

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

**Part Number:** [0878390018](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch SAS Receptacle, Vertical, Hybrid, with Straight Solder Tab, 2.36mm (.093") PCB Thickness, Embossed Tape Packaging, with Cap, 29 Circuits, Lead free

**Documents:**

[3D Model](#) [Product Specification PS-87839-041 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [87839](#)  
 Application Board-to-Board  
 Comments With pick and place cap  
 Component Type Receptacle  
 Product Name SAS  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 29  
 Circuits (maximum) 29  
 Circuits Detail Signal 7, SCSI 7, Power 15  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Gender Female  
 Keying to Mating Part Yes  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold, Tin  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.093 In  
 PC Tail Length (mm) 2.36 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.093 In  
 PCB Thickness Recommended (mm) 2.36 mm  
 Packaging Type Embossed Tape on Reel  
 Panel Mount Yes  
 Pitch - Mating Interface (in) 0.031 In, 0.050 In  
 Pitch - Mating Interface (mm) 0.80 mm, 1.27 mm  
 Pitch - Term. Interface (in) 0.031 In, 0.050 In  
 Pitch - Term. Interface (mm) 0.80 mm, 1.27 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 102  
 Plating min: Termination (µm) 2.54

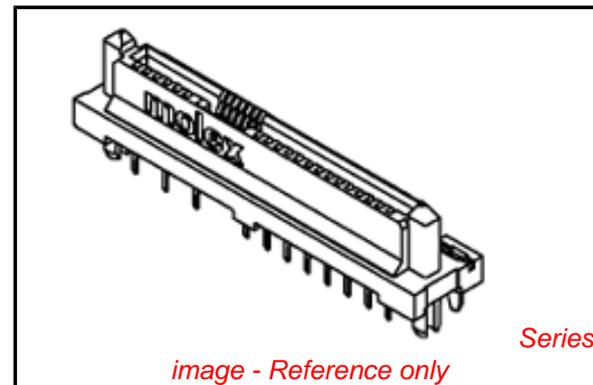


image - Reference only

Series

**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Halogen-Free**

**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.

**China RoHS**



**Search Parts in this Series**

[87839Series](#)

**Mates With**

Device Plugs [87679](#) , [87799](#) , [87703](#) , SFF 8482 Hard Disk Drive and Backplane Plug

|                                |                             |
|--------------------------------|-----------------------------|
| Polarized to Mating Part       | Yes                         |
| Polarized to PCB               | Yes                         |
| Surface Mount Compatible (SMC) | Yes                         |
| Temperature Range - Operating  | 0°C to +55°C                |
| Termination Interface: Style   | Surface Mount, Through Hole |
| Waterproof / Dustproof         | No                          |
| Wire Size AWG                  | N/A                         |

### **Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 1.5A |
| Shielded                      | No   |
| Voltage - Maximum             | 30V  |

### **Solder Process Data**

|  |                           |
|--|---------------------------|
| Duration at Max. Process Temperature (seconds) | 10                        |
| Lead-free Process Capability                   | Reflow Capable (SMT only) |
| Max. Cycles at Max. Process Temperature        | 1                         |
| Process Temperature max. C                     | 260                       |

### **Material Info**

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

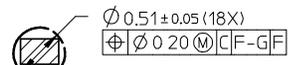
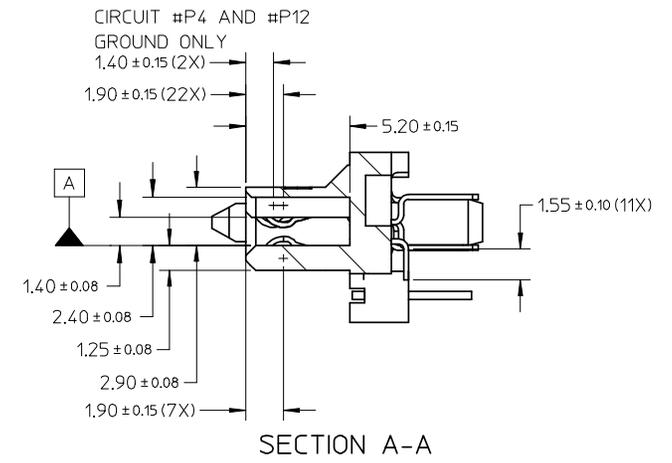
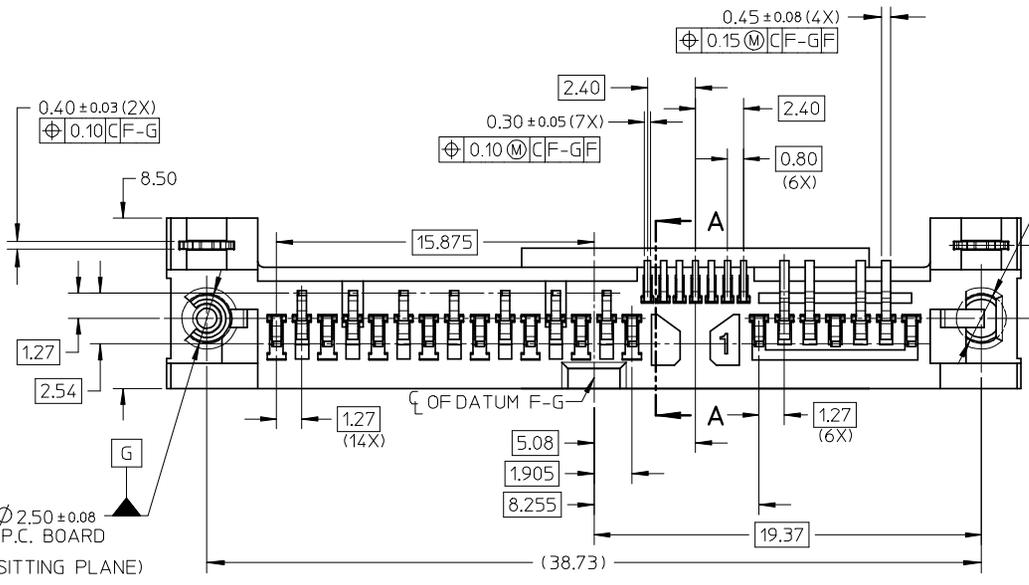
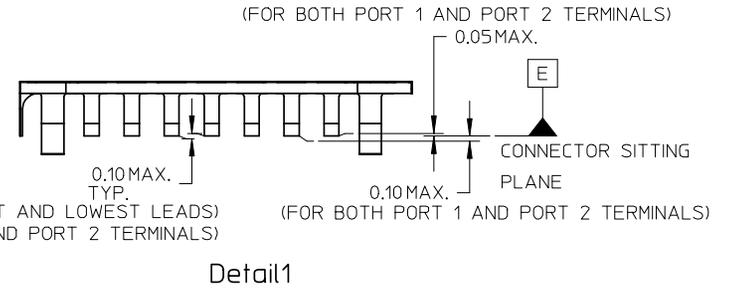
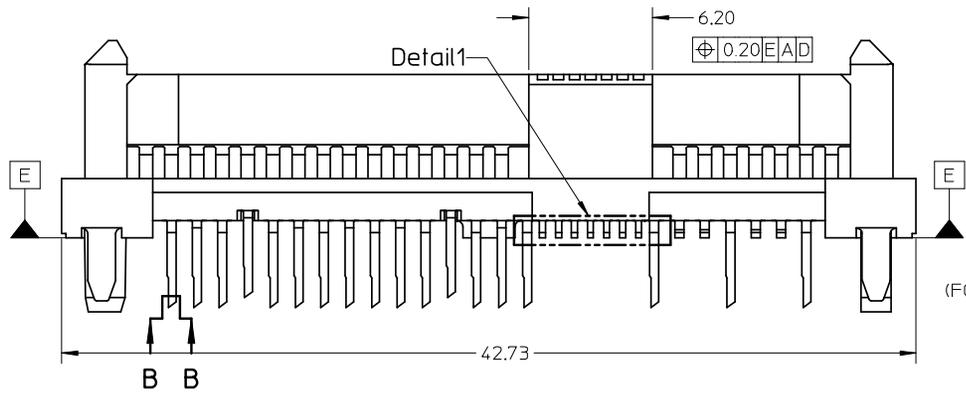
|                       |              |
|-----------------------|--------------|
| Product Specification | PS-87839-041 |
| Sales Drawing         | SD-87839-040 |

