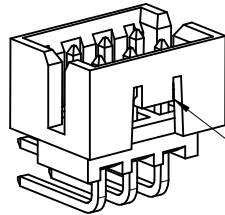
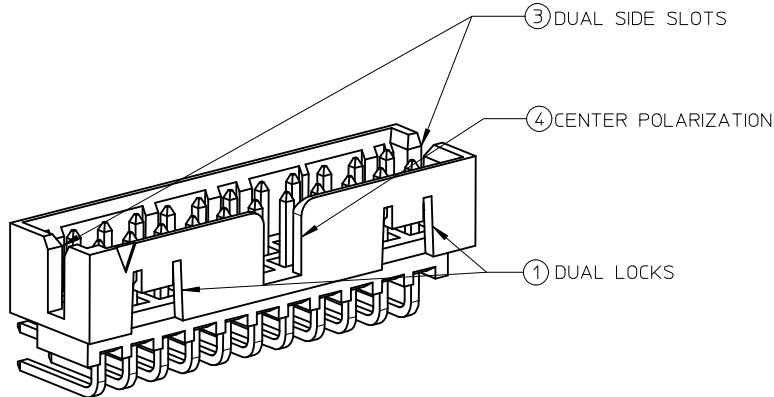


# FEATURES SELECTION GUIDE



② CENTER LOCK



③ DUAL SIDE SLOTS

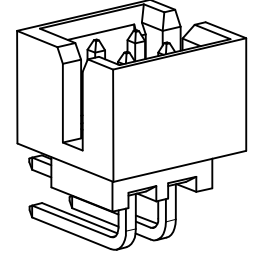
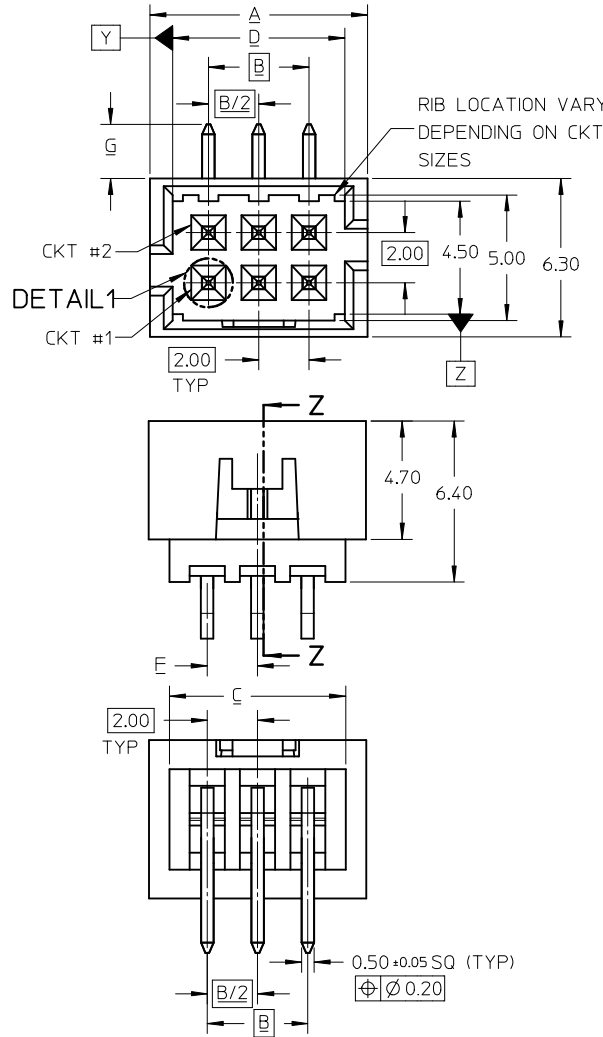
④ CENTER POLARIZATION

① DUAL LOCKS

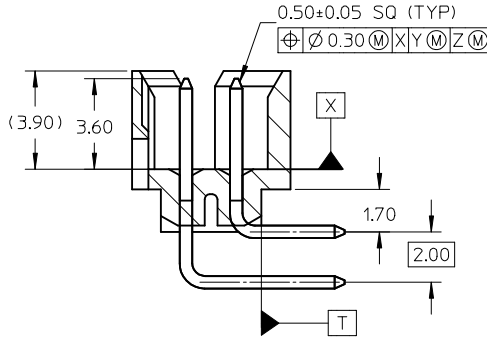
| CIRCUIT SIZE | FEATURES       |          |                   |                       | SHEET NO |
|--------------|----------------|----------|-------------------|-----------------------|----------|
|              | FRICTION LOCKS |          | ③ DUAL SIDE SLOTS | ④ CENTER POLARIZATION |          |
|              | ① DUAL         | ② CENTER |                   |                       |          |
| 4 - 6        | N.A            | N.A      | YES               | N.A                   | 2 - 3    |
|              | N.A            | YES      | YES               | N.A                   |          |
| 8 TO 12      | N.A            | N.A      | YES               | YES                   | 4 - 5    |
|              | N.A            | YES      | YES               | N.A                   |          |
| 14 TO 50     | YES            | N.A      | YES               | YES                   | 6 - 9    |
|              | N.A            | N.A      | YES               | YES                   |          |

|   |                       |  |  |      |   |                     |   |                        |                        |  |
|---|-----------------------|--|--|------|---|---------------------|---|------------------------|------------------------|--|
| RELEASED<br>EC NO: S2016-0368<br>DRW: GMENARLY 2015/09/29<br>CHKD: CGOH 2015/10/30<br>APPR: KHL IM 2015/11/03 | DESCRIPTION<br>REV    | QUALITY SYMBOLS                            | GENERAL TOLERANCES (UNLESS SPECIFIED)                |      | DIMENSION STYLE<br>MM ONLY  |                     | SCALE<br>NTS  | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|   |                       | $F_{\Delta} = 0$<br>$F_C = 0$<br>$F_P = 0$ | mm   | INCH | DRAWN BY<br>GMENARLY  | DATE<br>2015/09/29  | TITLE<br>MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER |                        |                        |  |
|   |                       |  | 4 PLACES ± --- ± ---                                 |      | CHECKED BY<br>CGOH  | DATE<br>2015/10/30  | <b>molex</b><br>SD-87833-0001                               |                        |                        |  |
|   |                       |  | 3 PLACES ± --- ± ---                                 |      | APPROVED BY<br>KHL IM   | DATE<br>2015/11/03  |   |                        |                        |  |
|   | 2 PLACES ± 0.20 ± --- |  | MATERIAL NO.<br>SEE TABLE                            |      | DOCUMENT NO.  | SHEET NO.<br>1 OF 9 |   |                        |                        |  |
|   | 1 PLACE ± --- ± ---   |  | ANGULAR ± 3 °  |      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                     |   |                        |                        |  |
|   | 0 PLACE ± --- ± ---   |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |      |   |                     |   |                        |                        |  |

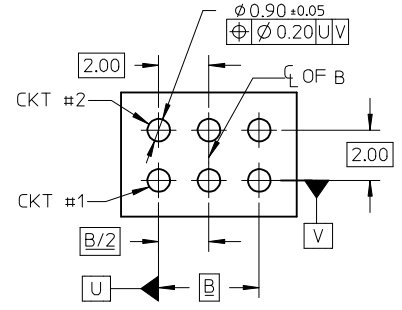
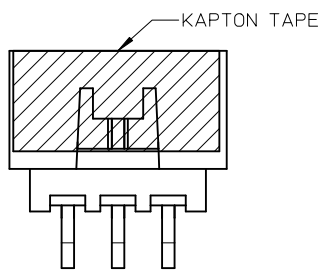
4 TO 6 CIRCUITS



ISO VIEW OF HEADER DUAL SIDE SLOTS



SECTION Z-Z



RECOMMENDED PCB LAYOUT

- NOTES:
- MATERIALS:
    - HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
    - PIN: 0.50MM SQ PHOSPHOR BRONZE
  - FINISHES: REFER TO PLATING OPTIONS
  - PRODUCT SPECIFICATION: PS-87831-027
  - PACKAGING SPECIFICATION:
    - TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300
  - MATES WITH:
    - A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
    - B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES
    - C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

|   |                    |   |   |  |  |   |   |                        |                        |  |
|---|--------------------|---|---|--|--|---|---|------------------------|------------------------|--|
| RELEASED<br>IEC NO: S2016-0368<br>DRWNG: GMENARLY 2015/09/29<br>CHKD: CGOH 2015/10/30<br>APPR: KHLIM 2015/11/03 | DESCRIPTION<br>REV | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>MM ONLY   |   | SCALE<br>NTS  | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|   |                    | $\nabla_F = 0$<br>$\nabla_E = 0$<br>$\nabla_D = 0$                      | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>0 PLACE ± --- ± --- | mm INCH<br>± --- ± ---<br>± 0.20 ± ---<br>± --- ± ---<br>± --- ± --- | DRAWN BY<br>GMENARLY<br>CHECKED BY<br>CGOH<br>APPROVED BY<br>KHLIM<br>MATERIAL NO. | DATE<br>2015/09/29<br>DATE<br>2015/10/30<br>DATE<br>2015/11/03  | TITLE<br>MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER<br><b>molex</b><br>DOCUMENT NO. SD-87833-0001<br>SHEET NO. 2 OF 9 |                        |                        |  |
|   |                    | ANGULAR ± 3°<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS |   | SEE TABLE  |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                        |                        |  |
|   |                    | SIZE<br>A 3   |   |  |  |   |   |                        |                        |  |

4 TO 6 CIRCUITS

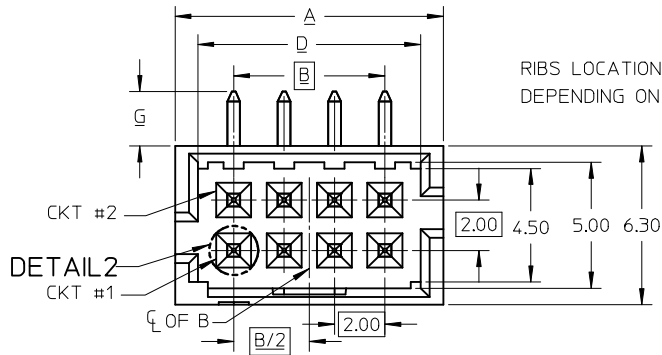
| CKT SIZE | ASSY P/N WITHOUT KAPTON IN TUBE | ASSY P/N WITH KAPTON IN TUBE | ASSY P/N WITH KAPTON IN T&R | PLATING OPTIONS | FRICTION LOCKS |        | DUAL SIDE SLOTS | CENTER POLARIZATION | DIMENSION |      |      |      |     |     |                 |
|----------|---------------------------------|------------------------------|-----------------------------|-----------------|----------------|--------|-----------------|---------------------|-----------|------|------|------|-----|-----|-----------------|
|          |                                 |                              |                             |                 | DUAL           | CENTER |                 |                     | A         | B    | C    | D    | E   | F   | G (SOLDER TAIL) |
| 4        | 87833-0419                      | N.A                          | N.A                         | 1               | N.A            | N.A    | YES             | N.A                 | 6.65      | 2.00 | 5.00 | 4.85 | N.A | N.A | 2.16            |
|          | 87833-0420                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |      |      |      |     | N.A | 3.18            |
|          | 87833-0421                      | N.A                          | N.A                         | 3               | N.A            | 2.16   |                 |                     |           |      |      |      |     |     |                 |
|          | 87833-5920                      | N.A                          | N.A                         | 2               | N.A            | 3.18   |                 |                     |           |      |      |      |     |     |                 |
|          | 87833-0431                      | 87833-0441                   | 87833-0451                  | 2               | N.A            | 1.00   | 2.16            |                     |           |      |      |      |     |     |                 |
|          | 87833-0432                      | N.A                          | N.A                         | 3               | N.A            | 1.00   | 3.18            |                     |           |      |      |      |     |     |                 |
| 6        | 87833-0619                      | N.A                          | N.A                         | 1               | N.A            | N.A    | YES             | N.A                 | 8.65      | 4.00 | 7.00 | 6.85 | N.A | N.A | 2.16            |
|          | 87833-0620                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |      |      |      |     | N.A | 3.18            |
|          | 87833-0621                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |      |      |      |     | N.A | 2.16            |
|          | 87833-6420                      | N.A                          | N.A                         | 2               | N.A            | 3.18   |                 |                     |           |      |      |      |     |     |                 |
|          | 87833-0631                      | 87833-0641                   | 87833-0651                  | 2               | N.A            | 2.00   | 2.16            |                     |           |      |      |      |     |     |                 |
|          | 87833-0632                      | N.A                          | N.A                         | 3               | N.A            | 2.00   | 3.18            |                     |           |      |      |      |     |     |                 |
|          | 87833-0661                      | N.A                          | N.A                         | 2               | N.A            | N.A    | 2.92            |                     |           |      |      |      |     |     |                 |
|          | 87833-0624                      | N.A                          | N.A                         | 2               | N.A            | N.A    | 2.92            |                     |           |      |      |      |     |     |                 |
|          | 87833-0625                      | N.A                          | N.A                         | 3               | N.A            | N.A    | 2.92            |                     |           |      |      |      |     |     |                 |

PLATING OPTIONS:

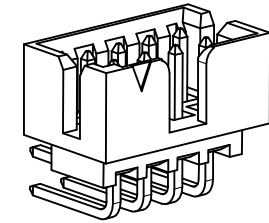
- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

|  |  |  |                   |                      |   |  |                        |       |
|--|--|--|-------------------|----------------------|---|--|------------------------|-------|
| RELEASED<br>EC NO: S2016-0368<br>DRWN:GMENARLY 2015/09/29<br>CHYKD:CGOH 2015/10/30<br>APPR:KHL IM 2015/11/03 | DESCRIPTION<br>QUALITY SYMBOLS<br>$\nabla_A=0$<br>$\nabla_C=0$<br>$\nabla_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)                |                   | DIMENSION STYLE      | SCALE   | DESIGN UNITS                                       | THIRD ANGLE PROJECTION |       |
|  |  |  |                   | MM ONLY              | NTS   | METRIC   |                        |       |
|  |  |  |                   | mm                   | INCH  | DRAWN BY   | DATE                   | TITLE |
|  |  |  |                   | 4 PLACES ± --- ± --- | GMENARLY 2015/09/29   | MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER |                        |       |
|  |  | 3 PLACES ± --- ± ---                                 | CHECKED BY        | DATE                 |   |  |                        |       |
|  |  | 2 PLACES ± 0.20 ± ---                                | CGOH 2015/10/30   |                      |   |  |                        |       |
|  |  | 1 PLACE ± --- ± ---                                  | APPROVED BY       | DATE                 |   |  |                        |       |
|  |  | 0 PLACE ± --- ± ---                                  | KHL IM 2015/11/03 |                      |   |  |                        |       |
|  |  | ANGULAR ± 3 °  |                   | MATERIAL NO.         | DOCUMENT NO.  | SHEET NO.  |                        |       |
|  |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                   | SEE TABLE            | SD-87833-0001   | 3 OF 9   |                        |       |
|  |  |  |                   | SIZE                 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                        |       |
|  |  |  |                   | A3                   |   |  |                        |       |

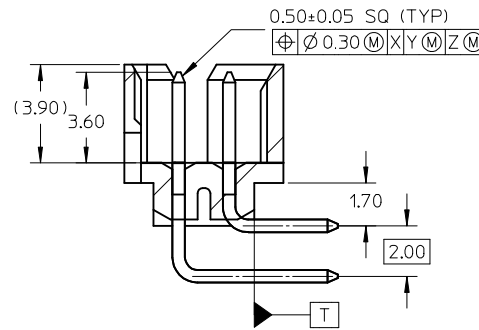
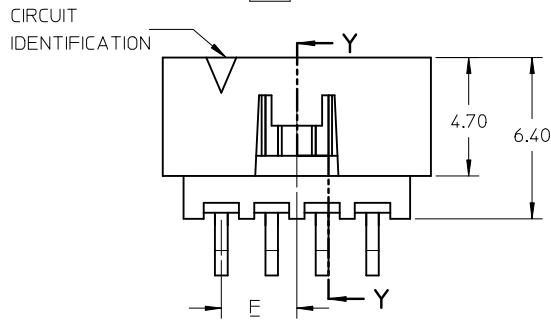
8 TO 12 CIRCUITS



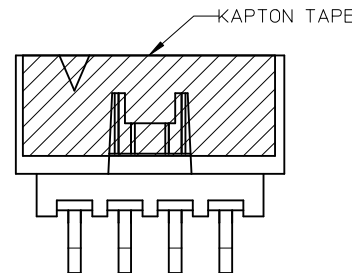
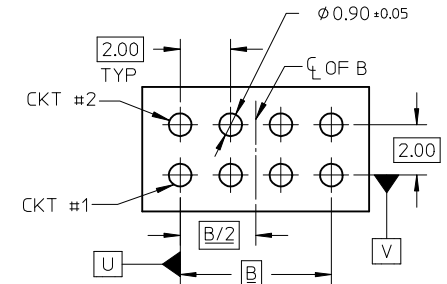
RIBS LOCATIONS VARY  
DEPENDING ON CKT SIZES



ISO VIEW OF HEADER WITH CENTER  
POLARIZATION AND DUAL SIDE SLOTS



SECTION Y-Y



NOTES:

- MATERIALS:  
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION:  
TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES  
B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES  
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

|   |  |                                       |   |                  |            |              |  |  |  |
|---|--|---------------------------------------|---|------------------|------------|--------------|--|--|--|
| ENTER DESCRIPTION<br>EC NO: S2016-0368<br>DRWN:GMENARLY 2015/09/29<br>CHKD:CGOH 2015/10/30<br>APPR:KHLIM 2015/11/03 | DESCRIPTION<br>QUALITY SYMBOLS<br>$\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_F = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) |   | DIMENSION STYLE  | SCALE      | DESIGN UNITS | THIRD ANGLE PROJECTION   |  |  |
|   |  | mm                                    | INCH  | MM ONLY          | 5:1        | METRIC       |  |  |  |
|   |  | 4 PLACES                              | $\pm \text{---}$  | $\pm \text{---}$ | DRAWN BY   | DATE         | TITLE  |  |  |
|   |  | 3 PLACES                              | $\pm \text{---}$  | $\pm \text{---}$ | GMENARLY   | 2015/09/29   | MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER<br><b>molex</b><br>DOCUMENT NO. SD-87833-0001<br>SHEET NO. 4 OF 9 |  |  |
| 2 PLACES  | $\pm 0.20$   | $\pm \text{---}$                      | CHECKED BY  | DATE             |            |              |  |  |  |
| 1 PLACE   | $\pm \text{---}$   | $\pm \text{---}$                      | CGOH  | 2015/10/30       |            |              |  |  |  |
| 0 PLACE   | $\pm \text{---}$   | $\pm \text{---}$                      | APPROVED BY   | DATE             |            |              |  |  |  |
| A   | REV  | ANGULAR $\pm 3^\circ$                 |   | MATERIAL NO.     | 9999999999 |              |  |  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  | SIZE                                  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                  |            |              |  |  |  |
|   |  | A3                                    |   |                  |            |              |  |  |  |

8 TO 12 CIRCUITS

| CKT SIZE   | ASSY P/N WITHOUT KAPTON IN TUBE | ASSY P/N WITH KAPTON IN TUBE | ASSY P/N WITH KAPTON IN T&R | PLATING OPTIONS | FRICTION LOCKS |        | DUAL SIDE SLOTS | CENTER POLARIZATION | DIMENSION |       |       |       |     |      |                 |      |
|------------|---------------------------------|------------------------------|-----------------------------|-----------------|----------------|--------|-----------------|---------------------|-----------|-------|-------|-------|-----|------|-----------------|------|
|            |                                 |                              |                             |                 | DUAL           | CENTER |                 |                     | A         | B     | C     | D     | E   | F    | G (SOLDER TAIL) |      |
| 8          | 87833-0819                      | N.A                          | N.A                         | 1               | N.A            | N.A    | YES             | YES                 | 10.65     | 6.00  | 9.00  | 8.85  | N.A | N.A  | 2.16            |      |
|            | 87833-0820                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-0821                      | N.A                          | N.A                         | 3               | N.A            | N.A    | YES             | YES                 |           |       |       |       |     | N.A  | 3.00            | 2.16 |
|            | 87833-6320                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-6321                      | N.A                          | N.A                         | 3               | N.A            | YES    | YES             | N.A                 |           |       |       |       |     | 3.00 | 3.18            |      |
|            | 87833-0831                      | 87833-0841                   | 87833-0851                  | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-0832                      | N.A                          | N.A                         | 3               | N.A            | YES    | YES             | N.A                 |           |       |       |       |     | N.A  | 2.92            |      |
|            | 87833-0861                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
| 87833-0824 | N.A                             | N.A                          | 2                           | N.A             | N.A            | YES    | YES             | N.A                 | 2.92      |       |       |       |     |      |                 |      |
| 87833-0825 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |      |
| 10         | 87832-1019                      | N.A                          | N.A                         | 1               | N.A            | N.A    | YES             | YES                 | 12.65     | 8.00  | 11.00 | 10.85 | N.A | N.A  | 2.16            |      |
|            | 87833-1020                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-1021                      | N.A                          | N.A                         | 3               | N.A            | YES    | YES             | N.A                 |           |       |       |       |     | 4.00 | 2.16            |      |
|            | 87833-1031                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-1032                      | N.A                          | N.A                         | 3               | N.A            | YES    | YES             | N.A                 |           |       |       |       |     | 4.00 | 1.70            |      |
|            | N.A                             | 87833-1041                   | 87833-1051                  | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
| 87833-1024 | N.A                             | N.A                          | 2                           | N.A             | N.A            | YES    | YES             | N.A                 | 2.92      |       |       |       |     |      |                 |      |
| 87833-1025 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |      |
| 12         | 87833-1219                      | N.A                          | N.A                         | 1               | N.A            | N.A    | YES             | YES                 | 14.65     | 10.00 | 13.00 | 12.85 | N.A | N.A  | 2.16            |      |
|            | 87833-1220                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-1221                      | N.A                          | N.A                         | 3               | N.A            | N.A    | YES             | YES                 |           |       |       |       |     | N.A  | 3.18            |      |
|            | 87833-6020                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-1231                      | N.A                          | N.A                         | 2               | N.A            | YES    | YES             | N.A                 |           |       |       |       |     | 5.00 | 2.16            |      |
|            | 87833-1232                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |     |      |                 |      |
|            | 87833-1224                      | N.A                          | N.A                         | 2               | N.A            | N.A    | YES             | YES                 |           |       |       |       |     | N.A  | 2.92            |      |
| 87833-1225 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |      |

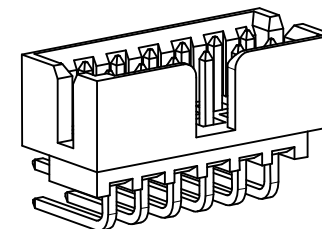
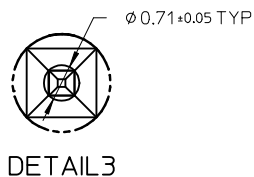
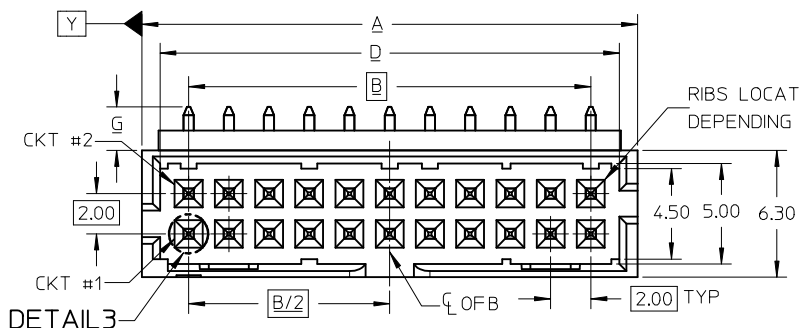
PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

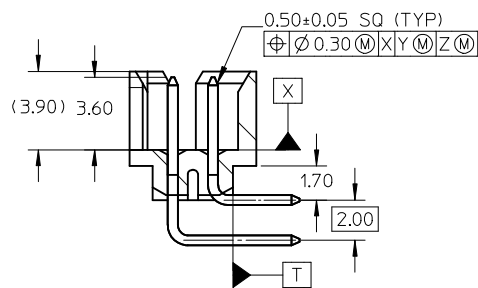
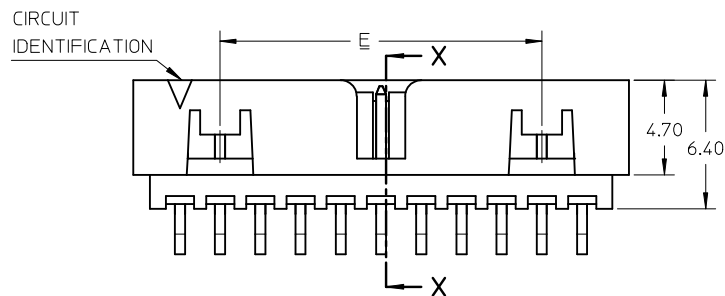
|   |                    |   |   |  |   |              |                        |
|---|--------------------|---|---|--|---|--------------|------------------------|
| RELEASED<br>EC NO: S2016-0368<br>DRWNG:GMENARLY 2015/09/29<br>CHK'D:CGOH 2015/10/30<br>APPR:KHL IM 2015/11/03 | REV<br>DESCRIPTION | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE  | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |
|   |                    |   | mm INCH   | MM ONLY  | NTS   | METRIC       |                        |
|   |                    | $\nabla_A = 0$<br>$\nabla_C = 0$<br>$\nabla_F = 0$                    | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>0 PLACE ± --- ± --- | DRAWN BY: GMENARLY DATE: 2015/09/29<br>CHECKED BY: CGOH DATE: 2015/10/30<br>APPROVED BY: KHL IM DATE: 2015/11/03 | TITLE: MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER |              |                        |
|   |                    | ANGULAR ± 3 °<br>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE TABLE<br>DOCUMENT NO. SD-87833-0001<br>SHEET NO. 5 OF 9  |  |   |              |                        |

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

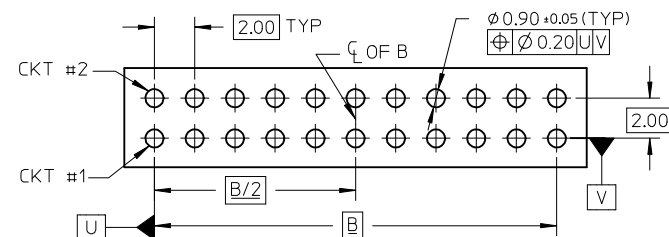
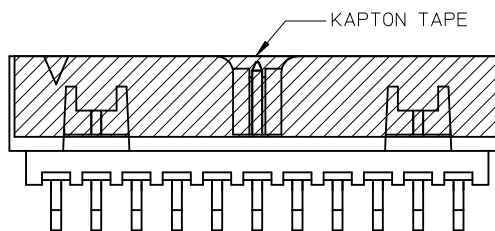
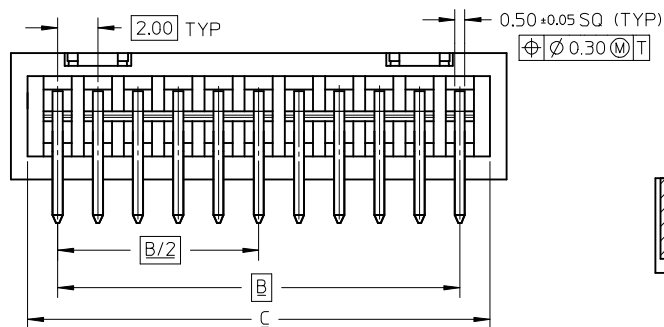
14 TO 50 CIRCUITS



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



SECTION X-X



NOTES:

- MATERIALS:  
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION:  
TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES  
B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES  
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

|  |                  |   |   |   |  |              |                        |
|--|------------------|---|---|---|--|--------------|------------------------|
| RELEASED<br>EC NO: S2016-0368<br>DRWN: GMENARLY 2015/09/29<br>CHKD: CGOH 2015/10/30<br>APPR: KHL IM 2015/11/03 | DESCRIPTION<br>A | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE   | SCALE  | DESIGN UNITS | THIRD ANGLE PROJECTION |
|  |                  | $F_A=0$<br>$F_C=0$<br>$F_P=0$   | mm    INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>0 PLACE ± --- ± --- | MM ONLY   | NTS  | METRIC       |                        |
|  |                  | ANGULAR ± 3°<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS | DRAWN BY: GMENARLY<br>CHECKED BY: CGOH<br>APPROVED BY: KHL IM<br>DATE: 2015/09/29<br>DATE: 2015/10/30<br>DATE: 2015/11/03         | TITLE   | MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER |              |                        |
|  |                  | SEE TABLE   | MATERIAL NO.<br>DOCUMENT NO.  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | SD-87833-0001                                      |              | SHEET NO.<br>6 OF 9    |

14 TO 24 CIRCUITS

| CKT SIZE | ASSY P/N WITHOUT KAPTON IN TUBE | ASSY P/N WITH KAPTON IN TUBE | ASSY P/N WITH KAPTON IN T&R | PLATING OPTIONS | FRICTION LOCKS |        | DUAL SIDE SLOTS | CENTER POLARIZATION | DIMENSION |       |       |       |       |     |                 |
|----------|---------------------------------|------------------------------|-----------------------------|-----------------|----------------|--------|-----------------|---------------------|-----------|-------|-------|-------|-------|-----|-----------------|
|          |                                 |                              |                             |                 | DUAL           | CENTER |                 |                     | A         | B     | C     | D     | E     | F   | G (SOLDER TAIL) |
| 14       | 87833-1419                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 16.65     | 12.00 | 15.00 | 14.85 | 8.00  | N.A | 2.16            |
|          | 87833-1420                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-1421                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-5320                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-5321                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-1436                      | N.A                          | N.A                         | 3               | YES            | N.A    | YES             | YES                 |           |       |       |       |       |     | 3.50            |
| 16       | 87833-1619                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 18.65     | 14.00 | 17.00 | 16.85 | 10.00 | N.A | 2.16            |
|          | 87833-1620                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-1621                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-6120                      | 87833-7120                   | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 18       | 87833-1819                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 20.65     | 16.00 | 19.00 | 18.85 | 12.00 | N.A | 2.16            |
|          | 87833-1820                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-1821                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-6220                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 20       | 87833-2019                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 22.65     | 18.00 | 21.00 | 20.85 | 14.00 | N.A | 2.16            |
|          | 87833-2020                      | 87833-7220                   | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-2021                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-6520                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-6521                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-2036                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 22       | 87833-2219                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 24.65     | 20.00 | 23.00 | 22.85 | 16.00 | N.A | 2.16            |
|          | 87833-2220                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-2221                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 24       | 87833-2419                      | N.A                          | N.A                         | 1               | YES            | N.A    | YES             | YES                 | 26.65     | 22.00 | 25.00 | 24.85 | 18.00 | N.A | 2.16            |
|          | 87833-2420                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-2421                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-2436                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-6920                      | N.A                          | N.A                         | 2               |                |        |                 |                     |           |       |       |       |       |     |                 |

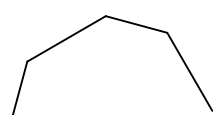
PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

|   |   |  |              |                            |                       |   |   |                        |  |  |
|---|---|--|--------------|----------------------------|-----------------------|---|---|------------------------|--|--|
| RELEASED<br>EC NO: S2016-0368<br>DRWG:GMENARLY 2015/09/29<br>CHKD:CGOH 2015/10/30<br>APPR:KHL IM 2015/11/03 | DESCRIPTION<br>QUALITY SYMBOLS<br>$F_A=0$<br>$F_G=0$<br>$F_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)                |              | DIMENSION STYLE<br>MM ONLY |                       | SCALE<br>NTS  | DESIGN UNITS<br>METRIC  | THIRD ANGLE PROJECTION |  |  |
|   |   |  | mm           | INCH                       | DRAWN BY<br>GMENARLY  | DATE<br>2015/09/29  | TITLE<br>MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER<br><b>molex</b><br>DOCUMENT NO. SD-87833-0001<br>SHEET NO. 7 OF 9 |                        |  |  |
|   |   |  |              |                            | CHECKED BY<br>CGOH    | DATE<br>2015/10/30  |   |                        |  |  |
|   |   |  |              |                            | APPROVED BY<br>KHL IM | DATE<br>2015/11/03  |   |                        |  |  |
|   |   |  | MATERIAL NO. |                            |                       |   |   |                        |  |  |
|   |   | ANGULAR $\pm 3^\circ$                                |              | SEE TABLE                  |                       |   |   |                        |  |  |
|   |   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |              | SIZE<br>A3                 |                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                        |  |  |

26 TO 38 CIRCUITS

| F  | CKT SIZE   | ASSY P/N WITHOUT KAPTON IN TUBE | ASSY P/N WITH KAPTON IN TUBE | ASSY P/N WITH KAPTON IN T&R | PLATING OPTIONS | FRICTION LOCKS |        | DUAL SIDE SLOTS | CENTER POLARIZATION | DIMENSION |       |       |       |     |      |                 |
|----|------------|---------------------------------|------------------------------|-----------------------------|-----------------|----------------|--------|-----------------|---------------------|-----------|-------|-------|-------|-----|------|-----------------|
|    |            |                                 |                              |                             |                 | DUAL           | CENTER |                 |                     | A         | B     | C     | D     | E   | F    | G (SOLDER TAIL) |
| 26 | 87833-2619 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-2620 | N.A                             | N.A                          | 2                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-2621 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             | 28.65               | 24.00     | 27.00 | 26.85 | 20.00 | N.A | 2.16 |                 |
|    | 87833-2636 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             |                     |           |       |       |       |     | 3.50 |                 |
| 28 | 87833-2819 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-2820 | N.A                             | N.A                          | 2                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-2821 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             | 30.65               | 26.00     | 29.00 | 28.85 | 22.00 | N.A | 2.16 |                 |
|    | 87833-6620 | N.A                             | N.A                          | 2                           | YES             | N.A            | YES    | YES             |                     |           |       |       |       |     | 3.18 |                 |
| 30 | 87832-3019 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3020 | N.A                             | N.A                          | 2                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3021 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             | 32.65               | 28.00     | 31.00 | 30.85 | 24.00 | N.A | 2.16 |                 |
|    | 87833-6720 | N.A                             | N.A                          | 2                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-6721 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             |                     |           |       |       |       |     | 3.18 |                 |
|    | 87833-3036 | N.A                             | N.A                          | 3                           | YES             | N.A            | YES    | YES             |                     |           |       |       |       |     | 3.50 |                 |
| 32 | 87833-3219 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3220 | N.A                             | N.A                          | 2                           | YES             | N.A            | YES    | YES             | 34.65               | 30.00     | 33.00 | 32.85 | 26.00 | N.A | 2.16 |                 |
|    | 87833-3221 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
| 34 | 87833-3419 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3420 | N.A                             | N.A                          | 2                           | YES             | N.A            | YES    | YES             | 36.65               | 32.00     | 35.00 | 34.85 | 28.00 | N.A | 2.16 |                 |
|    | 87833-3421 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-5420 | N.A                             | N.A                          | 2                           | YES             | N.A            | YES    | YES             |                     |           |       |       |       |     | 3.18 |                 |
|    | 87833-3424 | N.A                             | N.A                          | 2                           | N.A             | N.A            | YES    | YES             |                     |           |       |       |       |     | 2.92 |                 |
| 36 | 87833-3619 | N.A                             | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3620 | N.A                             | N.A                          | 2                           | YES             | N.A            | YES    | YES             | 38.65               | 34.00     | 37.00 | 36.85 | 30.00 | N.A | 2.16 |                 |
|    | 87833-3621 | N.A                             | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
| 38 | 87833-3819 | 87832-3862                      | N.A                          | 1                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |
|    | 87833-3820 | 87832-3822                      | N.A                          | 2                           | YES             | N.A            | YES    | YES             | 40.65               | 36.00     | 39.00 | 38.85 | 32.00 | N.A | 2.16 |                 |
|    | 87833-3821 | 87832-3823                      | N.A                          | 3                           |                 |                |        |                 |                     |           |       |       |       |     |      |                 |



PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

|  |                               |   |                       |                            |   |              |                               |                        |  |
|--|-------------------------------|---|-----------------------|----------------------------|---|--------------|-------------------------------|------------------------|--|
| RELEASED<br>EC NO: S2016-0368<br>DRWN:GMENARLY 2015/09/29<br>CH'KD:CGOH 2015/10/30<br>APPR:KHL IM 2015/11/03 | QUALITY SYMBOLS               | GENERAL TOLERANCES (UNLESS SPECIFIED)   |                       | DIMENSION STYLE<br>MM ONLY |   | SCALE<br>NTS | DESIGN UNITS<br>METRIC        | THIRD ANGLE PROJECTION |  |
|  | $F_A=0$<br>$F_C=0$<br>$F_B=0$ | mm    INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.20 ± ---<br>1 PLACE ± --- ± ---<br>0 PLACE ± --- ± --- | DRAWN BY<br>GMENARLY  | DATE<br>2015/09/29         | TITLE<br>MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER |              |                               |                        |  |
|  |                               | ANGULAR ± 3 °   | CHECKED BY<br>CGOH    | DATE<br>2015/10/30         | DRAWN BY<br>KHL IM  |              |                               |                        |  |
|  |                               | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | APPROVED BY<br>KHL IM | DATE<br>2015/11/03         | MATERIAL NO.<br>SEE TABLE                                   |              | DOCUMENT NO.<br>SD-87833-0001 | SHEET NO.<br>8 OF 9    |  |

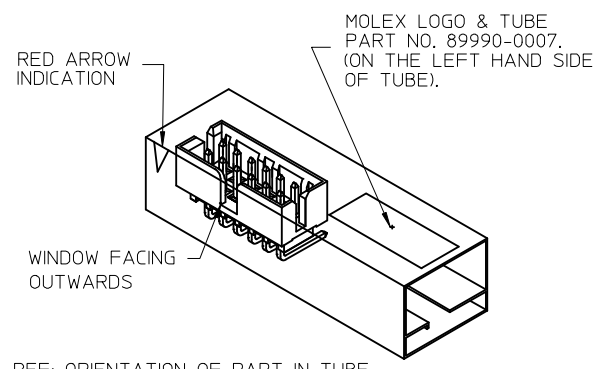
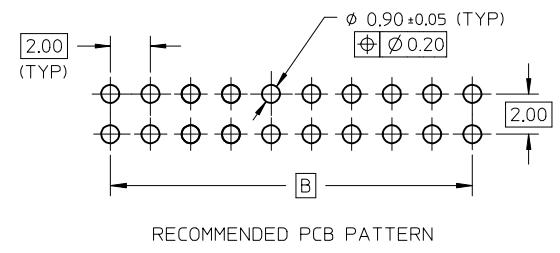
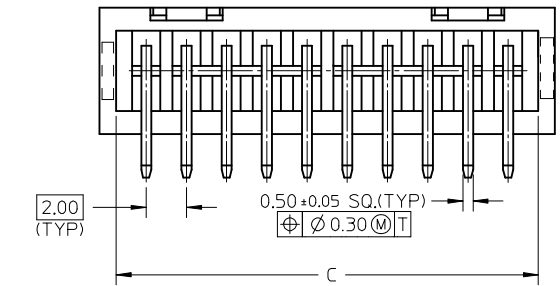
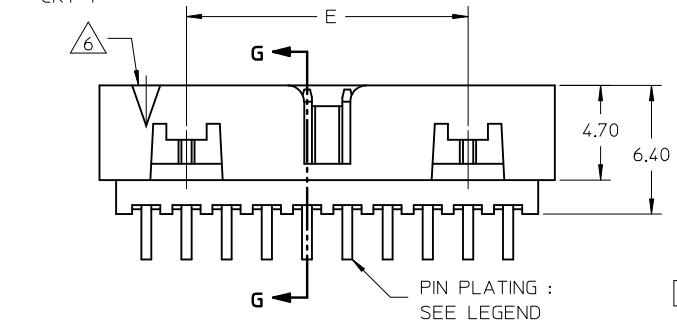
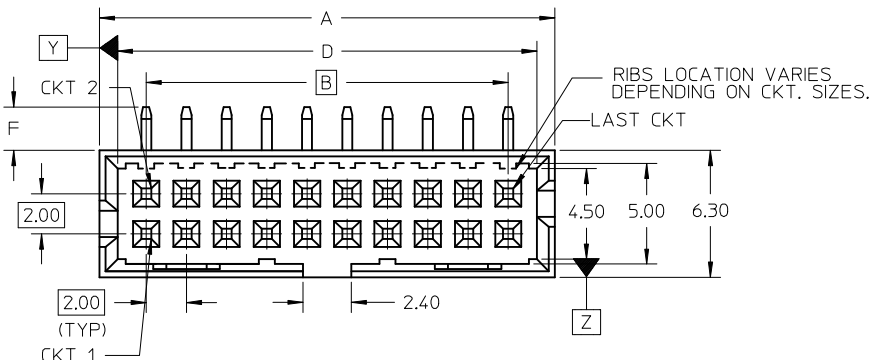
40 TO 50 CIRCUITS

| CKT SIZE | ASSY P/N WITHOUT KAPTON IN TUBE | ASSY P/N WITH KAPTON IN TUBE | ASSY P/N WITH KAPTON IN T&R | PLATING OPTIONS | FRICTION LOCKS |        | DUAL SIDE SLOTS | CENTER POLARIZATION | DIMENSION |       |       |       |       |     |                 |
|----------|---------------------------------|------------------------------|-----------------------------|-----------------|----------------|--------|-----------------|---------------------|-----------|-------|-------|-------|-------|-----|-----------------|
|          |                                 |                              |                             |                 | DUAL           | CENTER |                 |                     | A         | B     | C     | D     | E     | F   | G (SOLDER TAIL) |
| 40       | 87833-4019                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4020                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 42.65     | 38.00 | 41.00 | 40.85 | 34.00 | N.A | 2.16            |
|          | 87833-4021                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 42       | 87833-4219                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4220                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 44.65     | 40.00 | 43.00 | 42.85 | 36.00 | N.A | 2.16            |
|          | 87833-4221                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 44       | 87833-4419                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4420                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 46.65     | 42.00 | 45.00 | 44.85 | 38.00 | N.A | 2.16            |
|          | 87833-4421                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4424                      | N.A                          | N.A                         | 2               | N.A            | N.A    | YES             | YES                 |           |       |       |       |       |     |                 |
|          | 87832-4425                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     | 2.92            |
| 46       | 87833-4619                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4620                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 48.65     | 44.00 | 47.00 | 46.85 | 40.00 | N.A | 2.16            |
|          | 87833-4621                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 48       | 87833-4819                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-4820                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 50.65     | 46.00 | 49.00 | 48.85 | 42.00 | N.A | 2.16            |
|          | 87833-4821                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |
| 50       | 87833-5019                      | N.A                          | N.A                         | 1               |                |        |                 |                     |           |       |       |       |       |     |                 |
|          | 87833-5020                      | N.A                          | N.A                         | 2               | YES            | N.A    | YES             | YES                 | 52.65     | 48.00 | 51.00 | 50.85 | 44.00 | N.A | 0.15            |
|          | 87833-5021                      | N.A                          | N.A                         | 3               |                |        |                 |                     |           |       |       |       |       |     |                 |

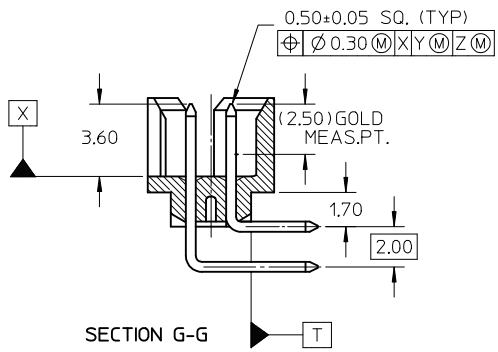
PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

|   |   |   |      |                 |       |  |                        |  |  |
|---|---|---|------|-----------------|-------|--|------------------------|--|--|
| RELEASED<br>EC NO: S2016-0368<br>DRWN:GMENARLY 2015/09/29<br>CHKD:CGOH 2015/10/30<br>APPR:KHL IM 2015/11/03 | DESCRIPTION<br>QUALITY SYMBOLS<br>$F_A=0$<br>$F_G=0$<br>$F_P=0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)   |      | DIMENSION STYLE | SCALE | DESIGN UNITS   | THIRD ANGLE PROJECTION |  |  |
|   |   |   |      | MM ONLY         | NTS   | METRIC   |                        |  |  |
|   |   |   |      | DRAWN BY        | DATE  | TITLE  |                        |  |  |
|   |   |   |      | CHECKED BY      | DATE  | MILLIGRID<br>2MM PITCH, SMT<br>R/A SHROUDED HEADER<br><b>molex</b> |                        |  |  |
|   |   | APPROVED BY   | DATE | DOCUMENT NO.    |       |  |                        |  |  |
|   |   | ANGULAR $\pm 3^\circ$   |      | MATERIAL NO.    |       | SD-87833-0001  |                        |  |  |
|   |   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |      | SEE TABLE       |       | 9 OF 9   |                        |  |  |
|   |   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |      |                 |       |  |                        |  |  |



REF: ORIENTATION OF PART IN TUBE  
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)

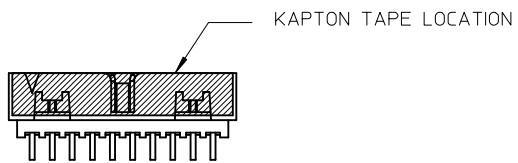


- NOTES:
- FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
  - MATERIAL : HOUSING : NYLON GLASS-FILLED, UL94V-0, COLOR BLACK. PIN : 0.50MM SQ.PHOSPHOR BRONZE.
  - PRODUCT SPECIFICATION PS-87831-027 APPLIES.
  - NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
  - NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
  - CKT 4 & 6 HAS NO IDENTIFICATION TAG.
  - THIS HEADER MATES WITH MOLEX:
    - CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
    - 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
  - PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.
  - PLATING SPECIFICATION REFERRED TO SHEET 2.
  - PACKAGING SPEC: PK-87831-001 FOR TUBE PK-87831-300 FOR T&R

|  |            |             |  |                                       |   |                 |              |   |              |                        |  |
|--|------------|-------------|--|---------------------------------------|---|-----------------|--------------|---|--------------|------------------------|--|
| SEE SHT 2<br>EC NO: S2016-0056<br>DRW:ATSEE<br>CHKD:CGOH<br>APPR:KHLIM | REV<br>B11 | DESCRIPTION | QUALITY SYMBOLS                                      | GENERAL TOLERANCES (UNLESS SPECIFIED) |   | DIMENSION STYLE |              | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |  |
|  |            |             | $F_{\Delta}=0$                                       | mm INCH                               |   | MM ONLY         |              | NTS   | METRIC       |                        |  |
|  |            |             | $F_{\square}=0$                                      | 4 PLACES ± --- ± ---                  | 3 PLACES ± --- ± ---  | DRAWN BY        | DATE         | TITLE   |              |                        |  |
|  |            |             | $F_{\nabla}=0$                                       | 2 PLACES ± 0.20 ± ---                 | 1 PLACE ± --- ± ---   | ATSEE           | 2003/10/23   | MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A |              |                        |  |
|  |            |             | 0 PLACE ± ±  | 3 PLACES ± --- ± ---                  | KCLING  | 2003/11/07      | <b>molex</b> |   |              |                        |  |
|  |            |             | ANGULAR ± 3 °  | APPROVED BY                           | DATE  | MATERIAL NO.    |              |   | DOCUMENT NO. | SHEET NO.              |  |
|  |            |             | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MLONG                                 | 2010/11/19  | SEE TABLE       |              | SD-87833-010                                    | 1 OF 3       |                        |  |
|  |            |             |  | SIZE                                  | 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

PLS REFER TO PART 87833-\*\*-3\* FOR CENTER LOCKING SLOT OPTION.



| PART NO IN TUBE (W/O KAPTON) | PART NO IN T&R (WITH KAPTON) | CKT SIZE | VOID PIN LOCATION | DIMENSION |       |       |       |       |             | PLATING OPTION |
|------------------------------|------------------------------|----------|-------------------|-----------|-------|-------|-------|-------|-------------|----------------|
|                              |                              |          |                   | A         | B     | C     | D     | E     | F           |                |
| 87833-04**                   | -                            | 4        | -                 | 6.65      | 2.00  | 5.00  | 4.85  | ---   | 19,20 OR 21 |                |
| 87833-06**                   | -                            | 6        | -                 | 8.65      | 4.00  | 7.00  | 6.85  | ---   |             |                |
| 87833-08**                   | -                            | 8        | -                 | 10.65     | 6.00  | 9.00  | 8.85  | ---   |             |                |
| 87833-10**                   | -                            | 10       | -                 | 12.65     | 8.00  | 11.00 | 10.85 | ---   |             |                |
| 87833-12**                   | -                            | 12       | -                 | 14.65     | 10.00 | 13.00 | 12.85 | ---   |             |                |
| 87833-14**                   | -                            | 14       | -                 | 16.65     | 12.00 | 15.00 | 14.85 | 8.00  |             |                |
| 87833-16**                   | -                            | 16       | -                 | 18.65     | 14.00 | 17.00 | 16.85 | 10.00 |             |                |
| 87833-18**                   | -                            | 18       | -                 | 20.65     | 16.00 | 19.00 | 18.85 | 12.00 |             |                |
| 87833-20**                   | -                            | 20       | -                 | 22.65     | 18.00 | 21.00 | 20.85 | 14.00 |             |                |
| 87833-22**                   | -                            | 22       | -                 | 24.65     | 20.00 | 23.00 | 22.85 | 16.00 |             |                |
| 87833-24**                   | -                            | 24       | -                 | 26.65     | 22.00 | 25.00 | 24.85 | 18.00 |             |                |
| 87833-26**                   | -                            | 26       | -                 | 28.65     | 24.00 | 27.00 | 26.85 | 20.00 |             |                |
| 87833-28**                   | -                            | 28       | -                 | 30.65     | 26.00 | 29.00 | 28.85 | 22.00 |             |                |
| 87833-30**                   | -                            | 30       | -                 | 32.65     | 28.00 | 31.00 | 30.85 | 24.00 |             |                |
| 87833-32**                   | -                            | 32       | -                 | 34.65     | 30.00 | 33.00 | 32.85 | 26.00 |             |                |
| 87833-34**                   | -                            | 34       | -                 | 36.65     | 32.00 | 35.00 | 34.85 | 28.00 |             |                |
| 87833-36**                   | -                            | 36       | -                 | 38.65     | 34.00 | 37.00 | 36.85 | 30.00 |             |                |
| 87833-38**                   | -                            | 38       | -                 | 40.65     | 36.00 | 39.00 | 38.85 | 32.00 |             |                |
| 87833-40**                   | -                            | 40       | -                 | 42.65     | 38.00 | 41.00 | 40.85 | 34.00 |             |                |
| 87833-42**                   | -                            | 42       | -                 | 44.65     | 40.00 | 43.00 | 42.85 | 36.00 |             |                |
| 87833-44**                   | -                            | 44       | -                 | 46.65     | 42.00 | 45.00 | 44.85 | 38.00 |             |                |
| 87833-46**                   | -                            | 46       | -                 | 48.65     | 44.00 | 47.00 | 46.85 | 40.00 |             |                |
| 87833-48**                   | -                            | 48       | -                 | 50.65     | 46.00 | 49.00 | 48.85 | 42.00 |             |                |
| 87833-50**                   | -                            | 50       | -                 | 52.65     | 48.00 | 51.00 | 50.85 | 44.00 |             |                |
| 87833-7000                   | -                            | 34       | 21                | 36.65     | 32.00 | 35.00 | 34.85 | 28.00 |             |                |
| 87833-5121                   | -                            | 26       | 14                | 28.65     | 24.00 | 27.00 | 26.85 | 20.00 |             |                |
| 87833-5120                   | -                            | 10       | 7                 | 12.65     | 8.00  | 11.00 | 10.85 | ---   |             |                |
| 87833-5520                   | -                            | 40       | 21                | 42.65     | 38.00 | 41.00 | 40.85 | 34.00 |             |                |
| 87833-5620                   | -                            | 20       | 14                | 22.65     | 18.00 | 21.00 | 20.85 | 14.00 |             |                |
| 87833-5720                   | -                            | 24       | 13                | 26.65     | 22.00 | 25.00 | 24.85 | 18.00 |             |                |
| 87833-5820                   | -                            | 14       | 1                 | 16.65     | 12.00 | 15.00 | 14.85 | 8.00  |             |                |
| 87833-2020                   | 87833-7220                   | 20       | -                 | 22.65     | 18.00 | 21.00 | 20.85 | 14.00 |             |                |
| 87833-63**                   | -                            | 8        | -                 | 10.65     | 6.00  | 9.00  | 8.85  | ---   |             |                |
| 87833-53**                   | -                            | 14       | -                 | 16.65     | 12.00 | 15.00 | 14.85 | 8.00  |             |                |
| 87833-5420                   | -                            | 34       | -                 | 36.65     | 32.00 | 35.00 | 34.85 | 28.00 |             |                |
| 87833-5920                   | -                            | 4        | -                 | 6.65      | 2.00  | 5.00  | 4.85  | ---   |             |                |
| 87833-6020                   | -                            | 12       | -                 | 14.65     | 10.00 | 13.00 | 12.85 | ---   |             |                |
| 87833-6120                   | 87833-7120                   | 16       | -                 | 18.65     | 14.00 | 17.00 | 16.85 | 10.00 |             |                |
| 87833-6220                   | -                            | 18       | -                 | 20.65     | 16.00 | 19.00 | 18.85 | 12.00 |             |                |
| 87833-6420                   | -                            | 6        | -                 | 8.65      | 4.00  | 7.00  | 6.85  | -     |             |                |
| 87833-65**                   | -                            | 20       | -                 | 22.65     | 18.00 | 21.00 | 20.85 | 14.00 |             |                |

2.16

3.18

|   |   |   |   |                            |                    |  |                        |                        |  |  |
|---|---|---|---|----------------------------|--------------------|--|------------------------|------------------------|--|--|
| ADD 87833-2020 & 87833-7220<br>EC NO: S2016-0056<br>DRW:ATSEE 2015/07/13<br>CHKD:CGOH 2015/08/20<br>APPR:KHL IM 2015/09/03<br>B11 | QUALITY SYMBOLS<br>$\nabla_A = 0$<br>$\nabla_B = 0$<br>$\nabla_C = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)   |   | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>NTS   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |  |
|   |   | 4 PLACES $\pm$ --- $\pm$ ---<br>3 PLACES $\pm$ --- $\pm$ ---<br>2 PLACES $\pm 0.20$ $\pm$ ---<br>1 PLACE $\pm$ --- $\pm$ ---<br>0 PLACE $\pm$ $\pm$ | mm INCH<br>$\pm$ --- $\pm$ ---<br>$\pm$ --- $\pm$ ---<br>$\pm 0.20$ $\pm$ ---<br>$\pm$ --- $\pm$ ---<br>$\pm$ $\pm$ | DRAWN BY<br>ATSEE          | DATE<br>2003/10/23 | TITLE<br>MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A |                        |                        |  |  |
|   |   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |   | CHECKED BY<br>KCL ING      | DATE<br>2003/11/07 | MATERIAL NO. SEE TABLE<br>DOCUMENT NO. SD-87833-010      |                        |                        |  |  |
|   |   |   |   | APPROVED BY<br>MLONG       | DATE<br>2010/11/19 | SHEET NO. 2 OF 3   |                        |                        |  |  |



9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1


| PART NO IN TUBE<br>(W/O KAPTON) | CKT<br>SIZE | VOID PIN<br>LOCATION | DIMENSION |       |       |       |       |      | PLATING<br>OPTION |
|---------------------------------|-------------|----------------------|-----------|-------|-------|-------|-------|------|-------------------|
|                                 |             |                      | A         | B     | C     | D     | E     | F    |                   |
| 87833-6620                      | 28          | -                    | 30.65     | 26.00 | 29.00 | 28.85 | 22.00 | 3.18 | 20                |
| 87833-67**                      | 30          | -                    | 32.65     | 28.00 | 31.00 | 30.85 | 24.00 |      | 20 OR 21          |
| 87833-6920                      | 24          | -                    | 26.65     | 22.00 | 25.00 | 24.85 | 18.00 |      | 3.27              |

PART NUMBER LEGEND :

87833 - \* \* \* \* \*

 PLATING OPTIONS:

- 18 - 0.38um/15uin PdNi WITH GOLD FLASH IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 19 - 0.05 - 0.13um/2 - 5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 00/ 20 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 21 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

|  |  |                   |   |                  |  |              |   |  |
|--|--|-------------------|---|------------------|--|--------------|---|--|
| SEE SHT 2<br>EC NO: S2016-0056<br>DRWN:ATSEE<br>CHKD:CGOH<br>APPR:KHL IM | REV<br>DESCRIPTION                                   | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE  | SCALE  | DESIGN UNITS | THIRD ANGLE PROJECTION  |  |
|  |  | $\nabla_A = 0$    | mm INCH   | MM ONLY          | NTS  | METRIC       |  |  |
|  |  | $\nabla_C = 0$    | 4 PLACES ± --- ± ---  | DRAWN BY DATE    | TITLE<br>MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A |              |   |  |
|  |  | $\nabla_P = 0$    | 3 PLACES ± --- ± ---  | ATSEE 2003/10/23 |  |              |   |  |
|  | 2 PLACES ± 0.20 ± ---                                | CHECKED BY DATE   | DOCUMENT NO.<br>SD-87833-010  |                  |  |              |   |  |
|  | 1 PLACE ± --- ± ---                                  | KCLING 2003/11/07 |   |                  |  |              |   |  |
|  | 0 PLACE ± ±  | APPROVED BY DATE  | SHEET NO.<br>3 OF 3   |                  |  |              |   |  |
|  | ANGULAR ± 3 °  | MLONG 2010/11/19  |   |                  |  |              |   |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO.      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                  |  |              |   |  |
|  |  | SEE TABLE         |   |                  |  |              |   |  |
|  |  | SIZE A3           |   |                  |  |              |   |  |

9 8 7 6 5 4 3 2 1