

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

**Part Number:** **0901301238**  
**Status:** **Active**  
**Overview:** [cgrid\\_iii](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, Shrouded, Fully Loaded, 38 Circuits, Black, 0.38µm (15µ") Gold (Au) Selective Plating

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)

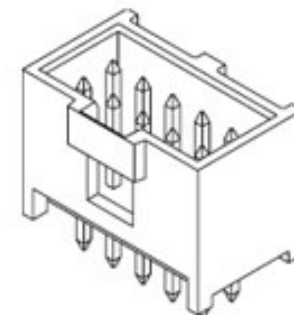
[RoHS Certificate of Compliance \(PDF\)](#)

**General**

|                |                           |
|----------------|---------------------------|
| Product Family | PCB Headers               |
| Series         | <a href="#">90130</a>     |
| Application    | Wire-to-Board             |
| Overview       | <a href="#">cgrid_iii</a> |
| Product Name   | C-Grid III™               |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 38              |
| Circuits (maximum)             | 38              |
| Color - Resin                  | Black           |
| Durability (mating cycles max) | 100             |
| 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                    | Vertical        |
| 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)      | 15.2            |
| Plating min: Mating (µm)       | 0.38            |
| 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    |



*image - Reference only*

*Series*

**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**

[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 05/25/2010

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# VERSION FULLY LOADED



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



| No. OF CKTS | DIM A             | DIM B             | DIM C             |
|-------------|-------------------|-------------------|-------------------|
| 6           | ( 5.08 ) / .200   | ( 9.96 ) / .392   | ( 8.12 ) / .320   |
| 8           | ( 7.62 ) / .300   | ( 12.50 ) / .492  | ( 10.66 ) / .420  |
| 10          | ( 10.16 ) / .400  | ( 15.04 ) / .592  | ( 13.20 ) / .520  |
| 12          | ( 12.70 ) / .500  | ( 17.58 ) / .692  | ( 15.74 ) / .620  |
| 14          | ( 15.24 ) / .600  | ( 20.12 ) / .792  | ( 18.28 ) / .720  |
| 16          | ( 17.78 ) / .700  | ( 22.66 ) / .892  | ( 20.82 ) / .820  |
| 18          | ( 20.32 ) / .800  | ( 25.20 ) / .992  | ( 23.36 ) / .920  |
| 20          | ( 22.86 ) / .900  | ( 27.74 ) / 1.092 | ( 25.90 ) / 1.020 |
| 22          | ( 25.40 ) / 1.000 | ( 30.28 ) / 1.192 | ( 28.44 ) / 1.120 |
| 24          | ( 27.94 ) / 1.100 | ( 32.82 ) / 1.292 | ( 30.98 ) / 1.220 |
| 26          | ( 30.48 ) / 1.200 | ( 35.36 ) / 1.392 | ( 33.52 ) / 1.320 |
| 28          | ( 33.02 ) / 1.300 | ( 37.90 ) / 1.492 | ( 36.06 ) / 1.420 |
| 30          | ( 35.56 ) / 1.400 | ( 40.44 ) / 1.592 | ( 38.60 ) / 1.520 |
| 32          | ( 38.10 ) / 1.500 | ( 42.98 ) / 1.692 | ( 41.15 ) / 1.620 |
| 34          | ( 40.64 ) / 1.600 | ( 45.52 ) / 1.792 | ( 43.68 ) / 1.720 |
| 36          | ( 43.18 ) / 1.700 | ( 48.06 ) / 1.892 | ( 46.22 ) / 1.820 |
| 38          | ( 45.72 ) / 1.800 | ( 50.60 ) / 1.992 | ( 48.76 ) / 1.920 |
| 40          | ( 48.26 ) / 1.900 | ( 53.14 ) / 2.092 | ( 51.30 ) / 2.020 |
| 42          | ( 50.80 ) / 2.000 | ( 55.68 ) / 2.192 | ( 53.84 ) / 2.120 |
| 44          | ( 53.34 ) / 2.100 | ( 58.22 ) / 2.292 | ( 56.38 ) / 2.220 |
| 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 | ( 65.84 ) / 2.592 | ( 64.00 ) / 2.520 |
| 52          | ( 63.50 ) / 2.500 | ( 68.38 ) / 2.692 | ( 66.54 ) / 2.620 |
| 54          | ( 66.04 ) / 2.600 | ( 70.92 ) / 2.792 | ( 69.08 ) / 2.720 |
| 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 | ( 78.54 ) / 3.092 | ( 76.70 ) / 3.020 |
| 62          | ( 76.20 ) / 3.000 | ( 81.08 ) / 3.192 | ( 79.24 ) / 3.120 |
| 64          | ( 78.74 ) / 3.100 | ( 83.62 ) / 3.292 | ( 81.78 ) / 3.220 |
| 66          | ( 81.28 ) / 3.200 | ( 86.16 ) / 3.392 | ( 84.32 ) / 3.320 |
| 68          | ( 83.82 ) / 3.300 | ( 88.70 ) / 3.492 | ( 86.86 ) / 3.420 |

|                   |                   |             |                   |
|-------------------|-------------------|-------------|-------------------|
| RE-POSITION DIM B | EC NO: S2010-0811 | 2010/03/25  | QUALITY SYMBOLS   |
|                   | DRWNSKANG         | 2010/03/31  | F <sub>A</sub> =0 |
|                   | CHKD:ATSEE        | 2010/03/31  | F <sub>E</sub> =0 |
|                   | APPR:MLONG        | 2010/03/31  | F <sub>B</sub> =0 |
| B1                | REV               | DESCRIPTION |                   |

| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |
|--|--------|
| mm   | INCH   |
| 4 PLACES ± ---                                       | ± ---  |
| 3 PLACES ± ---                                       | ± .004 |
| 2 PLACES ± 0.10                                      | ± ---  |
| 1 PLACE ± ---  | ± ---  |
| ANGULAR ± 1/2°                                       |        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        |

|                 |            |   |              |                        |
|-----------------|------------|---|--------------|------------------------|
| DIMENSION STYLE |            | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |
| MM/IN           |            | NTS   | METRIC       |                        |
| DRAWN BY        | DATE       | TITLE   |              |                        |
| KS              | 1988/08/23 | C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER  |              |                        |
| CHECKED BY      | DATE       | MOLEX INCORPORATED  |              |                        |
| ATSEE           | 2010/02/11 | DOCUMENT NO. SDA-90130  |              |                        |
| APPROVED BY     | DATE       | SHEET NO. 1 OF 4  |              |                        |
| MLONG           | 2010/02/19 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                        |
| MATERIAL NO.    | SEE TABLE  |   |              |                        |

| NO OF CKTS | HSG CKT SIZE | PART NUMBER    |                |                |
|------------|--------------|----------------|----------------|----------------|
|            |              | PLATING TYPE A | PLATING TYPE E | PLATING TYPE F |
| 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           |
| E 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           |
| D 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           |
| C 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           |
| B 68       | 68           | 90130-X168     | 90130-X268     | 90130-X368     |

**NOTES:**

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

90130 - \* \* \* \*

INDICATES CIRCUIT HOUSING SIZE  
(EXCEPTION ON VOIDED OPTION -  
SEE TABLE FOR HOUSING CIRCUIT SIZE)

PLATING  
1 - TYPE A  
2 - TYPE E  
3 - TYPE F  
4 - TYPE G

STYLE: - STRAIGHT ASSY  
- 1. VERSION FULLY LOADED BLACK  
8. VERSION WITH VOIDS

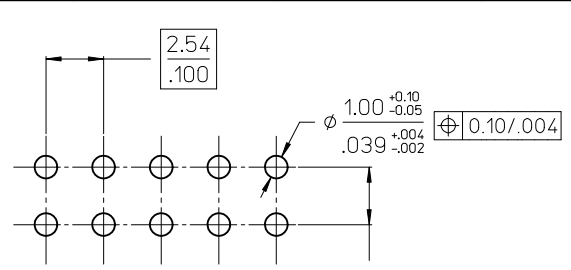
| NO OF CKTS | HSG CKT SIZE | VOIDED PART NUMBER | VOID POSITION | PLATING TYPE |
|------------|--------------|--------------------|---------------|--------------|
| 11         | 12           | 90130-8212         | 12            | E            |
| 9          | 10           | 90130-8309         | 2             | F            |
| 9          | 10           | 90130-8311         | 1             | F            |
| 11         | 12           | 90130-8213         | 2             | E            |
| 11         | 12           | 90130-8313         | 2             | F            |

