

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0674911038](#)
Status: **Active**
Overview: Serial ATA Products
Description: 1.27mm (.050") Pitch Serial ATA High Speed Header, Through Hole, Vertical, 7 Circuits, Gold (Au) Flash, for 2.40mm (.094") PCB, Lead-free

Documents:

[3D Model](#) [Product Specification PS-67491-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

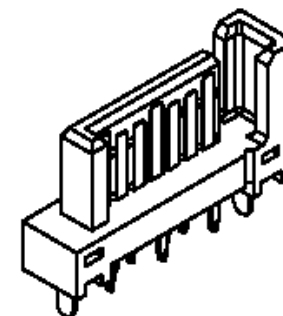
| | |
|----------------|-------------------------------------|
| Product Family | PCB Headers |
| Series | 67491 |
| Application | Board-to-Board, Wire-to-Board |
| Overview | Serial ATA Products |
| Product Name | Serial ATA |

Physical

| | |
|--------------------------------|----------------|
| Breakaway | No |
| Circuits (Loaded) | 7 |
| Color - Resin | Black |
| Durability (mating cycles max) | 50 |
| First Mate / Last Break | Yes |
| Glow-Wire Compliant | No |
| Guide to Mating Part | No |
| Keying to Mating Part | Yes |
| Lock to Mating Part | Yes |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Number of Rows | 1 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.118 In |
| PC Tail Length (mm) | 3.00 mm |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.093 In |
| PCB Thickness Recommended (mm) | 2.40 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.050 In |
| Pitch - Mating Interface (mm) | 1.27 mm |
| Pitch - Term. Interface (in) | 0.050 In |
| Pitch - Term. Interface (mm) | 1.27 mm |
| Plating min: Mating (µin) | 2 |
| Plating min: Mating (µm) | 0.05 |
| Plating min: Termination (µin) | 50.8 |
| Plating min: Termination (µm) | 1.27 |
| Polarized to Mating Part | Yes |
| Polarized to PCB | Yes |
| Shrouded | No |
| Stackable | No |
| Surface Mount Compatible (SMC) | No |
| Temperature Range - Operating | -35°C to +85°C |
| Termination Interface: Style | Through Hole |

Electrical

| | |
|-------------------------------|------|
| Current - Maximum per Contact | 1.5A |
|-------------------------------|------|



*Series
image - Reference only*

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Halogen-Free

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

[67491Series](#)

Mates With

Serial ATA Signal Connector [67489](#) , [88755](#)

Voltage - Maximum

15V DC

Material Info

Reference - Drawing Numbers

Product Specification

PS-67491-001

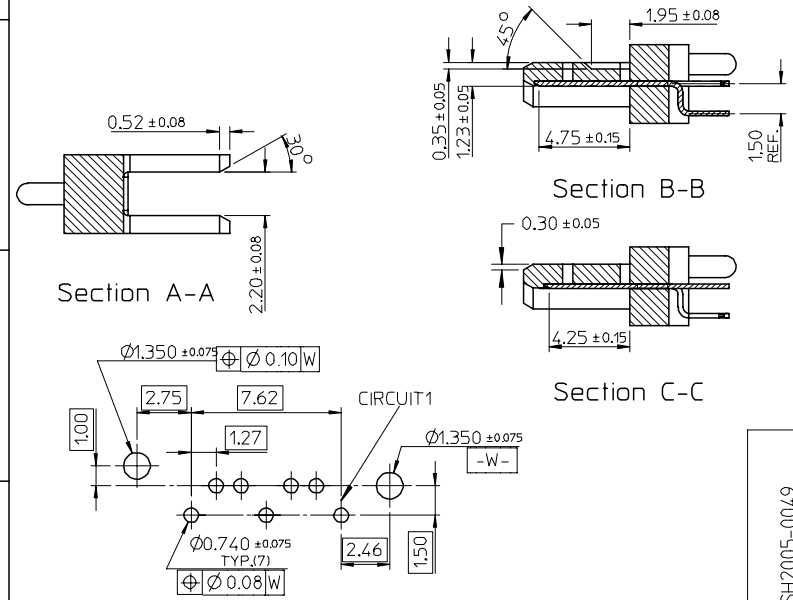
Sales Drawing

SD-67491-002

This document was generated on 04/07/2010

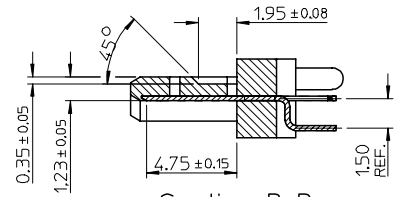
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|------------|-------------------------|------|------|---------------|-----------------|---|--|---|---|
| | P/N | CONTACT PLATING TYPE | "A" | "B" | PCB THICKNESS | SOLDERING PLATE | | | | |
| F | 67491-0030 | GOLD FLASH | 2.05 | 2.40 | 1.60 | TIN-LEAD | | <p>NOTES: 1. MATERIAL : HOUSING: THERMAL PLASTIC, UL94V-0, COLOR: BLACK TERMINAL/PEG: COPPER ALLOY 2. TERMINAL PLATING : CONTACT AREA: GOLD PLATED SOLDER TAIL: 1.27 MOICRON MIN. TIN-LEAD OR TIN PLATED UNDER PLATE: 1.27 MOICRON MIN. NICKEL PLATED 3. PEG PLATING: 1.27 MOICRON MIN. TIN-LEAD OR TIN PLATED OVERALL 1.27 MOICRON MIN. TNICKEL UNDER PLATED 4. PACKAGING SPECIFICATION REFER TO PK-67491-001 5. PRODUCT SPECIFICATION REFER TO PS-67491-001 6. MATING PART: 67489 7. RECOMMENDED PROCESS: WAVE SOLDERING</p> | | |
| | 67491-0031 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-0032 | 0.38 MICRON GOLD PLATED | | | | | | | | |
| E | 67491-0035 | GOLD FLASH | 2.35 | 2.40 | 2.00 | | | | | |
| | 67491-0036 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-0037 | 0.38 MICRON GOLD PLATED | | | | | | | | |
| D | 67491-0038 | GOLD FLASH | 3.00 | 3.20 | 2.40 | PURE TIN | | | | |
| | 67491-0039 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-0040 | 0.38 MICRON GOLD PLATED | | | | | | | | |
| C | 67491-1030 | GOLD FLASH | 2.05 | 2.40 | 1.60 | | | | | |
| | 67491-1031 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-1032 | 0.38 MICRON GOLD PLATED | | | | | | | | |
| B | 67491-1033 | GOLD FLASH | 2.35 | 2.40 | 2.00 | | | | | |
| | 67491-1036 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-1037 | 0.38 MICRON GOLD PLATED | | | | | | | | |
| A | 67491-1038 | GOLD FLASH | 3.00 | 3.20 | 2.40 | | | | | |
| | 67491-1039 | 0.76 MICRON GOLD PLATED | | | | | | | | |
| | 67491-1040 | 0.38 MICRON GOLD PLATED | | | | | | | | |

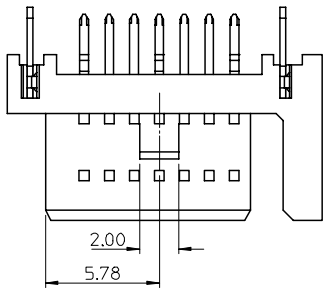


RECOMMENDED P.C.B. LAYOUT t=1.6mm OR 2.0mm

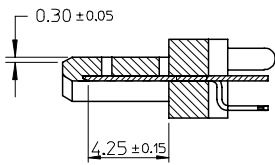
| EC NO: SH2005-0049 DRWN:GRMA 2004/09/03 CHKD:GRATE M&004/09/07 APPR: YTYAP 2004/09/10 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | | | | | | | | | | | | | | | |
|--|--|---|-----------|---------------------|------------------------|--------------------|---------|-----------|----------|--|-------|----------|-----------|---------|-----------|---------|-----------|-------------------------|------------------------|---|------------------|
| | | <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.15</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.15 | ± --- | 1 PLACE | ± 0.25 | ± --- | DIMENSION STYLE MM ONLY | TITLE | 1.27MM HIGH SPEED SERIAL PLUG VERTICLE TYPE | |
| | | | mm | INCH | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.15 | ± --- | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± --- | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE | <table border="1"> <thead> <tr> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>'01/06/21</td> <td>RICHARD</td> </tr> <tr> <td>'01/06/21</td> <td>VINCENT</td> </tr> <tr> <td>'01/06/21</td> <td>ERIC</td> </tr> </tbody> </table> | DATE | BY | '01/06/21 | RICHARD | '01/06/21 | VINCENT | '01/06/21 | ERIC | <table border="1"> <thead> <tr> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>'01/06/21</td> <td>RICHARD</td> </tr> <tr> <td>'01/06/21</td> <td>VINCENT</td> </tr> <tr> <td>'01/06/21</td> <td>ERIC</td> </tr> </tbody> </table> | DATE | BY | '01/06/21 | RICHARD | '01/06/21 | VINCENT | '01/06/21 | ERIC | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-67491-002 | SHEET NO. 1 OF 1 |
| DATE | BY | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | RICHARD | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | VINCENT | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | ERIC | | | | | | | | | | | | | | | | | | | | |
| DATE | BY | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | RICHARD | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | VINCENT | | | | | | | | | | | | | | | | | | | | |
| '01/06/21 | ERIC | | | | | | | | | | | | | | | | | | | | |
| REV | DESCRIPTION | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | |



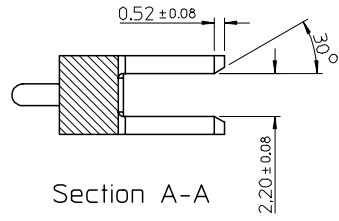
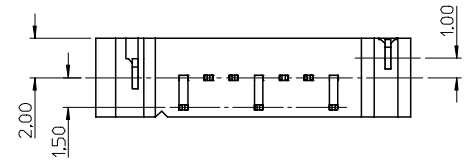
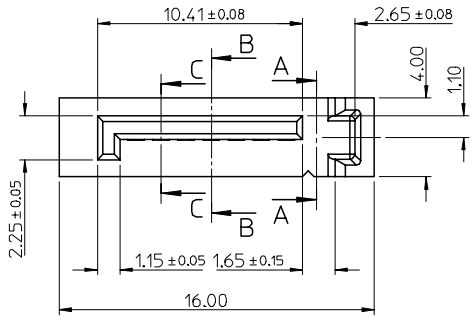
Section B-B



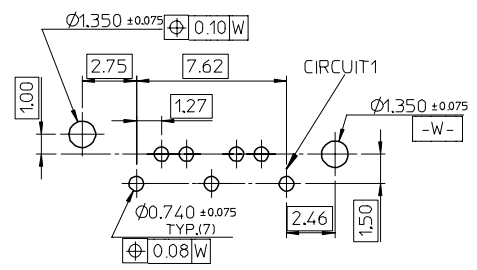
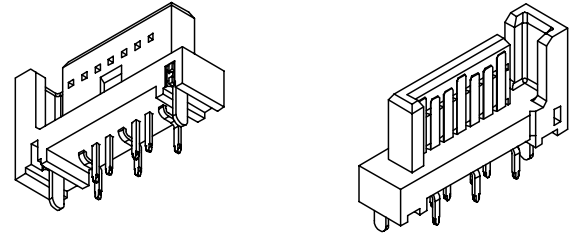
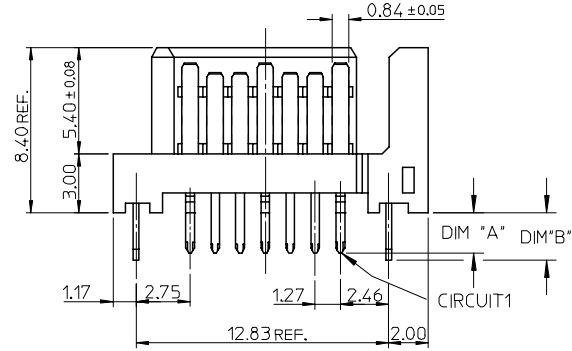
- NOTES:
- MATERIAL:
HOUSING: SEE TABLE, UL94V-0, COLOR: BLACK OR BULE (SEE P/N TABLE)
TERMINAL/PEG: COPPER ALLOY
 - TERMINAL PLATING :
CONTACT AREA: GOLD PLATED
SOLDER TAIL: 1.27 MICRON MIN. TIN PLATED
UNDER PLATE: 1.27 MICRON MIN. NICKEL PLATED
 - PEG PLATING:
1.27 MICRON MIN. TIN PLATED
OVERALL 1.27 MICRON MIN. NICKEL UNDER PLATED
 - PACKAGING SPECIFICATION REFER TO PK-67491-001
 - PRODUCT SPECIFICATION REFER TO PS-67491-001
 - MATING PART: 67489
 - RECOMMENDED PROCESS: WAVE SOLDERING
 - PRODUCT COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC"



Section C-C








Section A-A



RECOMMENDED P.C.B. LAYOUT t=1.6mm OR 2.0mm

| | | | | | | | | | | | |
|---|-------------------------------|---------------------------------------|----------------------|------------------------------|----------------------|--------------------------------------|------------------------|--|--|--|--|
| ADD PART NUMBER EC NO: SH2007-0134 DRWN: BCHENZ6 CHKD: JTIAN APPR: JNCHEN | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± --- | 2 PLACES ± 0.15 ± --- | 1 PLACE ± 0.25 ± --- | ANGULAR ± 3° | | DRAWN BY DATE RICHARD '01/06/21 | | | |
| | | | | | | CHECKED BY DATE VINCENT '01/06/21 | | TITLE 1.27MM HIGH SPEED SERIAL PLUG VERTICAL TYPE | | | |
| | | | | | | APPROVED BY DATE ERIC '01/06/21 | | MOLEX INCORPORATED | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE SHEET 2 | | DOCUMENT NO. SD-67491-002 | | SHEET NO. 1 OF 2 | | | | | |

| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | |
|------------|-------------------------|-------------------------|------|------|---------------|-----------------|------------------------------------|-------------------------------------|--|---|--|--|--|
| | P/N | CONTACT PLATING TYPE | "A" | "B" | PCB THICKNESS | SOLDERING PLATE | COLOR | PLASTIC TYPE | | | | | |
| F | 67491-1030 | GOLD FLASH | 2.05 | 2.40 | 1.60 | PURE TIN | BLACK | | <div style="text-align: center;">  </div> | | | | |
| | 67491-1031 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1032 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |
| 67491-1035 | GOLD FLASH | | | | | | | | | | | | |
| 67491-1036 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | | |
| 67491-1037 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | | |
| E | 67491-1038 | GOLD FLASH | 3.00 | 3.20 | 2.40 | | PURE TIN | BLACK | | | THERMAL PLASTIC | <div style="text-align: center;">  </div> | |
| | 67491-1039 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1040 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |
| 67491-2030 | GOLD FLASH | | | | | | | | | | | | |
| 67491-2031 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | | |
| 67491-2032 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | | |
| D | 67491-2035 | GOLD FLASH | 2.35 | 2.40 | 2.00 | PURE TIN | BLUE PENTONE NO.293C ΔE<3 | THERMAL PLASTIC | <div style="text-align: center;">  </div> | | | | |
| | 67491-2036 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-2037 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |
| 67491-2038 | GOLD FLASH | | | | | | | | | | | | |
| 67491-2039 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | | |
| 67491-2040 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | | |
| C | 67491-1130 | GOLD FLASH | 2.05 | 2.40 | 1.60 | PURE TIN | BLACK | HIGH TEMPERATURE THERMAL PLASTIC | | | <div style="text-align: center;">  </div> | | |
| | 67491-1131 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1132 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1135 | GOLD FLASH | | | | | | | | | | | |
| | 67491-1136 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1137 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |
| C | 67491-1138 | GOLD FLASH | 3.00 | 3.20 | 2.40 | PURE TIN | BLACK | HIGH TEMPERATURE THERMAL PLASTIC | <div style="text-align: center;">  </div> | | | | |
| | 67491-1139 | 0.76 MICRON GOLD PLATED | | | | | | | | | | | |
| | 67491-1140 | 0.38 MICRON GOLD PLATED | | | | | | | | | | | |

| | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| B | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|

| A | ADD PART NUMBER EC NO: SH2007-0134 DRWN: BCHENZ6 2006/09/01 CHKD: JTIAN 2006/09/01 APPR: JNCHEH 2006/09/08 | QUALITY SYMBOLS ▽=0 ▽C=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.15</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 3 °</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.15 | ± --- | 1 PLACE | ± 0.25 | ± --- | ANGULAR ± 3 ° | | | DIMENSION STYLE MM ONLY | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | DRAWN BY DATE RICHARD '01/06/21 CHECKED BY DATE VINCENT '01/06/21 APPROVED BY DATE ERIC '01/06/21 | TITLE 1.27MM HIGH SPEED SERIAL PLUG VERTICAL TYPE | MATERIAL NO. SD-67491-002 | DOCUMENT NO. SD-67491-002 | SHEET NO. 2 OF 2 |
|--|--|---|--|----------|-------|-------|----------|-------|-------|----------|-------|-------|----------|--------|-------|---------|--------|-------|---------------|--|--|----------------------------|--------------|------------------------|------------------------|--|--|------------------------------|------------------------------|---------------------|
| | | | | | mm | INCH | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.15 | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ± 3 ° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SEE TABLE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MOLEX MOLEX INCORPORATED | | | | | | | | | | | | | | | | | | | | | | | | | | | |