

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0705430116](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch SL™ Header, Single Row, Vertical, .120" Pocket, Shrouded, 12 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating, Tin (Sn) PC Tail Plating

Documents:

| | |
|---|--|
| 3D Model | Product Specification PS-70400 (PDF) |
| Packaging Specification (PDF) | Product Specification PS-70541 (PDF) |
| Drawing (PDF) | RoHS Certificate of Compliance (PDF) |

Agency Certification

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

General

| | |
|----------------|-----------------------------------|
| Product Family | PCB Headers |
| Series | 70543 |
| Application | Wire-to-Board |
| Overview | cgrid_sl_products |
| Product Name | SL™ |

Physical

| | |
|--------------------------------|--------------------------------|
| Breakaway | No |
| Circuits (Loaded) | 12 |
| Color - Resin | Black |
| Durability (mating cycles max) | 50 |
| 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 | 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 | 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) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 75 |
| Plating min: Termination (µm) | 1.875 |
| Polarized to Mating Part | Yes |
| Shrouded | Fully |

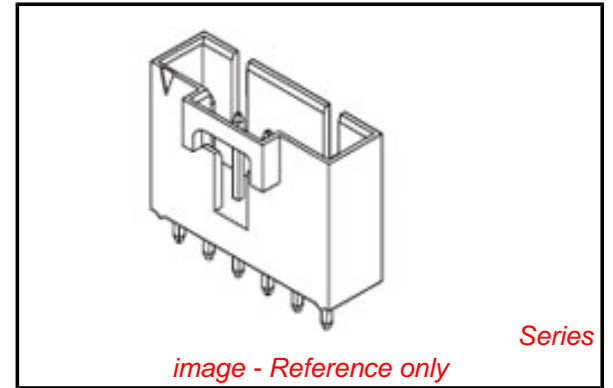


image - Reference only

EU RoHS

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

China RoHS



Not Reviewed

Need more information on product environmental compliance?

Email 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

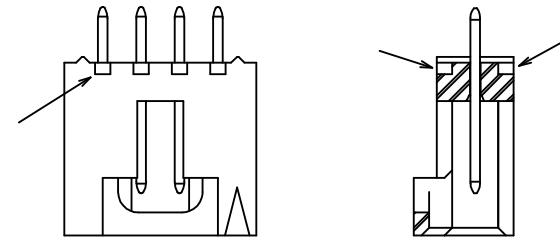
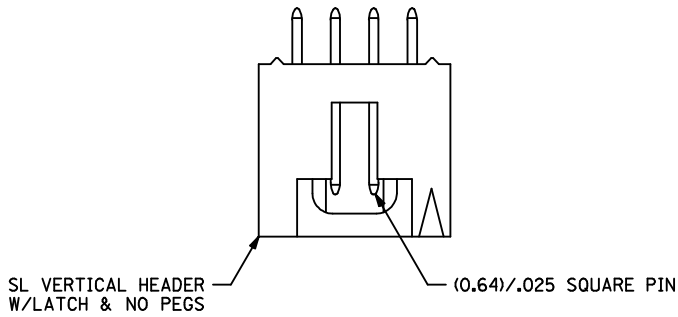
| | |
|--|------------------------|
| Duration at Max. Process Temperature (seconds) | 3 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 260 |

Material Info**Reference - Drawing Numbers**

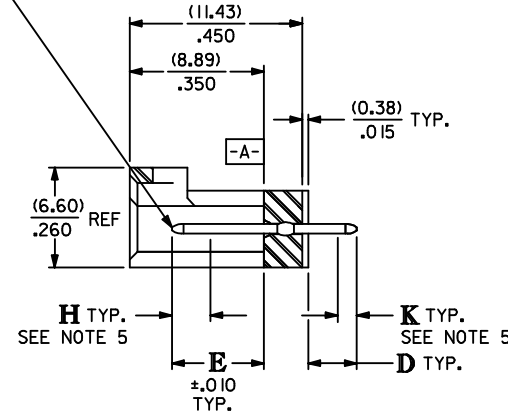
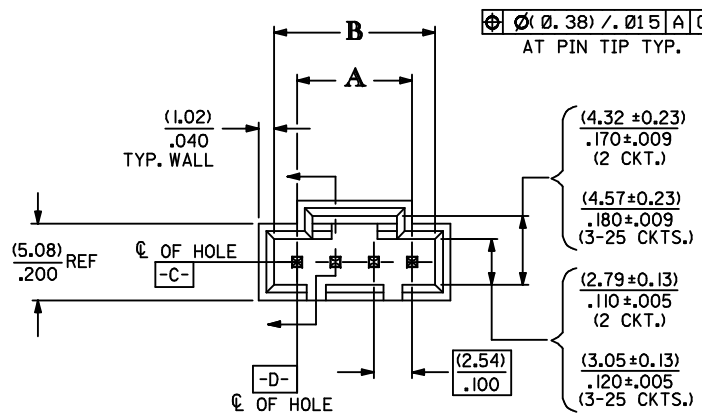
| | |
|-------------------------|--------------------|
| Packaging Specification | PK-70873-0014 |
| Product Specification | PS-70400, PS-70541 |
| Sales Drawing | SDA-70543-**** |

This document was generated on 05/24/2010

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| 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 |

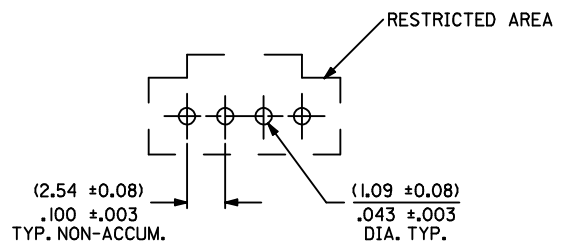


NOTES:

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.

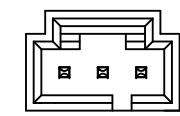
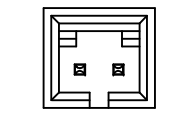
PLATING:

- 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



RECOMMENDED PC BOARD LAYOUT

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



| | | | | | | | |
|--|-------------------------------|---|--|---|--------------------------------|----------------------|------------------------|
| ADD PLATING FINISH EC NO: UCP2009-1566 DRWIN:SBARRA 2008/12/17 CHKD:DMORGAN 2008/12/17 APPR:SMILLER 2008/12/18 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM/IN | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
| | | mm INCH | DRAWN BY DATE AAB 1987/09/22 | TITLE SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS | | | |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- | CHECKED BY DATE MJM 1987/09/22 | MOLEX MOLEX INCORPORATED | | | |
| | | ANGULAR ± 1/2° | APPROVED BY DATE WAZ 1987/09/22 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SDA-70543-**** | SHEET NO. 1 OF 2 | |
| 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 | | | | | |

| CIRCUIT SIZE | ASSEMBLY ITEM NUMBER 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) .130 | (6.10) .240 | 15 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0036-0059 | R.F.M. | (3.30) .130 | (6.10) .240 | TIN | (2.54) .100 | | TIN | BRIGHT | (1.27) .050 |
| 2-25 | -0071-0094 | R.F.M. | (3.81) .150 | (6.10) .240 | TIN | (2.54) .100 | | TIN | BRIGHT | (1.27) .050 |
| 2-25 | -0106-0129 | R.F.M. | (3.30) .130 | (6.10) .240 | 30 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0141-0164 | R.F.M. | (2.54) .100 | (6.10) .240 | 15 GOLD | (3.94) .155 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0165-0188 | R.F.M. | (3.81) .150 | (6.10) .240 | 30 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0200-0223 | R.F.M. | (3.81) .150 | (6.10) .240 | 15 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0248-0271 | R.F.M. | (4.06) .160 | (6.10) .240 | TIN | (2.54) .100 | | TIN | BRIGHT | (1.27) .050 |
| 2-25 | -0272-0295 | R.F.M. | (4.06) .160 | (6.10) .240 | 15 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .050 |
| 2-25 | -0296-0319 | R.F.M. | (4.06) .160 | (6.10) .240 | 30 GOLD | (2.54) .100 | | TIN | MATTE | (1.27) .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

| ADD PLATING FINISH EC NO: UCP2009-1566 DRWINMS BARRA 2008/12/17 CHKXD: MORGAN 2008/12/17 APPR: MILLER 2008/12/18 DESCRIPTION | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <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 MM/IN | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
|--|---------------------------------------|---|---------------------------|---|----------------------------|-------|----------------|--------|-----------------|--------|----------------|-------|---------------------------------|---------------------|-----------------------------|------------------------|
| | mm | INCH | | | | | | | | | | | | | | |
| | 4 PLACES ± --- | ± --- | | | | | | | | | | | | | | |
| | 3 PLACES ± --- | ± .005 | | | | | | | | | | | | | | |
| 2 PLACES ± 0.13 | ± .010 | | | | | | | | | | | | | | | |
| 1 PLACE ± 0.25 | ± --- | | | | | | | | | | | | | | | |
| DRAWN BY AAB | DATE 1987/09/22 | CHECKED BY MJM | DATE 1987/09/22 | SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS | | | | | | | | | | | | |
| APPROVED BY WAZ | DATE 1987/09/22 | MOLEX MOLEX INCORPORATED | | | SHEET NO. 2 OF 2 | | | | | | | | | | | |
| MATERIAL NO. SEE TABLE | DOCUMENT NO. SDA-70543-**** | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | | | | | | | | | |