |   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
| 1 PLACE  | ± 0.20   | ± ---  |                    |   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
| DESCRIPTION<br>A   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | DRAWN BY<br>IVAN   | DATE<br>2007/06/27 | TITLE<br><b>1.70H TFR HEADER<br/>                 W/DETECT PIN(VDD)</b> |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
|  |  | CHECKED BY   | DATE               | APPROVED BY   |                            |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |
|  |  | MATERIAL NO.<br><b>1050270001</b>  |                    | DOCUMENT NO.<br><b>SD-105027-001</b>                                    | SHEET NO.<br><b>2 OF 2</b> |          |       |       |          |       |       |          |        |       |         |        |       |                                   |                     |                               |                        |