VOIDED OPTION

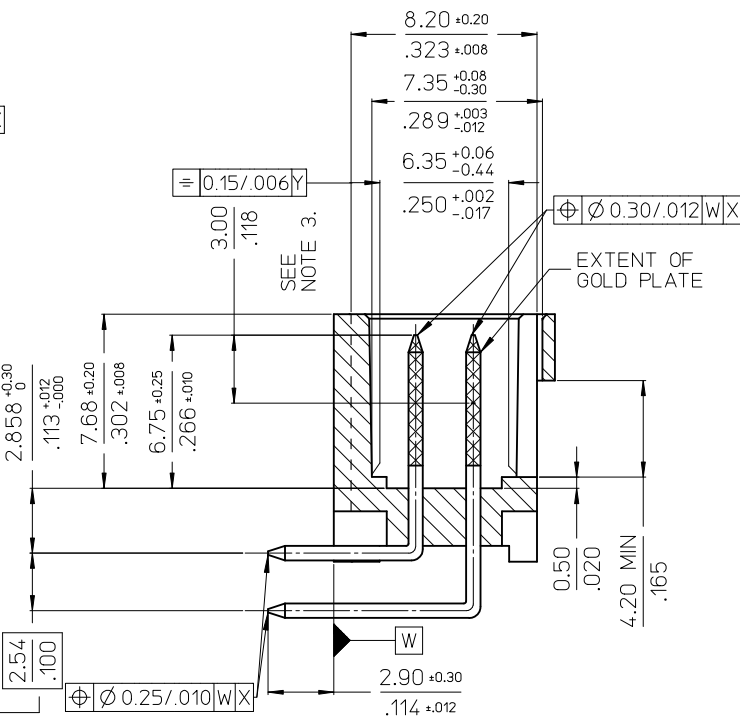
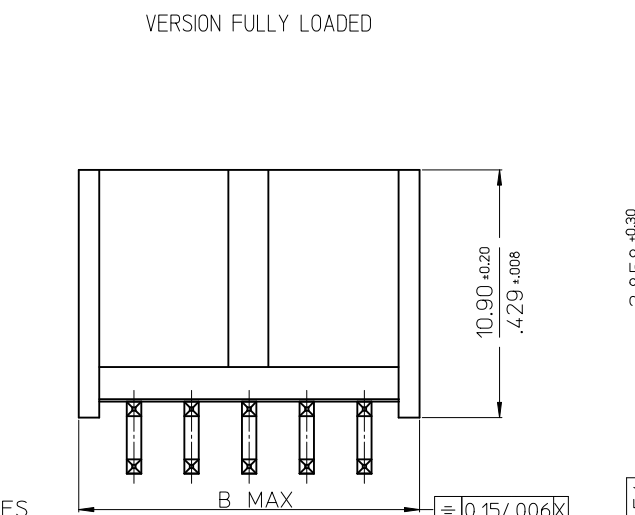
**VERSION FULLY LOADED**

| <b>RE-POSITION DIM B</b><br>EC NO: S2010-0811<br>DRWN:SKANG 2010/03/25<br>CHKD:ATSEE 2010/03/31<br>APPR:MLONG 2010/03/31      | QUALITY SYMBOLS                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE<br><b>MM/IN</b> | SCALE<br><b>NTS</b> | DESIGN UNITS<br><b>METRIC</b> | THIRD ANGLE PROJECTION |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
|---|--|---|---------------------------------|---------------------|-------------------------------|------------------------|-------|-------|----------|-------|--------|----------|--------|-------|---------|-------|-------|--|----------|------|----|------------|------------|------|-------|------------|-------------|------|-------|------------|---|--|--|
|   | $\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_F = 0$ | <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 | ± --- | ± --- | <table border="1"> <tr><th>DRAWN BY</th><th>DATE</th></tr> <tr><td>KS</td><td>1988/08/23</td></tr> <tr><th>CHECKED BY</th><th>DATE</th></tr> <tr><td>ATSEE</td><td>2010/02/11</td></tr> <tr><th>APPROVED BY</th><th>DATE</th></tr> <tr><td>MLONG</td><td>2010/02/19</td></tr> </table> | DRAWN BY | DATE | KS | 1988/08/23 | CHECKED BY | DATE | ATSEE | 2010/02/11 | APPROVED BY | DATE | MLONG | 2010/02/19 | <b>C-GRID III<br/>DUAL ROW STRAIGHT<br/>SHROUDED HEADER</b> |  |  |
|   |  | mm  | INCH                            |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
|   | 4 PLACES   | ± ---   | ± ---                           |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| 3 PLACES  | ± ---  | ± .004  |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| 2 PLACES  | ± 0.10   | ± ---   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| 1 PLACE   | ± ---  | ± ---   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| DRAWN BY  | DATE   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| KS  | 1988/08/23   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| CHECKED BY  | DATE   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| ATSEE   | 2010/02/11   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| APPROVED BY   | DATE   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| MLONG   | 2010/02/19   |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SEE TABLE  | MATERIAL NO.<br>SDA-90130   | DOCUMENT NO.<br>SDA-90130       | SHEET NO.<br>2 OF 4 |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |   |                                 |                     |                               |                        |       |       |          |       |        |          |        |       |         |       |       |  |          |      |    |            |            |      |       |            |             |      |       |            |   |  |  |

10 9 8 7 6 5 4 3 2 1



RECOMMENDED P.C. BOARD HOLE PATTERN



| 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 |

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

|                   |                 |
|-------------------|-----------------|
| RE-POSITION DIM B | QUALITY SYMBOLS |
| EC NO: S2010-0811 | $F_{A/0} = 0$   |
| DRWN:SKANG        | $F_{C/0} = 0$   |
| CHKD:ATSEE        | $F_{P/0} = 0$   |
| APPR:MLONG        |                 |
| REV               |                 |
| B1                |                 |

|  |
|--|
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |
| mm INCH  |
| 4 PLACES ± --- ± ---                                 |
| 3 PLACES ± --- ± .004                                |
| 2 PLACES ± 0.10 ± ---                                |
| 1 PLACE ± --- ± ---                                  |
| ANGULAR ± 1/2°                                       |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |

|                 |   |              |                        |
|-----------------|---|--------------|------------------------|
| DIMENSION STYLE | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |
| MM/IN           | NTS   | METRIC       |                        |
| DRAWN BY        | DATE  | TITLE        |                        |
| KS              | 1988/08/23  |              |                        |
| CHECKED BY      | DATE  |              |                        |
| ATSEE           | 2010/02/11  |              |                        |
| APPROVED BY     | DATE  |              |                        |
| MLONG           | 2010/02/19  |              |                        |
| MATERIAL NO.    | DOCUMENT NO.  |              |                        |
| SEE TABLE       |   |              |                        |
| SIZE            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                        |
| A3              |   |              |                        |

|                                   |        |
|-----------------------------------|--------|
| C-GRID III                        |        |
| DUAL ROW STRAIGHT SHROUDED HEADER |        |
| MOLEX INCORPORATED                |        |
| SDA-90130                         | 3 OF 4 |

9 8 7 6 5 4 3 2 1

| NO OF CKTS | HSG CKT SIZE | PART NUMBER    |                |                |
|------------|--------------|----------------|----------------|----------------|
|            |              | PLATING TYPE A | PLATING TYPE E | PLATING TYPE F |
| 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           |
| E 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           |
| D 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           |
| C 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         |
| B 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**

| <b>RE-POSITION DIM B</b><br>EC NO: S2010-0811<br>DRWN:SKANG 2010/03/25<br>CHKD:ATSEE 2010/03/31<br>APPR:MLONG 2010/03/31      | QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE<br><b>MM/IN</b>  | SCALE<br><b>NTS</b>        | DESIGN UNITS<br><b>METRIC</b> | THIRD ANGLE PROJECTION |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
|---|--|---|----------------------------------|----------------------------|-------------------------------|------------------------|-------|-------|----------|-------|--------|----------|--------|-------|---------|-------|-------|---|----------|--|------|----|--|------------|------------|--|------|-------|--|------------|-------------|--|------|-------|--|------------|--|--|--|--|
|   | $\nabla_A = 0$<br>$\nabla_C = 0$<br>$\nabla_B = 0$         | <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 | ± --- | ± --- | <table border="1"> <tr><th colspan="2">DRAWN BY</th><th>DATE</th></tr> <tr><td>KS</td><td></td><td>1988/08/23</td></tr> <tr><th colspan="2">CHECKED BY</th><th>DATE</th></tr> <tr><td>ATSEE</td><td></td><td>2010/02/11</td></tr> <tr><th colspan="2">APPROVED BY</th><th>DATE</th></tr> <tr><td>MLONG</td><td></td><td>2010/02/19</td></tr> </table> | DRAWN BY |  | DATE | KS |  | 1988/08/23 | CHECKED BY |  | DATE | ATSEE |  | 2010/02/11 | APPROVED BY |  | DATE | MLONG |  | 2010/02/19 | <b>C-GRID III<br/>DUAL ROW STRAIGHT<br/>SHROUDED HEADER</b><br><br><b>MOLEX INCORPORATED</b> |  |  |  |
|   |  | mm  | INCH                             |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
|   | 4 PLACES   | ± ---   | ± ---                            |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| 3 PLACES  | ± ---  | ± .004  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| 2 PLACES  | ± 0.10   | ± ---   |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| 1 PLACE   | ± ---  | ± ---   |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| DRAWN BY  |  | DATE  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| KS  |  | 1988/08/23  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| CHECKED BY  |  | DATE  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| ATSEE   |  | 2010/02/11  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| APPROVED BY   |  | DATE  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| MLONG   |  | 2010/02/19  |                                  |                            |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| <b>B1</b>   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | MATERIAL NO.<br><b>SEE TABLE</b>  | DOCUMENT NO.<br><b>SDA-90130</b> | SHEET NO.<br><b>4 OF 4</b> |                               |                        |       |       |          |       |        |          |        |       |         |       |       |   |          |  |      |    |  |            |            |  |      |       |  |            |             |  |      |       |  |            |  |  |  |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX 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     |

| NO OF CKTS | HSG CKT SIZE | VOIDED PART NUMBER | VOID POSITION | PLATING TYPE |
|------------|--------------|--------------------|---------------|--------------|
| 11         | 12           | 90130-8212         | 12            | E            |
| 9          | 10           | 90130-8309         | 2             | F            |
| 9          | 10           | 90130-8311         | 1             | F            |
| 11         | 12           | 90130-8213         | 2             | E            |
| 11         | 12           | 90130-8313         | 2             | F            |

VOIDED OPTION

**NOTES:**

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

90130 - \* \* \* \* \*

INDICATES CIRCUIT HOUSING SIZE  
(EXCEPTION ON VOIDED OPTION -  
SEE TABLE FOR HOUSING CIRCUIT SIZE)

PLATING  
1 - TYPE A  
2 - TYPE E  
3 - TYPE F  
4 - TYPE G

STYLE\* - STRAIGHT ASSY  
- 1. VERSION FULLY LOADED BLACK  
8. VERSION WITH VOIDS

VERSION FULLY LOADED

| Changed 8212 to void 2<br>EC NO: E2010-0123<br>DRWN: BMAGUIRE 2009/10/15<br>CHKD: 2009/10/15<br>APPR: BMAGUIRE 2009/10/15 | QUALITY SYMBOLS                                      | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|---|--|--|-----------------|---|--------------|------------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|---------|-----|--------|--|
|   | $\nabla=0$<br>$\nabla=0$                             | <table border="1"> <tr><th colspan="2">mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>±----</td><td>±----</td></tr> <tr><td>3 PLACES</td><td>±----</td><td>±----</td></tr> <tr><td>2 PLACES</td><td>±----</td><td>±----</td></tr> <tr><td>1 PLACE</td><td>±----</td><td>±----</td></tr> </table> | mm              |   | INCH         | 4 PLACES               | ±---- | ±---- | 3 PLACES | ±---- | ±---- | 2 PLACES | ±---- | ±---- | 1 PLACE | ±---- | ±---- | MM ONLY | 1:1 | METRIC |  |
|   | mm   |  | INCH            |   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   | 4 PLACES   | ±----  | ±----           |   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 3 PLACES  | ±----  | ±----  |                 |   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 2 PLACES  | ±----  | ±----  |                 |   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| 1 PLACE   | ±----  | ±----  |                 |   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| DESCRIPTION   | ANGULAR ±---°  | DRAWN BY   | DATE            | TITLE   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
| REV   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | KS   | 1987/09/10      | C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER  |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   |  | CHECKED BY   | DATE            | MOLEX INCORPORATED  |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   |  | APPROVED BY  | DATE            | MATERIAL NO. SDA-90130  |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   |  |  |                 | DOCUMENT NO. 2 OF 4   |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   |  |  |                 | SHEET NO. 2 OF 4  |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |
|   |  |  |                 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                        |       |       |          |       |       |          |       |       |         |       |       |         |     |        |  |