

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

**Part Number:** [0873402013](#)  
**Status:** **Active**  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount (Very Low Profile), Top Entry, without Locating Peg, 0.76µm (30µ") Gold (Au) Plating, 20 Circuits, Lead-free, Tube

**Documents:**

[3D Model](#) [Product Specification PS-87340 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [87340](#)  
 Application Board-to-Board  
 Product Literature Order No 987650-1991  
 Product Name Milli-Grid™

**Physical**

Circuits (Loaded) 20  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.031 In  
 PCB Thickness Recommended (mm) 0.80 mm  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.079 In  
 Pitch - Mating Interface (mm) 2.00 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 76  
 Plating min: Termination (µm) 1.9  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -55°C to +105°C  
 Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 125V

**Material Info**

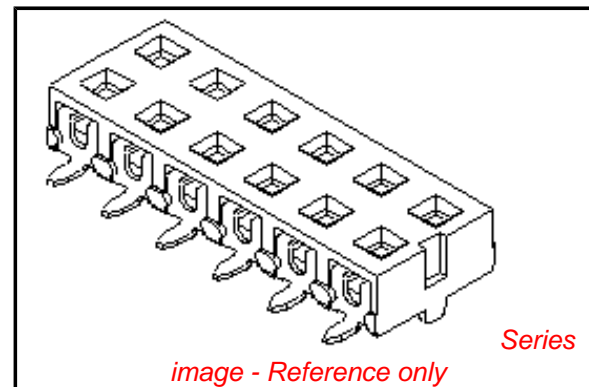


image - Reference only

**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**

[87340Series](#)

**Mates With**

[87759](#) Vertical, Surface Mount, Stackable PCB Headers, [87760](#) Right Angle, Through Hole, Stackable PCB Headers, [87758](#) Vertical, Through Hole, Stackable PCB Headers

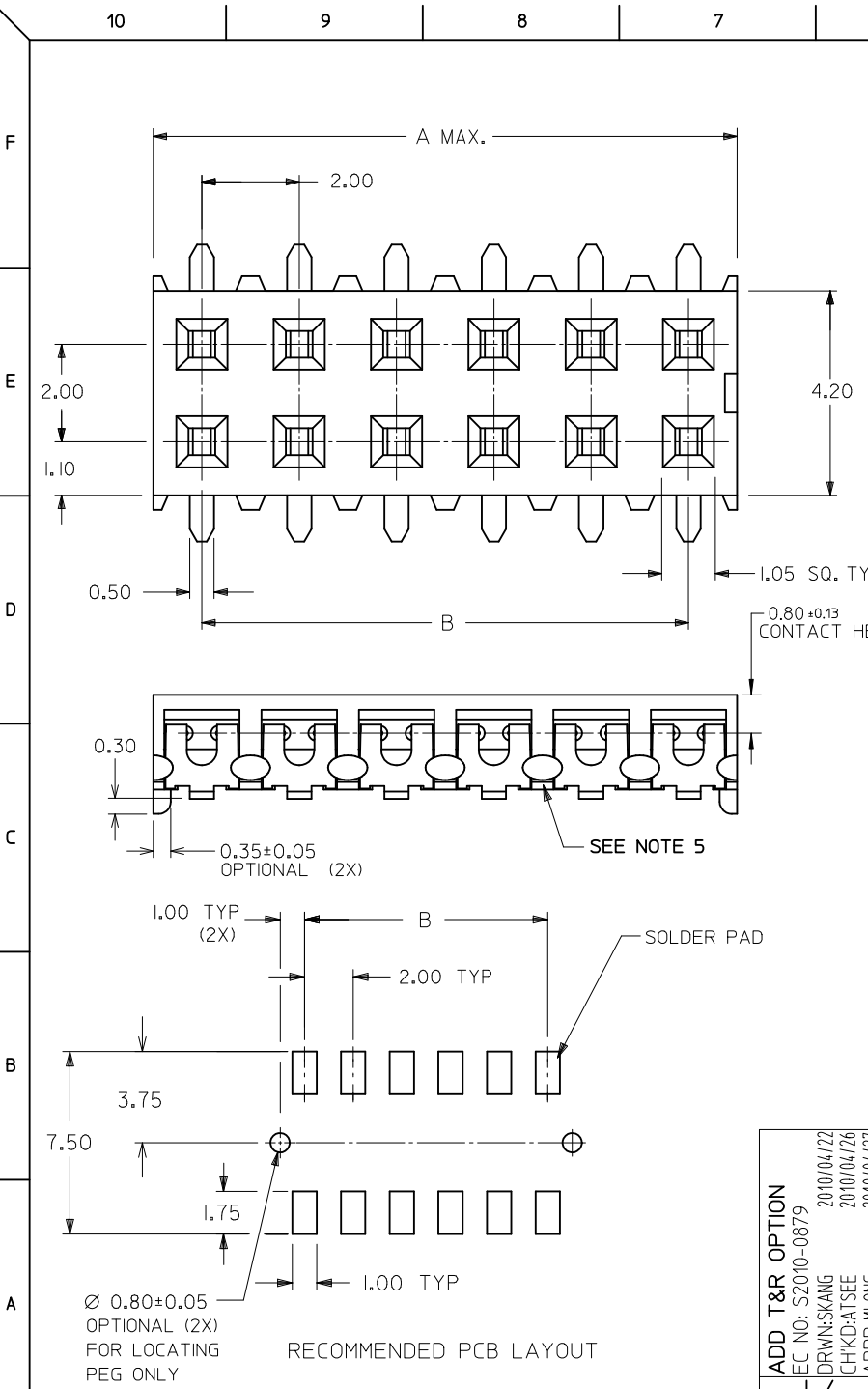
**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

PS-87340  
SD-87340-\*\*01

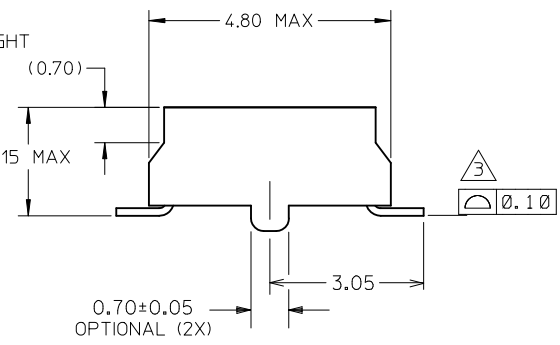
This document was generated on 05/03/2010

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



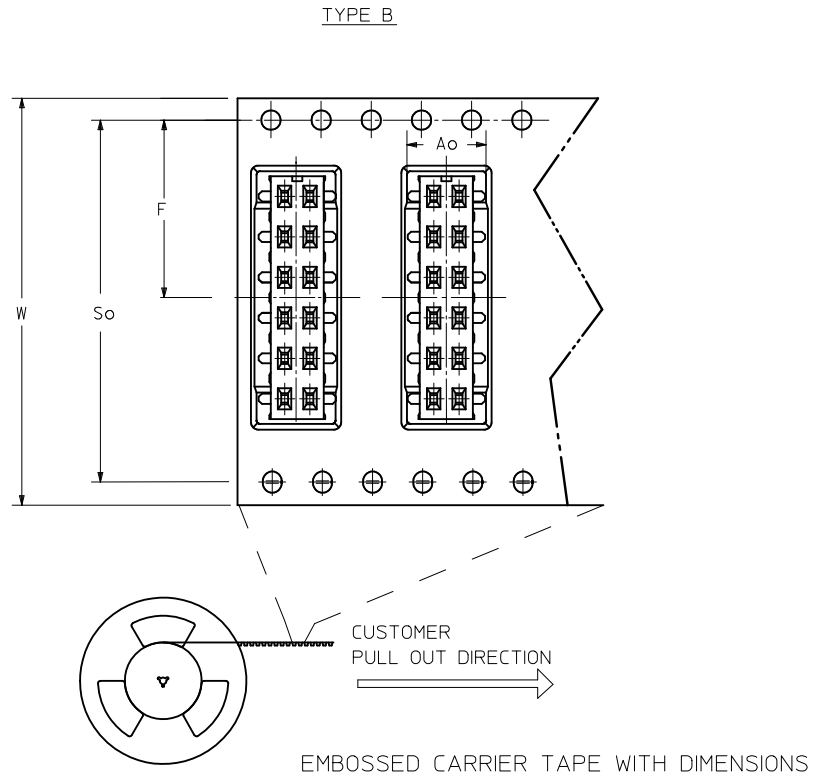
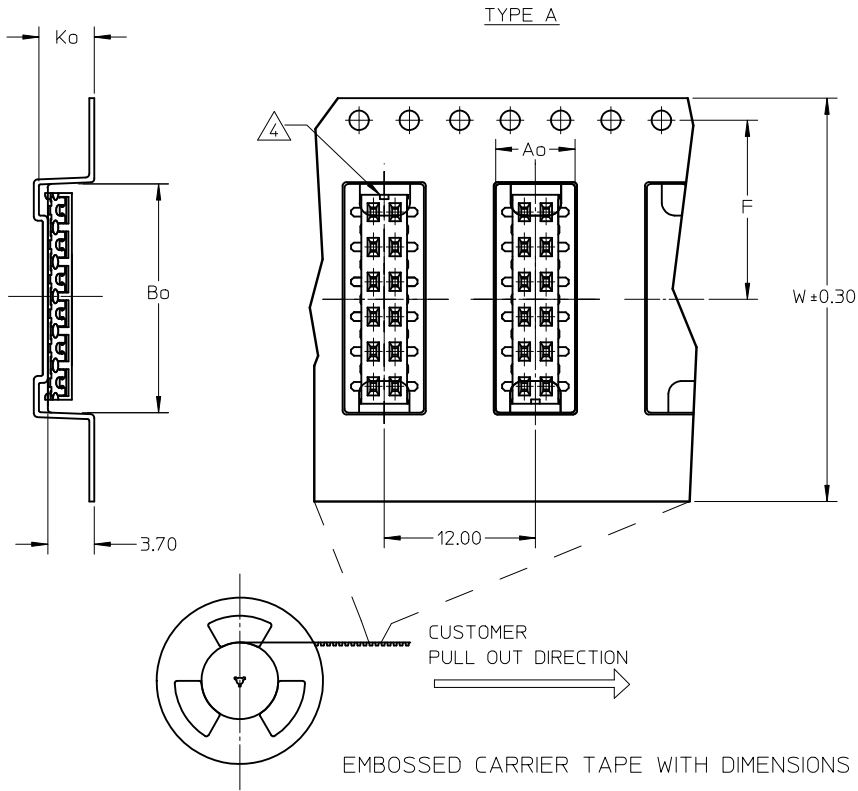
- NOTES:
- 12 CIRCUIT SIZE SHOWN FOR ILLUSTRATION ONLY. SEE CHART FOR AVAILABLE PART SIZES.
  - PLATING FINISH:
    - 3 & 8 - 0.76um/30uin MIN. GOLD IN CONTACT AREA  
1.90um/75uin MIN. TIN IN SOLDER TAIL AREA  
BOTH OVER 1.30um/50uin MIN. NICKEL OVERALL
    - 4 & 9 - 0.38um/15uin MIN. GOLD IN CONTACT AREA  
1.90um/75uin MIN. TIN IN SOLDER TAIL AREA  
BOTH OVER 1.30um/50uin MIN. NICKEL OVERALL
  - COPLANARITY OF SOLDER TAIL IS TO BE MEASURED BY RESTING THE PART ON A FLAT GAUGE SURFACE.
  - PRODUCT SPECIFICATION PS-87340 APPLIES.
  - THIS AREA OF PART TO BE HEAT STAKED TO RETAIN CONTACTS.
  - PART IS MATEABLE TO ALL MILLI-GRID HEADERS WITH MINIMUM PIN LENGTHS OF 1.90mm FOR TOP ENTRY.

| PART NO. IN TUBE | CKT. SIZE | DIM. B | DIM. A |
|------------------|-----------|--------|--------|
| 87340-04**       | 4         | 2.00   | 4.00   |
| 87340-06**       | 6         | 4.00   | 6.00   |
| 87340-08**       | 8         | 6.00   | 8.00   |
| 87340-10**       | 10        | 8.00   | 10.00  |
| 87340-12**       | 12        | 10.00  | 12.00  |
| 87340-14**       | 14        | 12.00  | 14.00  |
| 87340-16**       | 16        | 14.00  | 16.00  |
| 87340-18**       | 18        | 16.00  | 18.00  |
| 87340-20**       | 20        | 18.00  | 20.00  |



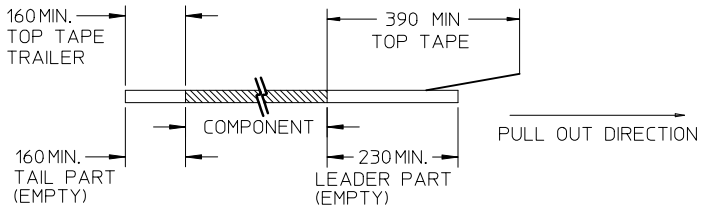
- PART NO. LEGEND
- 87340 - \* \* \* \*
- CIRCUIT SIZE
- PACKAGING & PLATING
- 3 - (TUBE WITH 0.76um MIN GOLD)
  - 4 - (TUBE WITH 0.38um MIN GOLD)
  - 8 - (T&R WITH 0.76um MIN GOLD)
  - 9 - (T&R WITH 0.38um MIN GOLD)
- 1 - WITHOUT LOCATING PEGS (HOUSING - BLACK)  
 2 - WITH LOCATING PEGS (HOUSING - BLACK)  
 5 - WITHOUT LOCATING PEGS (HOUSING - NATURAL)  
 6 - WITH LOCATING PEGS (HOUSING - NATURAL)

| ADD T&R OPTION<br>EC NO: S2010-0879<br>DRWN:SKANG 2010/04/22<br>CHKD:ATSEE 2010/04/26<br>APPR:MLONG 2010/04/27 | QUALITY SYMBOLS<br>▽ <sub>A</sub> =0<br>▽ <sub>G</sub> =0<br>▽ <sub>P</sub> =0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |        | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>NTS  | DESIGN UNITS<br>METRIC   | THIRD ANGLE PROJECTION |  |
|--|--|---------------------------------------|--------|----------------------------|--|---|--|------------------------|--|
|  |  | mm                                    | INCH   | DRAWN BY<br>JKACHL I       | DATE<br>1991/07/02   | TITLE<br>MGRID<br>VLPR II, 2MM DUAL ROW<br>TOP ENTRY RECEPT., SMT | MOLEX INCORPORATED   |                        |  |
| L4   | REV  | 4 PLACES                              | ± ---  | ± ---                      | CHECKED BY<br>JNG  | DATE<br>1991/07/09  | MATERIAL NO.<br>SD-87340-**-01   |                        |  |
|  |  | 3 PLACES                              | ± ---  | ± ---                      | APPROVED BY<br>MLONG                                       | DATE<br>2009/11/24  |  |                        |  |
|  |  | 2 PLACES                              | ± 0.20 | ± ---                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |   | SHEET NO.<br>1 OF 3  |                        |  |
|  |  | 1 PLACE                               | ± ---  | ± ---                      | SIZE<br>A3   |   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |  |

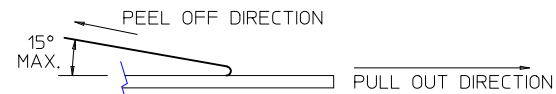


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf. (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



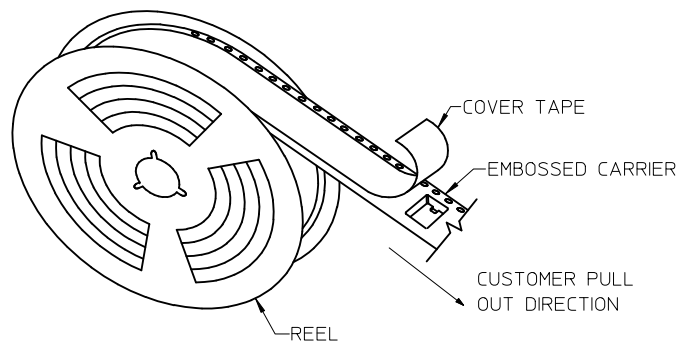
3. PACKAGING STANDARD IS AS PER EIA-481.

4. NO FIX ORIENTATION OF ASSEMBLY PART IN T&R.

5. TAPE & REEL QUANTITY : TBA

|   |  |                   |   |   |                                |                                |                     |   |       |  |
|---|--|-------------------|---|---|--------------------------------|--------------------------------|---------------------|---|-------|--|
| ADD T&R OPTION<br>EC NO: S2010-0879<br>DRWN:SKANG<br>CHKD:ATSEE<br>APPR:MLONG | 2010/04/22<br>2010/04/26<br>2010/04/27 | DESCRIPTION<br>L4 | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE                | SCALE                          | DESIGN UNITS        | THIRD ANGLE PROJECTION  |       |  |
|   |  |                   | $F_{\Delta} = 0$<br>$F_{\sigma} = 0$<br>$F_{\beta} = 0$   | mm    INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 3 ° | MM ONLY                        | NTS                            | METRIC              | DRAWN BY: JKACHL I<br>DATE: 1991/07/02<br>CHECKED BY: JNG<br>DATE: 1991/07/09<br>APPROVED BY: MLONG<br>DATE: 2009/11/24 | TITLE | MGRID<br>VLPR II, 2MM DUAL ROW<br>TOP ENTRY RECEPT., SMT |
|   |  |                   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SEE TABLE   | MATERIAL NO.<br>SD-87340-**-01 | DOCUMENT NO.<br>SD-87340-**-01 | SHEET NO.<br>2 OF 3 |   |       |  |
|   |  |                   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                                |                                |                     |   |       |  |

| PART NO.<br>IN TUBE | PART NO.<br>TAPE/REEL | CKT SIZE | Ao   | Bo    | F     | W     | Ko   | So    |
|---------------------|-----------------------|----------|------|-------|-------|-------|------|-------|
| 87340-1014          | 87340-1019            | 10       | 6.70 | 10.40 | 11.50 | 24.00 | 5.30 | -     |
| 87340-1613          | 87340-1618            | 16       | 6.60 | 16.30 | 11.50 | 24.00 | 4.40 | -     |
| 87340-1424          | 87340-1429            | 14       | 6.60 | 14.40 | 11.50 | 24.00 | 4.40 | -     |
| 87340-1813          | 87340-1818            | 18       | 6.60 | 18.40 | 14.20 | 32.00 | 4.40 | 28.40 |
| 87340-1814          | 87340-1819            | 18       | 6.60 | 18.40 | 14.20 | 32.00 | 4.40 | 28.40 |
| 87340-2024          | 87340-2029            | 20       | 6.60 | 20.30 | 20.20 | 44.00 | 5.40 | 40.40 |



TAPE AND REEL ASSEMBLY SHOWN IS FOR ILLUSTRATION ONLY.

| <b>ADD T&amp;R OPTION</b><br>EC NO: S2010-0879<br>DRWN:SKANG 2010/04/22<br>CHKD:ATSEE 2010/04/26<br>APPR:MLONG 2010/04/27 | QUALITY SYMBOLS<br>$F_A=0$<br>$F_C=0$<br>$F_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table> |                    | mm   | INCH                                  | 4 PLACES                   | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.20 | ± --- | 1 PLACE | ± --- | ± --- | DIMENSION STYLE<br><b>MM ONLY</b> | SCALE<br><b>NTS</b> | DESIGN UNITS<br><b>METRIC</b> | THIRD ANGLE PROJECTION |
|---|--|---|--------------------|--|---------------------------------------|----------------------------|-------|-------|----------|-------|-------|----------|--------|-------|---------|-------|-------|-----------------------------------|---------------------|-------------------------------|------------------------|
|   |  | mm  | INCH               |  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
|   | 4 PLACES   | ± ---   | ± ---              |  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
|   | 3 PLACES   | ± ---   | ± ---              |  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
| 2 PLACES  | ± 0.20   | ± ---   |                    |  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
| 1 PLACE   | ± ---  | ± ---   |                    |  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
|   |  | DRAWN BY<br>JKACHL I  | DATE<br>1991/07/02 | TITLE<br><b>MGRID<br/>         VLPR II, 2MM DUAL ROW<br/>         TOP ENTRY RECEPT., SMT</b> |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
|   |  | CHECKED BY<br>JNG   | DATE<br>1991/07/09 | <b>MOLEX</b> MOLEX INCORPORATED  |                                       |                            |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |
|   |  | APPROVED BY<br>MLONG  | DATE<br>2009/11/24 | MATERIAL NO.<br><b>SEE TABLE</b>   | DOCUMENT NO.<br><b>SD-87340-**-01</b> | SHEET NO.<br><b>3 OF 3</b> |       |       |          |       |       |          |        |       |         |       |       |                                   |                     |                               |                        |

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

SIZE  
A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION