

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0878910408](#)
Status: **Active**
Overview: [kk](#)
Description: 2.54mm (.100") Pitch KK® Header, Through Hole, Vertical, 4 Circuit, 2.50µm (100µ") Tin (Sn) Overall Plating, Tray Packaging, Lead-free

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-87920-019 \(PDF\)](#)

General

| | |
|----------------|-------------------------------|
| Product Family | PCB Headers |
| Series | 87891 |
| Application | Board-to-Board, Wire-to-Board |
| Overview | kk |
| Product Name | KK® |

Physical

| | |
|--------------------------------|-----------------|
| Breakaway | Yes |
| Circuits (Loaded) | 4 |
| Circuits (maximum) | 4 |
| Color - Resin | Black |
| First Mate / Last Break | No |
| Glow-Wire Compliant | No |
| Guide to Mating Part | No |
| Keying to Mating Part | None |
| Lock to Mating Part | None |
| Mated Height (in) | 1.000 In |
| Mated Height (mm) | 25.54 mm |
| Material - Metal | Copper Alloy |
| Material - Plating Mating | Tin |
| Material - Plating Termination | Nickel |
| Material - Resin | Nylon |
| Number of Rows | 1 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.117 In |
| PC Tail Length (mm) | 2.97 mm |
| PCB Locator | No |
| PCB Retention | None |
| PCB Thickness Recommended (in) | 0.063 In |
| PCB Thickness Recommended (mm) | 1.60 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.100 In |
| Pitch - Mating Interface (mm) | 2.54 mm |
| Pitch - Term. Interface (in) | 0.100 In |
| Pitch - Term. Interface (mm) | 2.54 mm |
| Plating min: Mating (µin) | 98 |
| Plating min: Mating (µm) | 2.50 |
| Plating min: Termination (µin) | 49 |
| Plating min: Termination (µm) | 1.25 |
| Polarized to Mating Part | No |
| Polarized to PCB | No |
| Robotic Placement | None |
| Shrouded | No |
| Stackable | No |
| Temperature Range - Operating | -55°C to +105°C |

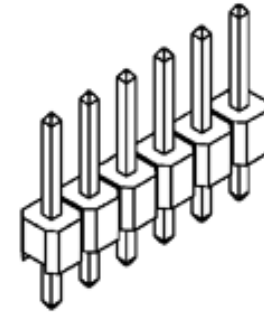


image - Reference only

Series

EU RoHS

**ELV and RoHS
Compliant**
**REACH SVHC
Not Reviewed**
**Halogen-Free
Status**

China RoHS



**Need more information on product
environmental compliance?**

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[87891Series](#)

Mates With

KK® PCB Receptacles [4455](#). SL™ IDT Housings [70430](#) , [7720](#), [70400](#). C-Grid® PCB Receptacles [90147](#), [90148](#)

Termination Interface: Style

Through Hole

Electrical

Current - Maximum per Contact

3A

Voltage - Maximum

250V

Material Info

Reference - Drawing Numbers

Packaging Specification

PK-89990-489

Product Specification

PS-87920-019

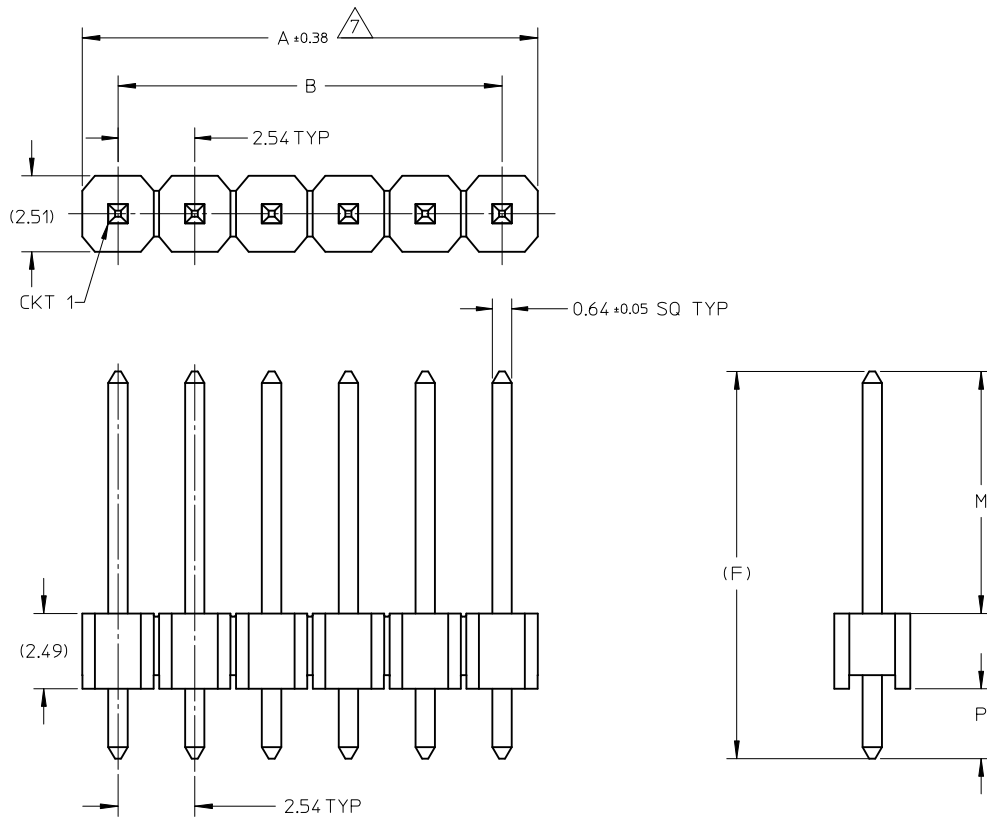
Sales Drawing

SD-87891-001

This document was generated on 05/25/2010

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ASSEMBLY WITHOUT CAP

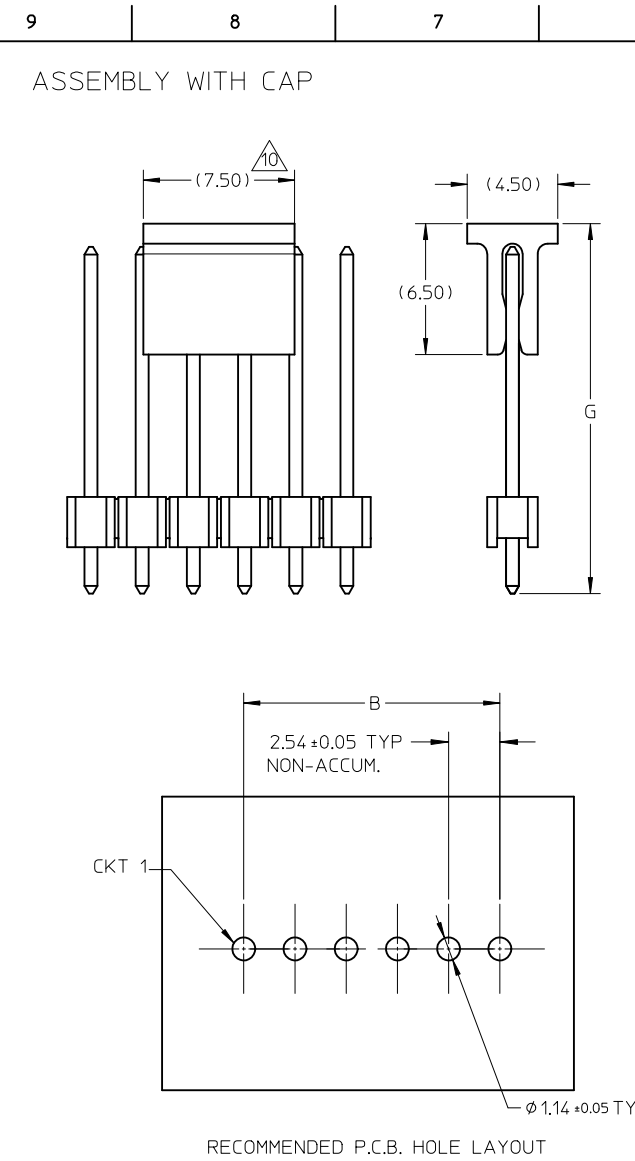


NOTES

1. MATERIAL:
 - HSG: NYLON, GLASS-FILLED, UL94V-0 COLOR: BLACK
 - PIN: 0.64MM SQ, COPPER ALLOY
2. PLATING TYPE:
 - (1) GOLD FLASH OVER
1.25µm MIN. NICKEL OVERALL.
 - (2) GOLD FLASH ON CONTACT AND
2.50µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
 - (3) 0.38µm MIN. GOLD PLATE ON CONTACT AND
2.00µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
 - (4) 0.75µm MIN. GOLD PLATE ON CONTACT AND
2.00µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
 - (5) 2.50µm MIN TIN OVERALL
1.25µm MIN NICKEL OVERALL
3. PRODUCT SPECIFICATION: PS-87920-019
4. PACKAGING TYPE: SEE TABLE
5. WAFER TO BE FLAT WITHIN 0.003 mm/mm
6. RECOMMENDED PCB THICKNESS IS 1.60mm±0.10
7. IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE
8. THE ABOVE CKT 6 IS FOR ILLUSTRATION PURPOSE ONLY
9. PACKAGING SPECIFICATION:
 - TRAY: PK-89990-489
 - BULK: PK-89990-491
10. CAP TO BE PLACED AT THE CENTER OF THE CONNECTOR.

| | | | | | | | | | | | | |
|--|--------------------|-------------------------------------|---|----------------------|----------------------------|--------------------|--|------------------------|------------------------------|--|---------------------|--|
| CN-0072.878910751/0851 EC NO: S2010-0506 DRWN:SKANG 2009/12/16 CHKD:ATSEE 2010/04/26 APPR:MLONG 2010/04/27 | DESCRIPTION REV | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | | |
| | | $F_A = 0$ $F_C = 0$ $F_P = 0$ | mm | INCH | DRAWN BY KCHO | DATE 2004/03/24 | TITLE CUSTOM HEADER 2.54MM PITCH, SINGLE ROW SINGLE WAFER, T/H HEADER | | | | | |
| | | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± --- | CHECKED BY PTL IM | DATE 2004/04/02 | MOLEX INCORPORATED | | | | | |
| | | | 2 PLACES ± 0.2 ± --- | 1 PLACE ± --- ± --- | APPROVED BY SCLOW | DATE 2004/04/08 | MATERIAL NO. SEE TABLE | | DOCUMENT NO. SD-87891-001 | | SHEET NO. 1 OF 3 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | |

| CKT SIZE | DIMENSION | |
|----------|-----------|-------|
| | A | B |
| 02 | 5.08 | 2.54 |
| 03 | 7.62 | 5.08 |
| 04 | 10.16 | 7.62 |
| 05 | 12.70 | 10.16 |
| 06 | 15.24 | 12.70 |
| 07 | 17.78 | 15.24 |
| 08 | 20.32 | 17.78 |
| 09 | 22.86 | 20.32 |
| 10 | 25.40 | 22.86 |
| 11 | 27.94 | 25.40 |
| 12 | 30.48 | 27.94 |
| 13 | 33.02 | 30.48 |
| 14 | 35.56 | 33.02 |
| 15 | 38.10 | 35.56 |
| 16 | 40.64 | 38.10 |
| 17 | 43.18 | 40.64 |
| 18 | 45.72 | 43.18 |
| 19 | 48.26 | 45.72 |
| 20 | 50.80 | 48.26 |
| 21 | 53.34 | 50.80 |
| 22 | 55.88 | 53.34 |
| 23 | 58.42 | 55.88 |
| 24 | 60.96 | 58.42 |
| 25 | 63.50 | 60.96 |
| 26 | 66.04 | 63.50 |
| 27 | 68.58 | 66.04 |
| 28 | 71.12 | 68.58 |
| 29 | 73.66 | 71.12 |
| 30 | 76.20 | 73.66 |
| 31 | 78.74 | 76.20 |
| 32 | 81.28 | 78.74 |
| 33 | 83.82 | 81.28 |
| 34 | 86.36 | 83.82 |
| 35 | 88.90 | 86.36 |
| 36 | 91.44 | 88.90 |
| 37 | 93.98 | 91.44 |
| 38 | 96.52 | 93.98 |
| 39 | 99.06 | 96.52 |
| 40 | 101.60 | 99.06 |



| ASSY W/CAP IN T&R | PART NO. IN TRAY PACKAGING | PART NO. IN BULK PACKAGING | CKT SIZE | VOID PIN | KINK PIN | G | DIMENSION | | | PLATING TYPE |
|-------------------|----------------------------|----------------------------|----------|----------|----------|-------|-----------|------------|-------------|--------------|
| | | | | | | | OAL | MATING END | SOLDER TAIL | |
| | | | | | | | F | M | P | |
| - | 87891-0200 | - | 02 | - | - | - | 11.76 | 6.09 | 3.18 | 5 |
| - | 87891-0207 | - | 02 | - | - | - | 9.80 | 4.00 | 3.31 | 5 |
| - | 87891-0208 | - | 02 | - | - | - | 7.49 | 4.00 | 1.00 | 2 |
| - | 87891-0209 | - | 02 | - | - | - | 10.80 | 5.08 | 3.23 | 5 |
| - | 87891-0210 | - | 02 | - | - | - | 31.00 | 25.54 | 2.97 | 5 |
| - | 87891-0402 | - | 04 | 2 | - | - | 10.80 | 5.89 | 2.41 | 5 |
| - | 87891-0411 | - | 04 | - | - | - | 10.09 | 4.00 | 3.60 | 5 |
| - | 87891-0407 | - | 04 | - | - | - | 9.80 | 4.00 | 3.31 | 5 |
| - | 87891-0408 | - | 04 | - | - | - | 31.00 | 25.54 | 2.97 | 5 |
| - | 87891-0500 | - | 05 | - | - | - | 11.94 | 6.10 | 3.30 | 5 |
| - | 87891-0501 | - | 05 | - | - | - | 13.62 | 8.08 | 3.05 | 5 |
| - | 87891-0502 | - | 05 | 2 | - | - | 10.80 | 5.89 | 2.41 | 5 |
| - | 87891-0503 | - | 05 | 2 | - | - | 45.00 | 13.51 | 29.00 | 5 |
| - | 87891-0504 | - | 05 | 2 | - | - | 45.00 | 13.51 | 29.00 | 3 |
| - | 87891-0507 | - | 05 | 4 | - | - | 10.92 | 5.84 | 2.59 | 3 |
| - | 87891-0516 | - | 05 | - | - | - | 32.49 | 16.00 | 14.00 | 4 |
| - | 87891-0602 | - | 06 | - | - | - | 12.80 | 8.00 | 2.31 | 5 |
| - | 87891-0700 | - | 07 | - | - | - | 11.94 | 6.10 | 3.30 | 5 |
| - | 87891-0751 | - | 07 | - | - | - | 13.74 | 8.00 | 3.25 | 5 |
| - | 87891-0851 | - | 08 | - | - | - | 13.74 | 8.00 | 3.25 | 5 |
| - | - | 87891-2601 | 26 | 4, 7, 17 | - | - | 11.13 | 5.59 | 3.05 | 3 |
| 87891-1817 | - | - | 18 | - | - | 18.36 | 17.20 | 13.21 | 1.50 | 5 |
| 87891-1818 | - | - | 18 | - | - | 18.36 | 17.20 | 13.21 | 1.50 | 3 |
| 87891-2817 | - | - | 28 | - | - | 18.36 | 17.20 | 13.21 | 1.50 | 5 |
| 87891-2818 | - | - | 28 | - | - | 18.36 | 17.20 | 13.21 | 1.50 | 3 |

RECOMMENDED P.C.B. HOLE LAYOUT

CN-0072.878910751/0851
 EC NO: S2010-0506
 DRWN:SKANG 2009/12/16
 CHYD:ATSEE 2010/04/26
 APPR:MLONG 2010/04/27

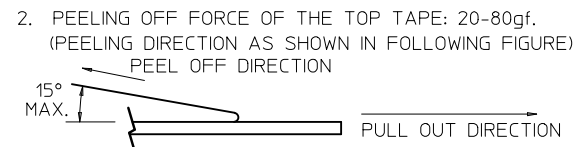
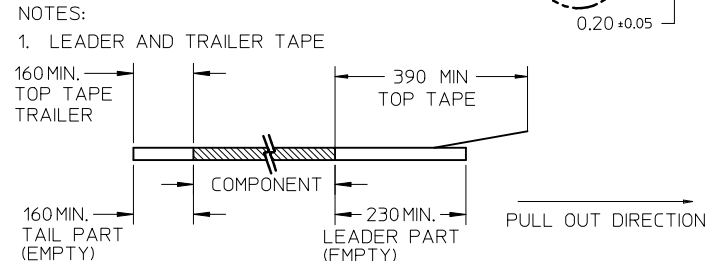
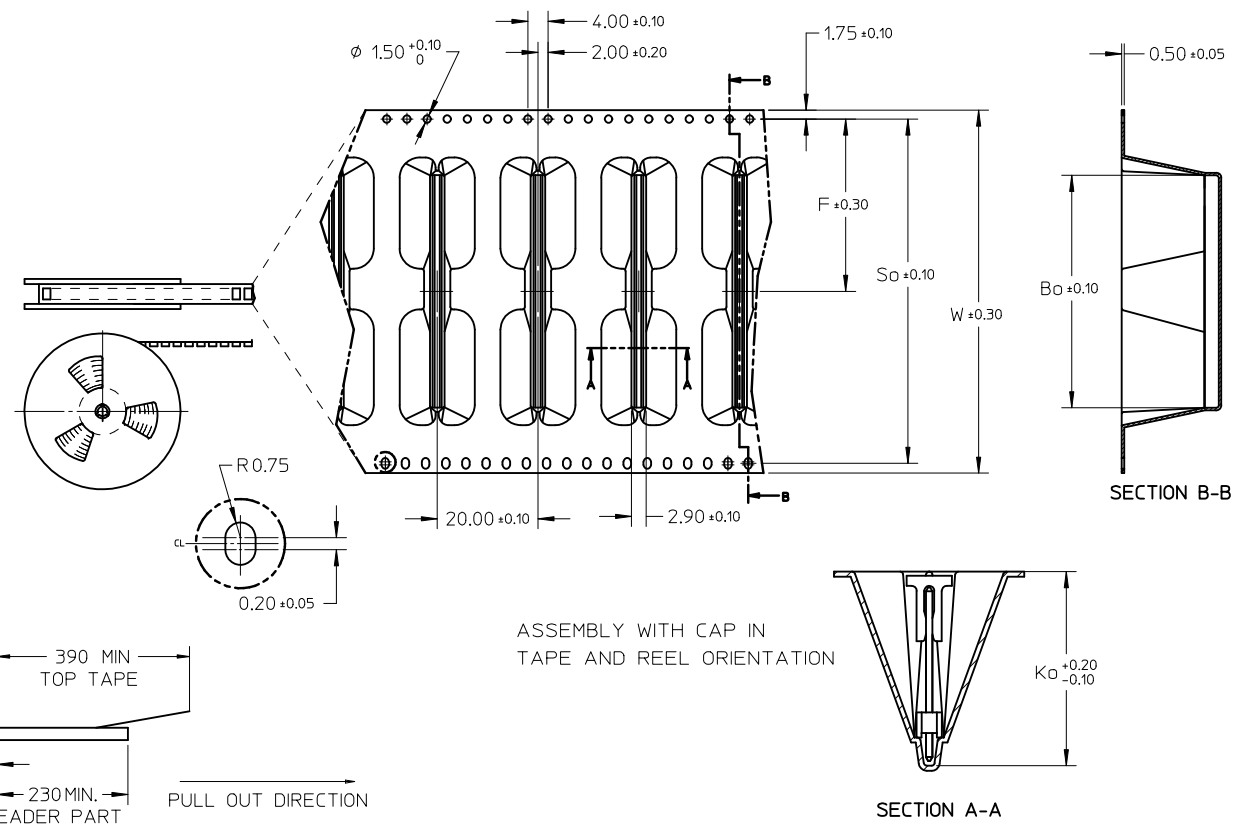
| QUALITY SYMBOLS | DESCRIPTION |
|-----------------|-------------|
| $\nabla_A = 0$ | |
| $\nabla_C = 0$ | |
| $\nabla_P = 0$ | |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|---------------------------------------|-------|
| | mm |
| 4 PLACES | ± --- |
| 3 PLACES | ± --- |
| 2 PLACES | ± 0.2 |
| 1 PLACE | ± --- |
| ANGULAR ± 3 ° | |

| DIMENSION STYLE | |
|-----------------|------------|
| MM ONLY | |
| DRAWN BY | DATE |
| KCHO | 2004/03/24 |
| CHECKED BY | DATE |
| PTL IM | 2004/04/02 |
| APPROVED BY | DATE |
| SCLOW | 2004/04/08 |
| MATERIAL NO. | |
| SEE TABLE | |

| SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|---|--------------|------------------------|
| NTS | METRIC | |
| CUSTOM HEADER 2.54MM PITCH, SINGLE ROW SINGLE WAFER, T/H HEADER | | |
| MOLEX INCORPORATED | | |
| DOCUMENT NO. | | SHEET NO. |
| SD-87891-001 | | 2 OF 3 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

| | | | | | |
|-----|-------|-------|-------|-------|-------|
| CKT | F | So | W | Bo | Ko |
| 18 | 34.20 | 68.40 | 72.00 | 46.12 | 19.25 |
| 28 | 42.20 | 84.40 | 88.00 | 71.52 | 19.25 |



- PACKAGING STANDARD IS AS PER EIA-481.
- TAPE & REEL QUANTITY = 230 PCS/REEL
- THE TAPE IS TREATED FOR ANTI-STATIC.

ASSEMBLY WITH CAP IN TAPE AND REEL ORIENTATION

| | | | | | | | | | | |
|--|--|---|-------------|----------------------------|--------------------|------------------------|---|---------------------------|--|--|
| CN-0072.878910751/0851 EC NO: S2010-0506 DRWN:SKANG 2009/12/16 CHKD:ATSEE 2010/04/26 APPR:MLONG 2010/04/27 | QUALITY SYMBOLS $F_{\Delta} = 0$ $F_{\square} = 0$ $F_{\nabla} = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | | mm | INCH | DRAWN BY | DATE | TITLE | | | |
| | | 4 PLACES | ± --- | ± --- | KCHO | 2004/03/24 | CUSTOM HEADER 2.54MM PITCH, SINGLE ROW SINGLE WAFER, T/H HEADER | | | |
| | | 3 PLACES | ± --- | ± --- | CHECKED BY | DATE | | | | |
| 2 PLACES | ± 0.2 | ± --- | PTL IM | 2004/04/02 | MOLEX INCORPORATED | | | | | |
| 1 PLACE | ± --- | ± --- | APPROVED BY | DATE | | | | | | |
| ANGULAR ± 3 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SCLOW 2004/04/08 | | MATERIAL NO. SEE TABLE | | DOCUMENT NO. SD-87891-001 | | |
| SIZE A3 | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | |