

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901303320](#)
Status: **Active**
Overview: [cgrid_iii](#)
Description: 2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Right Angle, Shrouded, Fully Loaded, 20 Circuits, Black 0.76µm (30µ") Gold (Au) Selective Plating

Documents:

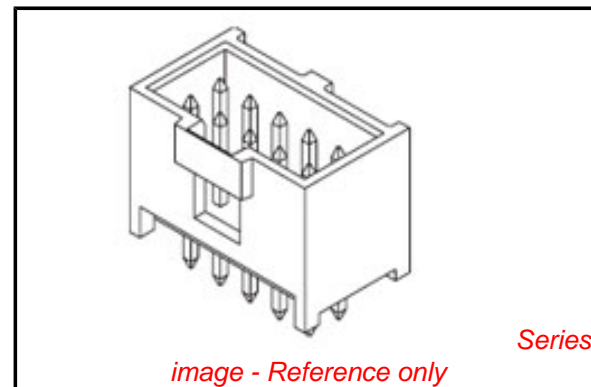
[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

General

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

Physical

| | |
|--------------------------------|-----------------|
| Breakaway | No |
| Circuits (Loaded) | 20 |
| Circuits (maximum) | 20 |
| 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 Contains SVHC: No
Halogen-Free Status

China RoHS



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

[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

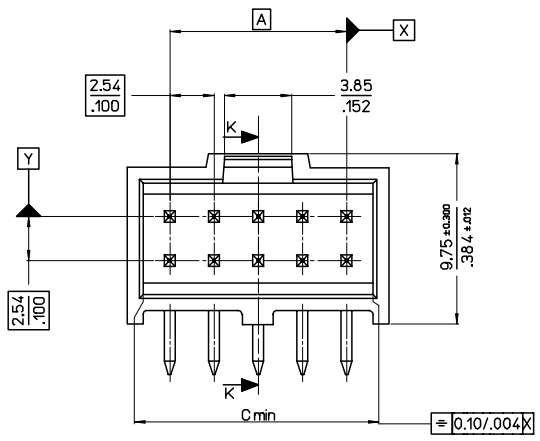
Material Info**Reference - Drawing Numbers**

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

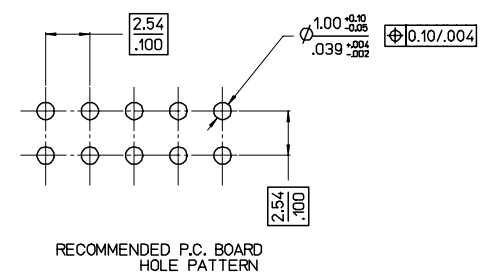
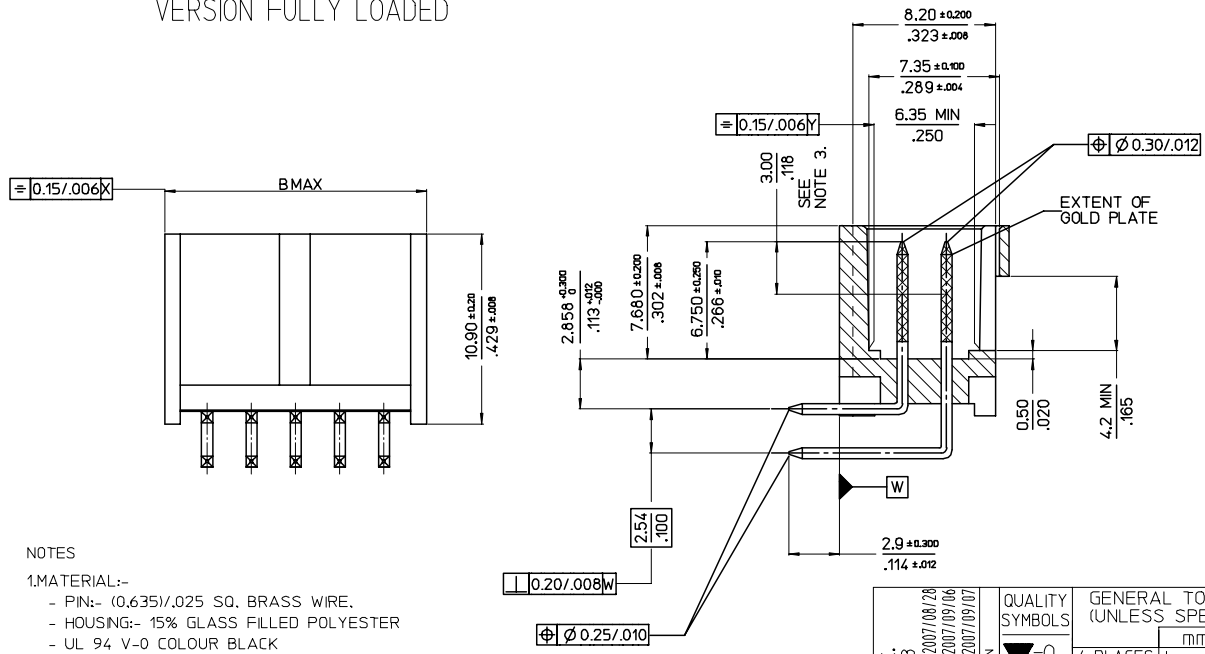
This document was generated on 05/26/2010

