

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

**Part Number:** [0702471654](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Header, Dual Row, Low Profile, Right Angle, Shrouded, 16 Circuits, 0.127µm (5µ") Gold (Au) Plating, Tin(Sn) PC TailPlating

**Documents:**

[3D Model](#) [Product Specification PS-70246-100 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-70246 \(PDF\)](#)

**Agency Certification**

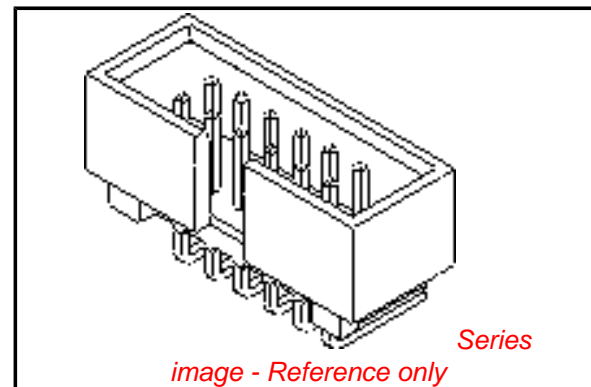
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [70247](#)  
 Application Wire-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®

**Physical**

Breakaway No  
 Circuits (Loaded) 16  
 Circuits (maximum) 16  
 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 None  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Polyester  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.100 In  
 PC Tail Length (mm) 2.54 mm  
 PCB Locator No  
 Packaging Type Tray  
 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) 5.2  
 Plating min: Mating (µm) 0.13  
 Plating min: Termination (µin) 75.2  
 Plating min: Termination (µm) 1.88  
 Polarized to Mating Part Yes  
 Polarized to PCB No  
 Shrouded Closed Ends  
 Stackable No  
 Surface Mount Compatible (SMC) No



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC  
 Contains SVHC: No**  
**Halogen-Free  
 Status**

**China RoHS**



**Not Halogen-Free**

**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**

[70247Series](#)

**Mates With**

[70450 SL™](#) Crimp Housing, [70058 SL™](#)  
 Crimp Terminal

Temperature Range - Operating -55°C to +120°C  
Termination Interface: Style Through Hole

### **Electrical**

Current - Maximum per Contact 2.5A  
Voltage - Maximum 250V DC

### **Solder Process Data**

Duration at Max. Process Temperature (seconds) 10  
Lead-free Process Capability Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 265

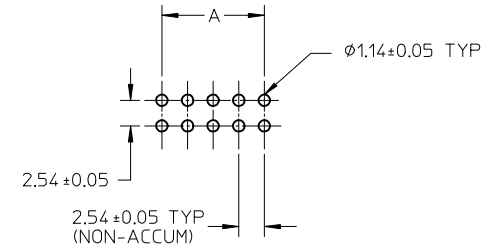
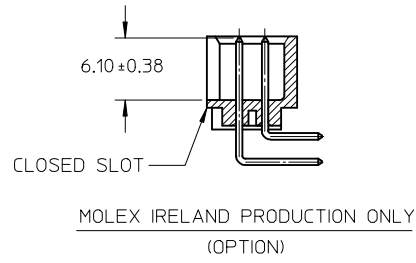
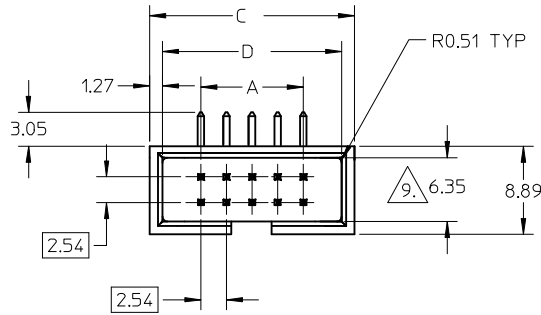
### **Material Info**

### **Reference - Drawing Numbers**

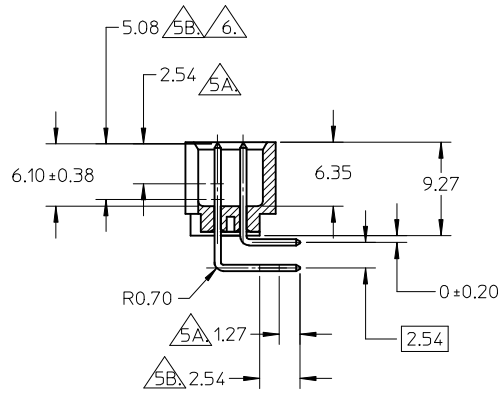
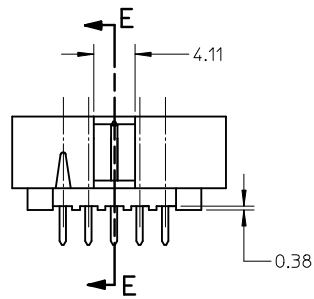
Packaging Specification PK-87835-001  
Product Specification PS-70246, PS-70246-100  
Sales Drawing SDA-70247-\*\*-00-04

This document was generated on 05/24/2010

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

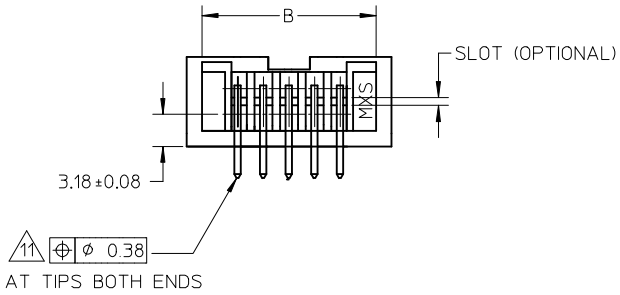


RECOMMENDED PCB HOLE LAYOUT



SECTION E-E

LEGEND:  
70247 - \* \* \* \*  
CKT SIZE  
7 PLATING OPT.








|   |  |                                       |   |                            |                    |              |                         |                        |  |  |
|---|--|---------------------------------------|---|----------------------------|--------------------|--------------|-------------------------|------------------------|--|--|
| REVISE DIMENSIONS<br>EC NO: S2010-0369<br>DRWN:SKANG 2009/10/27<br>CHKD:ATSEE 2009/11/09<br>APPR:MLONG 2009/11/11 | QUALITY SYMBOLS<br>$F_A=0$<br>$F_C=0$<br>$F_P=0$     | GENERAL TOLERANCES (UNLESS SPECIFIED) |   | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>NTS | DESIGN UNITS<br>METRIC  | THIRD ANGLE PROJECTION |  |  |
|   |  |                                       | mm  | INCH                       | DRAWN BY           | DATE         | TITLE                   |                        |  |  |
|   |  | 4 PLACES                              | ± ---   | ± ---                      | JENNIFER           | 1987/09/21   | C-GRID, SHROUDED HEADER |                        |  |  |
|   |  | 3 PLACES                              | ± ---   | ± ---                      | CHECKED BY         | DATE         | R/A                     |                        |  |  |
|   | ANGULAR ± 3 °  |                                       | 1 PLACES  | ± ---                      | ± ---              | MLA1         | 1987/09/21              | MOLEX INCORPORATED     |  |  |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                                       | 2 PLACES  | ± 0.20                     | ± ---              | APPROVED BY  | DATE                    | MATERIAL NO.           |  |  |
|   |  |                                       | 1 PLACES  | ± ---                      | ± ---              | MLONG        | 2009/11/10              | DOCUMENT NO.           |  |  |
|   |  |                                       | SEE TABLE   |                            | SDA-70247-***00-04 |              | SHEET NO.               |                        |  |  |
|   |  |                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                            |                    |              | 1 OF 2                  |                        |  |  |


NOTES:




1. PIN PUSHOUT FORCE (.9072KG)/2LBS MIN.
2. PIN SOLDERABILITY PER MOLEX SPEC. ES-152.
3. PRODUCT SPEC: PS-70246 APPLIES.
4. WAFER TO BE FLAT WITHIN .003 MM/MM.
5. DIMENSIONS FOR PLATING LOCATION:

 MEASURE POINT FOR THICKNESS  
 MINIMUM COVERAGE

-  GOLD END OF PIN UNLESS OVERALL PLATED.
-  FINISH: - 51 : 15 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.  
 - 52 : 30 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.  
 - 54 : 5 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.

