

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION

**Part Number:** [0737827200](#)  
**Status:** **Active**  
**Overview:** [hdm](#)  
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Stacking Header, High Rise Vertical, SMC, Closed End Option, 144 Circuits

**Documents:**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <a href="#">3D Model</a>      | <a href="#">Product Specification PS-73780-999 (PDF)</a> |
| <a href="#">Drawing (PDF)</a> | <a href="#">RoHS Certificate of Compliance (PDF)</a>     |

**Agency Certification**

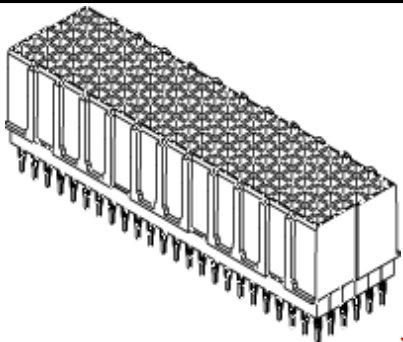
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                |                       |
|----------------|-----------------------|
| Product Family | Backplane Connectors  |
| Series         | <a href="#">73782</a> |
| Application    | Backplane, Mezzanine  |
| Component Type | PCB Header            |
| Overview       | <a href="#">hdm</a>   |
| Product Name   | HDM®                  |
| Style          | N/A                   |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Circuits (Loaded)              | 144                            |
| Circuits (maximum)             | 144                            |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 200                            |
| First Mate / Last Break        | No                             |
| Flammability                   | 94V-0                          |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | None                           |
| Material - Metal               | Phosphor Bronze                |
| Material - Plating Mating      | Gold                           |
| Material - Plating Termination | Tin-Lead                       |
| Material - Resin               | High Temperature Thermoplastic |
| Number of Columns              | 24                             |
| Number of Pairs                | Open Pin Field                 |
| Number of Rows                 | 6                              |
| Orientation                    | Vertical                       |
| PC Tail Length (in)            | 0.138 In                       |
| PC Tail Length (mm)            | 3.50 mm                        |
| PCB Retention                  | None                           |
| PCB Thickness Recommended (in) | 0.055 In                       |
| PCB Thickness Recommended (mm) | 1.40 mm                        |
| Packaging Type                 | Tube                           |
| Pitch - Mating Interface (in)  | 0.079 In                       |
| Pitch - Mating Interface (mm)  | 2.00 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 PCB               | No                             |
| Stackable                      | Yes                            |
| Surface Mount Compatible (SMC) | Yes                            |
| 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](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**

[73782Series](#)

**Mates With**

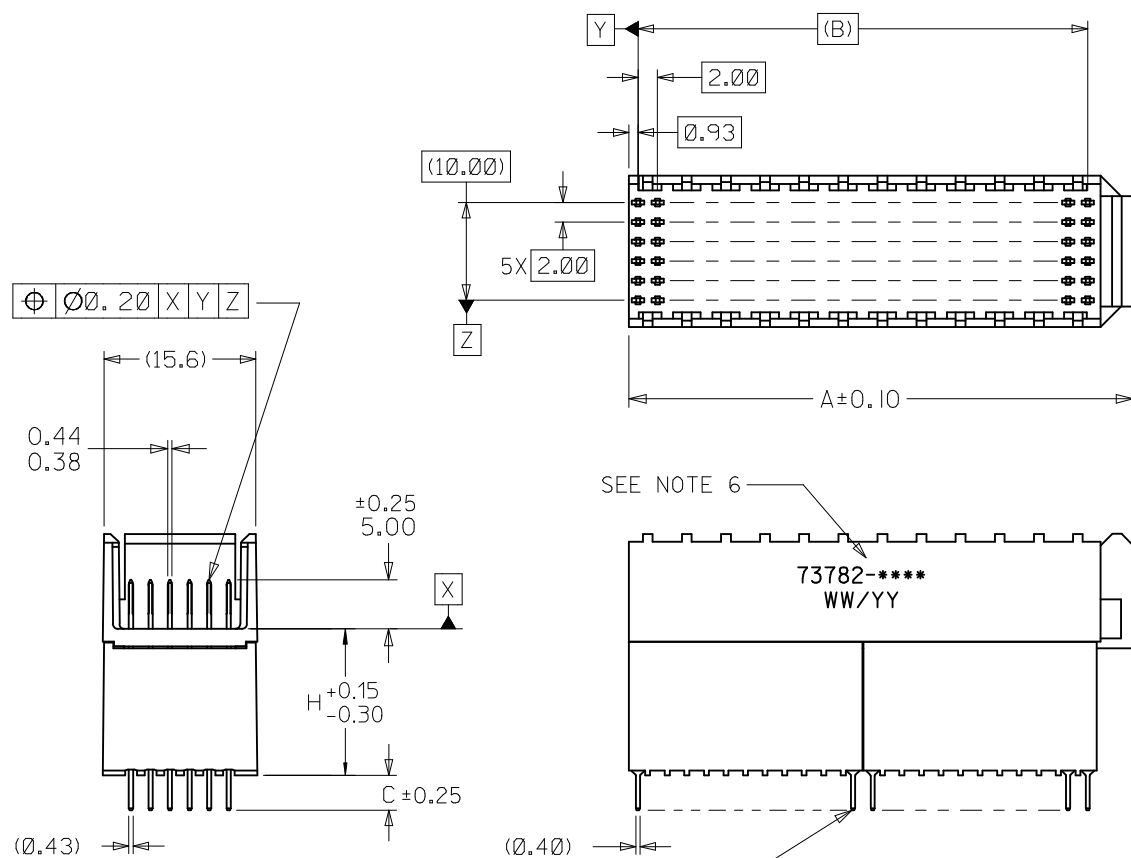
[73632](#) HDM PLUS® Board-to-Board  
Daughtercard Receptacle. [73780](#) HDM®  
Board-to-Board Daughtercard Receptacle

|                                                |                        |
|------------------------------------------------|------------------------|
| Termination Interface: Style                   | Through Hole           |
| <b>Electrical</b>                              |                        |
| Current - Maximum per Contact                  | 1A                     |
| Data Rate                                      | 1.0 Gbps               |
| Real Signals (per 25mm)                        | 72                     |
| Voltage - Maximum                              | 100V AC                |
| <b>Solder Process Data</b>                     |                        |
| 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                     | 260                    |
| <b>Material Info</b>                           |                        |
| <b>Reference - Drawing Numbers</b>             |                        |
| Packaging Specification                        | PK-70873-0875          |
| Product Specification                          | PS-73780-999           |
| Sales Drawing                                  | SD-73782-001           |

HDM and High Density Metric are trademarks of Amphenol Corporation

This document was generated on 05/14/2010

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION



SEE NOTE 6

⊕ Ø0.15 (M) X Y Z

## NOTES:

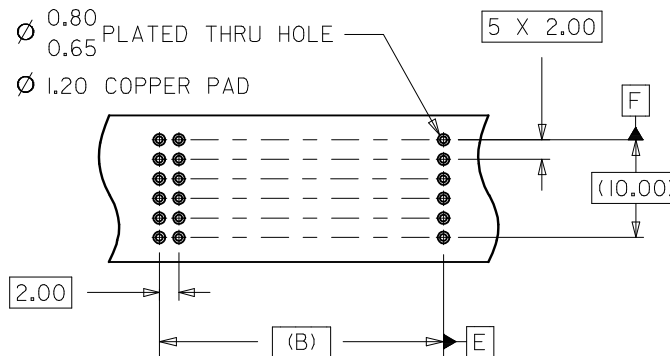
1. MATERIALS: HOUSING-LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0, COLOR: BLACK.  
TERMINAL-PHOSPHOR BRONZE
2. FINISH:  
0.75 MICROMETERS MINIMUM SELECTIVE GOLD IN MATING AREA  
2.50 MICROMETERS MINIMUM SELECTIVE TIN IN TAIL AREA  
NICKEL UNDERPLATE OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73780-999.
4. THIS PART CONFORMS TO MOLEX COSMETIC SPECIFICATION PS-45499-002 CLASS C.
5. PACKAGE PER PK-70873-0870, PK-70873-0871, OR PK-70873-0875.
6. PARTS MARKED WITH PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN.

⊕ Ø0.15 (M) E F

Ø 0.838 DRILL

Ø 0.80  
0.65 PLATED THRU HOLE

Ø 1.20 COPPER PAD



BACKPLANE HOLE PATTERN

|                                                                                                                              |             |                                                                                                                                  |                                                            |        |                            |                        |                    |                                                                                                       |                           |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------|----------------------------|------------------------|--------------------|-------------------------------------------------------------------------------------------------------|---------------------------|--|--|--|
| REVISE DIM H TOL<br>EC NO: UCP2008-3186<br>DRWN:SDANNELLEY 2008/07/29<br>CHKD:MSIBARRA 2008/09/11<br>APPR:SMILLER 2008/09/16 | DESCRIPTION | QUALITY SYMBOLS<br><br>▽=0<br>▽=0                                                                                                | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |        | DIMENSION STYLE<br>MM ONLY |                        | SCALE<br>2:1       | DESIGN UNITS<br>METRIC                                                                                | THIRD ANGLE<br>PROJECTION |  |  |  |
|                                                                                                                              |             |                                                                                                                                  |                                                            | mm     | INCH                       | DRAWN BY<br>JBINGHAM   | DATE<br>1997/04/25 | TITLE<br>SALES ASSEMBLY, HDM<br>BACKPLANE STACKING MOD<br>CLOSED END SOLDER<br><br>MOLEX INCORPORATED |                           |  |  |  |
|                                                                                                                              |             |                                                                                                                                  | 4 PLACES                                                   | ± ---  | ± ---                      | CHECKED BY<br>SREED    | DATE<br>1997/04/25 |                                                                                                       |                           |  |  |  |
|                                                                                                                              |             |                                                                                                                                  | 3 PLACES                                                   | ± ---  | ± ---                      | APPROVED BY<br>CBIXLER | DATE<br>1997/04/25 |                                                                                                       |                           |  |  |  |
|                                                                                                                              |             |                                                                                                                                  | 2 PLACES                                                   | ± 0.05 | ± ---                      | MATERIAL NO.           |                    | DOCUMENT NO.                                                                                          | SHEET NO.                 |  |  |  |
| 1 PLACE                                                                                                                      | ± 0.10      | ± ---                                                                                                                            | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | SEE TABLE                  |                        | SD-73782-001       |                                                                                                       | 1 OF 2                    |  |  |  |
| ANGULAR ±1/2°                                                                                                                |             | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                            |        |                            |                        |                    |                                                                                                       |                           |  |  |  |

MATERIAL NUMBER ASSIGNMENT

73782-\* \* 0 0

| NUMBER | CIRCUIT SIZE | DIM "A" | DIM "B" | DIM "C" |
|--------|--------------|---------|---------|---------|
| 0      | 72           | 27.6    | 22.00   | 2.0     |
| 1      | 144          | 51.6    | 46.00   | 2.0     |
| 2      | 72           | 27.6    | 22.00   | 2.5     |
| 3      | 144          | 51.6    | 46.00   | 2.5     |
| 4      | 72           | 27.6    | 22.00   | 3.0     |
| 5      | 144          | 51.6    | 46.00   | 3.0     |
| 6      | 72           | 27.6    | 22.00   | 3.5     |
| 7      | 144          | 51.6    | 46.00   | 3.5     |

| NUMBER | DIM "H" |
|--------|---------|
| 1      | 15.05   |
| 2      | 6.05    |
| 3      | 10.05   |

|                                                                                                                               |                    |                                                            |                                       |                      |                            |                    |                                                                             |                        |                        |  |  |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------|---------------------------------------|----------------------|----------------------------|--------------------|-----------------------------------------------------------------------------|------------------------|------------------------|--|--|
| SEE SHEET 1<br>EC NO: UCP2008-3186<br>DRAWN: SPANIELLEY 2008/07/29<br>CHKD: MSIBARRA 2008/09/11<br>APPR: SMILLER 2008/09/16   | DESCRIPTION<br>REV | QUALITY SYMBOLS<br>▽=0<br>▽=0                              | GENERAL TOLERANCES (UNLESS SPECIFIED) |                      | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>1:1                                                                | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |  |
|                                                                                                                               |                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | mm                                    | INCH                 | DRAWN BY<br>JB INGHAM      | DATE<br>1997/04/25 | TITLE<br>SALES ASSEMBLY, HDM<br>BACKPLANE STACKING MOD<br>CLOSED END SOLDER |                        |                        |  |  |
|                                                                                                                               |                    |                                                            | 4 PLACES ± --- ± ---                  | 3 PLACES ± --- ± --- | CHECKED BY<br>SREED        | DATE<br>1997/04/25 |                                                                             |                        |                        |  |  |
|                                                                                                                               |                    |                                                            | 2 PLACES ± 0.05 ± ---                 | 1 PLACE ± 0.10 ± --- | APPROVED BY<br>CBIXLER     | DATE<br>1997/04/25 | MOLEX INCORPORATED                                                          |                        |                        |  |  |
|                                                                                                                               |                    |                                                            | ANGULAR ±1/2°                         |                      | MATERIAL NO.<br>SEE TABLE  |                    |                                                                             |                        |                        |  |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                                                            |                                       |                      |                            |                    |                                                                             |                        |                        |  |  |

MATERIAL NUMBER ASSIGNMENT

73782-\* \* 0 0

| NUMBER | CIRCUIT SIZE | DIM "A" | DIM "B" | DIM "C" |
|--------|--------------|---------|---------|---------|
| 0      | 72           | 27.6    | 22.00   | 2.0     |
| 1      | 144          | 51.6    | 46.00   | 2.0     |
| 2      | 72           | 27.6    | 22.00   | 2.5     |
| 3      | 144          | 51.6    | 46.00   | 2.5     |
| 4      | 72           | 27.6    | 22.00   | 3.0     |
| 5      | 144          | 51.6    | 46.00   | 3.0     |
| 6      | 72           | 27.6    | 22.00   | 3.5     |
| 7      | 144          | 51.6    | 46.00   | 3.5     |

| NUMBER | DIM "H" |
|--------|---------|
| 1      | 15.05   |
| 2      | 6.05    |
| 3      | 10.05   |

|                                                                                                               |                    |                                                         |                                                                           |                              |                                        |                                                                                      |                                                                                                                                   |  |                       |           |
|---------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------|---------------------------------------------------------------------------|------------------------------|----------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|-----------|
| SEE SHEET 1<br>EC NO. UDT2000-1073<br>DRWN:JBINGHAM 0000508<br>CHK: REED 0000508<br>APPR:CBIXLER 0000508<br>F | DESCRIPTION<br>REV | QUALITY SYMBOLS<br>MAJOR<br>CRITICAL                    | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)                                 |                              | SCALE<br>NO:NE                         | DESIGN UNITS<br><input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH | DIMENSIONS:<br><input type="checkbox"/> mm <input type="checkbox"/> INCH <input checked="" type="checkbox"/> mm ONLY              |  | SHT                   | REV       |
|                                                                                                               |                    |                                                         | <input type="checkbox"/> mm <input type="checkbox"/> INCH                 |                              | THIRD ANGLE<br>PROJECTION              |                                                                                      | TITLE:<br>SALES ASSEMBLY<br>HDM BACKPLANE STACKING MODULE<br>CLOSED END OPTION SOLDER TAIL<br>MOLEX INCORPORATED                  |  | REVISE ON<br>CAD ONLY |           |
|                                                                                                               |                    |                                                         | 4 PLACES ±0. <input type="checkbox"/> mm <input type="checkbox"/> INCH    |                              | DRAWN BY & DATE<br>JBINGHAM 97/04/25   |                                                                                      | MATERIAL NO.                                                                                                                      |  | DRAWING NO.           | SHEET NO. |
|                                                                                                               |                    |                                                         | 3 PLACES ±0. <input type="checkbox"/> mm <input type="checkbox"/> INCH    |                              | CHECKED BY & DATE<br>SREED 97/04/25    |                                                                                      | SEE CHART                                                                                                                         |  | SD-73782-001          | 2         |
|                                                                                                               |                    |                                                         | 2 PLACES ±0.N/A <input type="checkbox"/> mm <input type="checkbox"/> INCH |                              | APPROVED BY & DATE<br>CBIXLER 97/04/25 |                                                                                      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |  | SIZE<br>B             |           |
| 1 PLACE ±0.NA/ <input type="checkbox"/> mm <input type="checkbox"/> INCH                                      |                    | ANGULAR: ± °                                            |                                                                           | CAD FILENAME<br>S73782X2.DGN |                                        |                                                                                      |                                                                                                                                   |  |                       |           |
|                                                                                                               |                    | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS |                                                                           |                              |                                        |                                                                                      |                                                                                                                                   |  |                       |           |