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Part Number:

0740602501

Status:

Active

Overview:

[vhdm](#)

Description:

2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Header, Vertical, 8-Row, Open Signal Module, 200 Circuits, Pin Length 4.75mm (.187")

Documents:

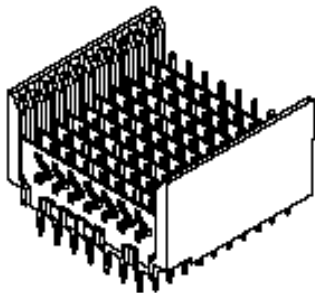
- [3D Model](#)
- [Drawing \(PDF\)](#)
- [Product Specification PS-74031-999 \(PDF\)](#)
- [RoHS Certificate of Compliance \(PDF\)](#)

General

|                               |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| Product Family                | Backplane Connectors                                                            |
| Series                        | 74060                                                                           |
| Application                   | Backplane                                                                       |
| Application Tooling Documents | <a href="http://www.molex.com/pdm_docs/ats/TM-622010999.pdf">Tooling Manual</a> |
| Comments                      | Open Header                                                                     |
| Component Type                | PCB Header                                                                      |
| Overview                      | <a href="#">vhdm</a>                                                            |
| Product Name                  | VHDM®                                                                           |
| Style                         | N/A                                                                             |

Physical

|                                |                                                |
|--------------------------------|------------------------------------------------|
| Circuits (Loaded)              | 200                                            |
| Circuits (maximum)             | 200                                            |
| Color - Resin                  | Black                                          |
| Durability (mating cycles max) | 200                                            |
| First Mate / Last Break        | No                                             |
| Guide to Mating Part           | No                                             |
| Keying to Mating Part          | None                                           |
| Material - Metal               | Beryllium Copper, High Performance Alloy (HPA) |
| Material - Plating Mating      | Gold                                           |
| Material - Plating Termination | Tin-Lead                                       |
| Material - Resin               | High Temperature Thermoplastic                 |
| Number of Columns              | N/A                                            |
| Number of Pairs                | Open Pin Field                                 |
| Number of Rows                 | 8                                              |
| Orientation                    | Vertical                                       |
| PC Tail Length (in)            | 0.098 In                                       |
| PC Tail Length (mm)            | 2.50 mm                                        |
| PCB Locator                    | No                                             |
| PCB Retention                  | None                                           |
| PCB Thickness Recommended (in) | 0.070 In                                       |
| PCB Thickness Recommended (mm) | 1.80 mm                                        |
| Packaging Type                 | Tube                                           |
| Pitch - Mating Interface (in)  | 0.079 In                                       |
| Pitch - Mating Interface (mm)  | 2.00 mm                                        |
| Pitch - Term. Interface (in)   | 0.039 In                                       |
| Pitch - Term. Interface (mm)   | 1.00 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 PCB               | Yes                                            |
| Stackable                      | Yes                                            |
| Surface Mount Compatible (SMC) | Yes                                            |



Series

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](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

74060Series

Mates With

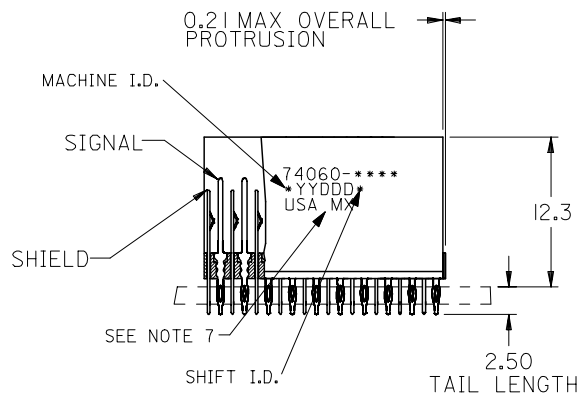
74040 VHDM® Board-to-Board Daughtercard Receptacle

| 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                                                                                                                                           | <a href="#">0622013700</a> |
| VHDM® Signal Pin                                                                                                                                                                | <a href="#">0622015700</a> |
| Insertor Repair Tool                                                                                                                                                            |                            |
| VHDM® 8 Row Pin and Shield Repair Tool                                                                                                                                          | <a href="#">0622015900</a> |

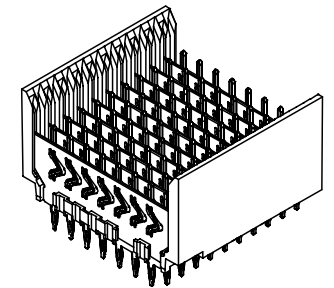
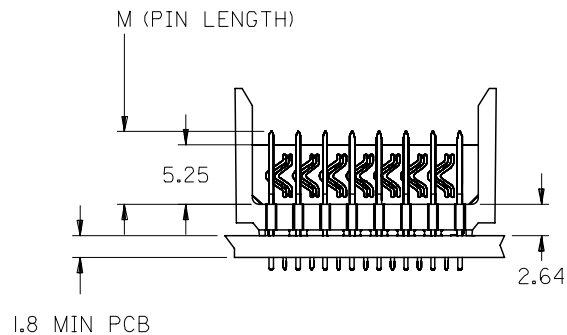
|                                                                          |                              |                     |                   |
|--------------------------------------------------------------------------|------------------------------|---------------------|-------------------|
| Temperature Range - Operating                                            | -55°C to +105°C              | VHDM® 8 Row         | <u>0622016100</u> |
| Termination Interface: Style                                             | Through Hole - Compliant Pin | Shield Extraction   |                   |
| <b>Electrical</b>                                                        |                              | Tool                |                   |
| Current - Maximum per Contact                                            | 3A                           | VHDM® Insertion     | <u>0622020206</u> |
| Data Rate                                                                | 3.125 Gbps                   | Module for Advanced |                   |
| Real Signals (per 25mm)                                                  | 100                          | Mate Signal Header, |                   |
| Shield Type                                                              | Ground Plane Shield          | 6 Row by 25 Wide,   |                   |
| Shielded                                                                 | Yes                          | 50.00mm (1.97")     |                   |
| Voltage - Maximum                                                        | 120V AC (RMS)/DC             | VHDM® Insertion     | <u>0622020210</u> |
| <b>Material Info</b>                                                     |                              | Module for Standard |                   |
| <b>Reference - Drawing Numbers</b>                                       |                              | Shield Signal       |                   |
| Packaging Specification                                                  | PK-74060-003                 | Header, 8 Row by    |                   |
| Product Specification                                                    | PS-74031-999                 | 25 Wide, 50.00mm    |                   |
| Sales Drawing                                                            | SD-74060-002                 | (1.97")             |                   |
| VHDM and Very High Density Metric are trademarks of Amphenol Corporation |                              |                     |                   |

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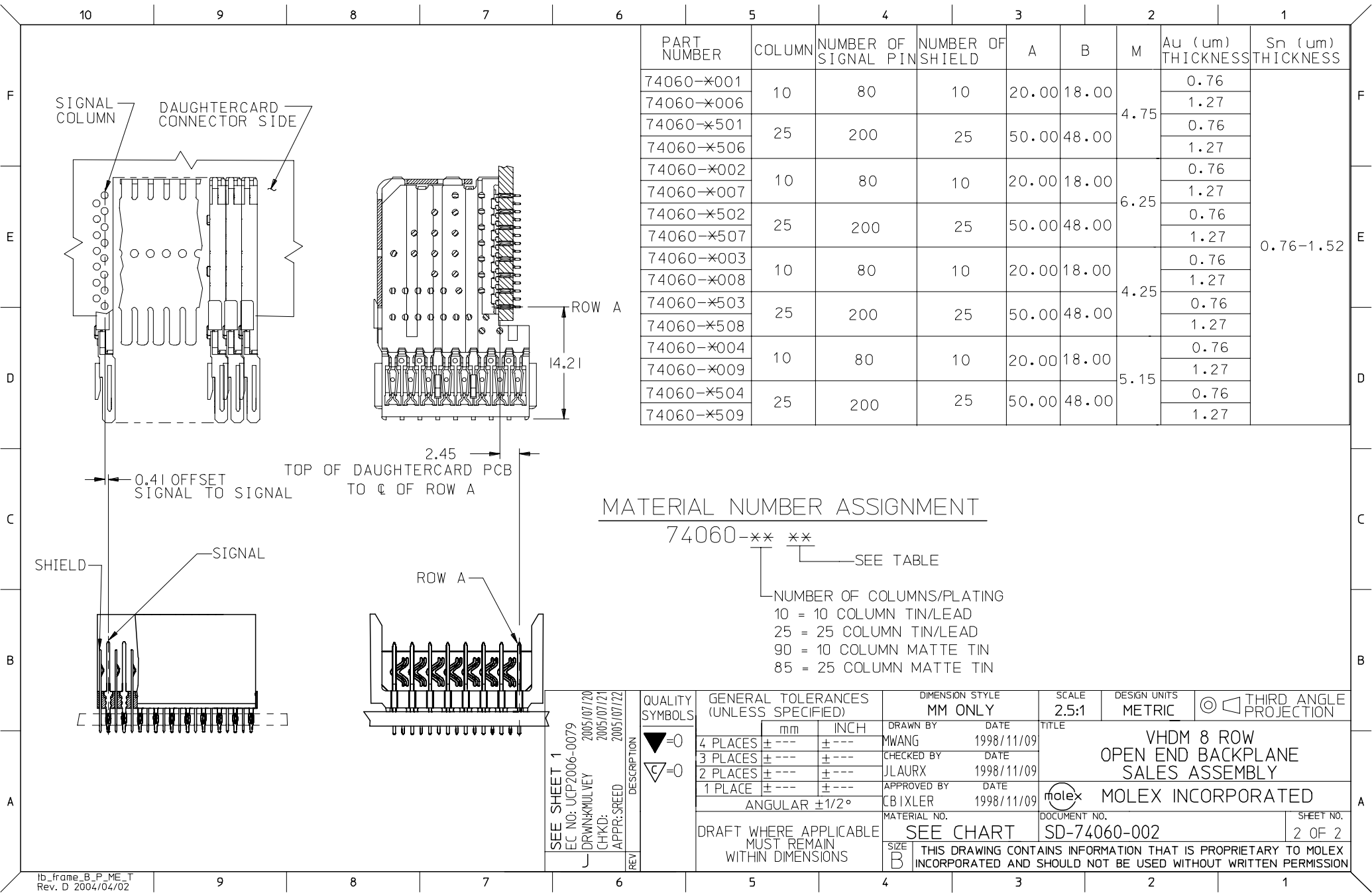


BACKPLANE HOLE PATTERN  
RECOMMENDED DIMENSION



- NOTES:
- MATERIALS:  
HOUSING - LIQUID CRYSTAL POLYMER (LCP).  
GLASS-FILLED, UL 94V-0, COLOR: BLACK  
SIGNAL PIN & SHIELD - COPPER ALLOY
  - FINISHES:  
CONTACT AREA: SELECTIVE GOLD (Au)  
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb)  
OR SELECTIVE MATTE TIN (Sn)  
NICKEL (Ni) OVERALL.
  - THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999
  - FOR MIXED CONTACT LENGTHS CONSULT MOLEX FOR AVAILABILITY
  - FOR SPECIFIC MATERIAL NUMBERS & MATING INFORMATION REFER TO SHEET 2
  - PACKAGE PER PK-74060-003
  - EITHER MARK PART WITH PART NUMBER & DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.

|                                                                                                                    |                                   |                    |                                                            |       |                            |                                                                                                                                  |                                                                                                          |                        |                                                                                                                 |                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------|------------------------------------------------------------|-------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--|
| ADD LEADFREE PINS<br>EC NO: UCP2006-0079<br>DRWNG: MULVEY 2005/07/20<br>CHKD: 2005/07/21<br>APPR: SREED 2005/07/22 | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | DESCRIPTION<br>REV | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY |                                                                                                                                  | SCALE<br>2.5:1                                                                                           | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION |                                                                 |  |
|                                                                                                                    |                                   |                    |                                                            |       | mm                         | INCH                                                                                                                             | DRAWN BY                                                                                                 | DATE                   |                                                                                                                 | TITLE<br><br>VHDM 8 ROW<br>OPEN END BACKPLANE<br>SALES ASSEMBLY |  |
|                                                                                                                    |                                   |                    | 4 PLACES                                                   | ± --- | ± ---                      | MWANG                                                                                                                            | 1998/11/09                                                                                               |                        |                                                                                                                 |                                                                 |  |
|                                                                                                                    |                                   |                    | 3 PLACES                                                   | ± --- | ± ---                      | CHECKED BY                                                                                                                       | DATE                                                                                                     |                        |                                                                                                                 |                                                                 |  |
|                                                                                                                    |                                   |                    | 2 PLACES                                                   | ± --- | ± ---                      | JLAURX                                                                                                                           | 1998/11/09                                                                                               |                        |                                                                                                                 |                                                                 |  |
|                                                                                                                    |                                   |                    | 1 PLACE                                                    | ± --- | ± ---                      | APPROVED BY                                                                                                                      | DATE                                                                                                     |                        |                                                                                                                 |                                                                 |  |
|                                                                                                                    |                                   |                    | ANGULAR ±1/2°                                              |       | CBIXLER                    | 1998/11/09                                                                                                                       |  MOLEX INCORPORATED |                        |                                                                                                                 |                                                                 |  |
|                                                                                                                    |                                   |                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | MATERIAL NO.               |                                                                                                                                  |                                                                                                          | DOCUMENT NO.           |                                                                                                                 | SHEET NO.                                                       |  |
|                                                                                                                    |                                   |                    |                                                            |       | SEE SHEET 2                |                                                                                                                                  |                                                                                                          | SD-74060-002           |                                                                                                                 | 1 OF 2                                                          |  |
|                                                                                                                    |                                   |                    |                                                            |       | SIZE<br>B                  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                                                          |                        |                                                                                                                 |                                                                 |  |



| PART NUMBER | COLUMN | NUMBER OF SIGNAL PIN | NUMBER OF SHIELD | A     | B     | M    | Au (um) THICKNESS | Sn (um) THICKNESS |
|-------------|--------|----------------------|------------------|-------|-------|------|-------------------|-------------------|
| 74060-×001  | 10     | 80                   | 10               | 20.00 | 18.00 | 4.75 | 0.76              | 0.76-1.52         |
| 74060-×006  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×501  | 25     | 200                  | 25               | 50.00 | 48.00 | 6.25 | 0.76              |                   |
| 74060-×506  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×002  | 10     | 80                   | 10               | 20.00 | 18.00 | 4.25 | 0.76              |                   |
| 74060-×007  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×502  | 25     | 200                  | 25               | 50.00 | 48.00 | 5.15 | 0.76              |                   |
| 74060-×507  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×003  | 10     | 80                   | 10               | 20.00 | 18.00 | 4.25 | 0.76              |                   |
| 74060-×008  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×503  | 25     | 200                  | 25               | 50.00 | 48.00 | 5.15 | 0.76              |                   |
| 74060-×508  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×004  | 10     | 80                   | 10               | 20.00 | 18.00 | 5.15 | 0.76              |                   |
| 74060-×009  |        |                      |                  |       |       |      | 1.27              |                   |
| 74060-×504  | 25     | 200                  | 25               | 50.00 | 48.00 | 5.15 | 0.76              |                   |
| 74060-×509  |        |                      |                  |       |       |      | 1.27              |                   |

MATERIAL NUMBER ASSIGNMENT

74060-\*\*-\*\*-\*\*

SEE TABLE

NUMBER OF COLUMNS/PLATING  
10 = 10 COLUMN TIN/LEAD  
25 = 25 COLUMN TIN/LEAD  
90 = 10 COLUMN MATTE TIN  
85 = 25 COLUMN MATTE TIN

|                                                                                                     |                                   |                                                                                                                                                                      |                            |                    |                                                                                                                               |                        |                        |                     |  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|---------------------|--|
| SEE SHEET 1<br>EC NO: UCP2006-0079<br>DRW:KIMULVEY<br>CHKD: 2005/07/21<br>APPR: SREED<br>2005/07/22 | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± --- ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ±1/2° | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>2.5:1                                                                                                                | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |                     |  |
|                                                                                                     |                                   |                                                                                                                                                                      | DRAWN BY<br>MWANG          | DATE<br>1998/11/09 | TITLE<br>VHDM 8 ROW<br>OPEN END BACKPLANE<br>SALES ASSEMBLY                                                                   |                        |                        |                     |  |
|                                                                                                     |                                   |                                                                                                                                                                      | CHECKED BY<br>JLAURX       | DATE<br>1998/11/09 |                                                                                                                               |                        |                        |                     |  |
|                                                                                                     |                                   |                                                                                                                                                                      | APPROVED BY<br>CBIXLER     | DATE<br>1998/11/09 | MOLEX MOLEX INCORPORATED                                                                                                      |                        |                        |                     |  |
|                                                                                                     |                                   |                                                                                                                                                                      | MATERIAL NO.<br>SEE CHART  |                    | DOCUMENT NO.<br>SD-74060-002                                                                                                  |                        |                        | SHEET NO.<br>2 OF 2 |  |
|                                                                                                     |                                   |                                                                                                                                                                      | SIZE<br>B                  |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                        |                     |  |