

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

**Part Number:** **0458301023**  
**Status:** **Active**  
**Description:** 1.20mm (.047") by 2.00mm (.079") Pitch HD Mezz™ Plug, 299 Circuits, 18.00mm (.708") Unmated Height, 23 Rows, Tin (Sn)/Lead (Pb) Plating

**Documents:**

[3D Model](#) [Product Specification PS-45802-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series 45830  
 Application Board-to-Board  
 Comments 1.20mm (.047") Pitch Pin-to-Pin and 2.00mm (.079") Pitch Row-to-Row  
 Product Name HD Mezz™

**Physical**

Breakaway No  
 Circuits (Loaded) 299  
 Circuits (maximum) 299  
 Circuits Detail 299  
 Color - Resin Black  
 Durability (mating cycles max) 100  
 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 High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 23  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.047 In  
 Pitch - Mating Interface (mm) 1.20 mm  
 Pitch - Term. Interface (in) 0.047 In  
 Pitch - Term. Interface (mm) 1.20 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.5  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Robotic Placement Vacuum Pick-Up Clip  
 Shrouded Closed Ends  
 Stackable No

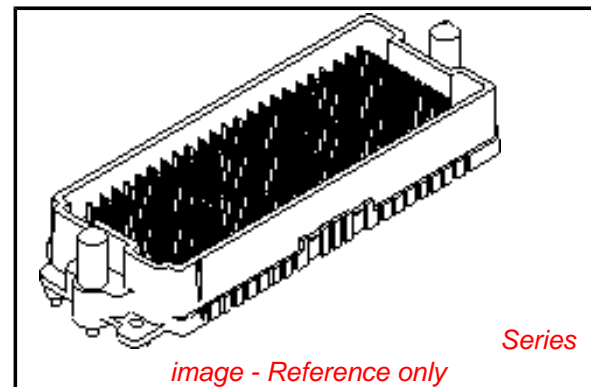


image - Reference only

**EU RoHS**

**Not RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**



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

Email [productcompliance@molex.com](mailto: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**

45830Series

**Mates With**

45802 HD Mezz™ Receptacle

|                                |                 |
|--------------------------------|-----------------|
| Surface Mount Compatible (SMC) | Yes             |
| Temperature Range - Operating  | -55°C to +105°C |
| Termination Interface: Style   | Surface Mount   |

### **Electrical**

|                               |         |
|-------------------------------|---------|
| Current - Maximum per Contact | 2A      |
| Voltage - Maximum             | 250V AC |

### **Solder Process Data**

|  |                           |
|--|---------------------------|
| Duration at Max. Process Temperature (seconds) | 20                        |
| Lead-free Process Capability                   | Reflow Capable (SMT only) |
| Max. Cycles at Max. Process Temperature        | 2                         |
| Process Temperature max. C                     | 260                       |
| Replacement RoHS Compliant Part Number         | 0458301221                |