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10 9 8 7 6 5 4 3 2 1



SECTION B-B

|                        |                     |
|------------------------|---------------------|
| UPDATE DRAWING         | QUALITY SYMBOLS     |
| EC NO: S2008-0663      | $\nabla=0$          |
| DRW:KHLIM 2008/02/14   | $\sphericalangle=0$ |
| CHKD:CGOH 2008/02/15   |                     |
| APPR:KCLING 2008/02/18 |                     |
| REV                    | DESCRIPTION         |
| A6                     |                     |

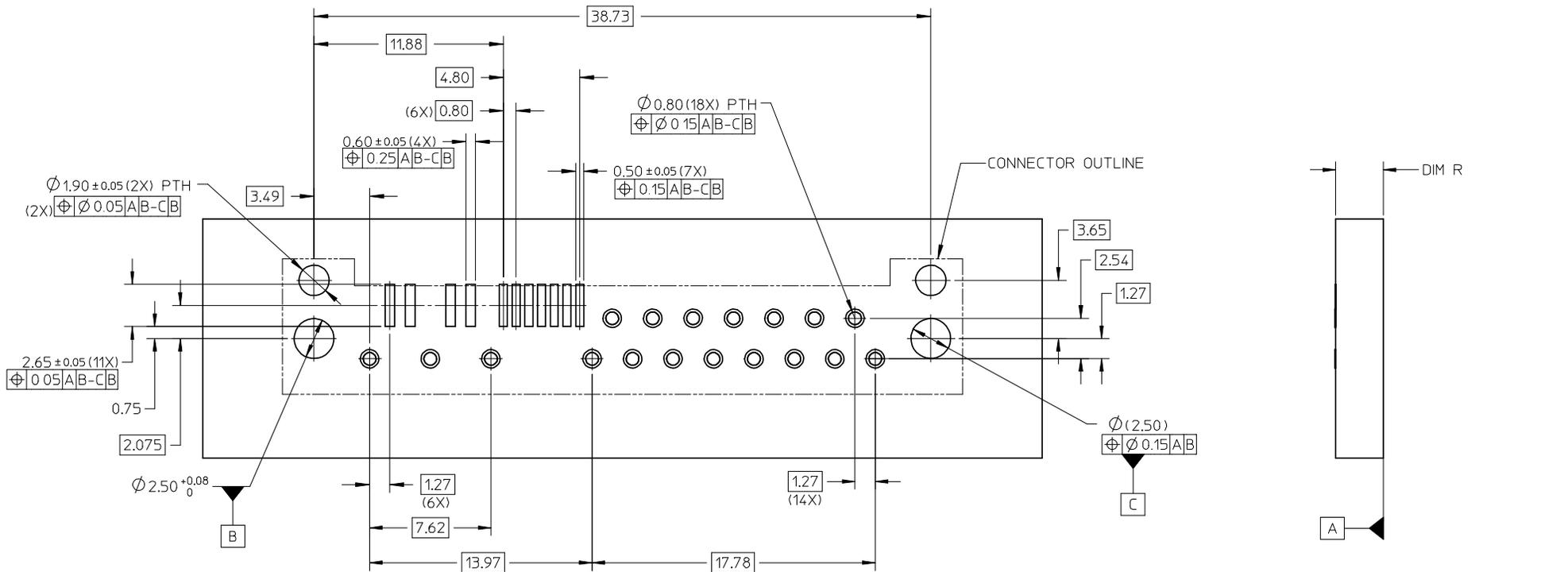
|  |                     |           |
|--|---------------------|-----------|
| GENERAL TOLERANCES (UNLESS SPECIFIED)                | mm                  | INCH      |
|  | 4 PLACES $\pm$ ---  | $\pm$ --- |
|  | 3 PLACES $\pm$ ---  | $\pm$ --- |
|  | 2 PLACES $\pm$ 0.20 | $\pm$ --- |
|  | 1 PLACE $\pm$ ---   | $\pm$ --- |
| ANGULAR $\pm$ 3°                                     |                     |           |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                     |           |

|                 |            |   |              |                        |
|-----------------|------------|---|--------------|------------------------|
| DIMENSION STYLE |            | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |
| MM ONLY         |            | NTS   | METRIC       |                        |
| DRAWN BY        | DATE       | TITLE   |              |                        |
| DKOH            | 2004/11/23 | SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT |              |                        |
| CHECKED BY      | DATE       | MOLEX INCORPORATED                                    |              |                        |
| KCLING          | 2004/12/01 | MOLEX INCORPORATED                                    |              |                        |
| APPROVED BY     | DATE       | DOCUMENT NO.  |              |                        |
| SKTOH           | 2004/12/01 | SD-87839-040  |              |                        |
| MATERIAL NO.    | SEE TABLE  | SHEET NO.   |              |                        |
|                 |            | 2 OF 4  |              |                        |

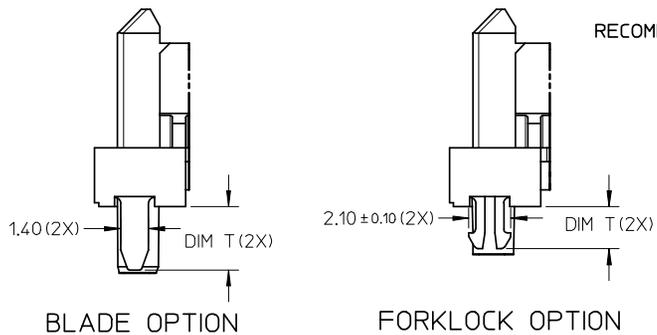
|   |           |
|---|-----------|
| SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT |           |
| MOLEX INCORPORATED                                    |           |
| DOCUMENT NO.  | SHEET NO. |
| SD-87839-040  | 2 OF 4    |

9 8 7 6 5 4 3 2 1

| 10         | 9             | 8        | 7         | 6                  | 5  | 4                               | 3                      | 2                        | 1                                   |
|------------|---------------|----------|-----------|--------------------|--|---------------------------------|------------------------|--------------------------|-------------------------------------|
| PART NO    | PACKAGING     | QUANTITY | HOLD DOWN | PICK AND PLACE CAP | DIM P (16X)<br>(PORT 1 AND POWER PORT)<br>(EXCLUDING P4 AND P12) | DIM Q (2X)<br>(PORT P4 AND P12) | DIM R<br>PCB THICKNESS | DIM S (2X)<br>PEG HEIGHT | DIM T (2X)<br>BLADE/FORKLOCK HEIGHT |
| 87839-0011 | TRAY          | 50/TRAY  | BLADE     | YES                | 3.49±0.15  | 2.99±0.15                       | 3.00±0.10              | 3.70±0.10                | 3.12                                |
| 87839-0019 | TRAY          | 30/TRAY  | BLADE     | NO                 | 3.49±0.15  | 2.99±0.15                       | 3.00±0.10              | 3.70±0.10                | 3.12                                |
| 87839-0017 | TAPE AND REEL | 350/REEL | BLADE     | YES                | 3.49±0.15  | 2.99±0.15                       | 3.00±0.10              | 3.70±0.10                | 3.12                                |
| 87839-0018 | TAPE AND REEL | 350/REEL | BLADE     | YES                | 2.36±0.15  | 2.36±0.15                       | 2.36±0.10              | 2.00±0.10                | 2.36                                |
| 87839-0039 | TAPE AND REEL | 350/REEL | FORKLOCK  | YES                | 2.11±0.15  | 2.11±0.15                       | 2.36±0.10              | 2.00±0.10                | 2.06                                |