-  CHECK WITH SALES OFFICE FOR AVAILABILITY.
-  DIM AT THE CENTRE OF THE SHROUDED WALL SHALL BE 5.91MM MIN. THIS SPEC IS VALID FOR ALL CKT SIZE.
10. MATERIAL:  
 HSG: PBT, GLASS FILLED, UL94V-0, COLOUR: BLACK (SPEC NO: 89992-0028)  
 PIN: 0.64MM SQ. PIN PHOSPHOR BRONZE.
-  SOLDERTAIL POSITION TOLERANCE TO BE GAUGED.

| PART NUMBER  | CKT SIZE | DIM A | DIM B | DIM C | DIM D |
|---|----------|-------|-------|-------|-------|
| 70247-08**  | 08       | 7.62  | 14.73 | 17.78 | 15.24 |
| 70247-10**  | 10       | 10.16 | 17.27 | 20.32 | 17.78 |
| 70247-12**  | 12       | 12.70 | 19.81 | 22.86 | 20.32 |
| 70247-14**  | 14       | 15.24 | 22.35 | 25.40 | 22.86 |
| 70247-16**  | 16       | 17.78 | 24.89 | 27.94 | 25.40 |
| 70247-20**  | 20       | 22.86 | 29.97 | 33.02 | 30.48 |
| 70247-24**  | 24       | 27.94 | 35.05 | 38.10 | 35.56 |
| 70247-26**  | 26       | 30.48 | 37.59 | 40.64 | 38.10 |
| 70247-30**  | 30       | 35.56 | 42.67 | 45.72 | 43.18 |
| 70247-34**  | 34       | 40.64 | 47.75 | 50.80 | 48.26 |
| 70247-40**  | 40       | 48.26 | 55.37 | 58.42 | 55.88 |
| 70247-44**  | 44       | 53.34 | 60.45 | 63.50 | 60.96 |
| 70247-48**  | 48       | 58.42 | 65.53 | 68.58 | 66.04 |
| 70247-50**  | 50       | 60.96 | 68.07 | 71.12 | 68.58 |
| 70247-56**  | 56       | 68.58 | 75.69 | 78.74 | 76.20 |
| 70247-60**  | 60       | 73.66 | 80.77 | 83.82 | 81.28 |
| 70247-64**  | 64       | 78.74 | 85.85 | 88.90 | 86.36 |
| 70247-72**  | 72       | 88.90 | 96.01 | 99.06 | 96.52 |

|   |   |                                       |        |                            |                      |   |  |                                    |                     |  |
|---|---|---------------------------------------|--------|----------------------------|----------------------|---|--|------------------------------------|---------------------|--|
| REVISE DIMENSIONS<br>EC NO: S2010-0369<br>2009/10/27<br>DRWN:SKANG<br>CHYKD:ATSEE<br>2009/11/09<br>APPR:MLONG<br>2009/11/11 | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED) |        | DIMENSION STYLE<br>MM ONLY |                      | SCALE<br>NTS  | DESIGN UNITS<br>METRIC                                       | THIRD ANGLE PROJECTION             |                     |  |
|   |  =0 | 4 PLACES                              | mm     | INCH                       | DRAWN BY<br>JENNIFER | DATE<br>1987/09/21  | TITLE<br>C-GRID, SHROUDED HEADER R/A (SLOTTED W/O STANDOFFS) |                                    |                     |  |
|   |  =0 | 3 PLACES                              | ± ---  | ± ---                      | CHECKED BY<br>MLA1   | DATE<br>1987/09/21  | MOLEX MOLEX INCORPORATED                                     |                                    |                     |  |
|   |  =0 | 2 PLACES                              | ± 0.20 | ± ---                      | APPROVED BY<br>MLONG | DATE<br>2009/11/10  | MATERIAL NO.<br>SEE TABLE                                    | DOCUMENT NO.<br>SDA-70247-**-00-04 | SHEET NO.<br>2 OF 2 |  |
|   | 1 PLACE   | ± ---                                 | ± ---  | ANGULAR ± 3 °              |                      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                                    |                     |  |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS                                    |                                       |        |                            |                      |   |  |                                    |                     |  |