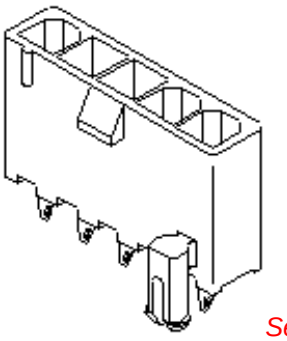
This document was generated on 04/09/2010

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

**Part Number:** 0444720502

**Status:** Active

**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Single Row, Vertical, with Snap-in Plastic Peg PCB Lock, 5 Circuits, PA Polyamide Nylon 6/6 94V-0, with Drain Holes



*Series image - Reference only*

**Documents:**

3D Model
Drawing (PDF)
Packaging Specification (PDF)
Product Specification PS-44476-001 (PDF)
RoHS Certificate of Compliance (PDF)

## Agency Certification

| | |
|---|---|
| CSA | LR19980 |
| UL | E29179 |

## General

| | |
|---|---|
| Product Family | PCB Headers |
| Series | 44472 |
| Application | Wire-to-Board |
| Comments | Square Pin\|Solder Type |
| Product Name | Mini-Fit HCS™ |

## Physical

| | |
|---|---|
| Breakaway | No |
| Circuits (Loaded) | 5 |
| Circuits (maximum) | 5 |
| Color - Resin | Natural (White) |
| Durability (mating cycles max) | 30 |
| Flammability | 94V-0 |
| Glow-Wire Compliant | No |
| Material - Metal | High Performance Alloy (HPA) |
| Material - Plating Mating | Tin |
| Material - Plating Termination | Tin |
| Material - Resin | Nylon |
| Number of Rows | 1 |
| Orientation | Vertical |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.070 In |
| PCB Thickness Recommended (mm) | 1.80 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.165 In |
| Pitch - Mating Interface (mm) | 4.20 mm |
| Plating min: Mating (µin) | 101.6 |
| Plating min: Mating (µm) | 2.54 |
| Plating min: Termination (µin) | 101.6 |
| Plating min: Termination (µm) | 2.54 |
| Polarized to PCB | Yes |
| Shrouded | Partial |
| Stackable | No |
| Surface Mount Compatible (SMC) | No |
| Temperature Range - Operating | -40°C to +105°C |
| Termination Interface: Style | Through Hole |

## Electrical

| | |
|---|---|
| Current - Maximum per Contact | 11A |
| Voltage - Maximum | 600V |

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

**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**
44472Series

**Mates With**
5557

## Solder Process Data

| | |
|---|---|
| Duration at Max. Process Temperature (seconds) | 5 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 240 |

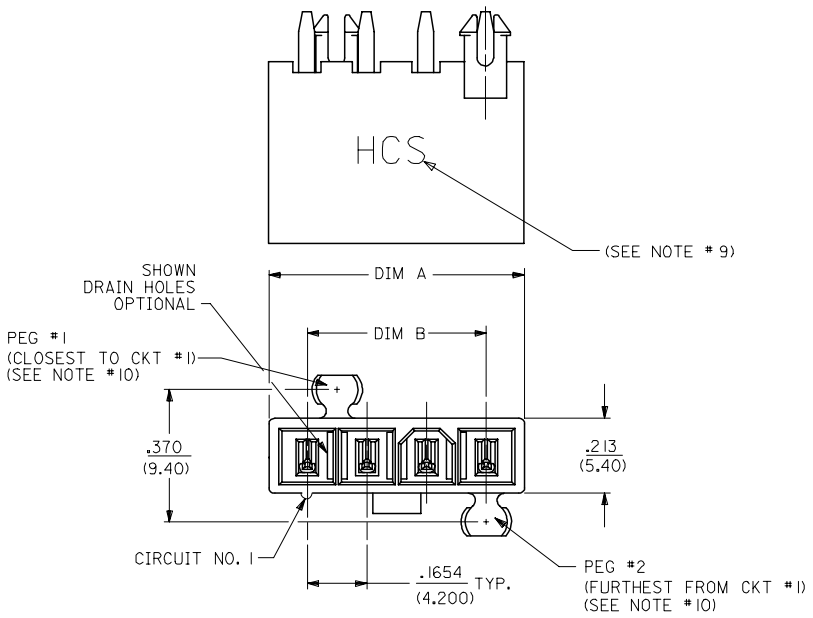
## Material Info

## Reference - Drawing Numbers

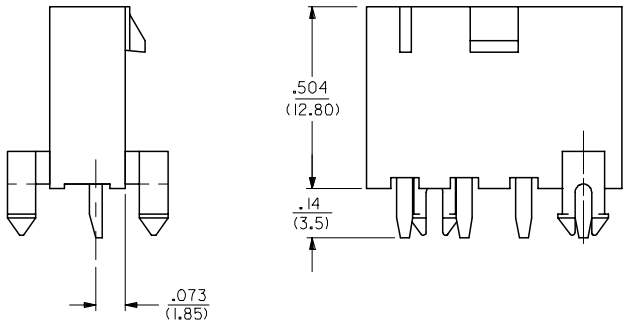
| | |
|---|---|
| Product Specification | PS-44476-001, RPS-44476-001 |
| Sales Drawing | SDA-44472-**** |

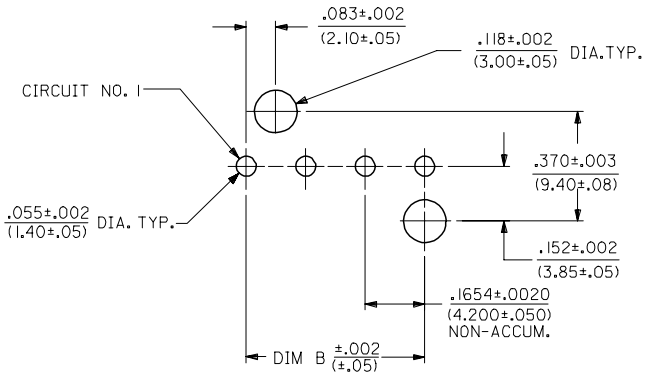
This document was generated on 04/09/2010
**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

| CKT SIZE | DIM A | DIM B |
|---|---|---|
| 4 | .709 (18.00) | .496 (12.60) |
| 5 | .874 (22.20) | .661 (16.80) |
| 6 | 1.039 (26.40) | .827 (21.00) |
| 7 | 1.205 (30.60) | .992 (25.20) |
| 8 | 1.370 (34.80) | 1.157 (29.40) |
| 9 | 1.535 (39.00) | 1.323 (33.60) |
| 10 | 1.701 (43.20) | 1.488 (37.80) |
| 11 | 1.866 (47.40) | 1.654 (42.00) |
| 12 | 2.031 (51.60) | 1.819 (46.20) |




NOTES:
1. MATERIALS:
   HOUSING:
   "1"=NYLON 6/6, UL94 V-2, COLOR: NATURAL
   "2"=NYLON 6/6, UL94 V-0, COLOR: NATURAL
   "3"=NYLON 6/6, UL94 V-2, COLOR: BLACK
   TERMINALS:
   COPPER ALLOY
2. TERMINAL PLATING:
   "x1"=.000100/(0.00254) MIN. BRIGHT TIN OVER .000050/(0.00127) MIN. NICKEL
   "x2"=.000030/(0.00076) MIN. SELECT GOLD AND .000100/(0.00254) MIN. SELECT MATTE TIN OVER .000050/(0.00127) MIN. NICKEL OVERALL
   "3"=.000100/(0.00254) MIN. MATTE TIN OVER .000050/(0.00127) MIN. NICKEL
   *THE PRIMARY SHIPPING CARTON WILL BE LABELED "ELV AND RoHS COMPLIANT"; CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
3. PRODUCT SPECIFICATION: PS-44476-001
4. PACKAGING: SEE CHARTS
5. PART MATES WITH MINI-FIT JR. RECEPTACLE NO. 5557.
6. PART IS NOT DESIGNED FOR CURRENT SHARING.
7. PARTS ARE NOT TO BE MATED OR UN-MATED WHILE CIRCUITS ARE LIVE.
8. 44472-2470 ONLY FOR WIDER LOCKING RAMP.
9. PARTS PRODUCED AFTER JULY 1, 2004 WILL HAVE "HCS" MARKING INSTEAD OF BLACK STRIPE.
10. SEE CHART FOR PARTS WITH PEGS REMOVED.
11. PART CONFORMS TO CLASS "B" REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.




RECOMMENDED HOLE LAYOUT FOR
.070/(1.78) MAX. THICK P. C. BOARD
VIEWED FROM COMPONENT SIDE

| | |
|---|---|
| 10 | L |
| 9 | L |
| 8 | L |
| 7 | L |
| 6 | L |
| 5 | L |
| 4 | L |
| 3 | L |
| 2 | L |
| 1 | L |
| SHT | REV |

LEGEND:
44472 - ** **
CIRCUIT SIZE
(04-12 FOR SINGLE ROW)
(02-24 FOR DUAL ROW)
ASSEMBLY VERSION
(01 THRU 49 FOR SINGLE ROW)
(50 THRU 99 FOR DUAL ROW)

SEE SHT. 2 FOR DUAL ROW
* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES
EC NO: UCP2008-0153 2007/09/26
DRWN:LSCHMIDT 2007/09/26
CHKD:ADERR 2007/09/26
APPR:FSMITH 2007/09/26
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± .015 |
| 2 PLACES | ± 0.38 | ± .020 |
| 1 PLACE | ± 0.50 | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

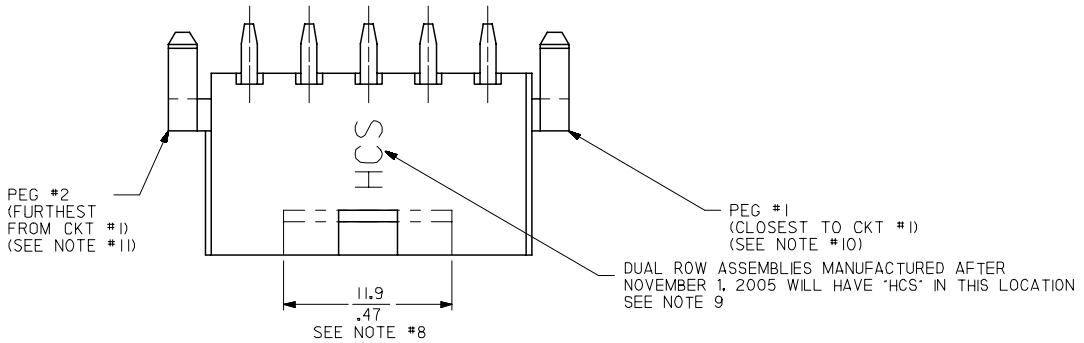
| | | DATE |
|---|---|---|
| DRAWN BY | GEP | 1994/07/25 |
| CHECKED BY | RJF | 1994/07/25 |
| APPROVED BY | RJF | 1994/07/25 |

TITLE: MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW

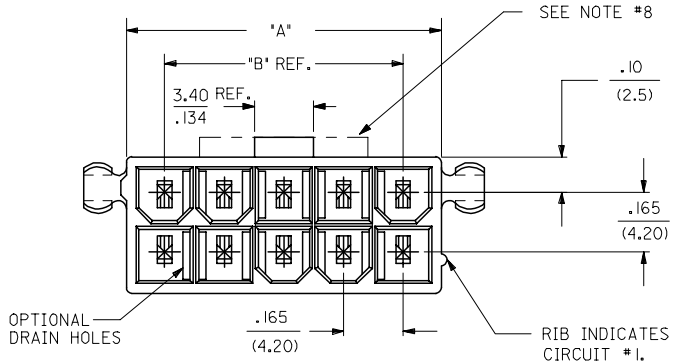
MOLEX INCORPORATED

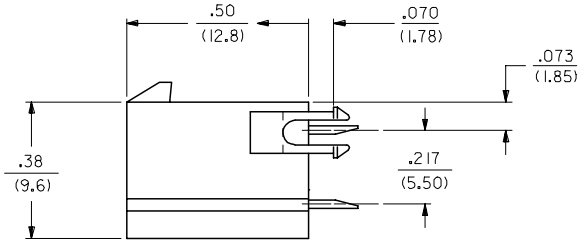
MATERIAL NO.: SEE CHARTS
DOCUMENT NO.: SDA-44472-****
SHEET NO.: 1 OF 10
SIZE: C

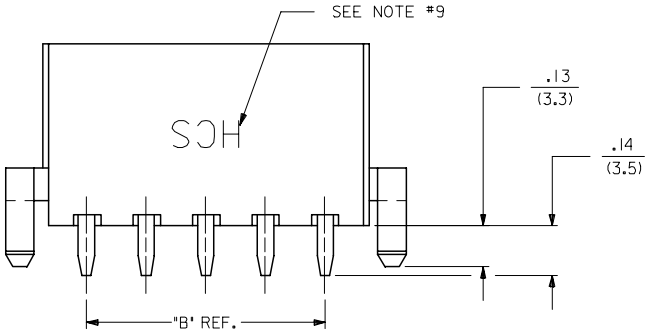
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

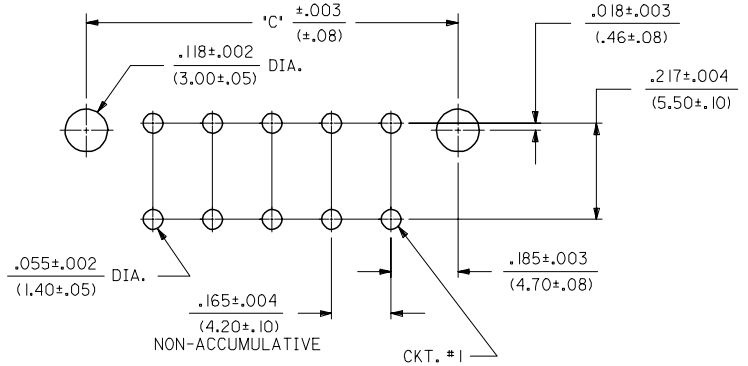



| CIRCUIT SIZE | DIM. "A" | DIM. "B" | DIM. "C" |
|---|---|---|---|
| 2 | .21 (5.4) | — | .370 (9.40) |
| 4 | .38 (9.6) | .17 (4.2) | .535 (13.60) |
| 6 | .54 (13.8) | .33 (8.4) | .701 (17.80) |
| 8 | .71 (18.0) | .50 (12.6) | .866 (22.00) |
| 10 | .87 (22.2) | .66 (16.8) | 1.031 (26.20) |
| 12 | 1.04 (26.4) | .83 (21.0) | 1.197 (30.40) |
| 14 | 1.20 (30.6) | .99 (25.2) | 1.362 (34.60) |
| 16 | 1.37 (34.8) | 1.16 (29.4) | 1.528 (38.80) |
| 18 | 1.54 (39.0) | 1.32 (33.6) | 1.693 (43.00) |
| 20 | 1.70 (43.2) | 1.49 (37.8) | 1.858 (47.20) |
| 22 | 1.87 (47.4) | 1.65 (42.0) | 2.024 (51.40) |
| 24 | 2.03 (51.6) | 1.82 (46.2) | 2.189 (55.60) |




RECOMMENDED HOLE LAYOUT FOR .070/(1.78) MAX. THICK P. C. BOARD

VIEWED FROM COMPONENT SIDE

SEE SHT. 1 FOR SINGLE ROW

STANDARDIZE NOTES
EC NO: UCP2008-0153 2007/09/26
DRWN:LSCHMIDT 2007/09/26
CHKD:ADERR 2007/09/26
APPR:FSMITH 2007/09/26
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± .015 |
| 2 PLACES | ± 0.38 | ± .020 |
| 1 PLACE | ± 0.50 | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | GEP | 1994/07/26 |
| CHECKED BY | RJF | 1994/07/26 |
| APPROVED BY | RJF | 1994/07/26 |

TITLE: MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW

MOLEX INCORPORATED

MATERIAL NO.: SEE CHARTS
DOCUMENT NO.: SDA-44472-****
SHEET NO.: 2 OF 10
SIZE: C

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| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PLATING: | 1 (SEE NOTE 2) | | | | | PLATING: | 1 (SEE NOTE 2) | | | | | PLATING: | 1 (SEE NOTE 2) | | | | | PLATING: | 1 (SEE NOTE 2) | | | | |
| DRAINS: | WITH DRAIN HOLES | | | | | DRAINS: | WITH DRAIN HOLES | | | | | DRAINS: | WITHOUT DRAIN HOLES | | | | | DRAINS: | WITHOUT DRAIN HOLES | | | | |
| PEGS: | WITH PEGS | | | | | PEGS: | WITH PEGS | | | | | PEGS: | WITH PEGS | | | | | PEGS: | WITH PEGS | | | | |
| MAT'L: | 94V-2 [NATURAL] | | | | | MAT'L: | 94V-0 [NATURAL] | | | | | MAT'L: | 94V-2 [NATURAL] | | | | | MAT'L: | 94V-0 [NATURAL] | | | | |
| PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | |
| | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | |
| | 44472-0401 | | | 4 | | X | 44472-0402 | | | 4 | | | 44472-0403 | | | 4 | | X | 44472-0404 | | | 4 | |
| X | 44472-0501 | | | 5 | | | 44472-0502 | | | 5 | | X | 44472-0503 | | | 5 | | | 44472-0504 | | | 5 | |
| X | 44472-0601 | | | 6 | | X | 44472-0602 | | | 6 | | X | 44472-0603 | | | 6 | | X | 44472-0604 | | | 6 | |
| X | 44472-0701 | | | 7 | | X | 44472-0702 | | | 7 | | X | 44472-0703 | | | 7 | | X | 44472-0704 | | | 7 | |
| X | 44472-0801 | | | 8 | | X | 44472-0802 | | | 8 | | X | 44472-0803 | | | 8 | | X | 44472-0804 | | | 8 | |
| X | 44472-0901 | | | 9 | | X | 44472-0902 | | | 9 | | X | 44472-0903 | | | 9 | | X | 44472-0904 | | | 9 | |
| X | 44472-1001 | | | 10 | | X | 44472-1002 | | | 10 | | X | 44472-1003 | | | 10 | | X | 44472-1004 | | | 10 | |
| X | 44472-1101 | | | 11 | | X | 44472-1102 | | | 11 | | X | 44472-1103 | | | 11 | | X | 44472-1104 | | | 11 | |
| X | 44472-1201 | | | 12 | | X | 44472-1202 | | | 12 | | X | 44472-1203 | | | 12 | | X | 44472-1204 | | | 12 | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PLATING: | 2 (SEE NOTE 2) | | | | | PLATING: | 2 (SEE NOTE 2) | | | | | PLATING: | 2 (SEE NOTE 2) | | | | | PLATING: | 2 (SEE NOTE 2) | | | | |
| DRAINS: | WITH DRAIN HOLES | | | | | DRAINS: | WITH DRAIN HOLES | | | | | DRAINS: | WITH DRAIN HOLES | | | | | DRAINS: | WITH DRAIN HOLES | | | | |
| PEGS: | WITHOUT PEGS | | | | | PEGS: | WITHOUT PEGS | | | | | PEGS: | WITHOUT PEGS | | | | | PEGS: | WITH PEGS | | | | |
| MAT'L: | 94V-2 [NATURAL] | | | | | MAT'L: | 94V-0 [NATURAL] | | | | | MAT'L: | 94V-2 [NATURAL] | | | | | MAT'L: | 94V-0 [NATURAL] | | | | |
| PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | | PACKAGING: | PK-5566-002 | | | | |
| | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | | | ITEM NO. | | | CKTS | |
| X | 44472-0405 | | | 4 | | X | 44472-0406 | | | 4 | | X | 44472-0407 | | | 4 | | X | 44472-0408 | | | 4 | |
| X | 44472-0505 | | | 5 | | X | 44472-0506 | | | 5 | | X | 44472-0507 | | | 5 | | X | 44472-0508 | | | 5 | |
| X | 44472-0605 | | | 6 | | X | 44472-0606 | | | 6 | | X | 44472-0607 | | | 6 | | X | 44472-0608 | | | 6 | |
| X | 44472-0705 | | | 7 | | X | 44472-0706 | | | 7 | | X | 44472-0707 | | | 7 | | X | 44472-0708 | | | 7 | |
| X | 44472-0805 | | | 8 | | X | 44472-0806 | | | 8 | | X | 44472-0807 | | | 8 | | X | 44472-0808 | | | 8 | |
| X | 44472-0905 | | | 9 | | X | 44472-0906 | | | 9 | | X | 44472-0907 | | | 9 | | X | 44472-0908 | | | 9 | |
| X | 44472-1005 | | | 10 | | X | 44472-1006 | | | 10 | | X | 44472-1007 | | | 10 | | X | 44472-1008 | | | 10 | |
| X | 44472-1105 | | | 11 | | X | 44472-1106 | | | 11 | | X | 44472-1107 | | | 11 | | X | 44472-1108 | | | 11 | |
| X | 44472-1205 | | | 12 | | X | 44472-1206 | | | 12 | | X | 44472-1207 | | | 12 | | X | 44472-1208 | | | 12 | |

TRAY PACKAGING
EC NO: UCP2008-0153 2007/09/26
DRWN:LSCHMIDT 2007/09/26
CHKD:ADERR 2007/09/26
APPR:FSMITH 2007/09/26
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: ---
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: LEM DATE: 1999/02/26
CHECKED BY: MAB DATE: 1999/02/26
APPROVED BY: RRE DATE: 1999/02/26

TITLE: MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SDA-44472-****
SHEET NO.: 7 OF 10

SIZE: C

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