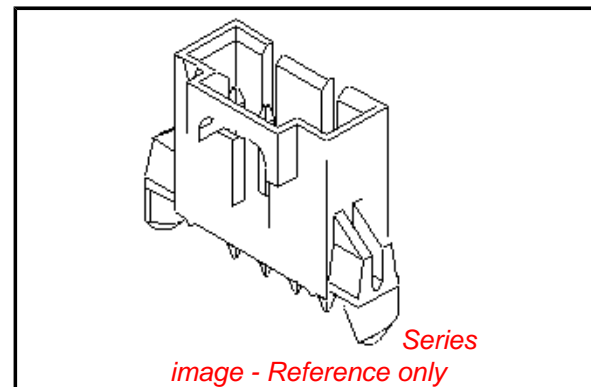


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0705450043](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ Header, Single Row .120" Pocket Vertical, Shrouded, with Press-fir Plastic Peg, 9 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Tin (Sn) PC Tail 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="#">70545</a>             |
| Application    | Wire-to-Board                     |
| Overview       | <a href="#">cgrid_sl_products</a> |
| Product Name   | SL™                               |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Breakaway                      | No                             |
| Circuits (Loaded)              | 9                              |
| Circuits (maximum)             | 9                              |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 50                             |
| Flammability                   | 94V-0                          |
| Glow-Wire Compliant            | No                             |
| Lock to Mating Part            | Yes                            |
| Material - Metal               | Brass, Phosphor Bronze         |
| Material - Plating Mating      | Gold                           |
| 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                    | 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)      | 15                             |
| Plating min: Mating (µm)       | 0.375                          |
| Plating min: Termination (µin) | 75                             |
| Plating min: Termination (µm)  | 1.875                          |
| Polarized to Mating Part       | Yes                            |
| Shrouded                       | Fully                          |
| Stackable                      | No                             |
| Surface Mount Compatible (SMC) | Yes                            |
| Temperature Range - Operating  | -40°C to +105°C                |

**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**

[70545Series](#)

**Mates With**

[70066n](#) , [70066g](#) , [70430g](#) , [70400g Housing](#)

Termination Interface: Style Through Hole

**Electrical**

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

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 3  
Lead-free Process Capability Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 3  
Process Temperature max. C 260

**Material Info**

Old Part Number A-70545-0043

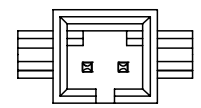
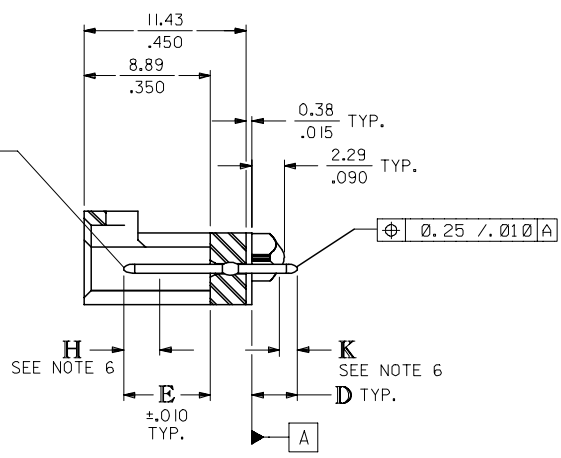
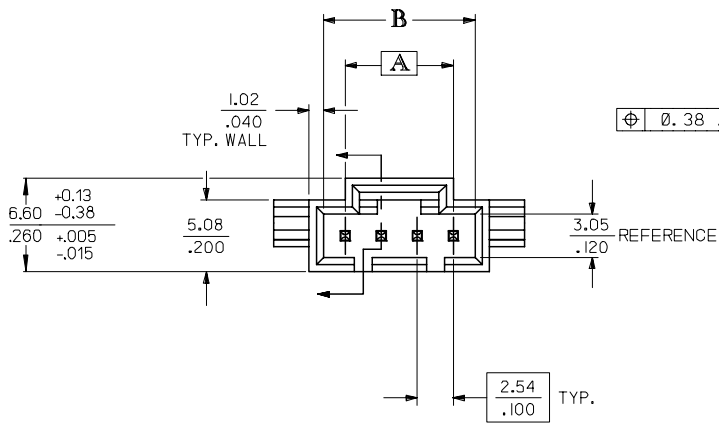
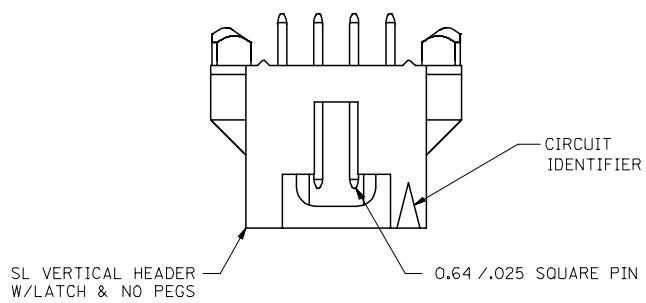
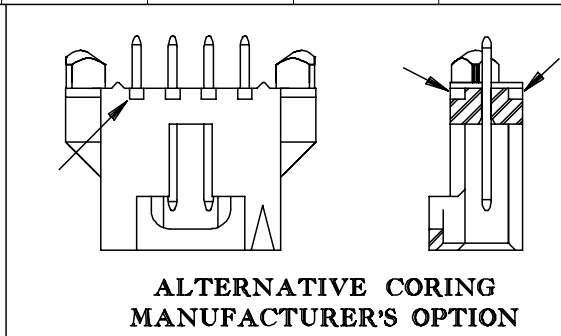
**Reference - Drawing Numbers**

Packaging Specification PK-70873-0014  
Product Specification PS-70400, PS-70541  
Sales Drawing SDA-70545-\*\*\*\*

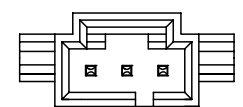
This document was generated on 05/25/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

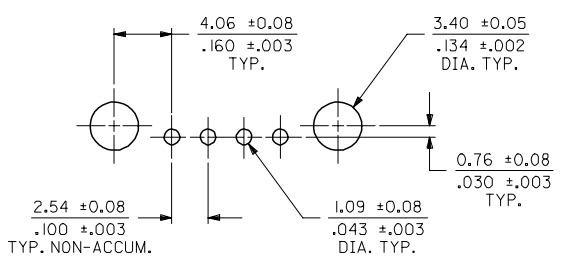
| CKT. SIZE | DIM. "A" |       | DIM. "B"   |            |
|-----------|----------|-------|------------|------------|
|           | MM       | IN.   | MM         | IN.        |
| 2         | 2.54     | .100  | 5.33±0.08  | .210±.003  |
| 3         | 5.08     | .200  | 8.13±0.10  | .320±.004  |
| 4         | 7.62     | .300  | 10.67±0.10 | .420±.004  |
| 5         | 10.16    | .400  | 13.21±0.10 | .520±.004  |
| 6         | 12.70    | .500  | 15.75±0.10 | .620±.004  |
| 7         | 15.24    | .600  | 18.29±0.10 | .720±.004  |
| 8         | 17.78    | .700  | 20.83±0.10 | .820±.004  |
| 9         | 20.32    | .800  | 23.37±0.10 | .920±.004  |
| 10        | 22.86    | .900  | 25.91±0.13 | 1.020±.005 |
| 11        | 25.40    | 1.000 | 28.45±0.13 | 1.120±.005 |
| 12        | 27.94    | 1.100 | 30.99±0.13 | 1.220±.005 |
| 13        | 30.48    | 1.200 | 33.53±0.13 | 1.320±.005 |
| 14        | 33.02    | 1.300 | 36.07±0.13 | 1.420±.005 |
| 15        | 35.56    | 1.400 | 38.61±0.15 | 1.520±.006 |
| 16        | 38.10    | 1.500 | 41.15±0.15 | 1.620±.006 |
| 17        | 40.64    | 1.600 | 43.69±0.15 | 1.720±.006 |
| 18        | 43.18    | 1.700 | 46.23±0.15 | 1.820±.006 |
| 19        | 45.72    | 1.800 | 48.77±0.18 | 1.920±.007 |
| 20        | 48.26    | 1.900 | 51.31±0.18 | 2.020±.007 |
| 21        | 50.80    | 2.000 | 53.85±0.18 | 2.120±.007 |
| 22        | 53.34    | 2.100 | 56.39±0.18 | 2.220±.007 |
| 23        | 55.88    | 2.200 | 58.93±0.18 | 2.320±.007 |
| 24        | 58.42    | 2.300 | 61.47±0.18 | 2.420±.007 |
| 25        | 60.96    | 2.400 | 64.01±0.20 | 2.520±.008 |



**2 CIRCUIT**



**3 CIRCUIT**



**RECOMMENDED PC BOARD LAYOUT**

(FOR USE WITH 1.57 / .062 THICK BOARD)

- NOTES:
- HEADER MATERIAL: GLASS FILLED POLYESTER, UL94V-0; COLOR: BLACK  
PIN MATERIAL: PHOSPHOR BRONZE
  - FINISH:  
TIN - 0.00381/0.000150 MIN TIN PLATE  
OVER 0.00127/0.000050 MIN NICKEL PLATE  
15 GOLD - 0.00038/0.000015 MIN GOLD PLATE IN SELECT AREA,  
0.00191/0.000075 MIN TIN PLATE IN SELECT AREA,  
OVER 0.00127/0.000050 MIN NICKEL PLATE OVERALL.  
30 GOLD - 0.00076/0.000030 MIN GOLD PLATE IN SELECT AREA,  
0.00191/0.000075 MIN TIN PLATE IN SELECT AREA,  
OVER 0.00127/0.000050 MIN NICKEL PLATE OVERALL.  
\* THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC," CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.
  - PRODUCT SPECIFICATION: PS-70541
  - PACKAGING SPECIFICATION: PK-70873-0014
  - HEADER TO BE USED WITH OPTION "G" 70400 AND 70430 SERIES SL CONNECTORS.
  - MEASURE POINT FOR PLATING THICKNESS.

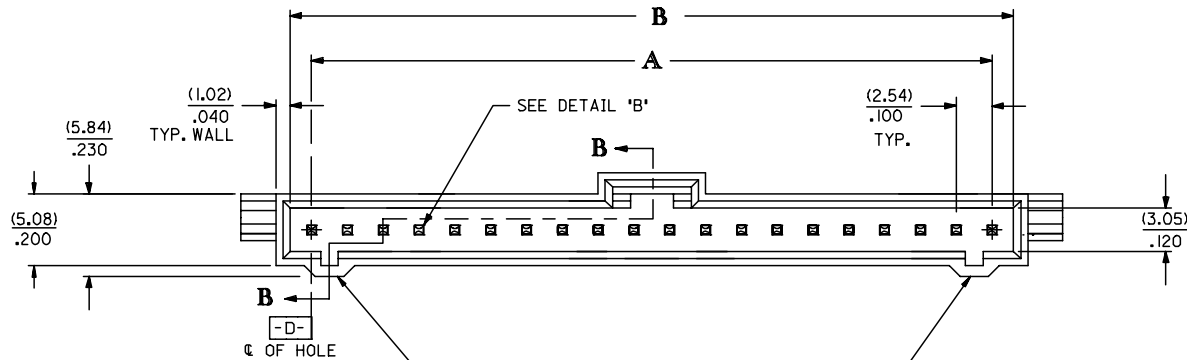
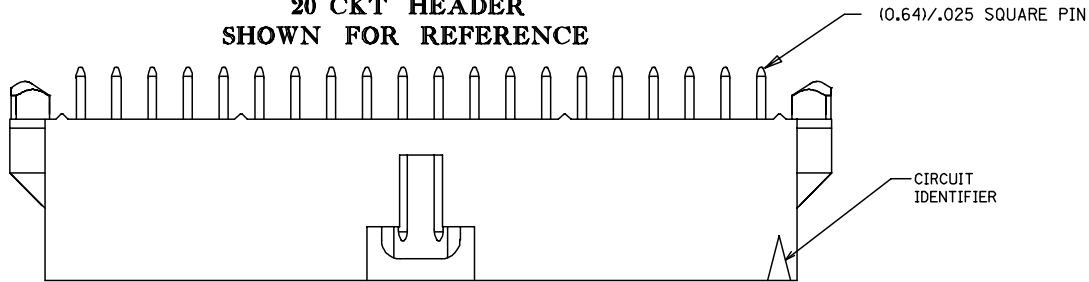
|   |                               |   |                                     |   |  |              |  |                        |  |
|---|-------------------------------|---|-------------------------------------|---|--|--------------|--|------------------------|--|
| CLARIFY DIM.<br>EC NO: UCP2007-1216<br>DRAWN BY: BARRA<br>CHK'D: MORGAN<br>APPR: MILLER<br>2006/11/28<br>2006/12/04<br>2006/12/05 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm      INCH   |                                     | DIMENSION STYLE<br>MM/IN  |  | SCALE<br>4:1 | DESIGN UNITS<br>INCH                   | THIRD ANGLE PROJECTION |  |
|   |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .005<br>2 PLACES ± 0.13 ± .01<br>1 PLACE ± 0.25 ± ---<br>ANGULAR ±1/2° | DRAWN BY<br>AAB<br>DATE<br>05/12/93 | CHECKED BY<br>MJM<br>DATE<br>05/12/93   | TITLE<br>SALES ASSY, SL VERTICAL HEADER W/LATCH&TRI-PEGS (2.54)/.100 CENTERS |              | APPROVED BY<br>WAZ<br>DATE<br>05/12/93 | MOLEX INCORPORATED     |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                               | SEE CHART   |                                     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |              |  |                        |  |

|         |    |
|---------|----|
| 4       | G1 |
| 3       | H  |
| 2       | F1 |
| 1       | J  |
| SHT/REV |    |

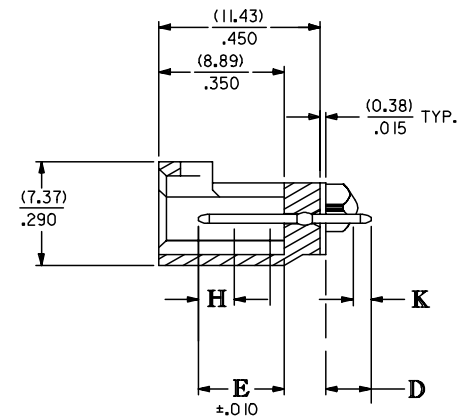
# OPTIONAL HOUSING

## WEBBED KEYING FEATURES

20 CKT HEADER  
SHOWN FOR REFERENCE



WEBBED KEYING FEATURES



### SECTION B-B

| UPDATE TITLE BLOCK<br>EC NO: UCP2006-0202<br>DRAWN: JLOWE 2005/08/05<br>CHKD: ADERR 2005/08/05<br>APPR: FSMITH 2005/08/09<br>REVISIONS<br>1<br>DESCRIPTION | QUALITY SYMBOLS  | 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>± .13</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .13</td> <td>± .01</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .01</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .01</td> </tr> <tr> <td colspan="3">ANGULAR ±1/2°</td> </tr> </tbody> </table> |                     | mm     | INCH | 4 PLACES | ± .13 | ± .005 | 3 PLACES | ± .13 | ± .01 | 2 PLACES | ± 0.25 | ± .01 | 1 PLACE | ± 0.25 | ± .01 | ANGULAR ±1/2° |  |  | DIMENSION STYLE<br>MM/IN | SCALE<br>--- | DESIGN UNITS<br>INCH | THIRD ANGLE PROJECTION |
|--|------------------|---|---------------------|--------|------|----------|-------|--------|----------|-------|-------|----------|--------|-------|---------|--------|-------|---------------|--|--|--------------------------|--------------|----------------------|------------------------|
|  |                  |   | mm                  | INCH   |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
|  | 4 PLACES         |   | ± .13               | ± .005 |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
|  | 3 PLACES         |   | ± .13               | ± .01  |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| 2 PLACES   | ± 0.25           | ± .01   |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| 1 PLACE  | ± 0.25           | ± .01   |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| ANGULAR ±1/2°  |                  |   |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| DRAWN BY<br>WGM  | DATE<br>07/10/96 | TITLE<br>SALES ASSY, SL VERTICAL<br>HEADER W/LATCH&TRI-PEGS<br>(2.54)/.100 CENTERS  |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| CHECKED BY<br>WGM  | DATE<br>07/10/96 | MOLEX INCORPORATED  |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| APPROVED BY<br>WAZ   | DATE<br>07/10/96 | MATERIAL NO.<br>SEE CHART   |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |                  | DOCUMENT NO.<br>SDA-70545-****  | SHEET NO.<br>2 OF 4 |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION                           |                  |   |                     |        |      |          |       |        |          |       |       |          |        |       |         |        |       |               |  |  |                          |              |                      |                        |

| J | CIRCUIT SIZE | ASSEMBLY ITEM NUMBER<br>70545 | MANUFACTURE RELEASE STATUS |  |  |  | D<br>(± 0.38)<br>± .015 | E<br>(± 0.25)<br>± .010 | CONNECTOR END PLATING |            |      | P.C. BOARD END PLATING |            |      | J |
|---|--------------|-------------------------------|----------------------------|--|--|--|-------------------------|-------------------------|-----------------------|------------|------|------------------------|------------|------|---|
|   |              |                               |                            |  |  |  |                         |                         | TYPE                  | H<br>MEAS. |      | TYPE                   | K<br>MEAS. |      |   |
|   |              |                               |                            |  |  |  |                         |                         |                       |            |      |                        |            |      |   |
| I | 2-10         | -0001-0009                    | R.F.M.                     |  |  |  | (3.30)                  | (6.10)                  | TIN                   | (2.54)     | .100 | TIN                    | (1.27)     | .050 | I |
|   | 11-25        | -0010-0024                    | R.F.M.                     |  |  |  | .130                    | .240                    |                       |            |      |                        |            |      |   |
| I | 2-10         | -0036-0044                    | R.F.M.                     |  |  |  | (3.30)                  | (6.10)                  | 15 GOLD               | (2.54)     | .100 | TIN                    | (1.27)     | .050 | I |
|   | 11-25        | -0045-0059                    | R.F.M.                     |  |  |  | .130                    | .240                    |                       |            |      |                        |            |      |   |
| H | 2-10         | -0071-0079                    | R.F.M.                     |  |  |  | (3.30)                  | (6.10)                  | 30 GOLD               | (2.54)     | .100 | TIN                    | (1.27)     | .050 | H |
|   | 11-25        | -0080-0094                    | R.F.M.                     |  |  |  | .130                    | .240                    |                       |            |      |                        |            |      |   |
| H | 2-10         | -0141-0149                    | R.F.M.                     |  |  |  | (5.21)                  | (6.10)                  | 15 GOLD               | (2.54)     | .100 | TIN                    | (1.27)     | .050 | H |
|   | 11-25        | -0150-0164                    | NOT TOOLED                 |  |  |  | .205                    | .240                    |                       |            |      |                        |            |      |   |
| G | 2-10         | -0176-0184                    | R.F.M.                     |  |  |  | (5.21)                  | (6.10)                  | 30 GOLD               | (2.54)     | .100 | TIN                    | (1.27)     | .050 | G |
|   | 11-25        | -0185-0199                    | NOT TOOLED                 |  |  |  | .205                    | .240                    |                       |            |      |                        |            |      |   |

| F | CIRCUIT SIZE | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER | ASSEMBLY ITEM NUMBER |
|---|--------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|   | 2            | 70545-0001           | 70545-0036           | 70545-0071           | 70545-0141           | 70545-0176           |
|   | 3            | 70545-0002           | 70545-0037           | 70545-0072           | 70545-0142           | 70545-0177           |
|   | 4            | 70545-0003           | 70545-0038           | 70545-0073           | 70545-0143           | 70545-0178           |
|   | 5            | 70545-0004           | 70545-0039           | 70545-0074           | 70545-0144           | 70545-0179           |
|   | 6            | 70545-0005           | 70545-0040           | 70545-0075           | 70545-0145           | 70545-0180           |
|   | 7            | 70545-0006           | 70545-0041           | 70545-0076           | 70545-0146           | 70545-0181           |
|   | 8            | 70545-0007           | 70545-0042           | 70545-0077           | 70545-0147           | 70545-0182           |
| E | 9            | 70545-0008           | 70545-0043           | 70545-0078           | 70545-0148           | 70545-0183           |
|   | 10           | 70545-0009           | 70545-0044           | 70545-0079           | 70545-0149           | 70545-0184           |
|   | 11           | 70545-0010           | 70545-0045           | 70545-0080           |                      |                      |
|   | 12           | 70545-0011           | 70545-0046           | 70545-0081           |                      |                      |
|   | 13           | 70545-0012           | 70545-0047           | 70545-0082           |                      |                      |
|   | 14           | 70545-0013           | 70545-0048           | 70545-0083           |                      |                      |
| D | 15           | 70545-0014           | 70545-0049           | 70545-0084           |                      |                      |
|   | 16           | 70545-0015           | 70545-0050           | 70545-0085           |                      |                      |
|   | 17           | 70545-0016           | 70545-0051           | 70545-0086           |                      |                      |
|   | 18           | 70545-0017           | 70545-0052           | 70545-0087           |                      |                      |
|   | 19           | 70545-0018           | 70545-0053           | 70545-0088           |                      |                      |
|   | 20           | 70545-0019           | 70545-0054           | 70545-0089           |                      |                      |
| C | 21           | 70545-0020           | 70545-0055           | 70545-0090           |                      |                      |
|   | 22           | 70545-0021           | 70545-0056           | 70545-0091           |                      |                      |
|   | 23           | 70545-0022           | 70545-0057           | 70545-0092           |                      |                      |
|   | 24           | 70545-0023           | 70545-0058           | 70545-0093           |                      |                      |
|   | 25           | 70545-0024           | 70545-0059           | 70545-0094           |                      |                      |

| B  | A  | CHG D DIM -0141-0199<br>EC NO: UCP2007-0420<br>DRAWN: JORGAN 2006/09/15<br>CHKD: MS BARA 2006/09/15<br>APPR: SMILLER 2006/09/19<br>REV: | QUALITY SYMBOLS<br>=0<br><=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <tr><th></th><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>3 PLACES</td><td>± .01</td><td>± .001</td></tr> <tr><td>2 PLACES</td><td>± 0.13</td><td>± .01</td></tr> <tr><td>1 PLACE</td><td>± 0.25</td><td>± .01</td></tr> </table> ANGULAR ±1/2° |  | mm | INCH | 4 PLACES | ± .005 | ± .0005 | 3 PLACES | ± .01 | ± .001 | 2 PLACES | ± 0.13 | ± .01 | 1 PLACE | ± 0.25 | ± .01 | DIMENSION STYLE<br>MM/IN<br>DRAWN BY DATE<br>WGM 07/12/96<br>CHECKED BY DATE<br>WGM 07/12/96<br>APPROVED BY DATE<br>DJB 07/12/96 | SCALE<br>---<br>DESIGN UNITS<br>INCH<br>THIRD ANGLE PROJECTION | TITLE<br>SALES ASSY, SL VERTICAL<br>HEADER W/LATCH&TRI-PEGS<br>(2.54)/.100 CENTERS<br>MOLEX INCORPORATED | MATERIAL NO.<br>SDA-70545-****<br>SHEET NO.<br>3 OF 4 |
|--|--|---|------------------------------|--|--|----|------|----------|--------|---------|----------|-------|--------|----------|--------|-------|---------|--------|-------|--|--|--|---|
|  |  |   |                              |  |  | mm | INCH |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |
| 4 PLACES   | ± .005   | ± .0005   |                              |  |  |    |      |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |
| 3 PLACES   | ± .01  | ± .001  |                              |  |  |    |      |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |
| 2 PLACES   | ± 0.13   | ± .01   |                              |  |  |    |      |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |
| 1 PLACE  | ± 0.25   | ± .01   |                              |  |  |    |      |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                              |  |  |    |      |          |        |         |          |       |        |          |        |       |         |        |       |  |  |  |   |