

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

**Part Number:** **0015475090**  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ FFC/FPC Connector - Single Row Male Version D, 9 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-70430 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series [70431](#)  
 Comments Male  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name SL™

**Physical**

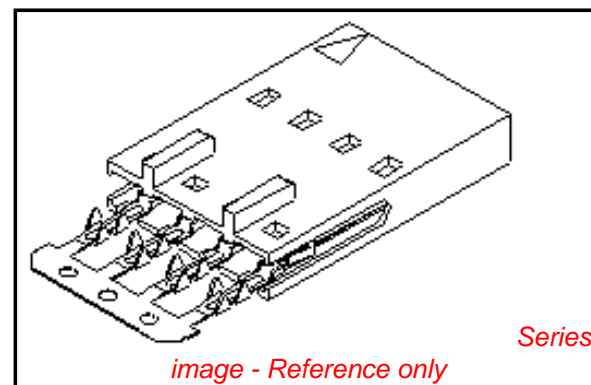
Circuits (Loaded) 9  
 Color - Resin Black  
 Contact Position N/A  
 Durability (mating cycles max) 50  
 Entry Angle Vertical  
 Flammability 94V-0  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Polyester Alloy  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 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 PCB No  
 Stackable Yes  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style IDT or Pierce  
 Wire/Cable Type FFC/FPC

**Electrical**

Current - Maximum per Contact 2A  
 Voltage - Maximum 250V

**Material Info**

Old Part Number 70431-0253



**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**

70431Series

**Application Tooling | FAQ**

*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

| Description  | Product #                  |
|--|----------------------------|
| Manual Ribbon  | <a href="#">0638170100</a> |
| Cable Cutter Hand Tool   |                            |
| Tool Kit for Standard  | <a href="#">0622007400</a> |
| Manual Press FFC   |                            |
| Standard Manual  | <a href="#">0622007800</a> |
| Press for FFC  |                            |
| TM-42™ FFC and SL™ Termination Kit                                 | <a href="#">0622018700</a> |
| TM-42™ FFC and SL™ Press and Termination Kit for 110v applications | <a href="#">0622020800</a> |

**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

PS-70430  
SDA-70431-\*\*\*\*

This document was generated on 05/18/2010

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OPTION -A-

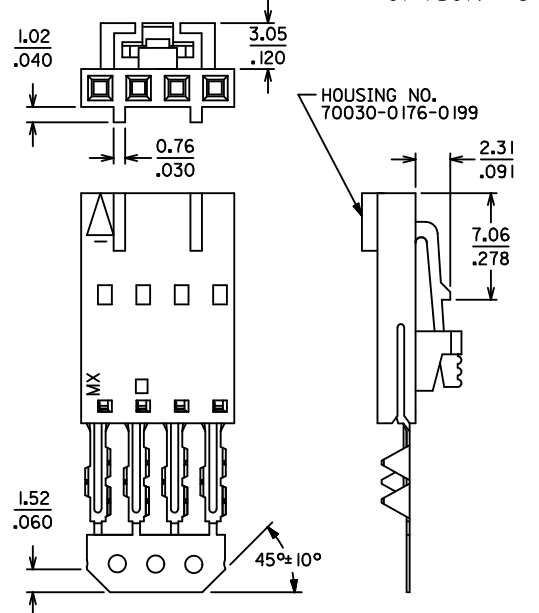


OPTION -D-



OPTIONAL CORE-OUT FOR HOUSING OPTIONS A & D  
CKT. SIZES 2-25  
(FOR CONTROL OF BOW)

OPTION -G-



- NOTES:  
1. HOUSING: POLYESTER (PBT), UL94 V-0  
COLOR: BLACK  
TERMINAL: PHOSPHOR-BRONZE  
2. FINISHES:  
SEE PAGE 2 FOR PLATING FINISHES  
3. PRODUCT SPECIFICATION: PS-70430  
4. PACKAGING SPECIFICATION: PK-70873-0001  
5. SEE CHART FOR CIRCUIT SIZES  
6. TERMINALS ARE SHOWN PRE-LOADED INTO HOUSING AND LOCKED INTO FIRST ROW OF LOCKING TANG WINDOWS  
7. ALL DIMENSIONS ARE FOR REFERENCE ONLY  
8. SEE SHEET 2 FOR PART NUMBERS AND PLATINGS

| CKT. SIZE | DIM. "A" (MAX.)  | DIM. "B" (MAX.)  |
|-----------|------------------|------------------|
| 2         | (2.54)<br>.100   | (5.05)<br>.199   |
| 3         | (5.08)<br>.200   | (7.59)<br>.299   |
| 4         | (7.62)<br>.300   | (10.13)<br>.399  |
| 5         | (10.16)<br>.400  | (12.67)<br>.499  |
| 6         | (12.70)<br>.500  | (15.21)<br>.599  |
| 7         | (15.24)<br>.600  | (17.75)<br>.699  |
| 8         | (17.78)<br>.700  | (20.29)<br>.799  |
| 9         | (20.32)<br>.800  | (22.83)<br>.899  |
| 10        | (22.86)<br>.900  | (25.37)<br>.999  |
| 11        | (25.40)<br>1.000 | (27.91)<br>1.099 |
| 12        | (27.94)<br>1.100 | (30.45)<br>1.199 |
| 13        | (30.48)<br>1.200 | (32.99)<br>1.299 |
| 14        | (33.02)<br>1.300 | (35.53)<br>1.399 |
| 15        | (35.56)<br>1.400 | (38.07)<br>1.499 |
| 16        | (38.10)<br>1.500 | (40.61)<br>1.599 |
| 17        | (40.64)<br>1.600 | (43.15)<br>1.699 |
| 18        | (43.18)<br>1.700 | (45.69)<br>1.799 |
| 19        | (45.72)<br>1.800 | (48.23)<br>1.899 |
| 20        | (48.26)<br>1.900 | (50.77)<br>1.999 |
| 21        | (50.80)<br>2.000 | (53.31)<br>2.099 |
| 22        | (53.34)<br>2.100 | (55.85)<br>2.199 |
| 23        | (55.88)<br>2.200 | (58.39)<br>2.299 |
| 24        | (58.42)<br>2.300 | (60.93)<br>2.399 |
| 25        | (60.96)<br>2.400 | (63.47)<br>2.499 |

|  |  |  |  |   |   |  |
|--|--|--|--|---|---|--|
| MODIFY PRODUCT SPEC<br>EC NO: UCP2010-0987<br>DRWNGS: BARRA 2009/12/28<br>CHKD: MORGAN 2010/01/08<br>APPR: MILLER 2010/01/11 | QUALITY SYMBOLS<br>▽=0<br>▽=0<br>▽=0                 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ±1/2° | DIMENSION STYLE<br>MM/IN<br>DRAWN BY DATE<br>MGB 12/21/88<br>CHECKED BY DATE<br>MGB 12/21/88<br>APPROVED BY DATE<br>WAZ 12/21/88 | SCALE<br>4:1<br>DESIGN UNITS<br>INCH<br>THIRD ANGLE PROJECTION  | ASSY, SL CONNECTOR, FFC MALE, SINGLE ROW 2.54/.100 GRID<br>MOLEX INCORPORATED<br>SDA-70431-****<br>SHEET NO. 1 OF 2 |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |  | MATERIAL NO. SEE TABLE<br>DOCUMENT NO. SDA-70431-****  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |  |
|  |  |  |  |   |   |  |
|  |  |  |  |   |   |  |

| CKT. SIZE | TIN PLATE OPTION -A- |              | TIN PLATE OPTION -D- |              | 15 GOLD PLATE OPTION -A- |              | 15 GOLD PLATE OPTION -D- |              | 30 GOLD PLATE OPTION -A- |              | 30 GOLD PLATE OPTION -D- |              | TIN PLATE OPTION -G- |              |
|-----------|----------------------|--------------|----------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|----------------------|--------------|
|           | EDP. NO.             | ENG. NO.     | EDP. NO.             | ENG. NO.     | EDP. NO.                 | ENG. NO.     | EDP. NO.                 | ENG. NO.     | EDP. NO.                 | ENG. NO.     | EDP. NO.                 | ENG. NO.     | EDP. NO.             | ENG. NO.     |
| 2         | 15-38-9020           | A-70431-0001 | 15-38-9022           | A-70431-0071 | 15-47-4028               | A-70431-0176 | 15-47-5020               | A-70431-0246 | 15-47-5022               | A-70431-0351 | 15-47-5024               | A-70431-0421 |                      |              |
| 3         | -9030                | -0002        | -9032                | -0072        | -4038                    | -0177        | -5030                    | -0247        | -5032                    | -0352        | -5034                    | -0422        |                      |              |
| 4         | -9040                | -0003        | -9042                | -0073        | -4048                    | -0178        | -5040                    | -0248        | -5042                    | -0353        | -5044                    | -0423        |                      |              |
| 5         | -9050                | -0004        | -9052                | -0074        | -4058                    | -0179        | -5050                    | -0249        | -5052                    | -0354        | -5054                    | -0424        |                      |              |
| 6         | -9060                | -0005        | -9062                | -0075        | -4068                    | -0180        | -5060                    | -0250        | -5062                    | -0355        | -5064                    | -0425        |                      |              |
| 7         | -9070                | -0006        | -9072                | -0076        | -4078                    | -0181        | -5070                    | -0251        | -5072                    | -0356        | -5074                    | -0426        |                      |              |
| 8         | -9080                | -0007        | -9082                | -0077        | -4088                    | -0182        | -5080                    | -0252        | -5082                    | -0357        | -5084                    | -0427        |                      |              |
| 9         | -9090                | -0008        | -9092                | -0078        | -4098                    | -0183        | -5090                    | -0253        | -5092                    | -0358        | -5094                    | -0428        |                      |              |
| 10        | -9100                | -0009        | -9102                | -0079        | -4108                    | -0184        | -5100                    | -0254        | -5102                    | -0359        | -5104                    | -0429        | 15-38-9103           | A-70431-0149 |
| 11        | -9110                | -0010        | -9112                | -0080        | -4118                    | -0185        | -5110                    | -0255        | -5112                    | -0360        | -5114                    | -0430        |                      |              |
| 12        | -9120                | -0011        | -9122                | -0081        | -4128                    | -0186        | -5120                    | -0256        | -5122                    | -0361        | -5124                    | -0431        |                      |              |
| 13        | -9130                | -0012        | -9132                | -0082        | -4138                    | -0187        | -5130                    | -0257        | -5132                    | -0362        | -5134                    | -0432        |                      |              |
| 14        | -9140                | -0013        | -9142                | -0083        | -4148                    | -0188        | -5140                    | -0258        | -5142                    | -0363        | -5144                    | -0433        |                      |              |
| 15        | -9150                | -0014        | -9152                | -0084        | -4158                    | -0189        | -5150                    | -0259        | -5152                    | -0364        | -5154                    | -0434        |                      |              |
| 16        | -9160                | -0015        | -9162                | -0085        | -4168                    | -0190        | -5160                    | -0260        | -5162                    | -0365        | -5164                    | -0435        |                      |              |
| 17        | -9170                | -0016        | -9172                | -0086        | -4178                    | -0191        | -5170                    | -0261        | -5172                    | -0366        | -5174                    | -0436        |                      |              |
| 18        | -9180                | -0017        | -9182                | -0087        | -4188                    | -0192        | -5180                    | -0262        | -5182                    | -0367        | -5184                    | -0437        |                      |              |
| 19        | -9190                | -0018        | -9192                | -0088        | -4198                    | -0193        | -5190                    | -0263        | -5192                    | -0368        | -5194                    | -0438        |                      |              |
| 20        | -9200                | -0019        | -9202                | -0089        | -4208                    | -0194        | -5200                    | -0264        | -5202                    | -0369        | -5204                    | -0439        |                      |              |
| 21        | -9210                | -0020        | -9212                | -0090        | -4218                    | -0195        | -5210                    | -0265        | -5212                    | -0370        | -5214                    | -0440        |                      |              |
| 22        | -9220                | -0021        | -9222                | -0091        | -4228                    | -0196        | -5220                    | -0266        | -5222                    | -0371        | -5224                    | -0441        |                      |              |
| 23        | -9230                | -0022        | -9232                | -0092        | -4238                    | -0197        | -5230                    | -0267        | -5232                    | -0372        | -5234                    | -0442        |                      |              |
| 24        | -9240                | -0023        | -9242                | -0093        | -4248                    | -0198        | -5240                    | -0268        | -5242                    | -0373        | -5244                    | -0443        |                      |              |
| 25        | 15-38-9250           | A-70431-0024 | 15-38-9252           | A-70431-0094 | 15-47-4258               | A-70431-0199 | 15-47-5250               | A-70431-0269 | 15-47-5252               | A-70431-0374 | 15-47-5254               | A-70431-0444 |                      |              |

| PLATING PER ES-88: | CARRIER STRIP COLOR CODE |
|--------------------|--------------------------|
| TIN                | NONE                     |
| 15 GOLD            | YELLOW                   |
| 30 GOLD            | RED                      |

PLATING CHART PER ES-88-\*\*\*

TIN: TIN OVERALL  
THICKNESS: 3.81 MICROMETERS (150 MICROINCHES) MINIMUM ALL OVER A NICKEL UNDERPLATE.

15 GOLD: SELECTIVE GOLD (Au) WITH SELECTIVE TIN  
THICKNESS: 0.38 MICROMETERS (15 MICROINCHES) MINIMUM GOLD (Au) IN SELECT AREA  
1.90 MICROMETERS (75 MICROINCHES) MINIMUM TIN IN SELECT AREA ALL OVER A NICKEL UNDERPLATE.

30 GOLD: SELECTIVE GOLD (Au) WITH SELECTIVE TIN  
THICKNESS: 0.76 MICROMETERS (30 MICROINCHES) MINIMUM GOLD (Au) IN SELECT AREA  
1.90 MICROMETERS (75 MICROINCHES) MINIMUM TIN IN SELECT AREA ALL OVER A NICKEL UNDERPLATE.

|   |                                      |                                       |       |   |                  |   |                        |                        |  |
|---|--------------------------------------|---------------------------------------|-------|---|------------------|---|------------------------|------------------------|--|
| SEE SHEET 1<br>EC NO: UCP2010-0987<br>DRAWN BY: DRWINMS BARRA 2009/12/28<br>CHKD BY: CHKD:DMORGAN 2010/01/08<br>APPR: MILLER 2010/01/11 | QUALITY SYMBOLS<br>▽=0<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |       | DIMENSION STYLE<br>MM/IN  |                  | SCALE<br>1:1  | DESIGN UNITS<br>INCH   | THIRD ANGLE PROJECTION |  |
|   |                                      | 4 PLACES ± ---                        | ± --- | DRAWN BY<br>MGB   | DATE<br>12/21/88 | TITLE<br>ASSY, SL CONNECTOR, FFC MALE, SINGLE ROW<br>2.54/.100 GRID |                        |                        |  |
|   |                                      | 3 PLACES ± ---                        | ± --- | CHECKED BY<br>MGB   | DATE<br>12/21/88 |   |                        |                        |  |
|   |                                      | 2 PLACES ± ---                        | ± --- | APPROVED BY<br>WAZ  |                  | DATE<br>12/21/88  | MATERIAL NO. SEE TABLE |                        |  |
| 1 PLACE ± ---   |                                      | ANGULAR ±1/2°                         |       | DOCUMENT NO. SDA-70431-****   |                  | SHEET NO. 2 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 |                  |   |                        |                        |  |