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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



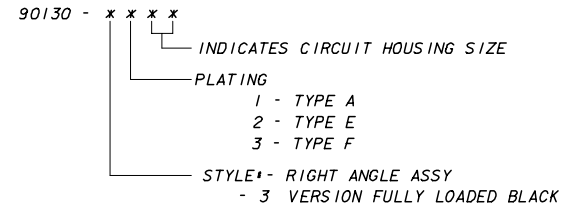
- NOTES
- MATERIAL:-
 - PIN:- (0.635)/.025 SQ. BRASS WIRE.
 - HOUSING:- 15% GLASS FILLED POLYESTER
 - UL 94 V-0 COLOUR BLACK
 - FOR PLATING VERSIONS AND VOID VERSIONS SEE SHEET 2.
 - MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.
 - FOR PRODUCT SPEC SEE PS-99020-0001
 - RECOMMENDED PCB THICKNESS: 1.6mm

| MODIFIED TITLE: EIC NO: E2008-0083 2007/08/28 DRAWN: LIBRINES 2007/09/06 CHKD: 2007/09/06 APPR: EGMADHONY 2007/09/07 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th></th><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>±---</td><td>±---</td></tr> <tr><td>3 PLACES</td><td>±---</td><td>±.004</td></tr> <tr><td>2 PLACES</td><td>±0.10</td><td>±---</td></tr> <tr><td>1 PLACE</td><td>±---</td><td>±---</td></tr> </table> | | mm | INCH | 4 PLACES | ±--- | ±--- | 3 PLACES | ±--- | ±.004 | 2 PLACES | ±0.10 | ±--- | 1 PLACE | ±--- | ±--- | DIMENSION STYLE MM ONLY | SCALE 5:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
|--|-------------------------------|--|----------------------------------|--------------|----------------------------|--|------|------|----------|------|-------|----------|-------|------|---------|------|------|-----------------------------------|---------------------|-------------------------------|------------------------|
| | | mm | INCH | | | | | | | | | | | | | | | | | | |
| 4 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±--- | ±.004 | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±0.10 | ±--- | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHART | C-GRID III DUAL ROW RIGHT ANGLE SHROUDED HEADER MOLEX MOLEX INCORPORATED | MATERIAL NO. SDA-90130 | DOCUMENT NO. | SHEET NO. 3 OF 4 | INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | |

| 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 EC NO: E2008-0083 DRAWN BY: DRW:NDIBRYNES CHKD: 2007/09/06 APPR: EOMAHONY 2007/09/07 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
| | ▽=0 ▽=0 | mm INCH | MM ONLY | --- | METRIC | | |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- | DRAWN BY DATE KS 1987/09/10 | TITLE C-GRID III DUAL ROW RIGHT ANGLE SHROUDED HEADER | | | |
| | | ANGULAR ± --- ° | CHECKED BY DATE APPROVED BY DATE | MOLEX INCORPORATED | | | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHART | MATERIAL NO. | DOCUMENT NO. | SHEET NO. 4 OF 4 | | |
| | | | SDA-90130 | | | | |
| | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |