

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0015977023](#)
Status: **Active**
Overview: [minifit_tpa](#)
Description: 4.20mm (.165") Pitch Mini-Fit TPA™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 2 Circuits, Tin (Sn) Plating, without Drain Holes

Documents:

[3D Model](#) [Product Specification PS-5556-003 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
TUV R72081037
UL E29179

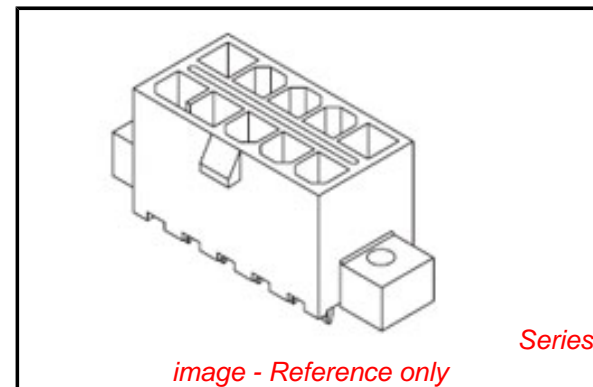
General

Product Family PCB Headers
Series [30069](#)
Application Wire-to-Board
Comments Current = 13A max. per circuit when header is mated to a receptacle loaded with [45750](#) Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex product specification PS-45750-001 for additional current de-rating information.. Square Pin, Solder Type, High Vibration Application

Overview [minifit_tpa](#)
Product Name Mini-Fit TPA™

Physical

Breakaway No
Circuits (Loaded) 2
Circuits (maximum) 2
Color - Resin Black
Durability (mating cycles max) 30
First Mate / Last Break No
Flammability 94V-0
Glow-Wire Compliant No
Guide to Mating Part No
Keying to Mating Part None
Lock to Mating Part Yes
Material - Metal Brass
Material - Plating Mating Tin
Material - Plating Termination Tin
Material - Resin Polyester
Number of Rows 2
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
Pitch - Term. Interface (in) 0.165 In
Pitch - Term. Interface (mm) 4.20 mm
Plating min: Mating (µin) 35



EU RoHS

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

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

[30069Series](#)

Mates With

[30067](#) Mini-Fit TPA™ Receptacle Housing

Use With

Mini-Fit TPA™ Receptacle Housing [30071](#) , [30072](#)

| | |
|--------------------------------|-----------------|
| Plating min: Mating (µm) | 0.90 |
| Plating min: Termination (µin) | 35 |
| Plating min: Termination (µm) | 0.90 |
| Polarized to Mating Part | Yes |
| 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 | 13A |
| Voltage - Maximum | 600V |

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 | 235 |

Material Info

| | |
|-----------------|------------|
| Old Part Number | 30069-02C1 |
|-----------------|------------|

Reference - Drawing Numbers

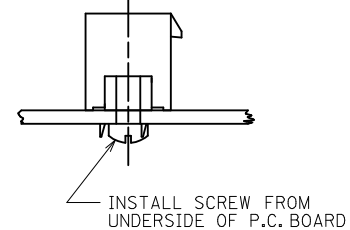
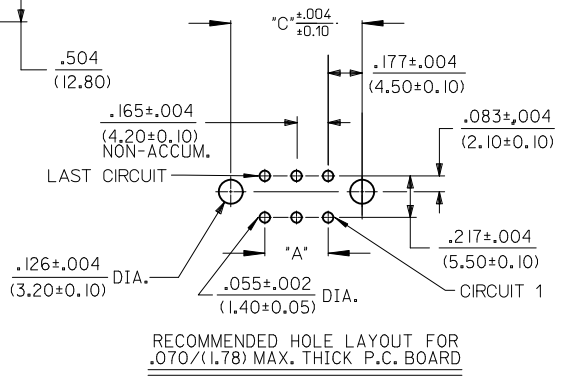
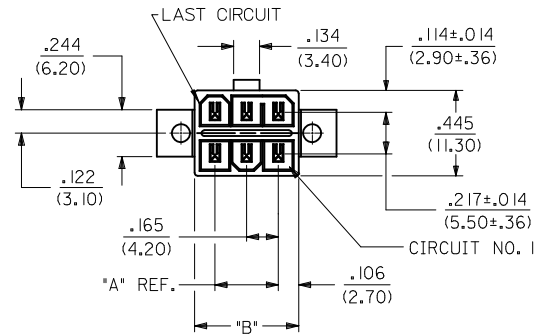
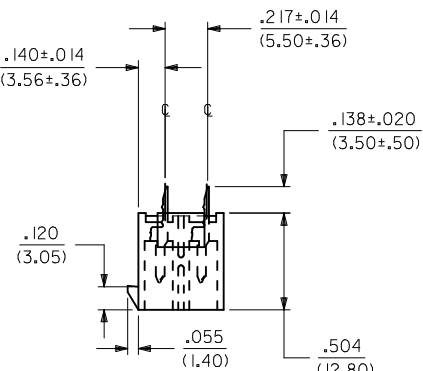
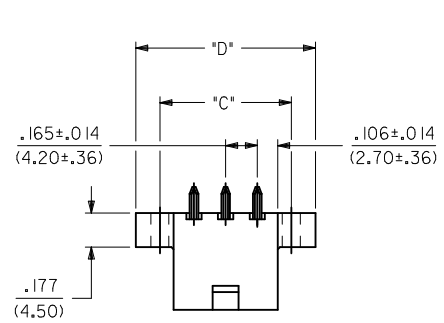
| | |
|-----------------------|----------------|
| Product Specification | PS-5556-003 |
| Sales Drawing | SDA-30069-**** |

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NOTES:

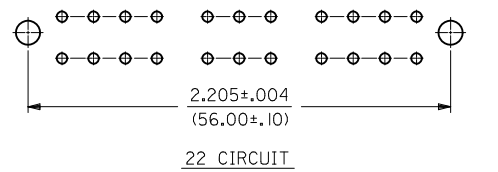
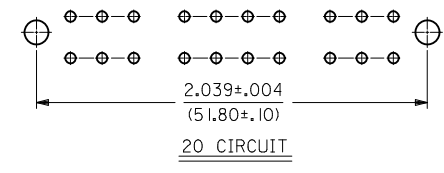
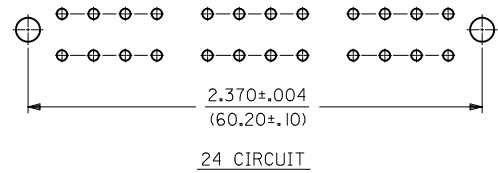
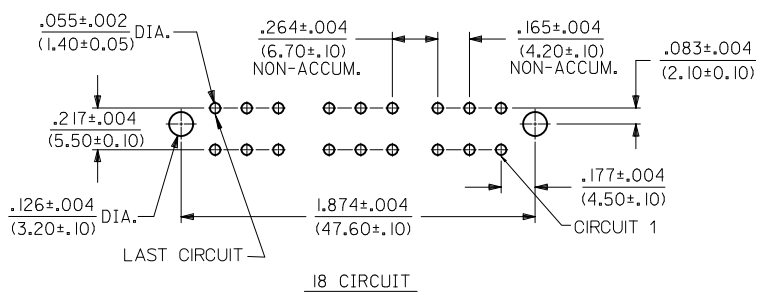
- HOUSING MAT'L.: POLYESTER, UNFILLED, 94V-0. COLOR: BLACK.
TERMINAL MATERIAL: BRASS ALLOY 260.
- PLATINGS:
1 = .000035/(.00090) MIN. BRIGHT TIN OVER
.000020/(.00050) MIN. COPPER.
*2 = .000030/(.00076) MIN. SELECT GOLD AND
.000100/(.00254) MIN. SELECT MATTE TIN OVER
.000050/(.00127) MIN. NICKEL OVERALL.
*THE PRIMARY SHIPPING CARTON WILL BE LABELED
"COMPLIANT TO RoHS DIRECTIVE 2002/95/EC
AND ELV ANNEX II OF DIRECTIVE 2000/53/EC."
CARTONS WITHOUT THIS LABEL MAY CONTAIN
PRODUCT WITH TIN-LEAD PLATING.
- PRODUCT SPECIFICATION AND PROCESSING PARAMETERS:
SEE PS-5556-003
- PACKAGING SPECIFICATION: BULK PACKED
- PART IS DESIGNED FOR USE WITH 4-40 OR M3 SCREWS.
- PART MATES WITH RECEPTACLE 30067-*
- THIS PART CONFORMS TO CLASS 'B' REQUIREMENTS OF COSMETIC
SPECIFICATION PS-45499-002.



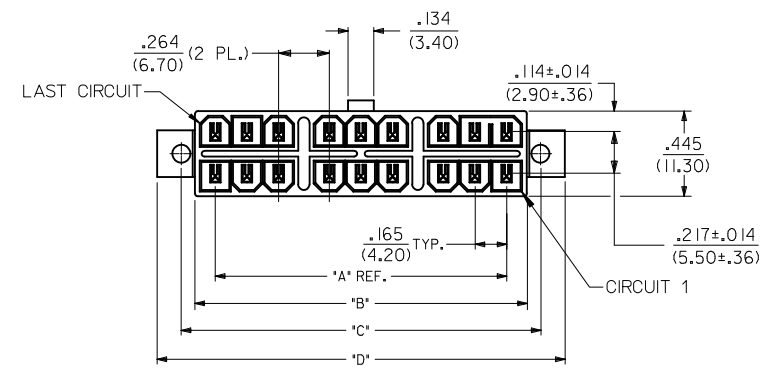
PCB LAYOUT FOR 2-16 CIRCUIT PARTS WITH FLANGES

RECOMMENDED INSTALLATION OF HEADER TO P.C. BOARD

LAYOUT FOR 18-24 CIRCUIT PARTS WITH FLANGES

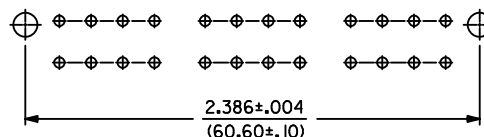
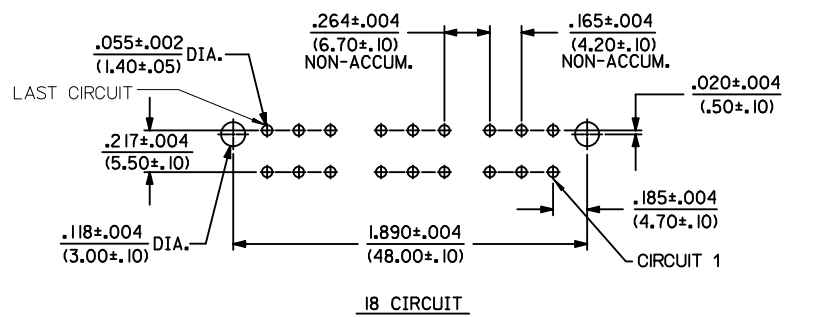


FLANGE MOUNT
(SEE SHT. 2 FOR PARTS WITH PEGS)

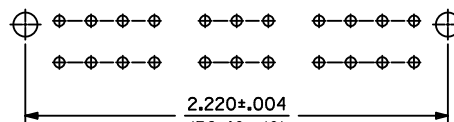


| REMOVE DRAIN HOLES EC NO: UCP2009-1388 DRWING: KLOSTERNER 2008/11/25 CHKD: JEBELL 2010/02/09 APPR: FSMITH 2010/05/14 REV DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | |
|---|---------------------------------------|---|---------------------|-------|--------------|------------------------|--------|--------|----------|--------|--------|----------|--------|--------|---------|--------|--------|--|-----|--------|---|
| | ▽=0 ▽=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>± .010</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .014</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.36</td> <td>± .---</td> </tr> </table> ANGULAR ±1/2° | | mm | INCH | 4 PLACES | ± .--- | ± .--- | 3 PLACES | ± .--- | ± .010 | 2 PLACES | ± 0.25 | ± .014 | 1 PLACE | ± 0.36 | ± .--- | IN/MM DRAWN BY: RJF DATE: 9/19/91 CHECKED BY: GEP DATE: 9/19/91 APPROVED BY: RAS DATE: 9/19/91 | 1:1 | METRIC | TITLE: MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY |
| | | mm | INCH | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± .--- | ± .--- | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± .--- | ± .010 | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.25 | ± .014 | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.36 | ± .--- | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE CHARTS SIZE: C | DOCUMENT NO. SDA-30069-**** | SHEET NO. 1 OF 4 | | | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | |

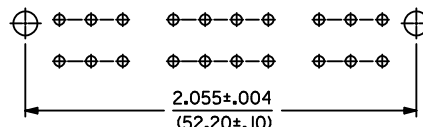
LAYOUT FOR 18-24 CIRCUIT PARTS WITH PEGS



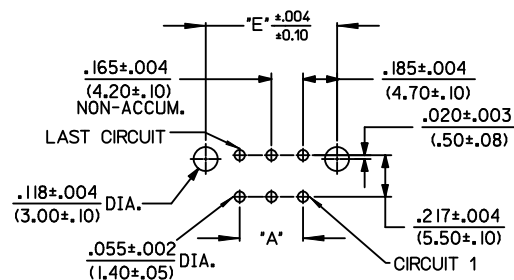
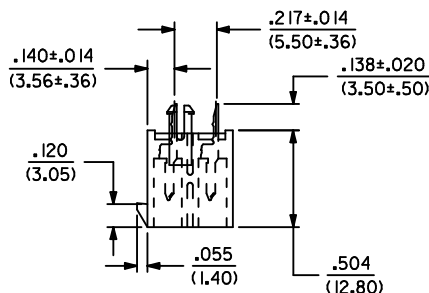
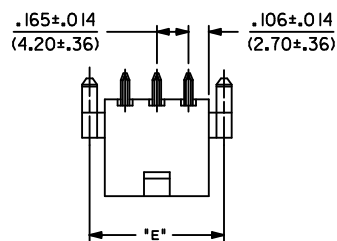
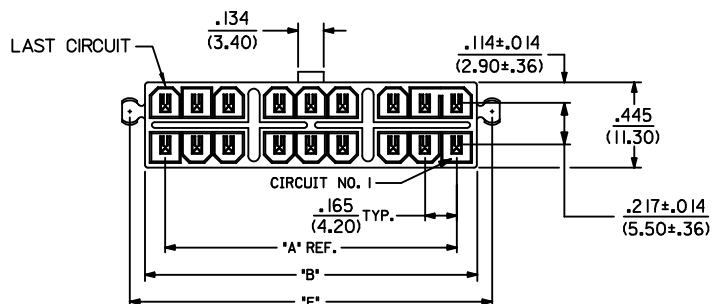
24 CIRCUIT



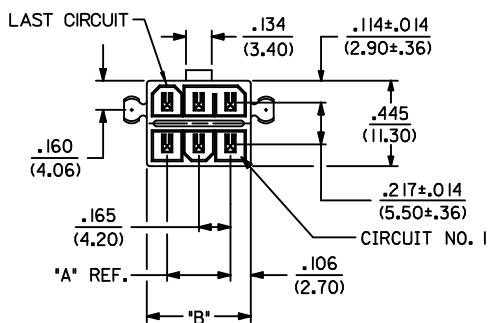
22 CIRCUIT



20 CIRCUIT



RECOMMENDED HOLE LAYOUT FOR
 .070/(1.78) MAX. THICK P.C. BOARD
 PCB LAYOUT FOR 2-16 CIRCUIT PARTS



WITH PEGS

| | | |
|---|-------------|-------------------------------|
| Correct peg-peg dim. EC NO: UCP2009-1388 DRAWN: KLOSTNER/ER 2008/11/25 CHKD: J.BELL 2010/02/09 APPR: F.SMITH 2010/05/14 | DESCRIPTION | QUALITY SYMBOLS ▽=0 ▽=0 |
|---|-------------|-------------------------------|

| | | | | |
|--|--------------------------|--|------------------------|--|
| GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE IN/MM | SCALE 1:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| 4 PLACES ± --- ± --- | mm | DRAWN BY R.J.F. | DATE 9/19/91 | TITLE MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY |
| 3 PLACES ± --- ± .010 | INCH | CHECKED BY GEP | DATE 9/19/91 | MATERIAL NO. SDA-30069-**** |
| 2 PLACES ± 0.25 ± .014 | | APPROVED BY RAS | DATE 9/19/91 | SHEET NO. 2 OF 4 |
| 1 PLACE ± 0.36 ± --- | | | | |
| ANGULAR ± 1/2° | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHARTS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

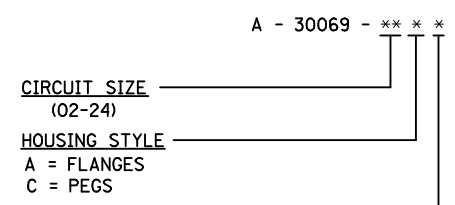
| | |
|-------|--------------------|
| MOLEX | MOLEX INCORPORATED |
|-------|--------------------|

| | |
|--------------|----------------|
| DOCUMENT NO. | SDA-30069-**** |
|--------------|----------------|

| TIN-PLATED ASSEMBLIES WITH PEGS, WITHOUT DRAIN HOLES. | | | | | | | GOLD-PLATED ASSEMBLIES WITH PEGS, WITHOUT DRAIN HOLES. | | | | | |
|---|--------------|------------|------------------|------------------|------------------|----------|--|------------|------------------|------------------|------------------|----------|
| CKT. SIZE | ENG. NO. | EDP. NO. | DIM. "A" | DIM. "B" | DIM. "E" | DIM. "D" | ENG. NO. | EDP. NO. | DIM. "A" | DIM. "B" | DIM. "E" | DIM. "D" |
| 2 | A-30069-02C1 | 15-97-7023 | — | .213 (5.40) | .370 (9.40) | — | A-30069-02C2 | 15-97-7025 | — | .213 (5.40) | .370 (9.40) | — |
| 4 | A-30069-04C1 | 15-97-7043 | .165 (4.20) | .378 (9.60) | .535 (13.60) | — | A-30069-04C2 | 15-97-7045 | .165 (4.20) | .378 (9.60) | .535 (13.60) | — |
| 6 | A-30069-06C1 | 15-97-7063 | .331 (8.40) | .543 (13.80) | .701 (17.80) | — | A-30069-06C2 | 15-97-7065 | .331 (8.40) | .543 (13.80) | .701 (17.80) | — |
| 8 | A-30069-08C1 | 15-97-7083 | .496 (12.60) | .709 (18.00) | .866 (22.00) | — | A-30069-08C2 | 15-97-7085 | .496 (12.60) | .709 (18.00) | .866 (22.00) | — |
| 10 | A-30069-10C1 | 15-97-7103 | .661 (16.80) | .874 (22.20) | 1.031 (26.20) | — | A-30069-10C2 | 15-97-7105 | .661 (16.80) | .874 (22.20) | 1.031 (26.20) | — |
| 12 | A-30069-12C1 | 15-97-7123 | .827 (21.00) | 1.039 (26.40) | 1.197 (30.40) | — | A-30069-12C2 | 15-97-7125 | .827 (21.00) | 1.039 (26.40) | 1.197 (30.40) | — |
| 14 | A-30069-14C1 | NOT TOOLED | .992 (25.20) | 1.205 (30.60) | 1.362 (34.60) | — | A-30069-14C2 | NOT TOOLED | .992 (25.20) | 1.205 (30.60) | 1.362 (34.60) | — |
| 16 | A-30069-16C1 | NOT TOOLED | 1.157 (29.40) | 1.370 (34.80) | 1.528 (38.80) | — | A-30069-16C2 | NOT TOOLED | 1.157 (29.40) | 1.370 (34.80) | 1.528 (38.80) | — |
| 18 | A-30069-18C1 | NOT TOOLED | 1.520 (38.60) | 1.732 (44.00) | 1.890 (48.00) | — | A-30069-18C2 | NOT TOOLED | 1.520 (38.60) | 1.732 (44.00) | 1.890 (48.00) | — |
| 20 | A-30069-20C1 | NOT TOOLED | 1.685 (42.80) | 1.898 (48.20) | 2.055 (52.20) | — | A-30069-20C2 | NOT TOOLED | 1.685 (42.80) | 1.898 (48.20) | 2.055 (52.20) | — |
| 22 | A-30069-22C1 | NOT TOOLED | 1.850 (47.00) | 2.063 (52.40) | 2.220 (56.40) | — | A-30069-22C2 | NOT TOOLED | 1.850 (47.00) | 2.063 (52.40) | 2.220 (56.40) | — |
| 24 | A-30069-24C1 | NOT TOOLED | 2.016 (51.20) | 2.228 (56.60) | 2.386 (60.60) | — | A-30069-24C2 | NOT TOOLED | 2.016 (51.20) | 2.228 (56.60) | 2.386 (60.60) | — |

| CKT. SIZE | ENG. NO. | EDP. NO. | DIM. "A" | DIM. "B" | DIM. "E" | DIM. "D" | ENG. NO. | EDP. NO. | DIM. "A" | DIM. "B" | DIM. "E" | DIM. "D" |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |

LEGEND:



PLATING (SEE SHT. 1, NOTE 6.)

1 = TIN OVER COPPER.
2 = GOLD OVER NICKEL.

| REV | DESCRIPTION |
|-----|--|
| H | REMOVE DH P/N'S EC NO: UCP2009-1386 DRAWN: JLOSTNER/ER 2008/11/25 CHKD: JBELL 2010/02/09 APPR: FSM/TH 2010/05/14 |

| | | | |
|---|--|--|--|
| QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2° | DIMENSION STYLE IN/MM DRAWN BY DATE R/JF 9/19/91 CHECKED BY DATE GEP 9/19/91 APPROVED BY DATE RAS 9/19/91 | SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | TITLE MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY |
| MATERIAL NO. SEE CHARTS | | MOLEX INCORPORATED DOCUMENT NO. SDA-30069-**** SHEET NO. 4 OF 4 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |