

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

**Part Number:** [0705430051](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ Header, Single Row, Vertical, .120" Pocket, Shrouded, 17 Circuits, Tin (Sn) Plating

**Documents:**

|   |  |
|---|--|
| <a href="#">3D Model</a>                      | <a href="#">Product Specification PS-70400 (PDF)</a> |
| <a href="#">Packaging Specification (PDF)</a> | <a href="#">Product Specification PS-70541 (PDF)</a> |
| <a href="#">Drawing (PDF)</a>                 | <a href="#">RoHS Certificate of Compliance (PDF)</a> |

**Agency Certification**

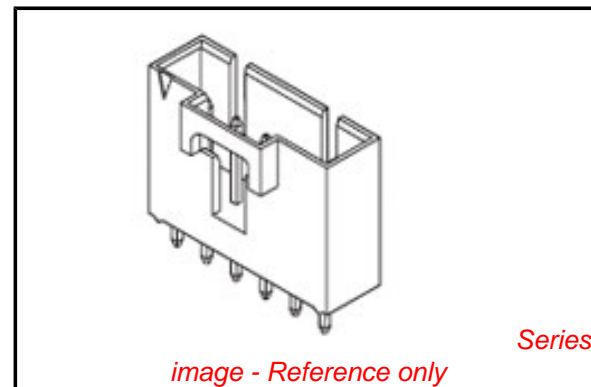
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                |                                   |
|----------------|-----------------------------------|
| Product Family | PCB Headers                       |
| Series         | <a href="#">70543</a>             |
| Application    | Wire-to-Board                     |
| Overview       | <a href="#">cgrid_sl_products</a> |
| Product Name   | SL™                               |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Breakaway                      | No                             |
| Circuits (Loaded)              | 17                             |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 25                             |
| First Mate / Last Break        | No                             |
| Flammability                   | 94V-0                          |
| Glow-Wire Compliant            | No                             |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | None                           |
| Lock to Mating Part            | Yes                            |
| Material - Metal               | Brass, Phosphor Bronze         |
| Material - Plating Mating      | Tin                            |
| Material - Plating Termination | Tin                            |
| Material - Resin               | High Temperature Thermoplastic |
| Number of Rows                 | 1                              |
| Orientation                    | Vertical                       |
| PC Tail Length (in)            | 0.130 In                       |
| PC Tail Length (mm)            | 3.30 mm                        |
| PCB Locator                    | No                             |
| PCB Retention                  | None                           |
| PCB Thickness Recommended (in) | 0.062 In                       |
| PCB Thickness Recommended (mm) | 1.60 mm                        |
| Packaging Type                 | Tube                           |
| Pitch - Mating Interface (in)  | 0.100 In                       |
| Pitch - Mating Interface (mm)  | 2.54 mm                        |
| Pitch - Term. Interface (in)   | 0.100 In                       |
| Pitch - Term. Interface (mm)   | 2.54 mm                        |
| Plating min: Mating (µin)      | 150                            |
| Plating min: Mating (µm)       | 3.75                           |
| Plating min: Termination (µin) | 150                            |
| Plating min: Termination (µm)  | 3.75                           |
| Polarized to Mating Part       | Yes                            |
| Shrouded                       | Fully                          |



*image - Reference only*

**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**

[70543Series](#)

|                                |                 |
|--------------------------------|-----------------|
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -40°C to +105°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 3A   |
| Voltage - Maximum             | 250V |

**Solder Process Data**

|                              |                        |
|------------------------------|------------------------|
| Lead-free Process Capability | Wave Capable (TH only) |
|------------------------------|------------------------|

**Material Info****Reference - Drawing Numbers**

|                         |                    |
|-------------------------|--------------------|
| Packaging Specification | PK-70873-0014      |
| Product Specification   | PS-70400, PS-70541 |
| Sales Drawing           | SDA-70543-****     |

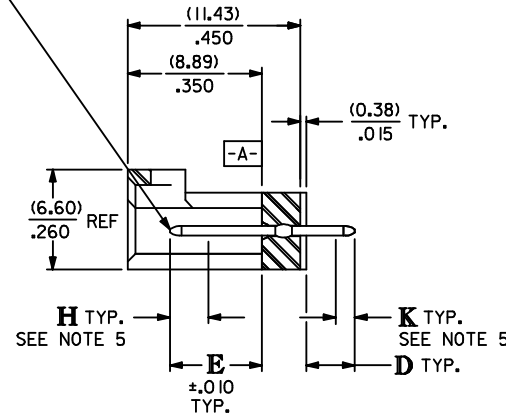
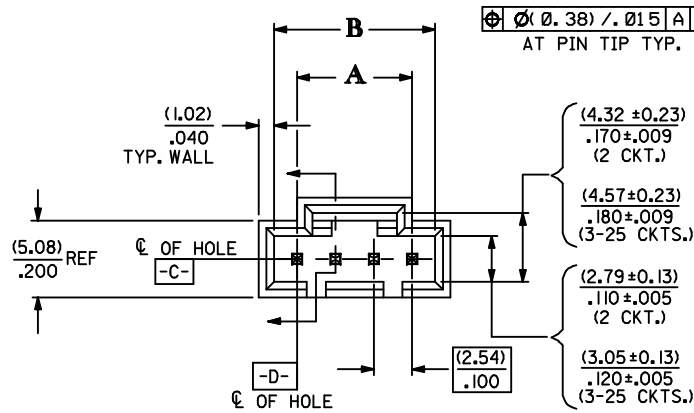
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**ALTERNATIVE CORING  
MANUFACTURER'S OPTION**

| CKT. SIZE | DIM. "A" |       | DIM. "B" |       |
|-----------|----------|-------|----------|-------|
|           | MM       | IN.   | MM       | IN.   |
| 2         | 2.54     | .100  | 5.33     | .210  |
| 3         | 5.08     | .200  | 8.13     | .320  |
| 4         | 7.62     | .300  | 10.67    | .420  |
| 5         | 10.16    | .400  | 13.21    | .520  |
| 6         | 12.70    | .500  | 15.75    | .620  |
| 7         | 15.24    | .600  | 18.29    | .720  |
| 8         | 17.78    | .700  | 20.83    | .820  |
| 9         | 20.32    | .800  | 23.37    | .920  |
| 10        | 22.86    | .900  | 25.91    | 1.020 |
| 11        | 25.40    | 1.000 | 28.45    | 1.120 |
| 12        | 27.94    | 1.100 | 30.99    | 1.220 |
| 13        | 30.48    | 1.200 | 33.53    | 1.320 |
| 14        | 33.02    | 1.300 | 36.07    | 1.420 |
| 15        | 35.56    | 1.400 | 38.61    | 1.520 |
| 16        | 38.10    | 1.500 | 41.15    | 1.620 |
| 17        | 40.64    | 1.600 | 43.69    | 1.720 |
| 18        | 43.18    | 1.700 | 46.23    | 1.820 |
| 19        | 45.72    | 1.800 | 48.77    | 1.920 |
| 20        | 48.26    | 1.900 | 51.31    | 2.020 |
| 21        | 50.80    | 2.000 | 53.85    | 2.120 |
| 22        | 53.34    | 2.100 | 56.39    | 2.220 |
| 23        | 55.88    | 2.200 | 58.93    | 2.320 |
| 24        | 58.42    | 2.300 | 61.47    | 2.420 |
| 25        | 60.96    | 2.400 | 64.01    | 2.520 |

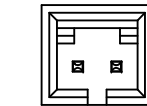
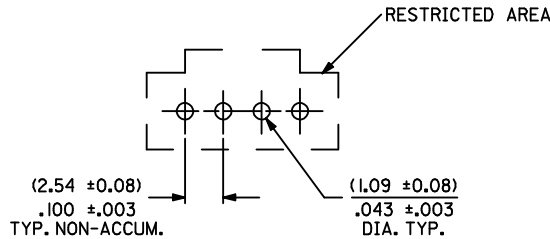


**NOTES:**

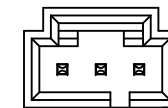
1. HEADER MATERIAL: GLASS FILLED POLYESTER; UL94V-0; COLOR: BLACK  
PIN MATERIAL: PHOSPHOR BRONZE
2. HEADER TO BE USED WITH OPTION 'G' 70400 AND 70430 SERIES SL CONNECTORS.
3. REFER TO MOLEX PRODUCT SPECIFICATION PS-70541.
4. STANDARD PACKAGING PER PK-70873-0014.
5. MEASURE POINT FOR PLATING THICKNESS.

