

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

**Part Number:** [0705510004](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ Header, Single Row, Right Angle, .120" Pocket, Shrouded, with Beveled Plastic Peg, 5 Circuits, Tin (Sn) Plating

**Documents:**

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

**Agency Certification**

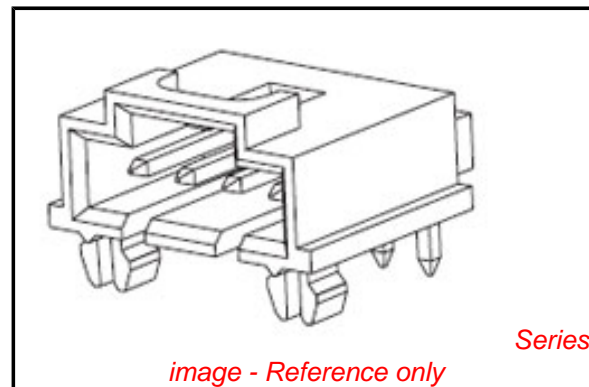
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                |                                   |
|----------------|-----------------------------------|
| Product Family | PCB Headers                       |
| Series         | <a href="#">70551</a>             |
| Application    | Wire-to-Board                     |
| Overview       | <a href="#">cgrid_sl_products</a> |
| Product Name   | SL™                               |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Breakaway                      | No                             |
| Circuits (Loaded)              | 5                              |
| Circuits (maximum)             | 5                              |
| 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                    | Right Angle                    |
| PC Tail Length (in)            | 0.130 In                       |
| PC Tail Length (mm)            | 3.30 mm                        |
| PCB Locator                    | Yes                            |
| PCB Retention                  | Yes                            |
| 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                        |
| 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                          |
| Stackable                      | No                             |



**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**

[70551Series](#)

**Mates With**

SL™ Crimp Housing [70066](#) , [70430](#) , [70400](#)

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-70873-0015  
Product Specification PS-70400, PS-70541  
Sales Drawing SDA-70551-\*\*\*\*

This document was generated on 05/27/2010

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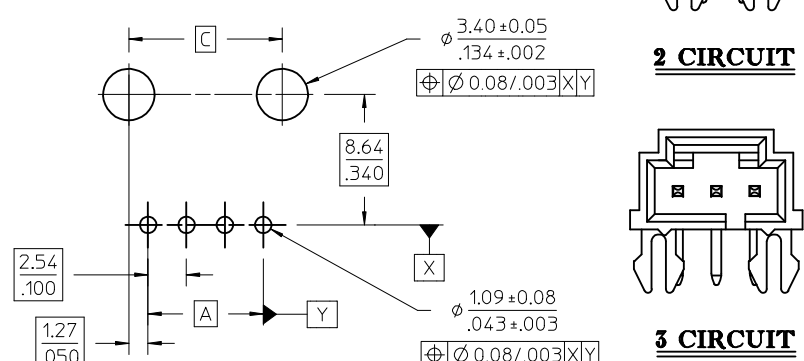
**ALTERNATIVE CORING  
MANUFACTURER'S OPTION**

| CKT. SIZE | DIM. "A" |       | DIM. "B" |       | DIM. "C" |       | DIM. "Z" |       |
|-----------|----------|-------|----------|-------|----------|-------|----------|-------|
|           | MM       | IN.   | MM       | IN.   | MM       | IN.   | MM       | IN.   |
| 2         | 2.54     | .100  | 5.33     | .210  | 5.08     | .200  | 8.64     | .340  |
| 3         | 5.08     | .200  | 8.13     | .320  | 7.62     | .300  | 11.43    | .450  |
| 4         | 7.62     | .300  | 10.67    | .420  | 10.16    | .400  | 13.97    | .550  |
| 5         | 10.16    | .400  | 13.21    | .520  | 12.70    | .500  | 16.51    | .650  |
| 6         | 12.70    | .500  | 15.75    | .620  | 15.24    | .600  | 19.05    | .750  |
| 7         | 15.24    | .600  | 18.29    | .720  | 17.78    | .700  | 21.59    | .850  |
| 8         | 17.78    | .700  | 20.83    | .820  | 20.32    | .800  | 24.13    | .950  |
| 9         | 20.32    | .800  | 23.37    | .920  | 22.86    | .900  | 26.67    | 1.050 |
| 10        | 22.86    | .900  | 25.91    | 1.020 | 25.40    | 1.000 | 29.21    | 1.150 |
| 11        | 25.40    | 1.000 | 28.45    | 1.120 | 27.94    | 1.100 | 31.75    | 1.250 |
| 12        | 27.94    | 1.100 | 30.99    | 1.220 | 30.48    | 1.200 | 34.29    | 1.350 |
| 13        | 30.48    | 1.200 | 33.53    | 1.320 | 33.02    | 1.300 | 36.83    | 1.450 |
| 14        | 33.02    | 1.300 | 36.07    | 1.420 | 35.56    | 1.400 | 39.37    | 1.550 |
| 15        | 35.56    | 1.400 | 38.61    | 1.520 | 38.10    | 1.500 | 41.91    | 1.650 |
| 16        | 38.10    | 1.500 | 41.15    | 1.620 | 40.64    | 1.600 | 44.45    | 1.750 |
| 17        | 40.64    | 1.600 | 43.69    | 1.720 | 43.18    | 1.700 | 46.99    | 1.850 |
| 18        | 43.18    | 1.700 | 46.23    | 1.820 | 45.72    | 1.800 | 49.53    | 1.950 |
| 19        | 45.72    | 1.800 | 48.77    | 1.920 | 48.26    | 1.900 | 52.07    | 2.050 |
| 20        | 48.26    | 1.900 | 51.31    | 2.020 | 50.80    | 2.000 | 54.61    | 2.150 |
| 21        | 50.80    | 2.000 | 53.85    | 2.120 | 53.34    | 2.100 | 57.15    | 2.250 |
| 22        | 53.34    | 2.100 | 56.39    | 2.220 | 55.88    | 2.200 | 59.69    | 2.350 |
| 23        | 55.88    | 2.200 | 58.93    | 2.320 | 58.42    | 2.300 | 62.23    | 2.450 |
| 24        | 58.42    | 2.300 | 61.47    | 2.420 | 60.96    | 2.400 | 64.77    | 2.550 |
| 25        | 60.96    | 2.400 | 64.01    | 2.520 | 63.50    | 2.500 | 67.31    | 2.750 |



- NOTES:  
 1. MATERIAL:  
 HOUSING: 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-70873-0015  
 5. DIMENSIONS WITHOUT TOLERANCE ARE SHOWN FOR REFERENCE ONLY  
 6. MEASURE POINT FOR PLATING THICKNESS

- PLATING CODES:  
 TIN - 3.81 MICROMETERS/15 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






**RECOMMENDED P.C. BOARD LAYOUT**  
(FOR USE WITH (1.57)/.062 THICK BOARD)

|  |                               |   |   |   |  |                    |                      |                           |
|--|-------------------------------|---|---|---|--|--------------------|----------------------|---------------------------|
| ADD DIMENSION "Z"<br>EC NO: UCP2010-1081<br>DR:WMS/BARRA 2009/10/26<br>CHKD: 2009/11/09<br>APPR:SWILLER 2009/11/09 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |   | DIMENSION STYLE<br>MM/IN  |  | SCALE<br>INCH      | DESIGN UNITS<br>INCH | THIRD ANGLE PROJECTION    |
|  |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .005<br>2 PLACES ± 0.13 ± .010<br>1 PLACE ± 0.25 ± ---<br>ANGULAR ± 1/2°             | mm INCH<br>DRAWN BY DATE<br>AAB 1993/05/13<br>CHECKED BY DATE<br>AAB 1993/05/13<br>APPROVED BY DATE<br>WAZ 1993/05/13 | TITLE<br>SL RIGHT ANGLE<br>HEADER W/LATCH & SPLIT<br>PEGS (2.54)/.100 CENTERS |  | MOLEX INCORPORATED |                      | MATERIAL NO.<br>SEE TABLE |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |                               | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |   |  |                    |                      |                           |

| 13                             |                                  | 12 |  | 11 |  | 10   |  | 9              |                | 8       |                | 7                     |                | 6 |  | 5                      |  | 4 |  | 3 |  | 2 |  | 1 |  |
|--------------------------------|----------------------------------|----|--|----|--|------|--|----------------|----------------|---------|----------------|-----------------------|----------------|---|--|------------------------|--|---|--|---|--|---|--|---|--|
| ENGINEERING NUMBER<br>A-7055 I | MANUFACTURE<br>RELEASE<br>STATUS |    |  |    |  |      |  |                |                |         |                | CONNECTOR END PLATING |                |   |  | P.C. BOARD END PLATING |  |   |  |   |  |   |  |   |  |
|                                |                                  | D  |  | E  |  | TYPE |  | H<br>MEAS.     |                | TYPE    |                | K<br>MEAS.            |                |   |  |                        |  |   |  |   |  |   |  |   |  |
| -0001-0024                     | R.F.M.                           |    |  |    |  |      |  | (3.30)<br>.130 | (6.10)<br>.240 | TIN     | (2.54)<br>.100 | TIN                   | (1.27)<br>.050 |   |  |                        |  |   |  |   |  |   |  |   |  |
| -0036-0059                     | R.F.M.                           |    |  |    |  |      |  | (3.30)<br>.130 | (6.10)<br>.240 | 15 GOLD | (2.54)<br>.100 | TIN                   | (1.27)<br>.050 |   |  |                        |  |   |  |   |  |   |  |   |  |
| -0071-0094                     | R.F.M.                           |    |  |    |  |      |  | (3.30)<br>.130 | (6.10)<br>.240 | 30 GOLD | (2.54)<br>.100 | TIN                   | (1.27)<br>.050 |   |  |                        |  |   |  |   |  |   |  |   |  |

| CKTS | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | CKTS |
|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| 02   | 705-51-0001 | 705-51-0036 | 705-51-0071 |             |             |             |             |             |             | 02   |
| 03   | 705-51-0002 | 705-51-0037 | 705-51-0072 |             |             |             |             |             |             | 03   |
| 04   | 705-51-0003 | 705-51-0038 | 705-51-0073 |             |             |             |             |             |             | 04   |
| 05   | 705-51-0004 | 705-51-0039 | 705-51-0074 |             |             |             |             |             |             | 05   |
| 06   | 705-51-0005 | 705-51-0040 | 705-51-0075 |             |             |             |             |             |             | 06   |
| 07   | 705-51-0006 | 705-51-0041 | 705-51-0076 |             |             |             |             |             |             | 07   |
| 08   | 705-51-0007 | 705-51-0042 | 705-51-0077 |             |             |             |             |             |             | 08   |
| 09   | 705-51-0008 | 705-51-0043 | 705-51-0078 |             |             |             |             |             |             | 09   |
| 10   | 705-51-0009 | 705-51-0044 | 705-51-0079 |             |             |             |             |             |             | 10   |
| 11   | 705-51-0010 | 705-51-0045 | 705-51-0080 |             |             |             |             |             |             | 11   |
| 12   | 705-51-0011 | 705-51-0046 | 705-51-0081 |             |             |             |             |             |             | 12   |
| 13   | 705-51-0012 | 705-51-0047 | 705-51-0082 |             |             |             |             |             |             | 13   |
| 14   | 705-51-0013 | 705-51-0048 | 705-51-0083 |             |             |             |             |             |             | 14   |
| 15   | 705-51-0014 | 705-51-0049 | 705-51-0084 |             |             |             |             |             |             | 15   |
| 16   | 705-51-0015 | 705-51-0050 | 705-51-0085 |             |             |             |             |             |             | 16   |
| 17   | 705-51-0016 | 705-51-0051 | 705-51-0086 |             |             |             |             |             |             | 17   |
| 18   | 705-51-0017 | 705-51-0052 | 705-51-0087 |             |             |             |             |             |             | 18   |
| 19   | 705-51-0018 | 705-51-0053 | 705-51-0088 |             |             |             |             |             |             | 19   |
| 20   | 705-51-0019 | 705-51-0054 | 705-51-0089 |             |             |             |             |             |             | 20   |
| 21   | 705-51-0020 | 705-51-0055 | 705-51-0090 |             |             |             |             |             |             | 21   |
| 22   | 705-51-0021 | 705-51-0056 | 705-51-0091 |             |             |             |             |             |             | 22   |
| 23   | 705-51-0022 | 705-51-0057 | 705-51-0092 |             |             |             |             |             |             | 23   |
| 24   | 705-51-0023 | 705-51-0058 | 705-51-0093 |             |             |             |             |             |             | 24   |
| 25   | 705-51-0024 | 705-51-0059 | 705-51-0094 |             |             |             |             |             |             | 25   |

| <b>SEE SHEET 1</b><br>EC NO: UCP2010-1081<br>DRWN:MS BARRA 2009/10/26<br>CHKD: 2009/11/09<br>APPR:SMILLER 2009/11/09<br>REV: | QUALITY SYMBOLS<br> = 0<br> = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <tr><th colspan="2">mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>3 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>2 PLACES</td><td>± 0.13</td><td>± .010</td></tr> <tr><td>1 PLACE</td><td>± 0.25</td><td>± .010</td></tr> </table> | mm  |  | INCH | 4 PLACES | ± .005 | ± .0005 | 3 PLACES | ± .005 | ± .0005 | 2 PLACES | ± 0.13 | ± .010 | 1 PLACE | ± 0.25 | ± .010 | DIMENSION STYLE<br><b>MM/IN</b><br>DRAWN BY: AAB DATE: 1993/05/13<br>CHECKED BY: AAB DATE: 1993/05/13<br>APPROVED BY: WAZ DATE: 1993/05/13 | SCALE: 4:1<br>DESIGN UNITS: INCH<br>THIRD ANGLE PROJECTION | TITLE:<br><b>SL RIGHT ANGLE<br/>         HEADER W/LATCH &amp; SPLIT<br/>         PEGS (2.54)/.100 CENTERS</b> |
|--|---|---|---|--|------|----------|--------|---------|----------|--------|---------|----------|--------|--------|---------|--------|--------|--|--|---|
|  | mm  |   | INCH  |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
|  | 4 PLACES  | ± .005  | ± .0005   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
|  | 3 PLACES  | ± .005  | ± .0005   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
| 2 PLACES   | ± 0.13  | ± .010  |   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
| 1 PLACE  | ± 0.25  | ± .010  |   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
| MATERIAL NO.<br><b>SEE TABLE</b>   | DOCUMENT NO.<br><b>SDA-70551-****</b>   | SHEET NO.<br><b>2 OF 2</b>  |   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |   |   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |
|  <b>MOLEX INCORPORATED</b>              |   |   |   |  |      |          |        |         |          |        |         |          |        |        |         |        |        |  |  |   |