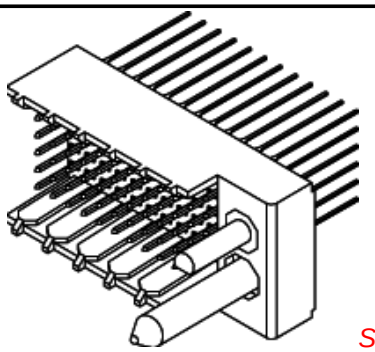
molex
one company > a world of innovation

This document was generated on 05/14/2010

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

**Part Number:** 0738022216
**Status:** Active
**Overview:** hdm
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Midplane Header, Vertical, SMC, Press-Fit, Long Pin, Guide Pin Option, 72 Circuits

**Documents:**
Drawing (PDF)
RoHS Certificate of Compliance (PDF)
Product Specification PS-73780-999 (PDF)



*Series image - Reference only*

## Agency Certification

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

## General

| | |
|---|---|
| Product Family | Backplane Connectors |
| Series | 73802 |
| Application | Midplane |
| Component Type | PCB Header |
| Overview | hdm |
| Product Name | HDM® |
| Style | N/A |

## Physical

| | |
|---|---|
| Circuits (Loaded) | 72 |
| Circuits (maximum) | 72 |
| Color - Resin | Black, Natural |
| Durability (mating cycles max) | 250 |
| First Mate / Last Break | No |
| Flammability | 94V-0 |
| Guide to Mating Part | Yes |
| Keying to Mating Part | None |
| Material - Metal | Stainless Steel |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin-Lead |
| Material - Resin | High Temperature Thermoplastic |
| Number of Columns | 15 |
| Number of Pairs | Open Pin Field |
| Number of Rows | 6 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.453 In |
| PC Tail Length (mm) | 11.50 mm |
| PCB Locator | No |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.156 In |
| PCB Thickness Recommended (mm) | 3.95 mm |
| Packaging Type | Tube |
| Pitch - Mating Interface (in) | 0.079 In |
| Pitch - Mating Interface (mm) | 2.00 mm |
| Pitch - Term. Interface (in) | 0.079 In |
| Pitch - Term. Interface (mm) | 2.00 mm |
| Plating min: Mating (µin) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 35.2 |
| Plating min: Termination (µm) | 0.88 |
| Polarized to PCB | No |

**EU RoHS**
RoHS Compliant by Exemption
**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**
73802Series

**Mates With**
73632 HDM PLUS® Board-to-Board Daughtercard Receptacle. 73780 HDM® Board-to-Board Daughtercard Receptacle

**Application Tooling** | **FAQ**
*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*
**Global**

| Description | Product # |
|---|---|
| Flat Rock Tooling for Pneumatic Press | 0622013700 |

| | |
|---|---|
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -55°C to +105°C |

## Electrical

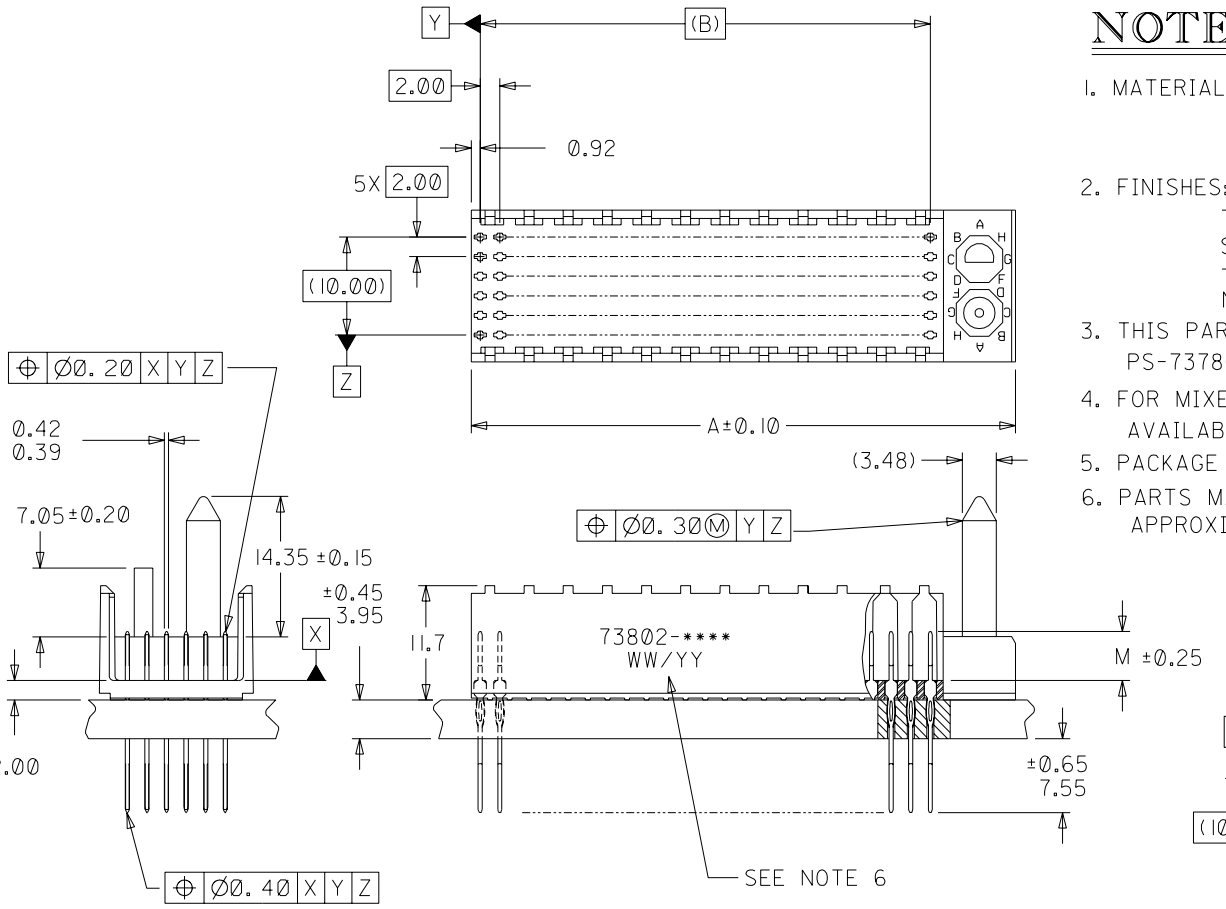
| | |
|---|---|
| Current - Maximum per Contact | 1A |
| Data Rate | 1.0 Gbps |
| Real Signals (per 25mm) | 75 |
| Shielded | No |
| Voltage - Maximum | 250V AC |

## Material Info

## Reference - Drawing Numbers

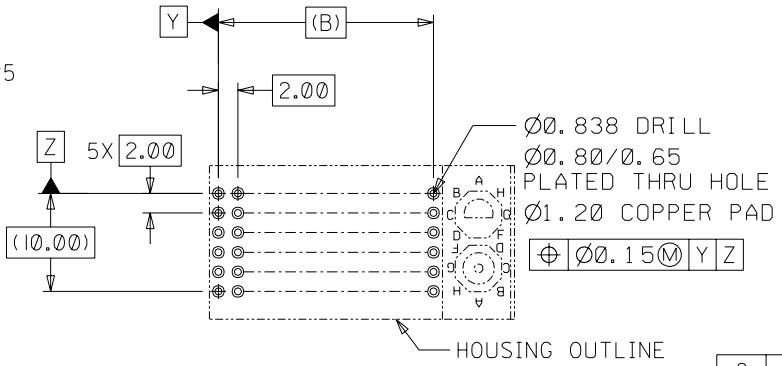
| | |
|---|---|
| Packaging Specification | PK-70873-0868 |
| Product Specification | PS-73780-999 |
| Sales Drawing | SD-73802-001 |

HDM and High Density Metric are trademarks of Amphenol Corporation




# NOTES:

1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0, COLOR: BLACK,
   TERMINAL - PHOSPHOR BRONZE.
2. FINISHES: SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MINIMUM THICKNESS; NICKEL (Ni) AND GOLD FLASH OVERALL
   SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MINIMUM THICKNESS; SELECTIVE TIN/LEAD (Sn/Pb) IN COMPLIANT AREA; NICKEL (Ni) OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73780-999.
4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
5. PACKAGE PER PK-70873-0868.
6. PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.




PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 3.95±0.45

| MATERIAL NUMBER | NUMBER OF CONTACTS | DIM "A" | DIM "B" | DIM "M" | PLATING |
|---|---|---|---|---|---|
| 73802-00** | 72 | 31.6 | 22.00 | 5.00 | GOLD/GOLD FLASH |
| 73802-02** | 72 | 31.6 | 22.00 | 6.00 | GOLD/GOLD FLASH |
| 73802-10** | 144 | 55.6 | 46.00 | 5.00 | GOLD/GOLD FLASH |
| 73802-12** | 144 | 55.6 | 46.00 | 6.00 | GOLD/GOLD FLASH |
| 73802-20** | 72 | 31.6 | 22.00 | 5.00 | GOLD/TIN-LEAD |
| 73802-22** | 72 | 31.6 | 22.00 | 6.00 | GOLD/TIN-LEAD |
| 73802-30** | 144 | 55.6 | 46.00 | 5.00 | GOLD/TIN-LEAD |
| 73802-32** | 144 | 55.6 | 46.00 | 6.00 | GOLD/TIN-LEAD |

REVISED
EC NO:UCP2004-1438
DRWN:BINGHAM 04/02/04
CH'K:REED 04/02/04
APPR:BIXLER 04/02/04
DESCRIPTION
H
REV

QUALITY SYMBOLS
MAJOR ▼ =0
CRITICAL (C) =0

GENERAL TOLERANCES: (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ±0. | ±. |
| 3 PLACES | ±0. | ±. |
| 2 PLACES | ±0.05 | ±. |
| 1 PLACE | ±0.10 | ±. |
| ANGULAR: ± 1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

SCALE 2 : 1
DESIGN UNITS ☒mm ☐INCH
THIRD ANGLE PROJECTION
DIMENSIONS: ☐mm/INCH ☐INCH/mm ☒mm ONLY
REVISE ON CAD ONLY

DRAWN BY & DATE JBINGHAM 97/05/19
CHECKED BY & DATE SREED 97/05/19
APPROVED BY & DATE CBIXLER 97/05/19

TITLE: SALES ASSEMBLY
HDM DOUBLE-END MIDPLANE
POLAR/GUIDE OPTION

molex MOLEX INCORPORATED

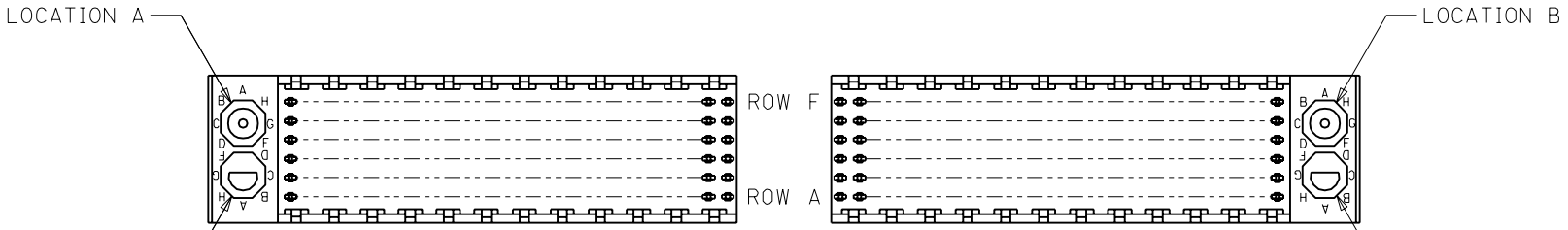
CAD FILENAME S73802X1.DGN
MATERIAL NO. SEE CHART
DRAWING NO. SD-73802-001
SHEET NO. 1 OF 2

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

SIZE B

| 2 | E |
|---|---|
| 1 | H |

SHT REV




REF. MATERIAL NUMBER 73802-1009
GUIDE PIN IS IN LOCATION A
POLARIZING KEY IS IN LOCATION B, POSITION E

REF. MATERIAL NUMBER 73802-1008
GUIDE PIN IS IN LOCATION B
POLARIZING KEY IS IN LOCATION A, POSITION E

# MATERIAL NUMBER ASSIGNMENT

73802- * * * *

0 = 72-CIRCUIT, GOLD/GOLD FLASH
1 = 144-CIRCUIT, GOLD/GOLDFLASH
2 = 72-CIRCUIT, GOLD/TIN-LEAD
3 = 144-CIRCUIT, GOLD/TIN-LEAD

0 = 5.00 MATING LENGTH
1 = RESERVED
2 = 6.00 MATING LENGTH

| NUMBER | GUIDE POST LOCATION | POLAR KEY POSITION |
|---|---|---|
| 00 | B | A |
| 01 | A | |
| 02 | B | B |
| 03 | A | |
| 04 | B | C |
| 05 | A | |
| 06 | B | D |
| 07 | A | |
| 08 | B | E |
| 09 | A | |
| 10 | B | F |
| 11 | A | |
| 12 | B | G |
| 13 | A | |
| 14 | B | H |
| 15 | A | |
| 16 | B | N/A |
| 17 | A | |
| 18 | N/A | |

SEE SHEET 1
EC NO. UDT2000-0277
DRWN: BINGHAM 99/09/21
CH'K: REED 99/09/21
APPR: BIXLER 99/09/21
DESCRIPTION
REV

QUALITY SYMBOLS
MAJOR ▼ = 0
CRITICAL (C) = 0

GENERAL TOLERANCES: (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ±0. | ±. |
| 3 PLACES | ±0. | ±. |
| 2 PLACES | ±0.N/A | ±. |
| 1 PLACE | ±0.N/A | ±. |
| ANGULAR: ± 1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

SCALE NO:NE
DESIGN UNITS ☒mm ☐INCH
THIRD ANGLE PROJECTION
DIMENSIONS: ☐ mm/INCH ☐ INCH/mm ☒ mm ONLY
SHT REV
REVISE ON CAD ONLY

DRAWN BY & DATE JBINGHAM 97/05/19
CHECKED BY & DATE SREED 97/05/19
APPROVED BY & DATE CBIXLER 97/05/19

TITLE: SALES ASSEMBLY
HDM DOUBLE-END MIDPLANE
POLAR/GUIDE OPTION

molex MOLEX INCORPORATED

CAD FILENAME S73802X2.DGN
MATERIAL NO. SEE CHART
DRAWING NO. SD-73802-001
SHEET NO. 2

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

SIZE B