

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

**Part Number:** [0873400814](#)  
**Status:** **Active**  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount (Very Low Profile), Top Entry, without Locating Peg, 0.38µm (15µ") Gold (Au) Plating, 8 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**

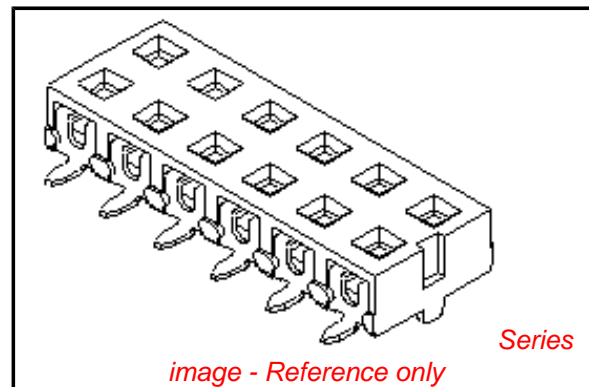
Circuits (Loaded) 8  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.079 In  
 Pitch - Mating Interface (mm) 2.00 mm  
 Plating min: Mating (µin) 15  
 Plating min: Mating (µm) 0.38  
 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

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 14  
 Lead-free Process Capability Reflow Capable (SMT only)  
 Max. Cycles at Max. Process Temperature 1



**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

Process Temperature max. C

265

**Material Info**

**Reference - Drawing Numbers**

Product Specification

PS-87340

Sales Drawing

SD-87340-\*\*01

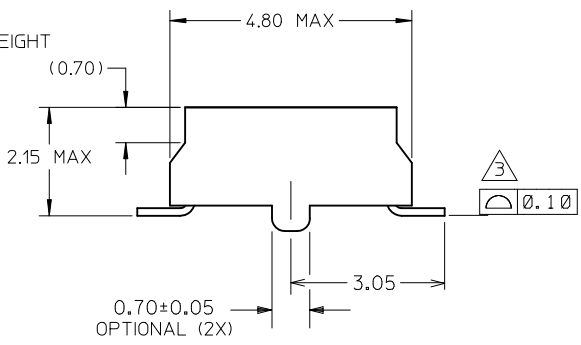
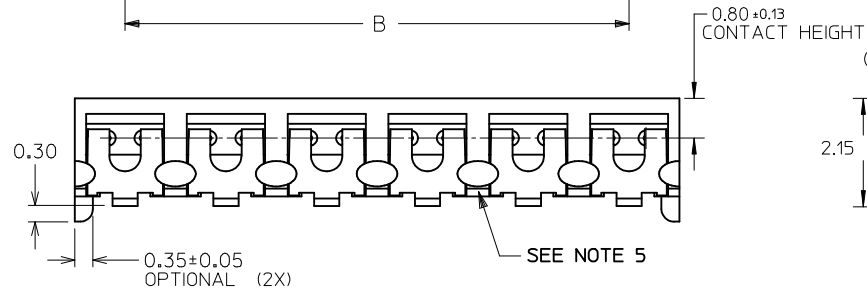
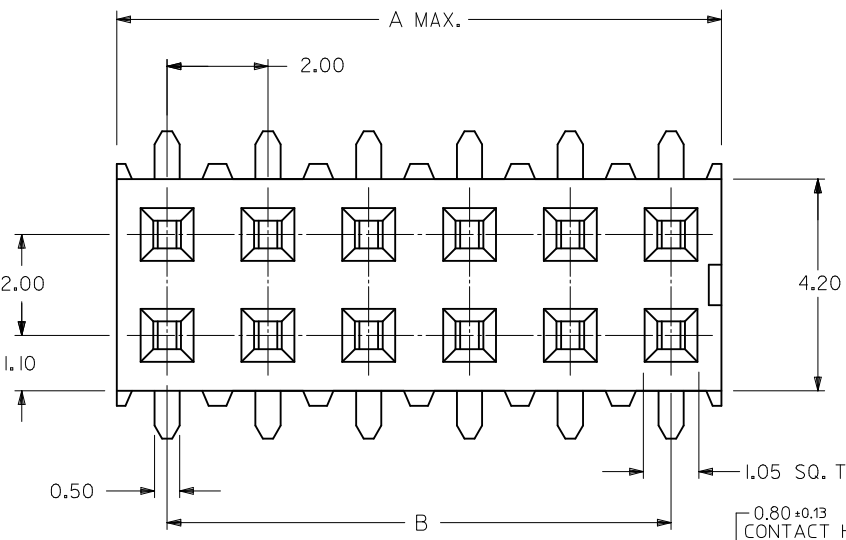
This document was generated on 05/03/2010

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10 9 8 7 6 5 4 3 2 1

| 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  |

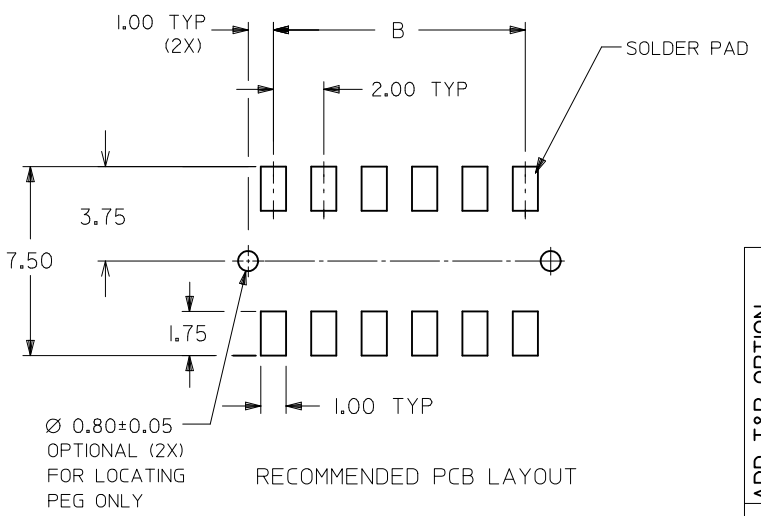
- NOTES:
- 12 CIRCUIT SIZE SHOWN FOR ILLUSTRATION ONLY. SEE CHART FOR AVAILABLE PART SIZES.
  - PLATING FINISH:
    - 3 & 8 - 0.76um/30uin MIN. GOLD IN CONTACT AREA  
1.90um/75uin MIN. TIN IN SOLDER TAIL AREA  
BOTH OVER 1.30um/50uin MIN. NICKEL OVERALL
    - 4 & 9 - 0.38um/15uin MIN. GOLD IN CONTACT 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. LEGEND

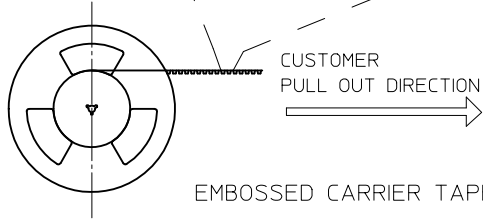
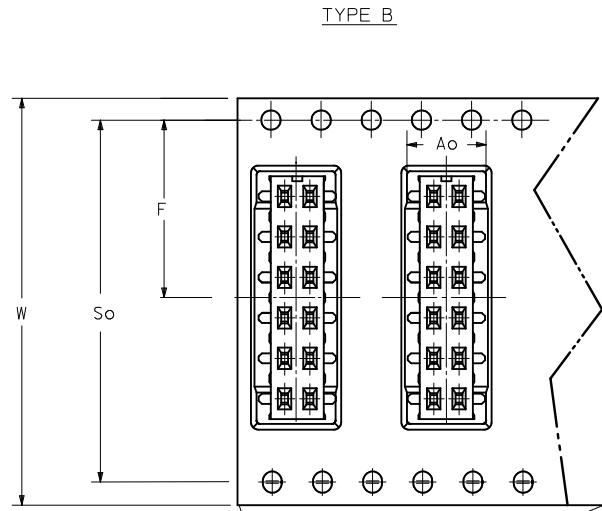
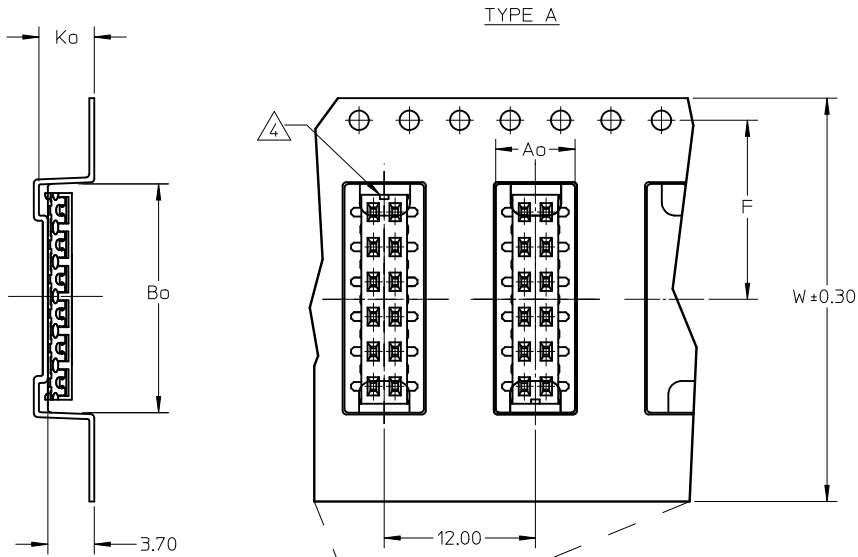
- 87340 - \* \* \* \* \*
- CIRCUIT SIZE
  - PACKAGING & PLATING
  - 3 - (TUBE WITH 0.76um MIN GOLD)
  - 4 - (TUBE WITH 0.38um MIN GOLD)
  - 8 - (T&R WITH 0.76um MIN GOLD)
  - 9 - (T&R WITH 0.38um MIN GOLD)

- 1 - WITHOUT LOCATING PEGS (HOUSING - BLACK)
- 2 - WITH LOCATING PEGS (HOUSING - BLACK)
- 5 - WITHOUT LOCATING PEGS (HOUSING - NATURAL)
- 6 - WITH LOCATING PEGS (HOUSING - NATURAL)

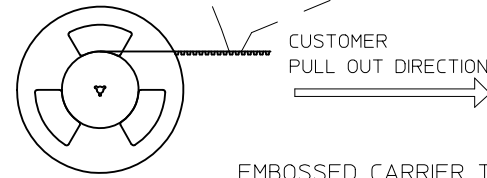


|  |   |  |    |                                       |                      |                            |   |                        |  |  |
|--|---|--|----|---------------------------------------|----------------------|----------------------------|---|------------------------|--|--|
| ADD T&R OPTION<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>$\nabla_A=0$<br>$\nabla_C=0$<br>$\nabla_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)  |    | DIMENSION STYLE<br><b>MM ONLY</b>     |                      | SCALE<br><b>NTS</b>        | DESIGN UNITS<br><b>METRIC</b>                   | THIRD ANGLE PROJECTION |  |  |
|  |   |  | mm | INCH                                  | DRAWN BY<br>JKACHL I | DATE<br>1991/07/02         | TITLE<br><b>MGRID</b>                           |                        |  |  |
|  |   | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± --- |    |                                       | CHECKED BY<br>JNG    | DATE<br>1991/07/09         | VLPR II, 2MM DUAL ROW<br>TOP ENTRY RECEPT., SMT |                        |  |  |
|  |   | ANGULAR ± 3 °  |    | APPROVED BY<br>MLONG                  |                      | DATE<br>2009/11/24         | <b>MOLEX</b> MOLEX INCORPORATED                 |                        |  |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |   | MATERIAL NO.<br><b>SEE TABLE</b>   |    | DOCUMENT NO.<br><b>SD-87340-**-01</b> |                      | SHEET NO.<br><b>1 OF 3</b> |   |                        |  |  |

9 8 7 6 5 4 3 2 1



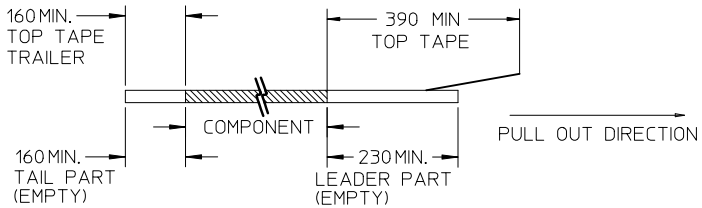
EMBOSSED CARRIER TAPE WITH DIMENSIONS



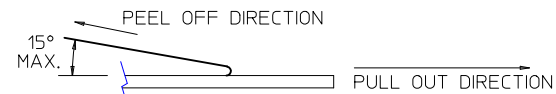
EMBOSSED CARRIER TAPE WITH DIMENSIONS

NOTES:

1. LEADER AND TRAILER TAPE



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



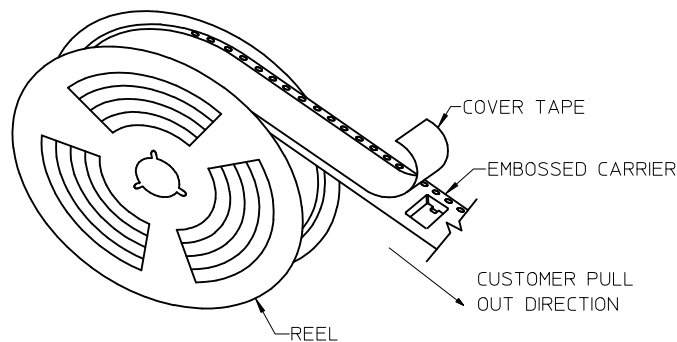
3. PACKAGING STANDARD IS AS PER EIA-481.

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>REV | 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              | TITLE<br>MGRID<br>VLPR II, 2MM DUAL ROW<br>TOP ENTRY RECEPT., SMT |
|   |  |                    | DRAWN BY: JKACHL I<br>CHECKED BY: JNG<br>APPROVED BY: MLONG | DATE: 1991/07/02<br>DATE: 1991/07/09<br>DATE: 2009/11/24  | MATERIAL NO.<br>SEE TABLE  | DOCUMENT NO.<br>SD-87340-**-01 | SHEET NO.<br>2 OF 3 |   |
|   |  |                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SIZE<br>A3  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>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   | ± ---  | ± ---   |   |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
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| DRAWN BY  | DATE   | TITLE   |   |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
| JKACHL I  | 1991/07/02                                       | <b>MGRID<br/>           VLPR II, 2MM DUAL ROW<br/>           TOP ENTRY RECEPT., SMT</b>   |   |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
| CHECKED BY  | DATE   |   |   |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
| JNG   | 1991/07/09                                       |   |   |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
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| APPROVED BY   | DATE   | MATERIAL NO.  | DOCUMENT NO.  | SHEET NO. |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
| MLONG   | 2009/11/24                                       | SEE TABLE   | SD-87340-**01   | 3 OF 3    |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |
|   |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |           |              |              |            |   |            |           |               |            |                           |       |         |       |       |                                   |                     |                               |                        |