

Excellent Integrated System Limited

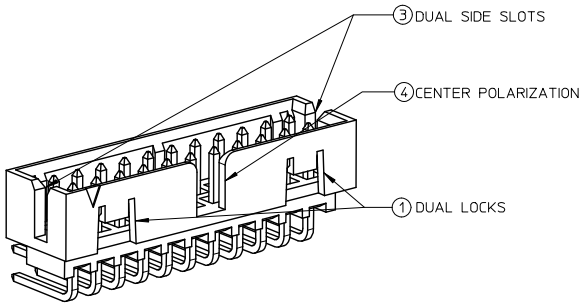
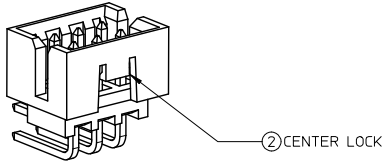
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)
[0878330841](#)

For any questions, you can email us directly:
sales@integrated-circuit.com

FEATURES SELECTION GUIDE



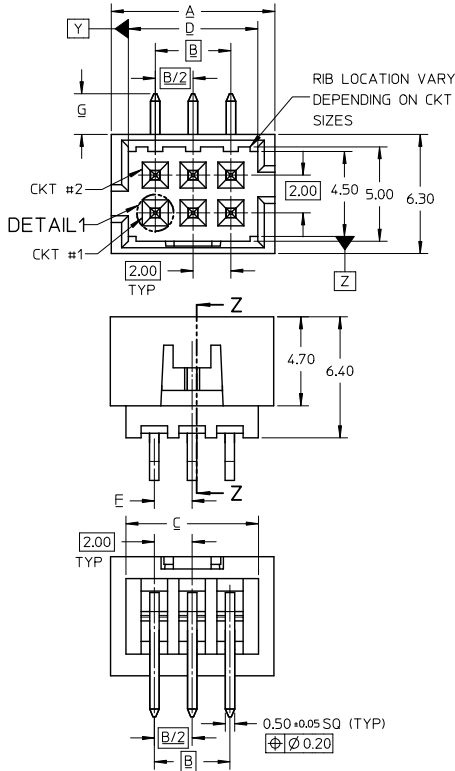
| CIRCUIT SIZE | FEATURES | | | | |
|--------------|----------------|----------|-------------------|-----------------------|----------|
| | FRICTION LOCKS | | 3 DUAL SIDE SLOTS | 4 CENTER POLARIZATION | SHEET NO |
| | 1 DUAL | 2 CENTER | | | |
| 4 - 6 | N.A | N.A | YES | N.A | 2 - 3 |
| | N.A | YES | 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 | |

PACKAGING SPECIFICATION TABLE

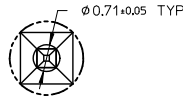
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|--|--------------|
| TAPE AND REEL PACKAGING | PK-87831-300 |
| TUBE STANDARD PACKAGING | PK-87831-001 |
| TUBE NON-STANDARD PACKAGING FOR: 87833-0861 87833-1420 | PK-87831-002 |

| | | | | | | | | | |
|--|--|--|--|---|--------------------|------------------|--------|--|------------------------|
| ADD PK TABLE EC NO: S2017-0022 DRAWN BY: GMENARLY CHKD: SCHEONG APPR: KHLIM | 2016/07/12 2016/07/27 2016/07/28 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | | $\nabla=0$ $\nabla=0$ $\nabla=0$ | mm | INCH | MM ONLY | NTS | METRIC | MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER molex | |
| | | 4 PLACES ± --- ± --- | ± --- | ± --- | DRAWN BY: GMENARLY | DATE: 2015/09/29 | TITLE | | |
| | | 3 PLACES ± --- ± --- | ± --- | ± --- | CHECKED BY: CGOH | DATE: 2015/10/30 | | | |
| 2 PLACES ± 0.20 ± --- | ± --- | ± --- | APPROVED BY: KHLIM | DATE: 2015/11/03 | | | | | |
| 1 PLACE ± --- ± --- | ± --- | ± --- | ANGULAR ± 3° | | MATERIAL NO. | DOCUMENT NO. | | | SHEET NO. |
| 0 PLACE ± --- ± --- | ± --- | ± --- | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | SD-87833-0001 | | | 1 OF 9 |
| REV | DESCRIPTION | SIZE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | |

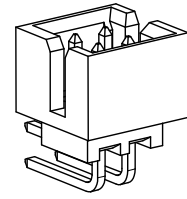
10 9 8 7 6 5 4 3 2 1



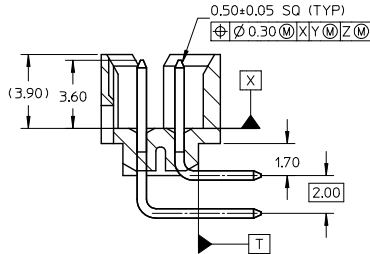
4 TO 6 CIRCUITS



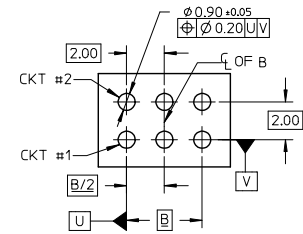
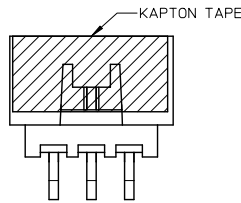
DETAIL 1



ISO VIEW OF HEADER
DUAL SIDE SLOTS



SECTION Z-Z



RECOMMENDED PCB LAYOUT

NOTES:

1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50MM SQ PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. 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)
6. FOR ILLUSTRATION PURPOSE, 6 CIRCUITS HEADER IS SHOWN

| EDIT NOTE 4 EC NO: S2017-0022 DRAWN: GMENARLY 2016/07/12 CHECKED: SCHEONG 2016/07/27 APPR: KHL IM 2016/07/28 REV: A2 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|-------------------------------|---------------------|--------------|------------------------|------|------|----------|------|------|----------|-------|------|---------|------|------|---------|------|------|---|---------|------|-------|-------------------|------------|--|-----------------|------------|--------------------|------------|-----|--------|--|
| | $\sqrt{\text{A}}=0$ $\sqrt{\text{B}}=0$ $\sqrt{\text{C}}=0$ | <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> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ±--- | ±--- | 3 PLACES | ±--- | ±--- | 2 PLACES | ±0.20 | ±--- | 1 PLACE | ±--- | ±--- | 0 PLACE | ±--- | ±--- | <table border="1"> <thead> <tr> <th>MM ONLY</th> <th>DATE</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>DRAWN BY GMENARLY</td> <td>2015/09/29</td> <td rowspan="3">MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER</td> </tr> <tr> <td>CHECKED BY CGOH</td> <td>2015/10/30</td> </tr> <tr> <td>APPROVED BY KHL IM</td> <td>2015/11/03</td> </tr> </tbody> </table> | MM ONLY | DATE | TITLE | DRAWN BY GMENARLY | 2015/09/29 | MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | CHECKED BY CGOH | 2015/10/30 | APPROVED BY KHL IM | 2015/11/03 | NTS | METRIC | |
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±0.20 | ±--- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MM ONLY | DATE | TITLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWN BY GMENARLY | 2015/09/29 | MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CHECKED BY CGOH | 2015/10/30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROVED BY KHL IM | 2015/11/03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE WITHIN DIMENSIONS | ANGULAR ± 3° MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87833-0001 | SHEET NO. 2 OF 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

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 | 2.16 |
| | 87833-0421 | N.A | N.A | 3 | N.A | 3.18 | | | | | | | | | |
| | 87833-5920 | N.A | N.A | 2 | N.A | 3.18 | | | | | | | | | |
| | 87833-0431 | 87833-0441 | 87833-0451 | 2 | N.A | 2.16 | | | | | | | | | |
| | 87833-0432 | N.A | N.A | 3 | N.A | 2.16 | | | | | | | | | |
| 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 | 3.18 | | | | | | | | | |
| | 87833-6420 | N.A | N.A | 2 | N.A | 2.16 | | | | | | | | | |
| | 87833-0631 | 87833-0641 | 87833-0651 | 2 | N.A | 2.16 | | | | | | | | | |
| | 87833-0632 | N.A | N.A | 3 | N.A | 3.18 | | | | | | | | | |
| | 87833-0661 | N.A | N.A | 2 | N.A | 3.18 | | | | | | | | | |
| | 87833-0624 | N.A | N.A | 2 | N.A | 2.92 | | | | | | | | | |
| | 87833-0625 | N.A | N.A | 3 | N.A | 2.92 | | | | | | | | | |

PLATING OPTIONS:

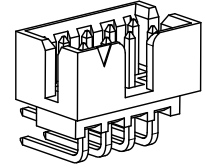
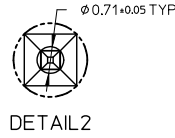
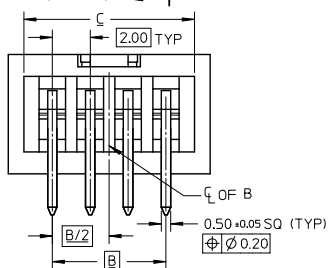
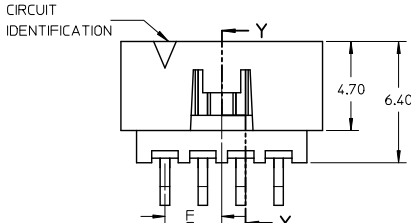
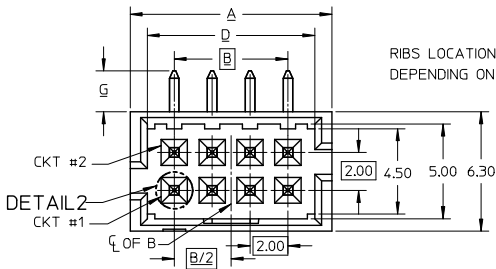
- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD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

| | | | | | | | |
|---|---|---|---|-------|--------------|--|---|
| SEE SHEET 1.2.4.6 EC NO: S2017-0022 DRAWN BY: GEMENARLY 2016/07/17 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV: A2 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
| | $\sqrt{\text{---}}=0$ $\sqrt{\text{---}}=0$ $\sqrt{\text{---}}=0$ | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3° | MM ONLY | NTS | METRIC | DRAWN BY: GEMENARLY 2015/09/29 CHECKED BY: CGOH 2015/10/30 APPROVED BY: KHLIM 2015/11/03 MATERIAL NO. SEE TABLE DOCUMENT NO. SD-87833-0001 | TITLE: MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SIZE: A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |
| | | | | | | SHEET NO. 3 OF 9 | |

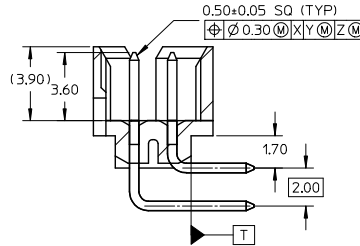
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10 9 8 7 6 5 4 3 2 1

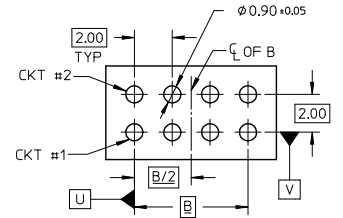
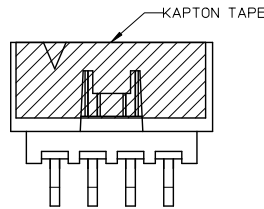
8 TO 12 CIRCUITS



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



SECTION Y-Y



NOTES:

1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50MM SQ PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
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B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)
6. FOR ILLUSTRATION PURPOSE, 8 CIRCUIT HEADER IS SHOWN

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|---|---|--|------------------|---|------------------|------------------------|------|------|----------|------|------|----------|-------|------|---------|------|------|---------|------|------|---------|-----|--------|--|
| | $\sqrt{\text{---}}=0$ $\sqrt{\text{---}}=0$ $\sqrt{\text{---}}=0$ | <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> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ±--- | ±--- | 3 PLACES | ±--- | ±--- | 2 PLACES | ±0.20 | ±--- | 1 PLACE | ±--- | ±--- | 0 PLACE | ±--- | ±--- | MM ONLY | NTS | METRIC | |
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±0.20 | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| | ANGULAR ± 3° | DRAWN BY: GMENARLY 2015/09/29 | DATE: 2015/09/29 | TITLE: MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | | | | | | | | | | | | | | | | | | | | |
| | DRAFT WHERE APPLICABLE WITHIN DIMENSIONS | CHECKED BY: CGOH 2015/10/30 | DATE: 2015/10/30 | DOCUMENT NO. SD-87833-0001 | SHEET NO. 4 OF 9 | | | | | | | | | | | | | | | | | | | |
| | | APPROVED BY: KHLIM 2015/11/03 | DATE: 2015/11/03 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

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 | | | | | | | | | |
| | 87833-0820 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | N.A | 2.16 | |
| | 87833-0821 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | 87833-6320 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | | 3.18 | |
| | 87833-6321 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | 87833-0831 | 87833-0841 | 87833-0851 | 2 | N.A | YES | YES | N.A | 10.65 | 6.00 | 9.00 | 8.85 | N.A | | | | 3.00 | 2.16 | | |
| | 87833-0832 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | 87833-0861 | N.A | N.A | 2 | N.A | YES | YES | N.A | | | | | | | | | | 3.00 | 3.18 | |
| | 87833-0824 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | | | |
| | 87833-0825 | N.A | N.A | 3 | | | | | | | | | | | | | | | 2.92 | |
| 10 | 87832-1019 | N.A | N.A | 1 | | | | | | | | | | | | | | | | |
| | 87833-1020 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | | N.A | 2.16 |
| | 87833-1021 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | 87833-1031 | N.A | N.A | 2 | N.A | N.A | YES | N.A | | | | | | | | | | | 4.00 | 2.16 |
| | 87833-1032 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | N.A | 87833-1041 | 87833-1051 | 2 | N.A | YES | YES | N.A | 12.65 | 8.00 | 11.00 | 10.85 | N.A | | | | | 4.00 | 1.70 | |
| | 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 | | | | | | | | | | | | | | | | |
| | 87833-1220 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | | N.A | 2.16 |
| | 87833-1221 | N.A | N.A | 3 | | | | | | | | | | | | | | | | |
| | 87833-6020 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | | | | | N.A | 3.18 |
| | 87833-1231 | N.A | N.A | 2 | N.A | N.A | YES | N.A | 14.65 | 10.00 | 13.00 | 12.85 | 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 | | | | | | | | | | | | |
| | 87833-1225 | N.A | N.A | 3 | | | | | | | | | | | | | | | | 2.92 |

PLATING OPTIONS:

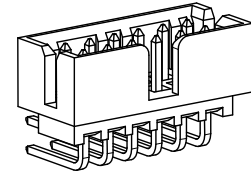
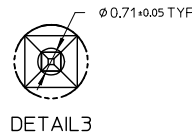
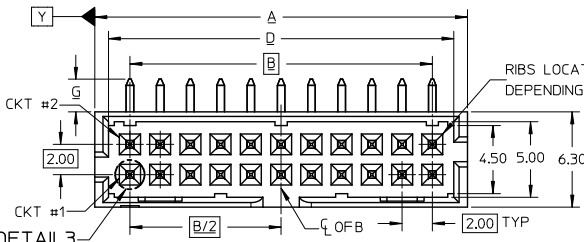
- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin MIN. GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin MIN. GOLD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

| SEE SHEET 12.4.6 IEC NO: S2017-0022 DRAWN BY: GEMENARLY 2016/07/12 CHECKED BY: CHIKO-SCHONG 2016/07/27 APPR: KHLIM 2016/07/28 REV: A2 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | | |
|--|--|--|----------------------------|------------------|---|------------------------|------|------|----------|------|------|----------|-------|------|---------|------|------|---------|------|------|---|-----|--------|--|
| | $\nabla=0$ $\nabla=0$ $\nabla=0$ | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±---</td> <td>±---</td> </tr> <tr> <td>3 PLACES</td> <td>±---</td> <td>±---</td> </tr> <tr> <td>2 PLACES</td> <td>±0.20</td> <td>±---</td> </tr> <tr> <td>1 PLACE</td> <td>±---</td> <td>±---</td> </tr> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </table> | | mm | INCH | 4 PLACES | ±--- | ±--- | 3 PLACES | ±--- | ±--- | 2 PLACES | ±0.20 | ±--- | 1 PLACE | ±--- | ±--- | 0 PLACE | ±--- | ±--- | MM ONLY DRAWN BY: GEMENARLY DATE: 2015/09/29 CHECKED BY: CGOH DATE: 2015/10/30 APPROVED BY: KHLIM DATE: 2015/11/03 | NTS | METRIC | |
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±0.20 | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE | ±--- | ±--- | | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ± 3° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87833-0001 | SHEET NO. 5 OF 9 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | |

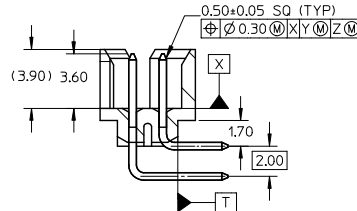
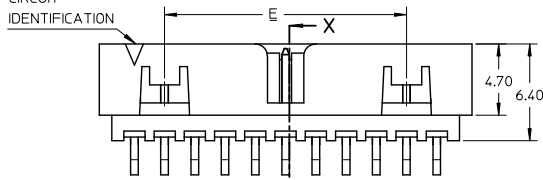
ib_frame_A3_P_AM_T Rev. G 2012/01/11 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

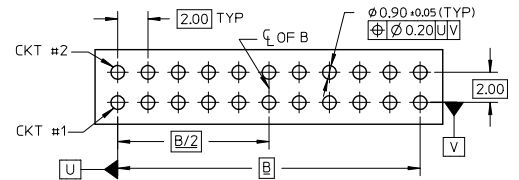
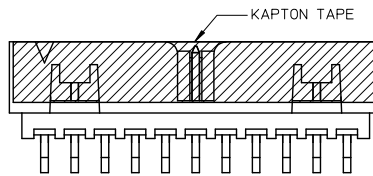
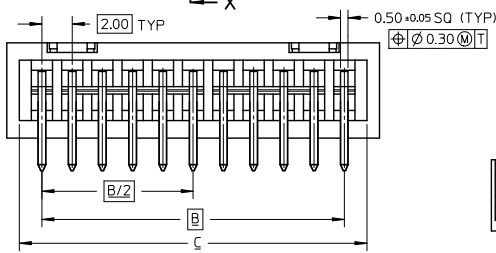
14 TO 50 CIRCUITS



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



SECTION X-X



NOTES:

1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50MM SQ PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. 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)
6. FOR ILLUSTRATION PURPOSE, 22 CIRCUITS HEADER IS SHOWN

| | | | | | | | | | | |
|--|--------------------------------------|--|----------------------|----------------------------|--------------------|---|------------------------|------------------------|--|--|
| EDIT NOTE 4 EC NO: S2017-0022 DRAWN BY: GMENARLY 2016/07/27 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 | QUALITY SYMBOLS ▽=0 ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± --- | DRAWN BY GMENARLY | DATE 2015/09/29 | TITLE MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | | | | |
| | | 2 PLACES ± 0.20 ± --- | 1 PLACE ± --- ± --- | CHECKED BY CGOH | DATE 2015/10/30 | molex | | | | |
| | | 0 PLACE ± --- ± --- | ANGULAR ± 3° | APPROVED BY KHLIM | DATE 2015/11/03 | | | | | |
| 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 | | | | | | | | |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

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 | | | | | 16.65 | 12.00 | 15.00 | 14.85 | 8.00 | N.A | 2.16 |
| | 87833-1420 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | 3.18 |
| | 87833-1421 | N.A | N.A | 3 | | | | | | | | | | | 3.50 |
| | 87833-5320 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | |
| | 87833-5321 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | |
| 16 | 87833-1619 | N.A | N.A | 1 | | | | | 18.65 | 14.00 | 17.00 | 16.85 | 10.00 | N.A | 2.16 |
| | 87833-1620 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | 3.18 |
| | 87833-1621 | N.A | N.A | 3 | | | | | | | | | | | |
| | 87833-6120 | N.A | 87833-7120 | 2 | YES | N.A | YES | YES | | | | | | | |
| 18 | 87833-1819 | N.A | N.A | 1 | | | | | 20.65 | 16.00 | 19.00 | 18.85 | 12.00 | N.A | 2.16 |
| | 87833-1820 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | 3.18 |
| | 87833-1821 | N.A | N.A | 3 | | | | | | | | | | | |
| | 87833-6220 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | |
| 20 | 87833-2019 | N.A | N.A | 1 | | | | | 22.65 | 18.00 | 21.00 | 20.85 | 14.00 | N.A | 2.16 |
| | 87833-2020 | N.A | 87833-7220 | 2 | YES | N.A | YES | YES | | | | | | | 3.18 |
| | 87833-2021 | N.A | N.A | 3 | | | | | | | | | | | 3.50 |
| | 87833-6520 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | |
| | 87833-6521 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | |
| | 87833-2036 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | |
| 22 | 87833-2219 | N.A | N.A | 1 | | | | | 24.65 | 20.00 | 23.00 | 22.85 | 16.00 | N.A | 2.16 |
| | 87833-2220 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | |
| | 87833-2221 | N.A | N.A | 3 | | | | | | | | | | | |
| 24 | 87833-2419 | N.A | N.A | 1 | | | | | 26.65 | 22.00 | 25.00 | 24.85 | 18.00 | N.A | 2.16 |
| | 87833-2420 | N.A | 87833-7020 | 2 | YES | N.A | YES | YES | | | | | | | 3.50 |
| | 87833-2421 | N.A | N.A | 3 | | | | | | | | | | | 3.27 |
| | 87833-2436 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | |
| | 87833-6920 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | |

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.

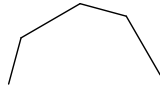
| | | | | | | |
|---|--|---|--|--------------|--|--|
| SEE SHEET 1.2.4.6 EC NO. S2017-0022 DRAWN:HEARLY 2016/07/17 CHKD:SCHEONG 2016/07/27 APPR:KILLIM 2016/07/28 REV DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | $\nabla=0$ $\nabla=0$ $\nabla=0$ | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3° | MM ONLY | NTS | METRIC | <input checked="" type="checkbox"/> THIRD ANGLE PROJECTION |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY DATE GMENARLY 2015/09/29 CHECKED BY DATE CGOH 2015/10/30 APPROVED BY DATE KHLIM 2015/11/03 | TITLE | MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | |
| | A2 | | MATERIAL NO. SEE TABLE SIZE A3 | DOCUMENT NO. | SD-87833-0001 SHEET NO. 7 OF 9 | |

10 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

26 TO 38 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) | |
| 26 | 87833-2619 | N.A | N.A | 1 | | | | | 28.65 | 24.00 | 27.00 | 26.85 | 20.00 | N.A | 2.16 | |
| | 87833-2620 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-2621 | N.A | N.A | 3 | | | | | | | | | | | | |
| | 87833-2636 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | | 3.50 |
| 28 | 87833-2819 | N.A | N.A | 1 | | | | | 30.65 | 26.00 | 29.00 | 28.85 | 22.00 | N.A | 2.16 | |
| | 87833-2820 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-2821 | N.A | N.A | 3 | | | | | | | | | | | | |
| | 87833-6620 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | 3.18 |
| 30 | 87832-3019 | N.A | N.A | 1 | | | | | 32.65 | 28.00 | 31.00 | 30.85 | 24.00 | N.A | 2.16 | |
| | 87833-3020 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-3021 | N.A | N.A | 3 | | | | | | | | | | | | |
| | 87833-6720 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | 3.18 |
| | 87833-6721 | N.A | N.A | 3 | YES | N.A | YES | YES | | | | | | | | 3.50 |
| 32 | 87833-3219 | N.A | N.A | 1 | | | | | 34.65 | 30.00 | 33.00 | 32.85 | 26.00 | N.A | 2.16 | |
| | 87833-3220 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-3221 | N.A | N.A | 3 | | | | | | | | | | | | |
| 34 | 87833-3419 | N.A | N.A | 1 | | | | | 36.65 | 32.00 | 35.00 | 34.85 | 28.00 | N.A | 2.16 | |
| | 87833-3420 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 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 | | | | | 38.65 | 34.00 | 37.00 | 36.85 | 30.00 | N.A | 2.16 | |
| | 87833-3620 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-3621 | N.A | N.A | 3 | | | | | | | | | | | | |
| 38 | 87833-3819 | N.A | N.A | 1 | | | | | 40.65 | 36.00 | 39.00 | 38.85 | 32.00 | N.A | 2.16 | |
| | 87833-3820 | N.A | N.A | 2 | YES | N.A | YES | YES | | | | | | | | |
| | 87833-3821 | 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.

| | | | | | | | | | |
|--|---------------------|---------------------------------------|--------------|----------------------------|---------------------------|-------------------------------|---|------------------------|--|
| SEE SHEET 1246 IEC NO. S2017-0022 DRAWN BY: GEMENARLY 2016/07/27 CHECKED BY: CHYK-SCHONG 2016/07/27 APPR: KHLIM 2016/07/28 REV: A2 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | | mm | INCH | DRAWN BY GEMENARLY | DATE 2015/09/29 | TITLE MILLIGRID 2MM PITCH, SMT R/A SHROUDED HEADER | | |
| | | 4 PLACES | ±--- | ±--- | CHECKED BY CGOH | DATE 2015/10/30 | | | |
| | | 3 PLACES | ±--- | ±--- | APPROVED BY KHLIM | DATE 2015/11/03 | | | |
| | | | ANGULAR ± 3° | | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87833-0001 | | SHEET NO. 8 OF 9 | |
| 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 | | | | | | | | | |

ib_frame_A3_P_AM_T Rev. G 2012/01/11 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

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 | YES | N.A | YES | YES | 42.65 | 38.00 | 41.00 | 40.85 | 34.00 | N.A | 2.16 |
| | 87833-4020 | N.A | N.A | 2 | | | | | | | | | | | |
| | 87833-4021 | N.A | N.A | 3 | | | | | | | | | | | |
| 42 | 87833-4219 | N.A | N.A | 1 | YES | N.A | YES | YES | 44.65 | 40.00 | 43.00 | 42.85 | 36.00 | N.A | 2.16 |
| | 87833-4220 | N.A | N.A | 2 | | | | | | | | | | | |
| | 87833-4221 | N.A | N.A | 3 | | | | | | | | | | | |
| 44 | 87833-4419 | N.A | N.A | 1 | YES | N.A | YES | YES | 46.65 | 42.00 | 45.00 | 44.85 | 38.00 | N.A | 2.16 |
| | 87833-4420 | N.A | N.A | 2 | | | | | | | | | | | |
| | 87833-4421 | N.A | N.A | 3 | | | | | | | | | | | |
| | 87833-4424 | N.A | N.A | 2 | N.A | N.A | YES | YES | | | | | | | |
| | 87833-4425 | N.A | N.A | 3 | | | | | | | | | | | |
| 46 | 87833-4619 | N.A | N.A | 1 | YES | N.A | YES | YES | 48.65 | 44.00 | 47.00 | 46.85 | 40.00 | N.A | 2.16 |
| | 87833-4620 | N.A | N.A | 2 | | | | | | | | | | | |
| | 87833-4621 | N.A | N.A | 3 | | | | | | | | | | | |
| 48 | 87833-4819 | N.A | N.A | 1 | YES | N.A | YES | YES | 50.65 | 46.00 | 49.00 | 48.85 | 42.00 | N.A | 2.16 |
| | 87833-4820 | N.A | N.A | 2 | | | | | | | | | | | |
| | 87833-4821 | N.A | N.A | 3 | | | | | | | | | | | |
| 50 | 87833-5019 | N.A | N.A | 1 | YES | N.A | YES | YES | 52.65 | 48.00 | 51.00 | 50.85 | 44.00 | N.A | 0.15 |
| | 87833-5020 | N.A | N.A | 2 | | | | | | | | | | | |
| | 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.

| SEE SHEET 1.2.4.6 EC NO: S2017-0022 DRAWN BY: GEMENARLY 2016/07/17 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | | |
|---|--|---|-----------------|-------|--------------|------------------------|-------|-------|----------|-------|-------|----------|--------|-------|---------|-------|-------|---------|-------|-------|---------|-----|--------|--|
| | $\nabla=0$ $\nabla=0$ $\nabla=0$ | <table border="1"> <tr><th colspan="2">mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>2 PLACES</td><td>± 0.20</td><td>± ---</td></tr> <tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr> <tr><td>0 PLACE</td><td>± ---</td><td>± ---</td></tr> </table> | mm | | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.20 | ± --- | 1 PLACE | ± --- | ± --- | 0 PLACE | ± --- | ± --- | MM ONLY | NTS | METRIC | |
| | mm | | INCH | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.20 | ± --- | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | |
| 0 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | |
| | ANGULAR ± 3° | | | | | | | | | | | | | | | | | | | | | | | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | | | | | | | | | | | | | | | | | | | | | |

MILLIGRID
 2MM PITCH, SMT
 R/A SHROUDED HEADER
molex

DOCUMENT NO. SD-87833-0001
 SHEET NO. 9 OF 9
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