**PLATING:**

- TIN - 3.81 MICROMETERS/150 MICROINCHES MINIMUM BRIGHT TIN PLATE OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE
- 15 GOLD - 0.38 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM MATTE TIN PLATE IN SELECT AREA OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE OVERALL
- 30 GOLD - 0.76 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM MATTE TIN PLATE IN SELECT AREA OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE OVERALL



**2 CIRCUIT**



**3 CIRCUIT**

**RECOMMENDED PC BOARD LAYOUT**

(FOR USE WITH (1.57)/.062 THICK BOARD)

|   |             |                               |                                       |      |                                  |       |   |                        |
|---|-------------|-------------------------------|---------------------------------------|------|----------------------------------|-------|---|------------------------|
| ADD PLATING FINISH<br>EC NO: UCP2009-1566<br>2008/12/17<br>DRWINMS BARRA<br>2008/12/17<br>CHKD:JORGAN<br>2008/12/18<br>APPR:SMILLER | DESCRIPTION | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |      | DIMENSION STYLE                  | SCALE | DESIGN UNITS  | THIRD ANGLE PROJECTION |
|   |             |                               | mm                                    | INCH | MM/IN                            | 4:1   | INCH  |                        |
| DRAWN BY<br>AAB<br>1987/09/22   |             |                               | CHECKED BY<br>MJM<br>1987/09/22       |      | APPROVED BY<br>WAZ<br>1987/09/22 |       | TITLE<br>SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS |                        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |             |                               | MATERIAL NO.<br>SEE TABLE             |      | DOCUMENT NO.<br>SDA-70543-****   |       | SHEET NO.<br>1 OF 2   |                        |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION       |             |                               |                                       |      |                                  |       |   |                        |

| CIRCUIT SIZE | ASSEMBLY ITEM NUMBER<br>70543 | MANUFACTURE RELEASE STATUS | D REF.         | E ± .010       | CONNECTOR END PLATING |                |  | P.C. BOARD END PLATING |        |                |
|--------------|-------------------------------|----------------------------|----------------|----------------|-----------------------|----------------|--|------------------------|--------|----------------|
|              |                               |                            |                |                | TYPE                  | H MEAS.        |  | TYPE                   | FINISH | K MEAS.        |
| 2-25         | -0001-0024                    | R.F.M.                     | (3.30)<br>.130 | (6.10)<br>.240 | 15 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0036-0059                    | R.F.M.                     | (3.30)<br>.130 | (6.10)<br>.240 | TIN                   | (2.54)<br>.100 |  | TIN                    | BRIGHT | (1.27)<br>.050 |
| 2-25         | -0071-0094                    | R.F.M.                     | (3.81)<br>.150 | (6.10)<br>.240 | TIN                   | (2.54)<br>.100 |  | TIN                    | BRIGHT | (1.27)<br>.050 |
| 2-25         | -0106-0129                    | R.F.M.                     | (3.30)<br>.130 | (6.10)<br>.240 | 30 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0141-0164                    | R.F.M.                     | (2.54)<br>.100 | (6.10)<br>.240 | 15 GOLD               | (3.94)<br>.155 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0165-0188                    | R.F.M.                     | (3.81)<br>.150 | (6.10)<br>.240 | 30 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0200-0223                    | R.F.M.                     | (3.81)<br>.150 | (6.10)<br>.240 | 15 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0248-0271                    | R.F.M.                     | (4.06)<br>.160 | (6.10)<br>.240 | TIN                   | (2.54)<br>.100 |  | TIN                    | BRIGHT | (1.27)<br>.050 |
| 2-25         | -0272-0295                    | R.F.M.                     | (4.06)<br>.160 | (6.10)<br>.240 | 15 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |
| 2-25         | -0296-0319                    | R.F.M.                     | (4.06)<br>.160 | (6.10)<br>.240 | 30 GOLD               | (2.54)<br>.100 |  | TIN                    | MATTE  | (1.27)<br>.050 |

| CIRCUIT SIZE | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | CIRCUIT SIZE |
|--------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------------|
| 2            | 70543-0001           | 70543-0036           | 70543-0071           | 70543-0106           | 70543-0141           | 70543-0165           | 70543-0200           | 70543-0248           | 70543-0272           | 70543-0296           | 2                    |              |
| 3            | 70543-0002           | 70543-0037           | 70543-0072           | 70543-0107           | 70543-0142           | 70543-0166           | 70543-0201           | 70543-0249           | 70543-0273           | 70543-0297           | 3                    |              |
| 4            | 70543-0003           | 70543-0038           | 70543-0073           | 70543-0108           | 70543-0143           | 70543-0167           | 70543-0202           | 70543-0250           | 70543-0274           | 70543-0298           | 4                    |              |
| 5            | 70543-0004           | 70543-0039           | 70543-0074           | 70543-0109           | 70543-0144           | 70543-0168           | 70543-0203           | 70543-0251           | 70543-0275           | 70543-0299           | 5                    |              |
| 6            | 70543-0005           | 70543-0040           | 70543-0075           | 70543-0110           | 70543-0145           | 70543-0169           | 70543-0204           | 70543-0252           | 70543-0276           | 70543-0300           | 6                    |              |
| 7            | 70543-0006           | 70543-0041           | 70543-0076           | 70543-0111           | 70543-0146           | 70543-0170           | 70543-0205           | 70543-0253           | 70543-0277           | 70543-0301           | 7                    |              |
| 8            | 70543-0007           | 70543-0042           | 70543-0077           | 70543-0112           | 70543-0147           | 70543-0171           | 70543-0206           | 70543-0254           | 70543-0278           | 70543-0302           | 8                    |              |
| 9            | 70543-0008           | 70543-0043           | 70543-0078           | 70543-0113           | 70543-0148           | 70543-0172           | 70543-0207           | 70543-0255           | 70543-0279           | 70543-0303           | 9                    |              |
| 10           | 70543-0009           | 70543-0044           | 70543-0079           | 70543-0114           | 70543-0149           | 70543-0173           | 70543-0208           | 70543-0256           | 70543-0280           | 70543-0304           | 10                   |              |
| 11           | 70543-0010           | 70543-0045           | 70543-0080           | 70543-0115           | 70543-0150           | 70543-0174           | 70543-0209           | 70543-0257           | 70543-0281           | 70543-0305           | 11                   |              |
| 12           | 70543-0011           | 70543-0046           | 70543-0081           | 70543-0116           | 70543-0151           | 70543-0175           | 70543-0210           | 70543-0258           | 70543-0282           | 70543-0306           | 12                   |              |
| 13           | 70543-0012           | 70543-0047           | 70543-0082           | 70543-0117           | 70543-0152           | 70543-0176           | 70543-0211           | 70543-0259           | 70543-0283           | 70543-0307           | 13                   |              |
| 14           | 70543-0013           | 70543-0048           | 70543-0083           | 70543-0118           | 70543-0153           | 70543-0177           | 70543-0212           | 70543-0260           | 70543-0284           | 70543-0308           | 14                   |              |
| 15           | 70543-0014           | 70543-0049           | 70543-0084           | 70543-0119           | 70543-0154           | 70543-0178           | 70543-0213           | 70543-0261           | 70543-0285           | 70543-0309           | 15                   |              |
| 16           | 70543-0015           | 70543-0050           | 70543-0085           | 70543-0120           | 70543-0155           | 70543-0179           | 70543-0214           | 70543-0262           | 70543-0286           | 70543-0310           | 16                   |              |
| 17           | 70543-0016           | 70543-0051           | 70543-0086           | 70543-0121           | 70543-0156           | 70543-0180           | 70543-0215           | 70543-0263           | 70543-0287           | 70543-0311           | 17                   |              |
| 18           | 70543-0017           | 70543-0052           | 70543-0087           | 70543-0122           | 70543-0157           | 70543-0181           | 70543-0216           | 70543-0264           | 70543-0288           | 70543-0312           | 18                   |              |
| 19           | 70543-0018           | 70543-0053           | 70543-0088           | 70543-0123           | 70543-0158           | 70543-0182           | 70543-0217           | 70543-0265           | 70543-0289           | 70543-0313           | 19                   |              |
| 20           | 70543-0019           | 70543-0054           | 70543-0089           | 70543-0124           | 70543-0159           | 70543-0183           | 70543-0218           | 70543-0266           | 70543-0290           | 70543-0314           | 20                   |              |
| 21           | 70543-0020           | 70543-0055           | 70543-0090           | 70543-0125           | 70543-0160           | 70543-0184           | 70543-0219           | 70543-0267           | 70543-0291           | 70543-0315           | 21                   |              |
| 22           | 70543-0021           | 70543-0056           | 70543-0091           | 70543-0126           | 70543-0161           | 70543-0185           | 70543-0220           | 70543-0268           | 70543-0292           | 70543-0316           | 22                   |              |
| 23           | 70543-0022           | 70543-0057           | 70543-0092           | 70543-0127           | 70543-0162           | 70543-0186           | 70543-0221           | 70543-0269           | 70543-0293           | 70543-0317           | 23                   |              |
| 24           | 70543-0023           | 70543-0058           | 70543-0093           | 70543-0128           | 70543-0163           | 70543-0187           | 70543-0222           | 70543-0270           | 70543-0294           | 70543-0318           | 24                   |              |
| 25           | 70543-0024           | 70543-0059           | 70543-0094           | 70543-0129           | 70543-0164           | 70543-0188           | 70543-0223           | 70543-0271           | 70543-0295           | 70543-0319           | 25                   |              |

