

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

**Part Number:** **0901303310**  
**Status:** **Active**  
**Overview:** cgrid\_iii  
**Description:** 2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Right Angle, Shrouded, Fully Loaded, 10 Circuits, Black 0.76µm (30µ") Gold (Au) Selective Plating

**Documents:**

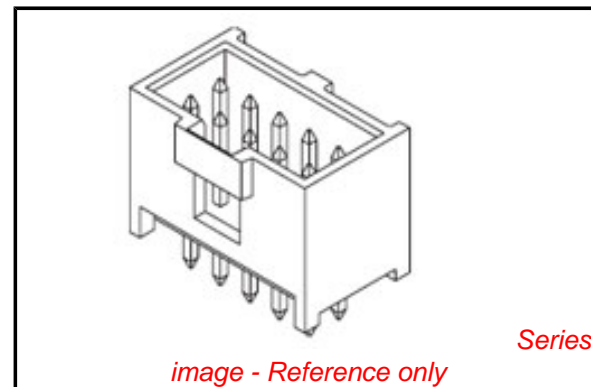
[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

|                |                  |
|----------------|------------------|
| Product Family | PCB Headers      |
| Series         | <u>90130</u>     |
| Application    | Wire-to-Board    |
| Overview       | <u>cgrid_iii</u> |
| Product Name   | C-Grid III™      |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 10              |
| Circuits (maximum)             | 10              |
| Color - Resin                  | Black           |
| Durability (mating cycles max) | 200             |
| First Mate / Last Break        | No              |
| Glow-Wire Compliant            | No              |
| Guide to Mating Part           | No              |
| Keying to Mating Part          | None            |
| Lock to Mating Part            | Yes             |
| Material - Metal               | Brass           |
| Material - Plating Mating      | Gold            |
| Material - Plating Termination | Tin             |
| Material - Resin               | Polyester       |
| Number of Rows                 | 2               |
| Orientation                    | Right Angle     |
| PC Tail Length (in)            | 0.114 In        |
| PC Tail Length (mm)            | 2.90 mm         |
| PCB Locator                    | No              |
| PCB Retention                  | None            |
| PCB Thickness Recommended (in) | 0.063 In        |
| PCB Thickness Recommended (mm) | 1.60 mm         |
| 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)      | 30.48           |
| Plating min: Mating (µm)       | 0.762           |
| Plating min: Termination (µin) | 120             |
| Plating min: Termination (µm)  | 3               |
| Polarized to Mating Part       | Yes             |
| Polarized to PCB               | No              |
| Shrouded                       | Closed Ends     |
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -55°C to +125°C |
| Termination Interface: Style   | Through Hole    |



**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**

90130Series

**Mates With**

90142 C-Grid III™ Crimp Housing

**Electrical**

Current - Maximum per Contact 3A  
Voltage - Maximum 350V AC/DC

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5  
Lead-free Process Capability Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 260

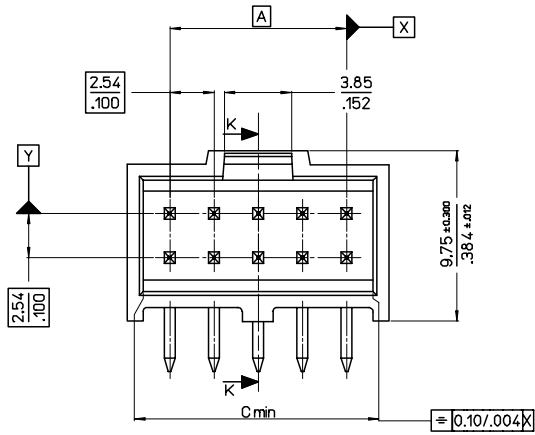
**Material Info****Reference - Drawing Numbers**

Packaging Specification PK-90130-001, PK-91814-005  
Sales Drawing SDA-90130

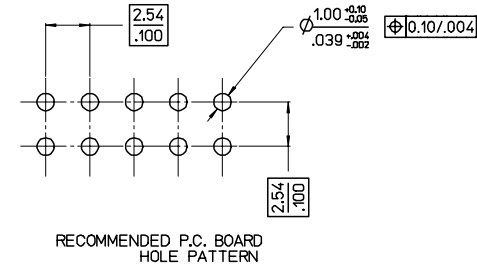
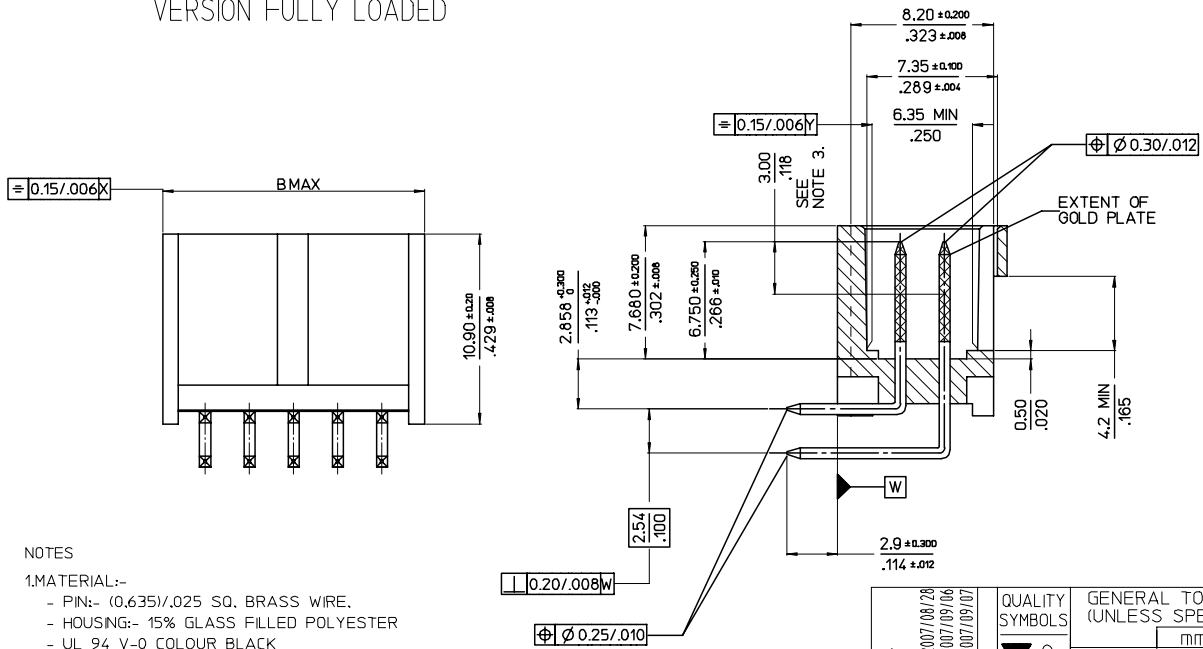
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| HSG CKT SIZE | A             | B             | C             |
|--------------|---------------|---------------|---------------|
| 6            | (5.08) .200   | (10.34) .407  | (7.92) .312   |
| 8            | (7.62) .300   | (12.88) .507  | (10.46) .412  |
| 10           | (10.16) .400  | (15.42) .607  | (13.00) .512  |
| 12           | (12.70) .500  | (17.96) .707  | (15.54) .612  |
| 14           | (15.24) .600  | (20.50) .807  | (18.08) .712  |
| 16           | (17.78) .700  | (23.04) .907  | (20.62) .812  |
| 18           | (20.32) .800  | (25.58) 1.007 | (23.16) .912  |
| 20           | (22.86) .900  | (28.12) 1.107 | (25.70) 1.012 |
| 22           | (25.40) 1.000 | (30.66) 1.207 | (28.24) 1.112 |
| 24           | (27.94) 1.100 | (33.20) 1.307 | (30.78) 1.212 |
| 26           | (30.48) 1.200 | (35.74) 1.407 | (33.32) 1.312 |
| 28           | (33.02)/1.300 | (37.90)/1.492 | (36.06)/1.420 |
| 30           | (35.56) 1.400 | (40.82) 1.607 | (38.40) 1.512 |
| 32           | (38.10)/1.500 | (42.98)/1.692 | (41.15)/1.620 |
| 34           | (40.64) 1.600 | (45.90) 1.807 | (43.48) 1.712 |
| 36           | (43.18)/1.700 | (48.06)/1.892 | (46.22)/1.820 |
| 38           | (45.72) 1.800 | (50.98) 2.007 | (48.56) 1.912 |
| 40           | (48.26) 1.900 | (53.52) 2.107 | (51.10) 2.012 |
| 42           | (50.80)/2.000 | (55.68)/2.192 | (53.84)/2.120 |
| 44           | (53.34) 2.100 | (58.60) 2.307 | (56.18) 2.212 |
| 46           | (55.88)/2.200 | (60.76)/2.392 | (58.92)/2.320 |
| 48           | (58.42)/2.300 | (63.30)/2.492 | (61.46)/2.420 |
| 50           | (60.96) 2.400 | (66.22) 2.607 | (63.80) 2.512 |
| 52           | (63.50)/2.500 | (68.38)/2.692 | (66.54)/2.620 |
| 54           | (66.04) 2.600 | (71.30) 2.807 | (68.88) 2.712 |
| 56           | (68.58)/2.700 | (73.46)/2.892 | (71.62)/2.820 |
| 58           | (71.12)/2.800 | (76.00)/2.992 | (74.16)/2.920 |
| 60           | (73.66) 2.900 | (78.92) 3.107 | (76.50) 3.012 |
| 62           | (76.20)/3.000 | (81.08)/3.192 | (79.24)/3.120 |
| 64           | (78.74) 3.100 | (84.00) 3.307 | (81.58) 3.212 |
| 66           | (81.28)/3.200 | (86.16)/3.392 | (84.32)/3.320 |
| 68           | (83.82) 3.300 | (89.08) 3.507 | (86.66) 3.412 |



VERSION FULLY LOADED



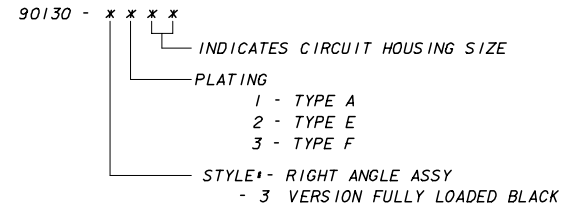
- NOTES
- MATERIAL:-
    - PIN:- (0.635)/.025 SQ. BRASS WIRE.
    - HOUSING:- 15% GLASS FILLED POLYESTER
    - UL 94 V-0 COLOUR BLACK
  - FOR PLATING VERSIONS AND VOID VERSIONS SEE SHEET 2.
  - MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.
  - FOR PRODUCT SPEC SEE PS-99020-0001
  - RECOMMENDED PCB THICKNESS: 1.6mm

|  |                               |   |            |                            |                    |  |                        |                        |  |
|--|-------------------------------|---|------------|----------------------------|--------------------|--|------------------------|------------------------|--|
| MODIFIED TITLE:<br>ELC NO: E2008-0083<br>2007/08/28<br>DRAWN: LIBRINES<br>2007/09/06<br>CHKD:<br>APPR: EGMADHONY<br>2007/09/07 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |            | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>5:1   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|  |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ±.004<br>2 PLACES ± 0.10 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ±1/2° | mm<br>INCH | DRAWN BY<br>KS             | DATE<br>1987/09/11 | TITLE<br>C-GRID III<br>DUAL ROW RIGHT ANGLE<br>SHROUDED HEADER |                        | MOLEX INCORPORATED     |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |                               | SEE CHART   |            | MATERIAL NO.<br>SDA-90130  |                    | DOCUMENT NO.   |                        | SHEET NO.<br>3 OF 4    |  |

| NO OF CKTS | HSG CKT SIZE | PART NUMBER    |                |                |
|------------|--------------|----------------|----------------|----------------|
|            |              | PLATING TYPE A | PLATING TYPE E | PLATING TYPE F |
| 6          | 6            | 90130-X106     | 90130-X206     | 90130-X306     |
| 8          | 8            | X108           | X208           | X308           |
| 10         | 10           | X110           | X210           | X310           |
| 12         | 12           | X112           | X212           | X312           |
| 14         | 14           | X114           | X214           | X314           |
| 16         | 16           | X116           | X216           | X316           |
| 18         | 18           | X118           | X218           | X318           |
| 20         | 20           | X120           | X220           | X320           |
| 22         | 22           | X122           | X222           | X322           |
| 24         | 24           | X124           | X224           | X324           |
| 26         | 26           | X126           | X226           | X326           |
| 28         | 28           | X128           | X228           | X328           |
| 30         | 30           | X130           | X230           | X330           |
| 32         | 32           | X132           | X232           | X332           |
| 34         | 34           | X134           | X234           | X334           |
| 36         | 36           | X136           | X236           | X336           |
| 38         | 38           | X138           | X238           | X338           |
| 40         | 40           | X140           | X240           | X340           |
| 42         | 42           | X142           | X242           | X342           |
| 44         | 44           | X144           | X244           | X344           |
| 46         | 46           | X146           | X246           | X346           |
| 48         | 48           | X148           | X248           | X348           |
| 50         | 50           | X150           | X250           | X350           |
| 52         | 52           | X152           | X252           | X352           |
| 54         | 54           | X154           | X254           | X354           |
| 56         | 56           | X156           | X256           | X356           |
| 58         | 58           | X158           | X258           | X358           |
| 60         | 60           | X160           | X260           | X360           |
| 62         | 62           | X162           | X262           | X362           |
| 64         | 64           | X164           | X264           | X364           |
| 66         | 66           | X166           | X266           | X366           |
| 68         | 68           | 90130-X168     | 90130-X268     | 90130-X368     |

**NOTES:**

1. FOR ASSY SEE SHEET 3.
2. FOR PLATING DETAILS SEE SDES-99000-0003



**VERSION FULLY LOADED**

|  |  |   |   |  |                     |                        |  |
|--|--|---|---|--|---------------------|------------------------|--|
| REMOVED NATURAL OPT<br>EC NO: E2008-0083<br>DRAWN BY: DRW:NDIBYRNES 2007/06/28<br>CHKD: CHFKD: 2007/09/06<br>APPR: EOMAHONY 2007/09/07 | QUALITY SYMBOLS                                      | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE   | SCALE  | DESIGN UNITS        | THIRD ANGLE PROJECTION |  |
|  | ▽=0<br>▽=0   | mm INCH   | MM ONLY   | ---  | METRIC              |                        |  |
|  |  | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± --- ± --- | DRAWN BY DATE<br>KS 1987/09/10  | TITLE<br>C-GRID III<br>DUAL ROW RIGHT ANGLE<br>SHROUDED HEADER |                     |                        |  |
|  |  | ANGULAR ± --- °   | CHECKED BY DATE<br>APPROVED BY DATE   | MOLEX INCORPORATED   |                     |                        |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHART   | MATERIAL NO.  | DOCUMENT NO.   | SHEET NO.<br>4 OF 4 |                        |  |
|  |  |   | SDA-90130   |  |                     |                        |  |
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