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Part Number: [0751400017](#)
Status: **Active**
Description: 1.50mm (.059")/ 5.00mm(.197") Pitch Plateau HS Dock™ Plug, Vertical, 108Circuits

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

| | |
|----------------|-----------------------|
| Product Family | PCB Headers |
| Series | 75140 |
| Application | Board-to-Board |
| Product Name | Plateau HS Dock™ |

Physical

| | |
|--------------------------------|---|
| Breakaway | No |
| Circuits (Loaded) | 108 |
| Circuits (maximum) | 108 |
| Color - Resin | Black, Natural, White |
| Durability (mating cycles max) | 100 |
| First Mate / Last Break | No |
| Glow-Wire Compliant | No |
| Guide to Mating Part | No |
| Lock to Mating Part | Yes |
| Material - Metal | Copper-Nickel-Silicon, High Performance Alloy (HPA) |
| Material - Plating Mating | Gold, Tin-Lead |
| Material - Plating Termination | Tin-Lead |
| Material - Resin | High Temperature Thermoplastic |
| Number of Rows | 3 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.111 In |
| PC Tail Length (mm) | 2.82 mm |
| 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) | 0.059 In, 0.197 In |
| Pitch - Mating Interface (mm) | 1.50 mm, 5.00 mm |
| Plating min: Mating (µin) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 30 |
| Plating min: Termination (µm) | 0.75 |
| Polarized to Mating Part | Yes |
| Shrouded | Fully |
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -20°C to +85°C |
| Termination Interface: Style | Through Hole - Compliant Pin |

Electrical

| | |
|-------------------------------|--------|
| Current - Maximum per Contact | 1.5A |
| Voltage - Maximum | 12V DC |

Material Info

Reference - Drawing Numbers

| | |
|---------------|--------------|
| Sales Drawing | SD-75140-002 |
|---------------|--------------|

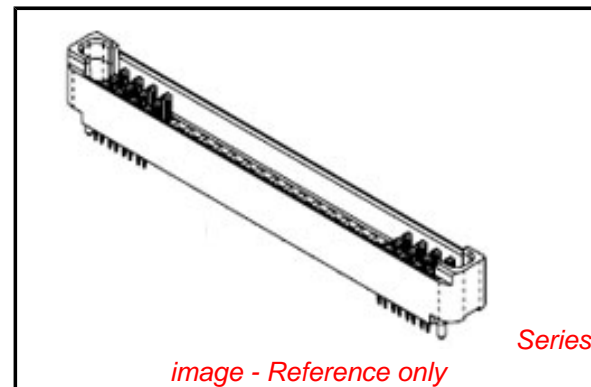


image - Reference only

EU RoHS

RoHS Compliant by Exemption

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

Halogen-Free

China RoHS



Pb

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

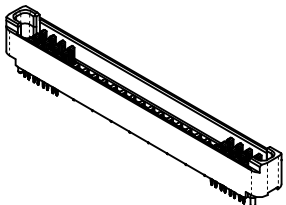
[75140Series](#)

Mates With

[75019](#) Plateau HS Dock™ Receptacle Right Angle

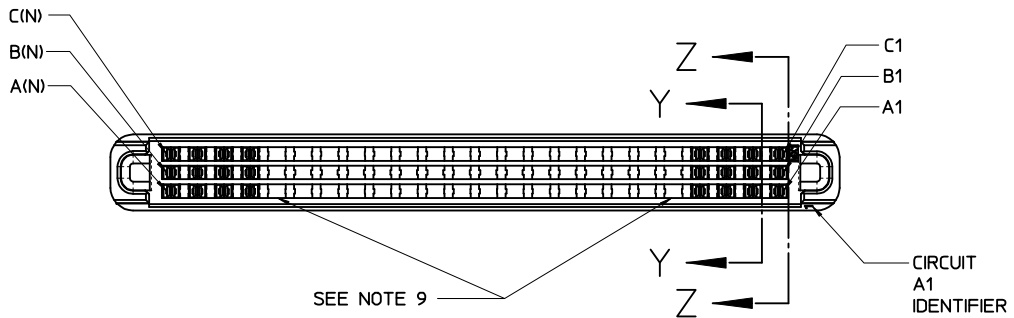
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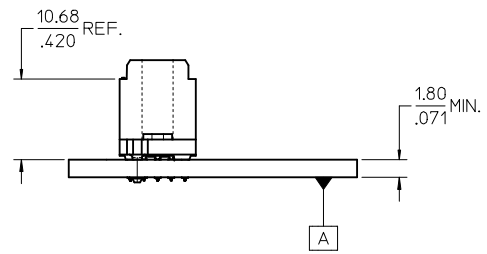
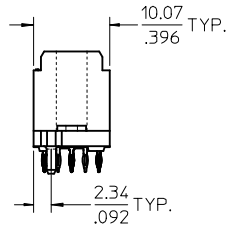
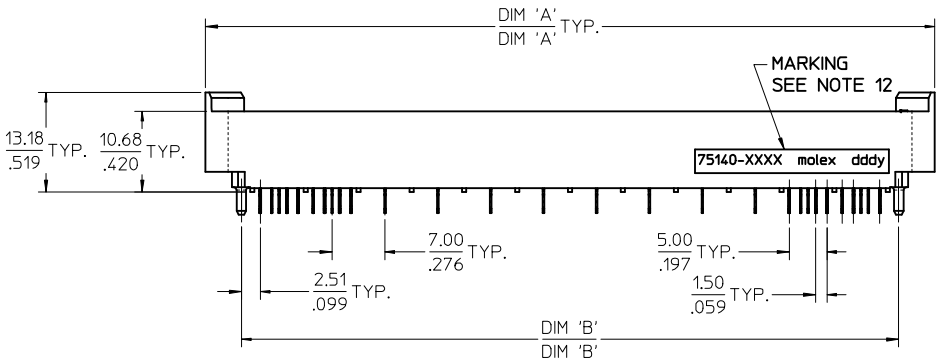


NOTES:

- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER, UL94 V-0
WAFER DIELECTRIC - LIQUID CRYSTAL POLYMER, UL94 V-0
CONTACT - COPPER ALLOY
- 2) FINISHES:
CONTACT
0.76 MICROMETER MINIMUM SELECT GOLD OVER
NICKEL OVERALL
CONTACT
0.76 MICROMETER MINIMUM SELECT TIN-LEAD OVER
NICKEL OVERALL
HOUSING
0.10 MICROMETER MAXIMUM IMMERSION GOLD OVER
NICKEL OVER COPPER OVERALL
- 3) PRODUCT SPECIFICATION
THIS PART CONFORMS TO MOLEX SPECIFICATION PS-75018-001
- 4) PACKAGING SPECIFICATION
THIS PART TO BE PACKAGED PER SPECIFICATION PK-75020-010
- 5) APPLICATION SPECIFICATION
THIS PART TO BE APPLIED PER SPECIFICATION AS-75018-001
APPLICATION TOOL AND INSTRUCTIONS PER AS-75018-001
- 6) MATING INFORMATION
THIS PART MATES WITH 75019-XXXX.
WILL MATE WITH MAXIMUM 1.27mm MISALIGNMENT.
WILL MATE WITH MAXIMUM 0.5° ROTATION MISALIGNMENT.
- 7) FOR CIRCUIT DESIGNATION SEE SHEET 3
- 8) FOR PCB INFORMATION SEE SHEET 3
- 9) CIRCUITS IN THIS ZONE HAVE BEEN OMITTED TO SIMPLIFY THE MODEL. ACTUAL PRODUCT IS FULLY LOADED WITH TERMINALS.
- 10) APPLICATION TOOLING KEEP OUT AREA.
NO COMPONENTS ALLOWED IN THIS AREA.
- 11) CONFORMS TO MOLEX COSMETIC SPECIFICATION PS-45499-002 AND PS-45499-003 CLASS C.
- 12) MARKING: PART NUMBER, MOLEX LOGO, DATE CODE (dddy)
- 13) RECOMMENDED DRILL SIZE 0.66±0.03 TO YIELD FINISHED PLATED THROUGH HOLE 0.55±0.05



SEE NOTE 9

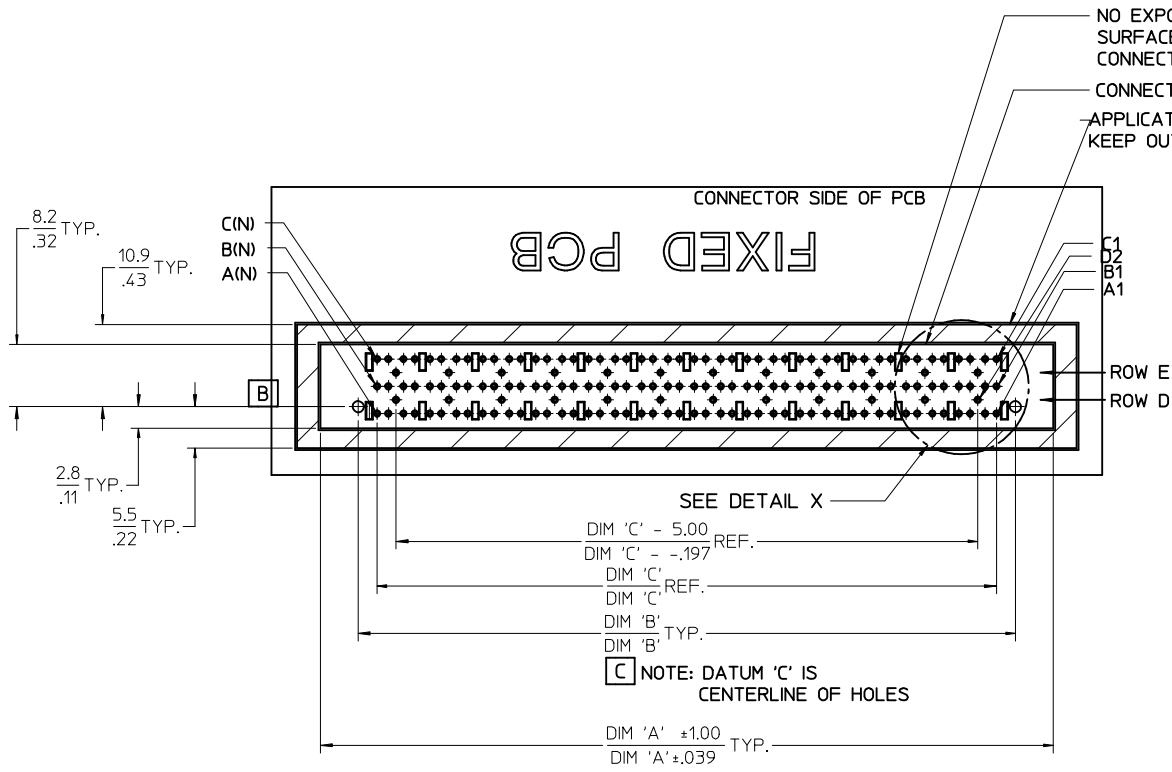


| ADD 75140-0017 EC NO: UCP2009-2445 DRWN: SDANNELL 2009/05/12 CHKD: MSIBARRA 2009/05/12 APPR: SMILLER 2009/05/13 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | | | | | | | | | | | | | | | | | | |
|---|--|---|-----------|--|------------------------|--------------------|-------|-------|----------|-------|--------|----------|--------|-------|---------|--------|-------|----------------|--|--|-----------------------|--|-------|--|
| | DESCRIPTION DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | <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>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .01</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 1/2°</td> </tr> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± .005 | 2 PLACES | ± 0.13 | ± .01 | 1 PLACE | ± 0.25 | ± --- | ANGULAR ± 1/2° | | | DIMENSION STYLE MM/IN | | TITLE | |
| | | | | mm | INCH | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± .005 | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.13 | ± .01 | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± --- | | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ± 1/2° | | | | | | | | | | | | | | | | | | | | | | | | |
| REV | APPROVED BY BANAKIS DATE 03-OCT-29 | DRAWN BY LANG DATE 03-OCT-29 | | HIGH SPEED DOCKING VERTICAL FIXED CONNECTOR NO GROUND FINGER | | | | | | | | | | | | | | | | | | | | |
| | | CHECKED BY LANG DATE 03-OCT-29 | | MOLEX INCORPORATED | | | | | | | | | | | | | | | | | | | | |
| | | MATERIAL NO. SEE SHEET 2 | | DOCUMENT NO. SD-75140-002 | | SHEET NO. 1 OF 3 | | | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | | |

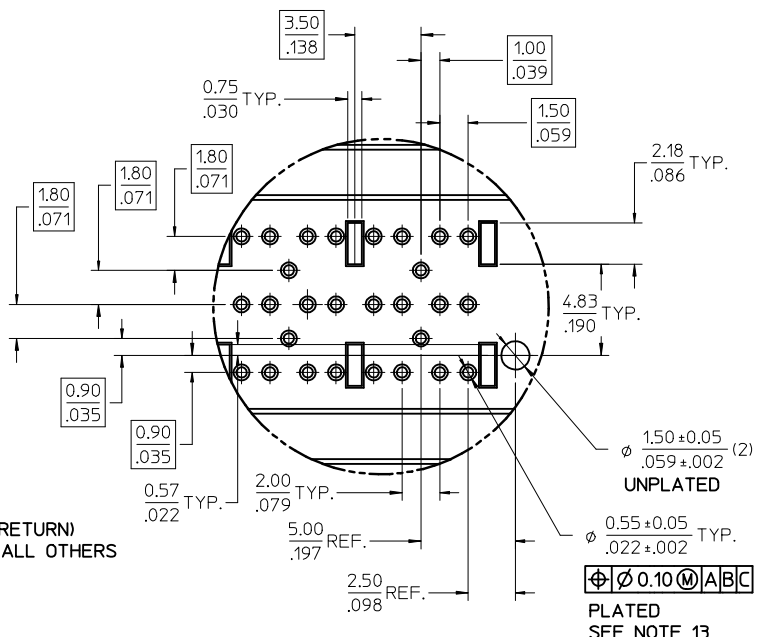
J
I
H
G
F
E
D
C
B
A

| ITEM NUMBER | CIRCUIT SIZE | NO. OF COLUMNS 'N' | O/A LENGTH DIMENSION 'A' mm(in) | PEG TO PEG DIMENSION 'B' mm(in) | FIRST-LAST DIMENSION 'C' mm(in) |
|-------------|--------------|--------------------|---------------------------------|---------------------------------|---------------------------------|
| 75140-0012 | 144 | 48 | 96.50 (3.799) | 87.00 (3.425) | 82.00 (3.228) |
| NOT TOOLED | 132 | 44 | 89.50 (3.524) | 80.00 (3.150) | 75.00 (2.953) |
| NOT TOOLED | 120 | 40 | 82.50 (3.248) | 73.00 (2.874) | 68.00 (2.677) |
| 75140-0017 | 108 | 36 | 75.50 (2.972) | 66.00 (2.598) | 61.00 (2.402) |
| NOT TOOLED | 96 | 32 | 68.50 (2.697) | 59.00 (2.323) | 54.00 (2.126) |
| NOT TOOLED | 84 | 28 | 61.50 (2.421) | 52.00 (2.047) | 47.00 (1.850) |
| NOT TOOLED | 72 | 24 | 54.50 (2.146) | 45.00 (1.772) | 40.00 (1.575) |
| NOT TOOLED | 60 | 20 | 47.50 (1.870) | 38.00 (1.496) | 33.00 (1.299) |
| NOT TOOLED | 48 | 16 | 40.50 (1.594) | 31.00 (1.220) | 26.00 (1.024) |
| NOT TOOLED | 36 | 12 | 33.50 (1.319) | 24.00 (0.945) | 19.00 (0.748) |

| | | | | | | | | |
|---|-------------------------------|---------------------------------------|-----------------------|--------------------------|------------------------|---|--------------------|--|
| ADD 75140-0017 EC NO: UCP2009-2445 DRWN: SDANNELL 2009/05/12 CHKD: MSIBARRA 2009/05/12 APPR: SMILLER 2009/05/13 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | SCALE 1:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | |
| | ▼ - 0 ∇ - 0 | mm | INCH | DIMENSION STYLE MM/IN | | TITLE HIGH SPEED DOCKING VERTICAL FIXED CONNECTOR NO GROUND FINGER | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± .005 | DRAWN BY | DATE | MOLEX INCORPORATED SEE CHART SD-75140-002 | | |
| | | 2 PLACES ± 0.13 ± .01 | 1 PLACE ± 0.25 ± --- | LANG | 03-OCT-29 | | | |
| ANGULAR ± 1/2° | DRAFT WHERE APPLICABLE | | CHECKED BY | DATE | MATERIAL NO. | DOCUMENT NO. | SHEET NO. | |
| | MUST REMAIN WITHIN DIMENSIONS | | LANG | 03-OCT-29 | SEE CHART | SD-75140-002 | 2 OF 3 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | |



NO EXPOSED TRACES ON SURFACE OF PCB IN CONNECTOR STAND OFF LOCATIONS
 CONNECTOR KEEP OUT AREA
 APPLICATION TOOLING KEEP OUT AREAS (NOTES 10 & 11)



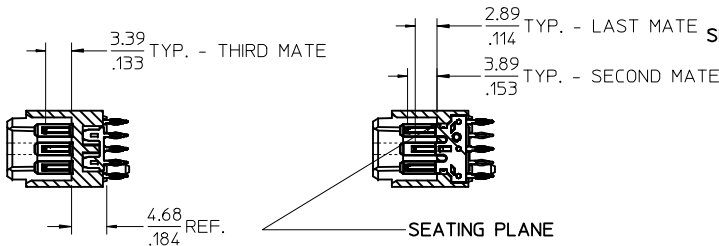
DETAIL X
 SCALE 5:1

NOMINAL WIPE - FULLY MATED
 FIRST MATE: 5.2mm
 SECOND MATE: 2.7mm
 THIRD MATE: 2.2mm
 LAST MATE: 1.7mm

CIRCUIT DESIGNATION
 FIRST MATE: HOUSING - SIGNAL GROUND
 SECOND MATE: A1, C1, A(N) & C(N) (FOR POWER RETURN)
 THIRD MATE: A2, B2, C2, A(N-1), B(N-1), C(N-1) & ALL OTHERS (A2, C2, A(N-1), & C(N-1) FOR POWER) (ALL OTHERS FOR SIGNAL)
 LAST MATE: B1 & B(N) (FOR CARD DETECT)

ALL COLUMNS FROM 3 THROUGH (N-2) ARE SUITABLE FOR DIFFERENTIAL PAIRS
 EG: A3-A4, B3-B4, C3-C4, A(N-2)-A(N-3), B(N-2)-B(N-3)

SIGNAL GROUND: ROWS D & E



SECTION Y-Y SECTION Z-Z

| | | | | | | | |
|---|----------------------|---------------------------------------|----------------|-------------|---------------------|---|---|
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| | 0 0 | 4 PLACES ± --- ± --- | mm | INCH | DIMENSION STYLE | | TITLE HIGH SPEED DOCKING VERTICAL FIXED CONNECTOR NO GROUND FINGER |
| | | 3 PLACES ± --- ± .005 | MM/IN | | DRAWN BY | DATE | |
| | | 2 PLACES ± 0.13 ± .01 | ANGULAR ± 1/2° | | CHECKED BY | DATE | MOLEX INCORPORATED SEE SHEET 2 SD-75140-002 |
| | 1 PLACE ± 0.25 ± --- | DRAFT WHERE APPLICABLE | | APPROVED BY | DATE | | |
| | | MUST REMAIN WITHIN DIMENSIONS | | BANAKIS | 03-OCT-29 | MATERIAL NO. / DOCUMENT NO. SHEET NO. 3 OF 3 | |
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