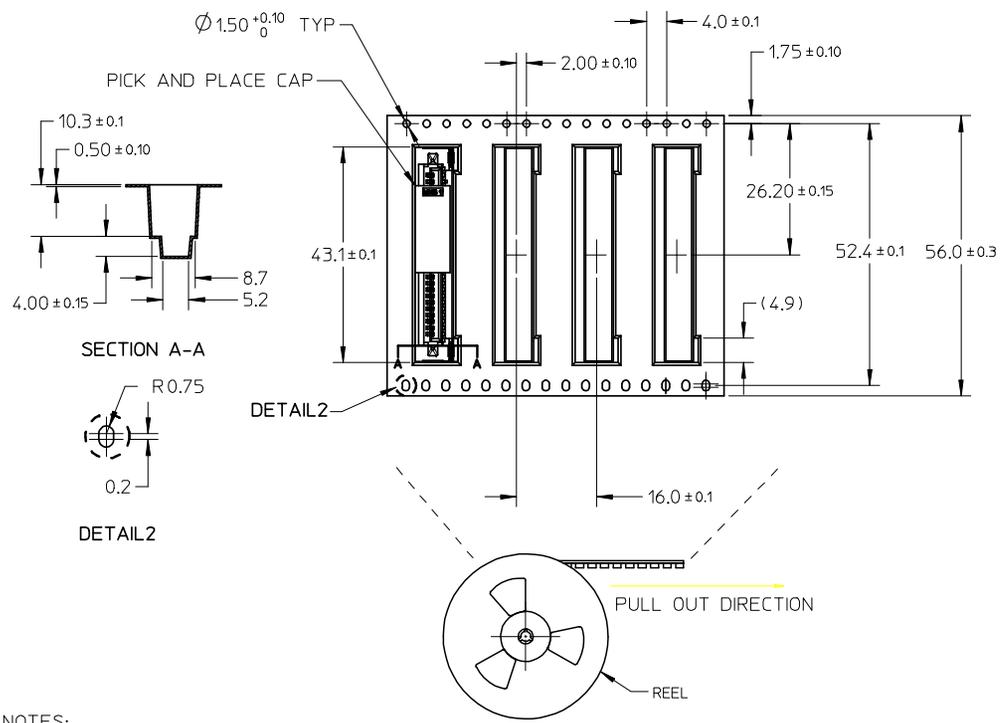


RECOMMENDED PCB LAYOUT  
RECOMMENDED PCB THICKNESS DIM R±0.10

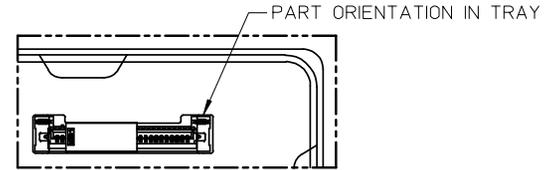
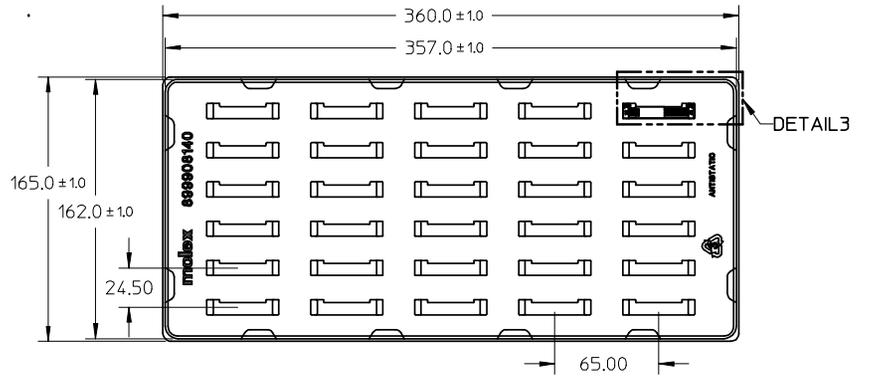


|  |                               |                                       |   |                                   |                  |              |   |                        |  |  |
|--|-------------------------------|---------------------------------------|---|-----------------------------------|------------------|--------------|---|------------------------|--|--|
| <b>UPDATE DRAWING</b><br>EC NO: S2008-0663<br>DRW:KHLIM 2008/02/14<br>CHKD:CGOH 2008/02/15<br>APPR:KCLING 2008/02/18 | QUALITY SYMBOLS<br>▽=0<br>◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |   | DIMENSION STYLE<br><b>MM ONLY</b> |                  | SCALE<br>NTS | DESIGN UNITS<br>METRIC                                | THIRD ANGLE PROJECTION |  |  |
|  |                               | 4 PLACES                              | ± ---   | ± ---                             | DRAWN BY         | DATE         | TITLE   |                        |  |  |
|  |                               | 3 PLACES                              | ± ---   | ± ---                             | CHECKED BY       | DATE         | SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT |                        |  |  |
|  |                               | 2 PLACES                              | ± 0.20  | ± ---                             | APPROVED BY      | DATE         | MOLEX INCORPORATED                                    |                        |  |  |
| 1 PLACE  | ± ---                         | ± ---                                 | ANGULAR ± 3 °   |                                   | MATERIAL NO.     |              | DOCUMENT NO.  |                        |  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |                               |                                       | SEE TABLE   |                                   | SKTOH 2004/12/01 |              | SD-87839-040  |                        |  |  |
| SIZE A3  |                               |                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                   |                  |              |   |                        |  |  |

TAPE AND REEL PACKAGING

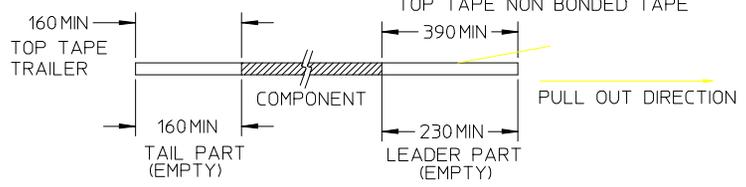


TRAY PACKAGING

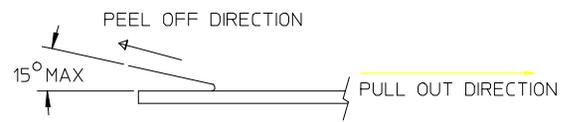


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 80gf MAX.  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. PACKAGING QTY IS: 350 PCS/REEL
- 4. PACKAING STANDARD IS AS PER EIA-481.
- 5. CONNECTOR COMES WITH PICK AND PLACE CAP.

NOTES:

- 1. PACKAGING QTY: 30PCS/TRAY
- 2. NO PICK AND PLACE CAP

|   |                 |                                       |                      |  |                    |  |                        |                        |  |
|---|-----------------|---------------------------------------|----------------------|--|--------------------|--|------------------------|------------------------|--|
| UPDATE DRAWING<br>EC NO: S2008-0663<br>DRW:KHLIM 2008/02/14<br>CHK:D:CGOH 2008/02/15<br>APPR:KCLING 2008/02/18<br>REV: A6 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) |                      | DIMENSION STYLE<br>MM ONLY                           |                    | SCALE<br>NTS   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|   | ▼=0<br>◻=0      | mm                                    | INCH                 | DRAWN BY<br>DKOH                                     | DATE<br>2004/11/23 | TITLE<br>SERIAL ATTACH SCSI RECEPTACLE, HYBRID STANDARD HEIGHT |                        |                        |  |
|   |                 | 4 PLACES ± --- ± ---                  | 3 PLACES ± --- ± --- | CHECKED BY<br>KCLING                                 | DATE<br>2004/12/01 | MATERIAL NO.<br>SD-87839-040                                   |                        |                        |  |
|   |                 | 2 PLACES ± 0.20 ± ---                 | 1 PLACE ± --- ± ---  | APPROVED BY<br>SKTOH                                 | DATE<br>2004/12/01 | DOCUMENT NO.<br>SD-87839-040                                   |                        |                        |  |
|   |                 | ANGULAR ± 3 °                         |                      | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                    | SEE TABLE  |                        | SHEET NO.<br>4 OF 4    |  |