

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

**Part Number:** [0878342045](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Header, Dual Row, Low Profile, Vertical, Through Hole, Shrouded, Lead-free, 20 Circuits, 0.13µm (5µ) Gold (Au) Selective Plating, Black, Center Polarization Slot, with Press-fit Locating Plastic Pegs

**Documents:**

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

**Agency Certification**

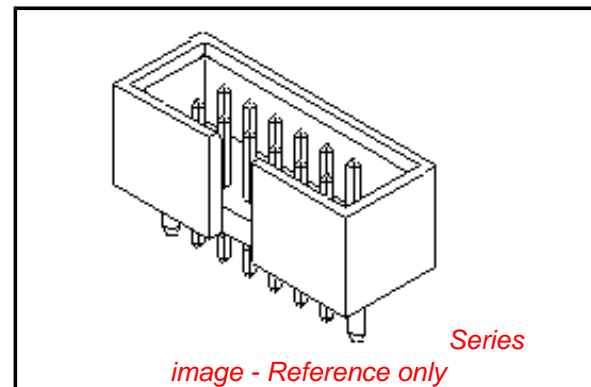
UL E29179

**General**

Product Family PCB Headers  
 Series [87834](#)  
 Application Wire-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®

**Physical**

Breakaway No  
 Circuits (Loaded) 20  
 Circuits (maximum) 20  
 Color - Resin Black  
 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 Vertical  
 PC Tail Length (in) 0.135 In  
 PC Tail Length (mm) 3.43 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 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 Center Slot  
 Polarized to PCB Yes  
 Shrouded Fully  
 Stackable No  
 Temperature Range - Operating -55°C to +120°C  
 Termination Interface: Style Through Hole



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC  
 Contains SVHC: No**  
**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**

[87834Series](#)

**Mates With**

.050" pitch ribbon cable connectors

**Electrical**

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

**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                     | 235                    |

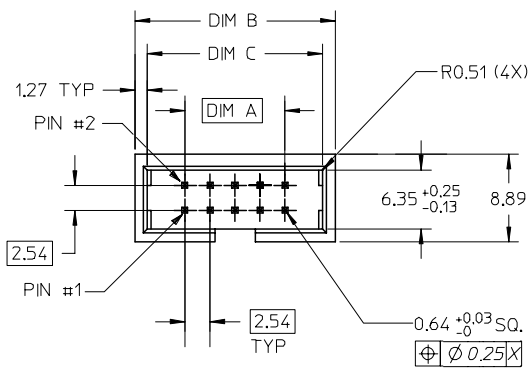
**Material Info****Reference - Drawing Numbers**

|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-87835-001 |
| Product Specification   | PS-70246-100 |
| Sales Drawing           | SD-87834-020 |

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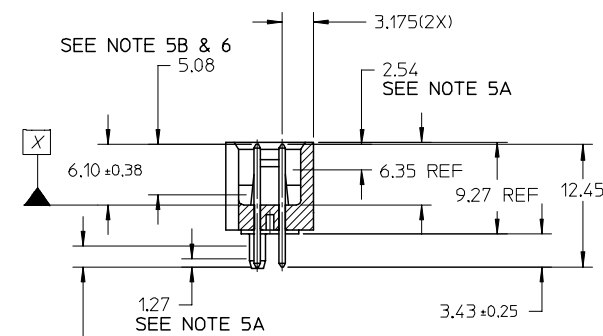
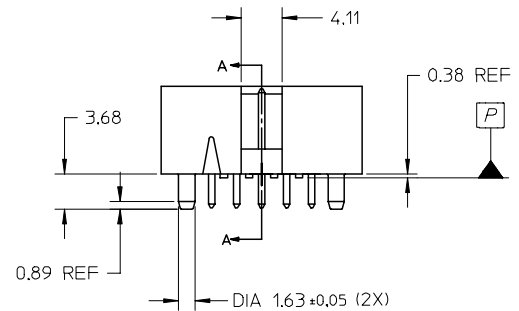
10 9 8 7 6 5 4 3 2 1



PART NUMBER LEGEND

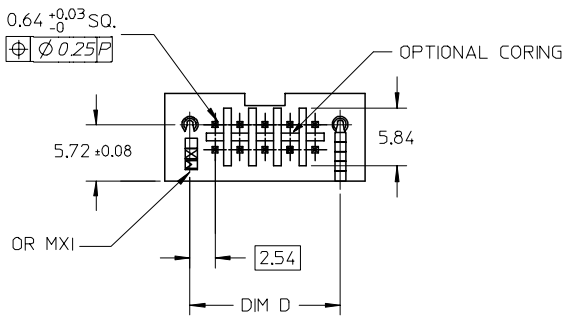
87834 - \* \* \* 4 5  
 CKT SIZES

| PART NUMBERS | CKT SIZE | DIM A | DIM B | DIM C | DIM D |
|--------------|----------|-------|-------|-------|-------|
| 87834-0445   | 04       | 2.54  | 12.70 | 10.16 | 7.62  |
| 87834-0645   | 06       | 5.08  | 15.24 | 12.70 | 10.16 |
| 87834-0845   | 08       | 7.62  | 17.78 | 15.24 | 12.70 |
| 87834-1045   | 10       | 10.16 | 20.32 | 17.78 | 15.24 |
| 87834-1245   | 12       | 12.70 | 22.86 | 20.32 | 17.78 |
| 87834-1445   | 14       | 15.24 | 25.40 | 22.86 | 20.32 |
| 87834-1645   | 16       | 17.78 | 27.94 | 25.40 | 22.86 |
| 87834-1845   | 18       | 20.32 | 30.48 | 27.94 | 25.40 |
| 87834-2045   | 20       | 22.86 | 33.02 | 30.48 | 27.94 |
| 87834-2445   | 24       | 27.94 | 38.10 | 35.56 | 33.02 |
| 87834-2645   | 26       | 30.48 | 40.64 | 38.10 | 35.56 |
| 87834-3045   | 30       | 35.56 | 45.72 | 43.18 | 40.64 |
| 87834-3445   | 34       | 40.64 | 50.80 | 48.26 | 45.72 |
| 87834-4045   | 40       | 48.26 | 58.42 | 55.88 | 53.34 |
| 87834-4445   | 44       | 53.34 | 63.50 | 60.96 | 58.42 |
| 87834-5045   | 50       | 60.96 | 71.12 | 68.58 | 66.04 |
| 87834-5645   | 56       | 68.58 | 78.74 | 76.20 | 73.66 |
| 87834-6045   | 60       | 73.66 | 83.82 | 81.28 | 78.74 |
| 87834-6445   | 64       | 78.74 | 88.90 | 86.36 | 83.82 |
| 87834-7245   | 72       | 88.90 | 99.06 | 96.52 | 93.98 |

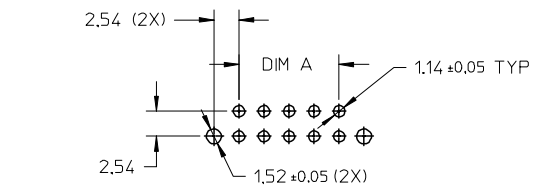


NOTES :

- MATERIAL :  
 HOUSING : POLYESTER (PBT), 94V-0, COLOUR: BLACK,  
 PIN : COPPER ALLOY.
- PIN PUSHOUT FORCE 0.91 KG MIN.
- PRODUCT SPECIFICATION PS-70246-100 APPLIES.
- WAFER TO BE FLAT WITHIN 0.03MM/CM
- DIMENSIONS FOR PLATING LOCATIONS : A - MEASURE POINT FOR THICKNESS,  
 B - MINIMUM COVERAGE.
- GOLD END OF PIN UNLESS OVERALL PLATED.
- FINISH :  
 0.13um MIN GOLD IN SELECTED AREA,  
 AND 1.91um MIN TIN IN SELECTED AREA,  
 BOTH OVER 1.27um MIN NICKEL OVERALL.
- FOR ILLUSTRATION PURPOSE A 10 CKT IS SHOWN.
- WEEK/YEAR STAMP NOT REQUIRED BY CUSTOMER.



2.54 SEE NOTE 5B & 6  
 SECTION A-A



RECOMMENDED PCB PATTERN

|   |                                      |  |                                      |                                   |  |                               |                        |
|---|--------------------------------------|--|--------------------------------------|-----------------------------------|--|-------------------------------|------------------------|
| <b>ADD MATERIAL NOTE</b><br>EC NO: S2005-0319<br>DRAWN AT SEE 2004/12/08<br>CHK'D: SHONG 2004/12/09<br>APPR: SKTOH 2004/12/13 | <b>QUALITY SYMBOLS</b><br>= 0<br>= 0 | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>   |                                      | <b>DIMENSION STYLE</b><br>MM ONLY | <b>SCALE</b><br>NTS  | <b>DESIGN UNITS</b><br>METRIC | THIRD ANGLE PROJECTION |
|   |                                      | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± --- | mm INCH                              | DRAWN BY DATE<br>RSHAN 2003/11/20 | TITLE<br>C-GRID, SHROUDED WAFER<br>SLOTTED, WITH IN-LINE<br>POLARIZATION PEG |                               |                        |
|   |                                      | ANGULAR ± 3 °  | APPROVED BY DATE<br>SKTOH 2003/12/06 | MOLEX INCORPORATED                | DOCUMENT NO.<br>SD-87834-020   |                               |                        |
|   |                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                   | SEE TABLE                            | MATERIAL NO.                      | SHEET NO.<br>1 OF 1  |                               |                        |

9 8 7 6 5 4 3 2 1