\*X\* IN COLUMN UNDER \*ASSEMBLY ITEM NUMBER\* HEADING DENOTES TOOLING NOT AVAILABLE

| <b>ADD PLATING FINISH</b><br>EC NO: UCP2009-1566<br>DRWINMS BARRA 2008/12/17<br>CHKXD: MORGAN 2008/12/17<br>APPR: MILLER 2008/12/18<br>DESCRIPTION | QUALITY SYMBOLS<br>       | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <tr><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES ± ---</td><td>± ---</td></tr> <tr><td>3 PLACES ± ---</td><td>± .005</td></tr> <tr><td>2 PLACES ± 0.13</td><td>± .010</td></tr> <tr><td>1 PLACE ± 0.25</td><td>± ---</td></tr> </table> | mm                        | INCH   | 4 PLACES ± ---                       | ± ---                      | 3 PLACES ± --- | ± .005 | 2 PLACES ± 0.13 | ± .010 | 1 PLACE ± 0.25 | ± --- | DIMENSION STYLE<br><b>MM/IN</b> | SCALE<br><b>4:1</b> | DESIGN UNITS<br><b>INCH</b> | THIRD ANGLE PROJECTION<br> |
|--|---------------------------|---|---------------------------|--|--------------------------------------|----------------------------|----------------|--------|-----------------|--------|----------------|-------|---------------------------------|---------------------|-----------------------------|----------------------------|
|  | mm                        | INCH  |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
|  | 4 PLACES ± ---            | ± ---   |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
|  | 3 PLACES ± ---            | ± .005  |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
| 2 PLACES ± 0.13  | ± .010                    |   |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
| 1 PLACE ± 0.25   | ± ---                     |   |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
| DRAWN BY<br><b>AAB</b>   | DATE<br><b>1987/09/22</b> | CHECKED BY<br><b>MJM</b>  | DATE<br><b>1987/09/22</b> | TITLE<br><b>SALES ASSY, SL VERTICAL HEADER W/LATCH &amp; NO PEGS (2.54)/.100 CENTERS</b> |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |
| APPROVED BY<br><b>WAZ</b>  | DATE<br><b>1987/09/22</b> | MATERIAL NO.<br><b>SEE TABLE</b>  |                           |  | DOCUMENT NO.<br><b>SDA-70543-***</b> | SHEET NO.<br><b>2 OF 2</b> |                |        |                 |        |                |       |                                 |                     |                             |                            |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |                           |   |                           |  |                                      |                            |                |        |                 |        |                |       |                                 |                     |                             |                            |