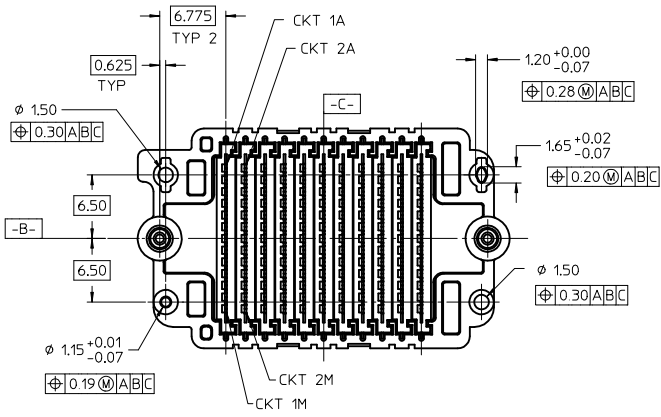
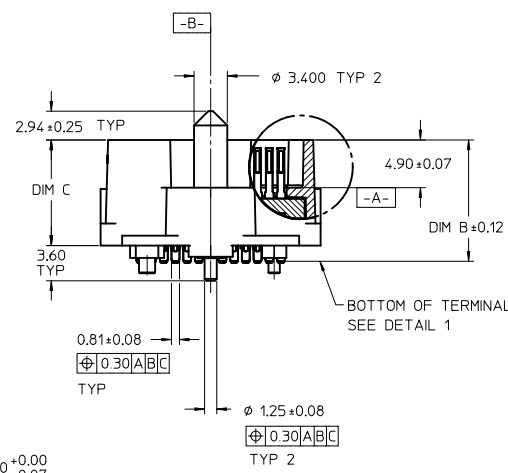
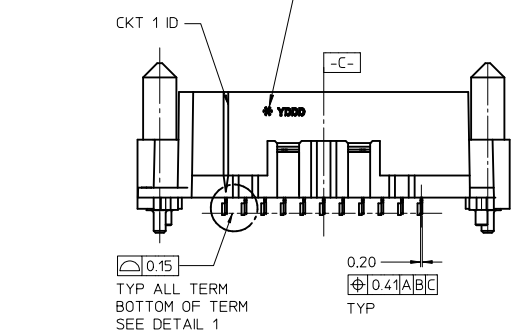
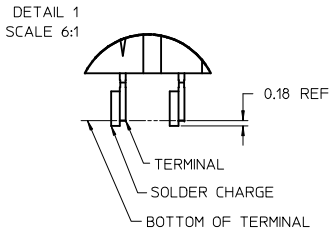
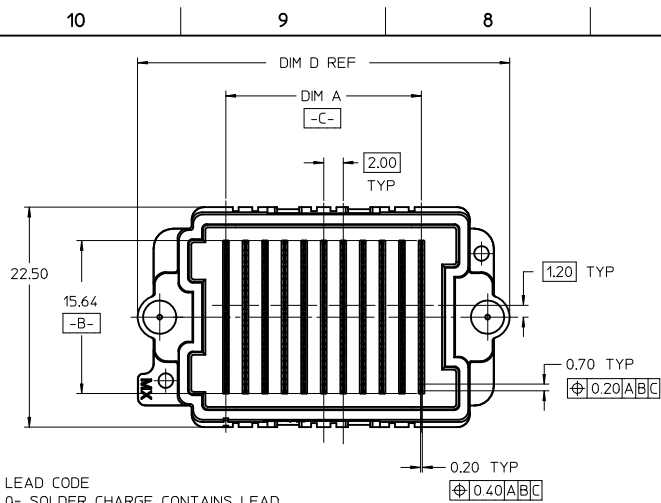
### **Material Info**

#### **Reference - Drawing Numbers**

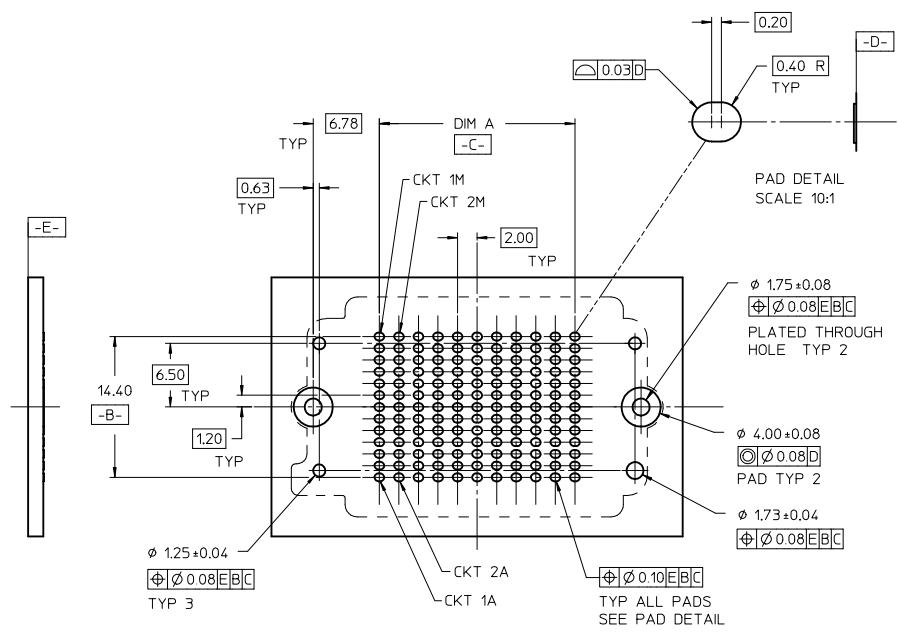
|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-45830-001 |
| Product Specification   | PS-45802-001 |
| Sales Drawing           | SD-45830-001 |

This document was generated on 05/25/2010

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- NOTES:
- HOUSING MATERIAL: LCP, GLASS FILLED, UL94V-0, BLACK  
CONTACT MATERIAL: HIGH PERFORMANCE ALLOY  
GUIDE PIN MATERIAL: STAINLESS STEEL  
SOLDER CHARGE MATERIAL: TIN OR TIN/LEAD SEE CHART
  - CONTACT FINISH: SELECT GOLD: 30 MI MIN IN CONTACT AREA  
SELECT TIN: 100 MI MIN IN TAIL AREA BOTH OVER NICKEL
  - PRODUCT SPECIFICATION: PS-45802-001
  - COSMETIC SPECIFICATION: PS-45499-002 CLASS B
  - PACKAGING SPECIFICATION: PK-45830-001
  - C- IS THE CENTERLINE OF THE 2 END SLOTS. END SLOT CENTERLINES ARE ESTABLISHED USING 2 MEASUREMENTS FOR EACH SLOT TAKEN 7.28 EITHER SIDE -B-



RECOMMENDED PCB LAYOUT: COMPONENT SIDE  
PCB THICKNESS: NA

|                     |             |
|---------------------|-------------|
| REV PER PART        | DESCRIPTION |
| EC NO: UCP2008-0213 |             |
| DRWN:KSAMIEC        | 2007/10/30  |
| CHKD:               | 2007/10/30  |
| APPR: JCOMERCI      | 2007/10/30  |

| GENERAL TOLERANCES (UNLESS SPECIFIED) |              |
|---------------------------------------|--------------|
|                                       | mm INCH      |
| 4 PLACES                              | ± --- ± ---  |
| 3 PLACES                              | ± 0.05 ± --- |
| 2 PLACES                              | ± 0.15 ± --- |
| 1 PLACE                               | ± 0.3 ± ---  |
| ANGULAR ± 1/2°                        |              |

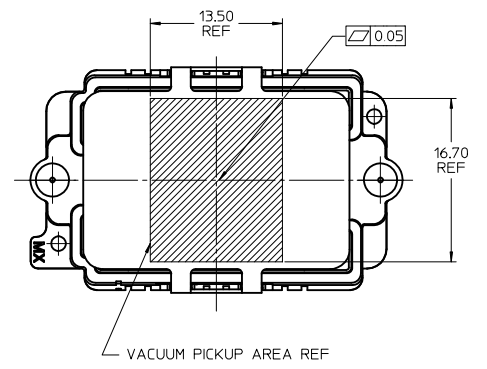
| DIMENSION STYLE |           |
|-----------------|-----------|
| MM ONLY         |           |
| DRAWN BY        | DATE      |
| PELOZA          | 05/02/04  |
| CHECKED BY      | DATE      |
| PELOZA          | 05/02/07  |
| APPROVED BY     | DATE      |
| COMERCI         | 05/02/07  |
| MATERIAL NO.    | SEE CHART |

|                      |     |              |              |                        |
|----------------------|-----|--------------|--------------|------------------------|
| SCALE                | 2:1 | DESIGN UNITS | METRIC       | THIRD ANGLE PROJECTION |
| TITLE                |     |              |              |                        |
| HDMEZZ PLUG ASSEMBLY |     |              |              |                        |
| MATERIAL NO.         |     |              | DOCUMENT NO. | SHEET NO.              |
| COMERCI              |     |              | SD-45830-001 | 1 OF 2                 |

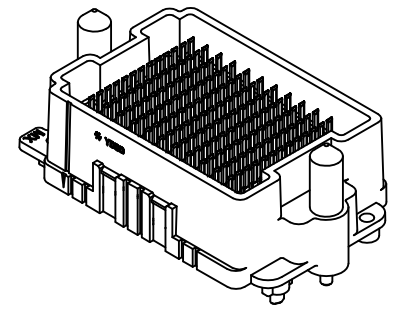
DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

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|  |               | 10    | 9          | 8           | 7           | 6           | 5           | 4           | 3           | 2           | 1           |             |            |
|--|---------------|-------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| F<br>TIN / LEAD PARTS<br>LEAD CODE = "0" | STACK HEIGHT: |       | 8mm        | 9mm         | 10mm        | 11mm        | 12mm        | 13mm        | 14mm        | 15mm        | 17mm        | 18mm        |            |
|  | DIM B         |       | 10.41      | 11.41       | 12.41       | 13.41       | 14.41       | 15.41       | 16.41       | 17.41       | 19.41       | 20.41       |            |
|  | DIM C         |       | 8.80       | 9.80        | 10.80       | 11.80       | 12.80       | 13.80       | 14.80       | 15.80       | 17.80       | 18.80       |            |
|  | ROWS          | DIM A | DIM D      | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO |            |
|  | 7             | 12.00 | 30.06      | 45830-0007  | 45830-3007  | 45830-2007  | 45830-8007  | 45830-4007  | 45830-9007  | 45830-6007  | 45830-7007  | 45830-5007  | 45830-1007 |
|  | 9             | 16.00 | 34.06      | 45830-0009  | 45830-3009  | 45830-2009  | 45830-8009  | 45830-4009  | 45830-9009  | 45830-6009  | 45830-7009  | 45830-5009  | 45830-1009 |
|  | 11            | 20.00 | 38.06      | 45830-0011  | 45830-3011  | 45830-2011  | 45830-8011  | 45830-4011  | 45830-9011  | 45830-6011  | 45830-7011  | 45830-5011  | 45830-1111 |
|  | 13            | 24.00 | 42.06      | 45830-0013  | 45830-3013  | 45830-2013  | 45830-8013  | 45830-4013  | 45830-9013  | 45830-6013  | 45830-7013  | 45830-5013  | 45830-1013 |
|  | 15            | 28.00 | 46.06      | 45830-0015  | 45830-3015  | 45830-2015  | 45830-8015  | 45830-4015  | 45830-9015  | 45830-6015  | 45830-7015  | 45830-5015  | 45830-1015 |
|  | 17            | 32.00 | 50.06      | 45830-0017  | 45830-3017  | 45830-2017  | 45830-8017  | 45830-4017  | 45830-9017  | 45830-6017  | 45830-7017  | 45830-5017  | 45830-1017 |
|  | 19            | 36.00 | 54.06      | 45830-0019  | 45830-3019  | 45830-2019  | 45830-8019  | 45830-4019  | 45830-9019  | 45830-6019  | 45830-7019  | 45830-5019  | 45830-1019 |
|  | 21            | 40.00 | 58.06      | 45830-0021  | 45830-3021  | 45830-2021  | 45830-8021  | 45830-4021  | 45830-9021  | 45830-6021  | 45830-7021  | 45830-5021  | 45830-1021 |
|  | 23            | 44.00 | 62.06      | 45830-0023  | 45830-3023  | 45830-2023  | 45830-8023  | 45830-4023  | 45830-9023  | 45830-6023  | 45830-7023  | 45830-5023  | 45830-1023 |
| 25                                       | 48.00         | 66.06 | 45830-0025 | 45830-3025  | 45830-2025  | 45830-8025  | 45830-4025  | 45830-9025  | 45830-6025  | 45830-7025  | 45830-5025  | 45830-1025  |            |
| 27                                       | 52.00         | 70.06 | 45830-0027 | 45830-3027  | 45830-2027  | 45830-8027  | 45830-4027  | 45830-9027  | 45830-6027  | 45830-7027  | 45830-5027  | 45830-1027  |            |



|                                   |               | 10    | 9          | 8           | 7           | 6           | 5           | 4           | 3           | 2           | 1           |             |            |
|-----------------------------------|---------------|-------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| D<br>TIN PARTS<br>LEAD CODE = "2" | STACK HEIGHT: |       | 8mm        | 9mm         | 10mm        | 11mm        | 12mm        | 13mm        | 14mm        | 15mm        | 17mm        | 18mm        |            |
|                                   | DIM B         |       | 10.41      | 11.41       | 12.41       | 13.41       | 14.41       | 15.41       | 16.41       | 17.41       | 19.41       | 20.41       |            |
|                                   | DIM C         |       | 8.80       | 9.80        | 10.80       | 11.80       | 12.80       | 13.80       | 14.80       | 15.80       | 17.80       | 18.80       |            |
|                                   | ROWS          | DIM A | DIM D      | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO | MATERIAL NO |            |
|                                   | 7             | 12.00 | 30.06      | 45830-0207  | 45830-3207  | 45830-2207  | 45830-8207  | 45830-4207  | 45830-9207  | 45830-6207  | 45830-7207  | 45830-5207  | 45830-1207 |
|                                   | 9             | 16.00 | 34.06      | 45830-0209  | 45830-3209  | 45830-2209  | 45830-8209  | 45830-4209  | 45830-9209  | 45830-6209  | 45830-7209  | 45830-5209  | 45830-1209 |
|                                   | 11            | 20.00 | 38.06      | 45830-0211  | 45830-3211  | 45830-2211  | 45830-8211  | 45830-4211  | 45830-9211  | 45830-6211  | 45830-7211  | 45830-5211  | 45830-1211 |
|                                   | 13            | 24.00 | 42.06      | 45830-0213  | 45830-3213  | 45830-2213  | 45830-8213  | 45830-4213  | 45830-9213  | 45830-6213  | 45830-7213  | 45830-5213  | 45830-1213 |
|                                   | 15            | 28.00 | 46.06      | 45830-0215  | 45830-3215  | 45830-2215  | 45830-8215  | 45830-4215  | 45830-9215  | 45830-6215  | 45830-7215  | 45830-5215  | 45830-1215 |
|                                   | 17            | 32.00 | 50.06      | 45830-0217  | 45830-3217  | 45830-2217  | 45830-8217  | 45830-4217  | 45830-9217  | 45830-6217  | 45830-7217  | 45830-5217  | 45830-1217 |
|                                   | 19            | 36.00 | 54.06      | 45830-0219  | 45830-3219  | 45830-2219  | 45830-8219  | 45830-4219  | 45830-9219  | 45830-6219  | 45830-7219  | 45830-5219  | 45830-1219 |
|                                   | 21            | 40.00 | 58.06      | 45830-0221  | 45830-3221  | 45830-2221  | 45830-8221  | 45830-4221  | 45830-9221  | 45830-6221  | 45830-7221  | 45830-5221  | 45830-1221 |
|                                   | 23            | 44.00 | 62.06      | 45830-0223  | 45830-3223  | 45830-2223  | 45830-8223  | 45830-4223  | 45830-9223  | 45830-6223  | 45830-7223  | 45830-5223  | 45830-1223 |
| 25                                | 48.00         | 66.06 | 45830-0225 | 45830-3225  | 45830-2225  | 45830-8225  | 45830-4225  | 45830-9225  | 45830-6225  | 45830-7225  | 45830-5225  | 45830-1225  |            |
| 27                                | 52.00         | 70.06 | 45830-0227 | 45830-3227  | 45830-2227  | 45830-8227  | 45830-4227  | 45830-9227  | 45830-6227  | 45830-7227  | 45830-5227  | 45830-1227  |            |



|   |             |  |                       |                            |                     |                               |   |                        |  |
|---|-------------|--|-----------------------|----------------------------|---------------------|-------------------------------|---|------------------------|--|
| SEE SHEET 1<br>EC NO: UCP2008-0213<br>DRAWN: KSAMIEC 2007/10/30<br>CHKD: 2007/10/30<br>APPR: JCOMERC I<br>REV | DESCRIPTION | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |                       | DIMENSION STYLE<br>MM ONLY |                     | SCALE<br>2:1                  | DESIGN UNITS<br>METRIC  | THIRD ANGLE PROJECTION |  |
|   |             | 4 PLACES ± --- ± ---                                       | 3 PLACES ± 0.05 ± --- | DRAWN BY<br>PELOZA         | DATE<br>05/02/04    | TITLE<br>HDMEZZ PLUG ASSEMBLY |   |                        |  |
|   |             | 2 PLACES ± 0.15 ± ---                                      | 1 PLACE ± 0.3 ± ---   | CHECKED BY<br>PELOZA       | DATE<br>05/02/07    | MATERIAL NO.                  |   |                        |  |
|   |             | ANGULAR ± 1/2°   |                       | APPROVED BY<br>COMERC I    | DATE<br>05/02/07    | DOCUMENT NO.<br>SD-45830-001  |   |                        |  |
|   |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                       | SEE CHART                  | SHEET NO.<br>2 OF 2 |                               | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |  |