

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

**Part Number:** [0878380002](#)  
**Status:** **Active**  
**Description:** 0.60mm (.024") Pitch miniDIMM Socket, Surface Mount, Vertical, 140 Circuits, with Locating Peg, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87838-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Memory Module Sockets  
 Series [87838](#)  
 Comments JEDEC module is yet to finalise  
 Component Type Memory Module  
 JEDEC Outline N/A  
 Product Name MiniDIMM

**Physical**

Circuits (Loaded) 140  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Entry Angle Vertical (Top Entry)  
 Flammability 94V-0  
 Keying to Mating Part Yes  
 Material - Metal Brass  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.024 In  
 Pitch - Mating Interface (mm) 0.60 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 150  
 Plating min: Termination (µm) 3.81  
 Temperature Range - Operating -10°C to +85°C  
 Termination Interface: Style Surface Mount

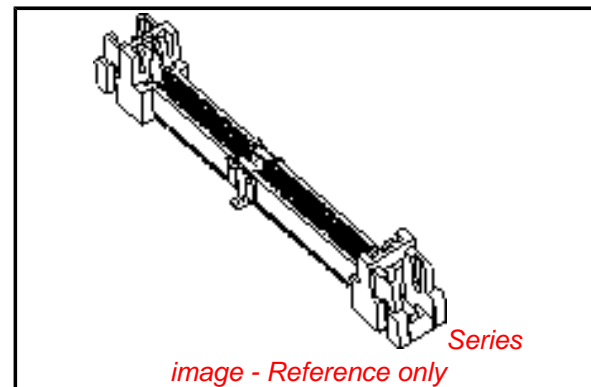
**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 30V  
 Voltage Key Right

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 10  
 Lead-free Process Capability SMC & Wave Capable (TH only)  
 Max. Cycles at Max. Process Temperature 1  
 Process Temperature max. C 260

**Material Info**



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC  
 Contains SVHC: No  
 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**

[87838Series](#)

**Mates With**

1.0mm Thick Memory Module

**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

PS-87838-002  
SD-87838-001

This document was generated on 03/23/2010

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NOTES :

1. MATERIAL:

Housing : Liquid Crystal Polymer, Glass Filled,  
UL94V-0, Colour: Black  
Contacts : Copper Alloy

2. FINISH

Contact Area : 0.76 Micrometer(30 Microinch) Min Gold Over  
1.25 Micrometer(50 Microinch) Min Nickel  
Solder Leads : 3.75 Micrometer(150 Microinch) Min Tin Over  
1.25 Micrometer(50 Microinch) Min Nickel

3. Accepts 1.0mm Thick Memory Module.

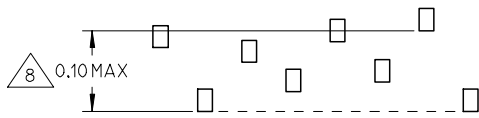
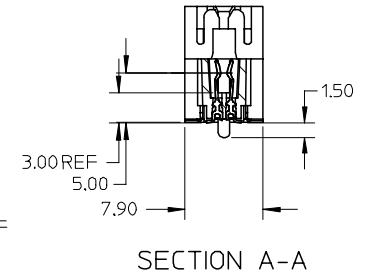
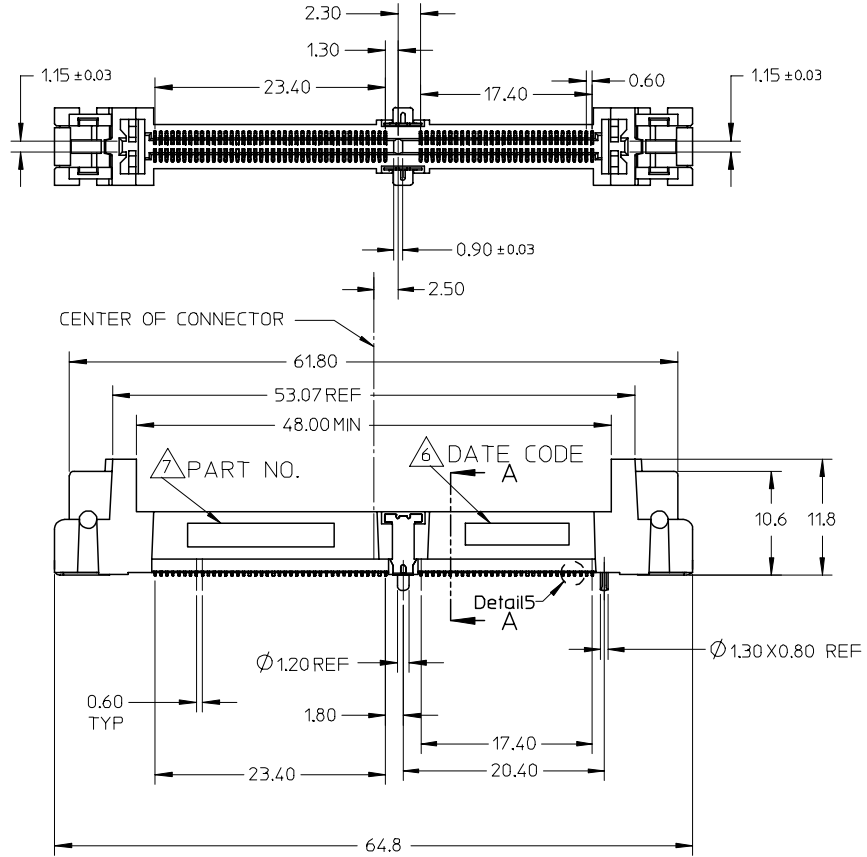
4. Product specification : PS-87838-002

5. Product shall be packed in tape and reel.

6. Date code shall be marked legibly as shown: YYDDD

7. Part number shall be marked legibly as shown,  
87838-xxxx (Refer to table)

8. Coplanarity of all SMT lead surfaces to be within  
0.10mm (0.004").



Detail5

|  |   |  |   |   |                                      |  |                        |  |
|--|---|--|---|---|--------------------------------------|--|------------------------|--|
| REVISE DESIGN<br>EC NO: S2008-0403<br>DRWN: TYANG01<br>CHKD: CGTAN<br>APPR: SILENI | DESCRIPTION<br>2007/11/29<br>2007/11/29<br>2007/11/30 | QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE   | SCALE                                | DESIGN UNITS                                       | THIRD ANGLE PROJECTION |  |
|  |   | ▽=0<br>∇=0   | mm INCH   | MM ONLY   | NTS                                  | METRIC   |                        |  |
|  |   |  | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.13 ± ---<br>1 PLACE ± 0.25 ± --- | DRAWN BY DATE<br>MLONG 2003/09/30   | TITLE                                | MINI DIMM, 0.60MM PITCH<br>140 CKTS, VERTICAL, SMT |                        |  |
|  |   |  | ANGULAR ± 1 °   | CHECKED BY DATE<br>KCL ING 2003/10/07   | APPROVED BY DATE<br>SKTOH 2003/10/07 | MOLEX INCORPORATED                                 |                        |  |
|  |   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | MATERIAL NO.<br>87838-0002  | DOCUMENT NO.<br>SD-87838-001  | SHEET NO.<br>1 OF 5                  |  |                        |  |
|  |   |  | SIZE<br>A3  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                      |  |                        |  |

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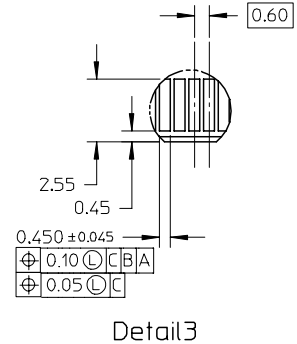
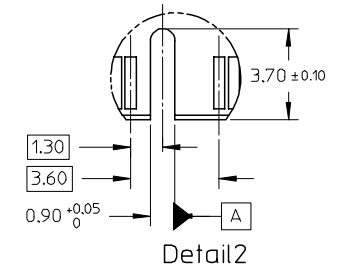
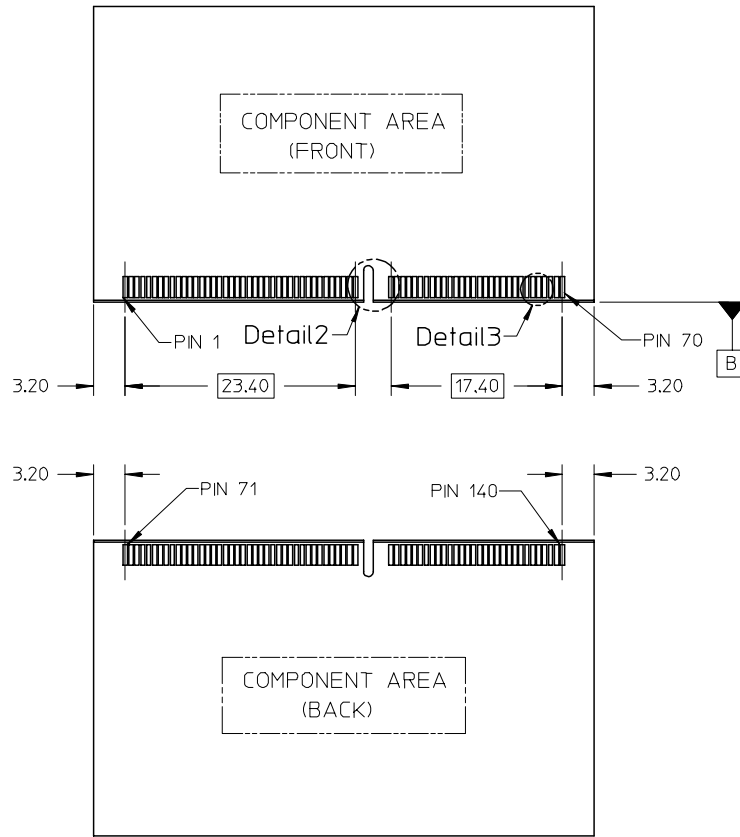
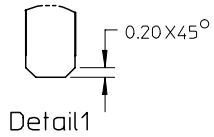
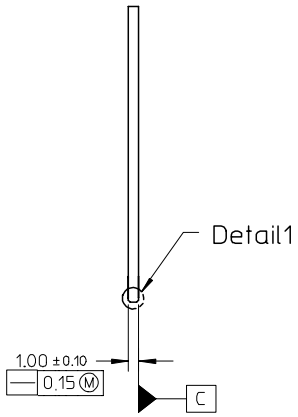
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| REVISE DESIGN<br>EC NO: S2008-0403<br>DRWN: TYANG01<br>CHKD: CGTAN<br>APPR: SHLENI | 2007/11/29<br>2007/11/29<br>2007/11/30 | QUALITY SYMBOLS<br>▽=0<br>◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |   | DIMENSION STYLE<br>MM ONLY |   | SCALE<br>NTS       | DESIGN UNITS<br>METRIC                                      | THIRD ANGLE PROJECTION |                     |  |  |
|  |  |                               |                                       | mm  | INCH                       | DRAWN BY<br>MLONG   | DATE<br>2003/09/30 | TITLE<br>MINI DIMM, 0.60MM PITCH<br>140 CKTS, VERTICAL, SMT |                        |                     |  |  |
|  |  |                               | 4 PLACES                              | ± ---   | ± ---                      | CHECKED BY<br>KCL   | DATE<br>2003/10/07 | MATERIAL NO.<br>87838-0002                                  |                        |                     |  |  |
|  |  |                               | 3 PLACES                              | ± ---   | ± ---                      | APPROVED BY<br>SKTOH  | DATE<br>2003/10/07 | DOCUMENT NO.<br>SD-87838-001                                |                        | SHEET NO.<br>2 OF 5 |  |  |
|  |  | ANGULAR ± 1 °                 |                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS |                            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |   |                        |                     |  |  |

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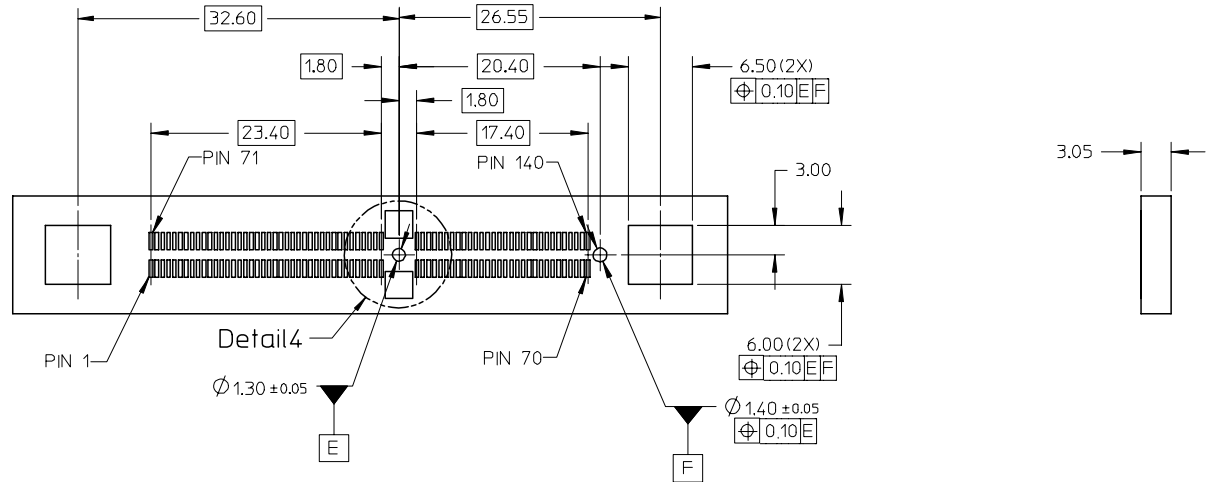
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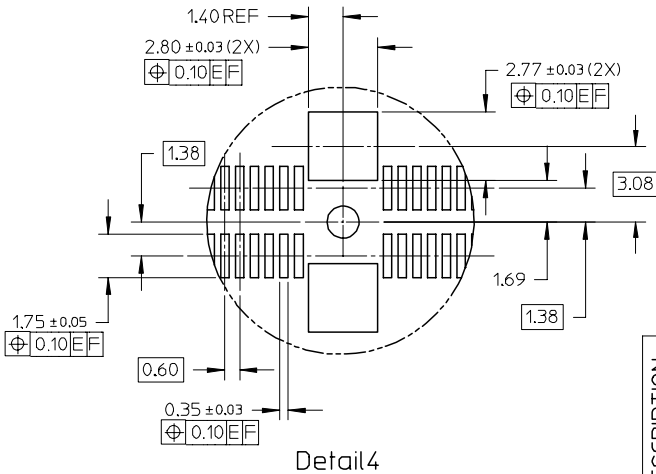
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RECOMMENDED PCB LAYOUT



Detail4

|  |  |                               |   |         |   |  |   |                        |                     |
|--|--|-------------------------------|---|---------|---|--|---|------------------------|---------------------|
| ENTER DESCRIPTION<br>EC NO: S2008-0403<br>DRWN: TYANG01<br>CHKD: CGTAN<br>APPR: SHLENI | 2007/11/29<br>2007/11/29<br>2007/11/30 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |         | DIMENSION STYLE<br>MM ONLY              | SCALE<br>NTS                               | DESIGN UNITS<br>METRIC                                      | THIRD ANGLE PROJECTION |                     |
|  |  |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.13 ± ---<br>1 PLACE ± 0.25 ± ---<br>ANGULAR ± 1 °                | mm INCH | DRAWN BY<br>MLONG<br>DATE<br>2003/09/30 | CHECKED BY<br>KCLING<br>DATE<br>2003/10/07 | TITLE<br>MINI DIMM, 0.60MM PITCH<br>140 CKTS, VERTICAL, SMT |                        |                     |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS                                |  |                               | APPROVED BY<br>SKTOH<br>DATE<br>2003/10/07  |         | MOLEX INCORPORATED                      |  | DOCUMENT NO.<br>SD-87838-001                                |                        | SHEET NO.<br>3 OF 5 |
| MATERIAL NO.<br>87838-0002   |  |                               | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |         |   |  |   |                        |                     |

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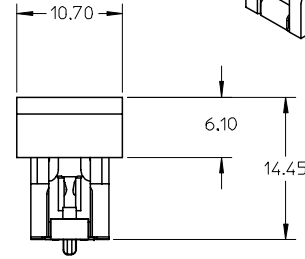
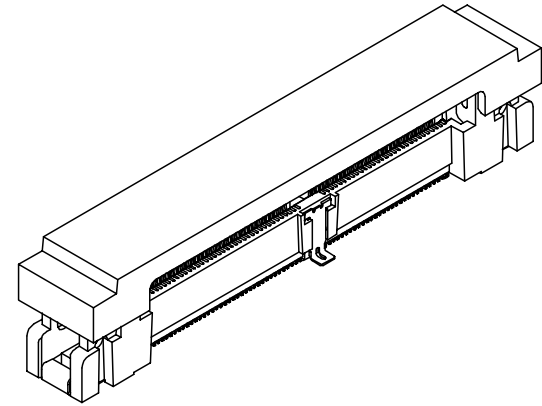
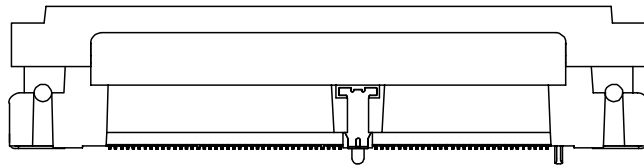
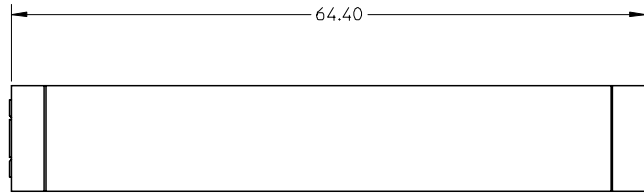
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| REVISE DESIGN     | 2007/11/29 |
| EC NO: S2008-0403 | 2007/11/29 |
| DRWN: TYANG01     | 2007/11/29 |
| CHKD: CGTAN       | 2007/11/29 |
| APPR: SHLENI      | 2007/11/30 |

| QUALITY SYMBOLS | DESCRIPTION |
|-----------------|-------------|
| ▽=0             |             |
| ∇=0             |             |

| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |
|--|--------|
|  | mm     |
| 4 PLACES   | ± 0.13 |
| 3 PLACES   | ± 0.25 |
| 2 PLACES   | ± 0.38 |
| 1 PLACE  | ± 0.51 |
| ANGULAR ± 1 °  |        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        |

| DIMENSION STYLE |            |
|-----------------|------------|
| MM ONLY         |            |
| DRAWN BY        | DATE       |
| MLONG           | 2003/09/30 |
| CHECKED BY      | DATE       |
| KCLING          | 2003/10/07 |
| APPROVED BY     | DATE       |
| SKTOH           | 2003/10/07 |
| MATERIAL NO.    |            |
| 87838-0002      |            |

|                         |              |                        |
|-------------------------|--------------|------------------------|
| SCALE                   | DESIGN UNITS | THIRD ANGLE PROJECTION |
| NTS                     | METRIC       |                        |
| TITLE                   |              |                        |
| MINI DIMM, 0.60MM PITCH |              |                        |
| 140 CKTS, VERTICAL, SMT |              |                        |
| MOLEX INCORPORATED      |              | SHEET NO.              |
| DOCUMENT NO.            |              | 4 OF 5                 |
| SD-87838-001            |              |                        |

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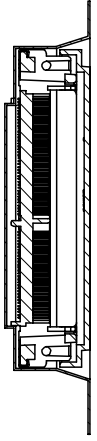
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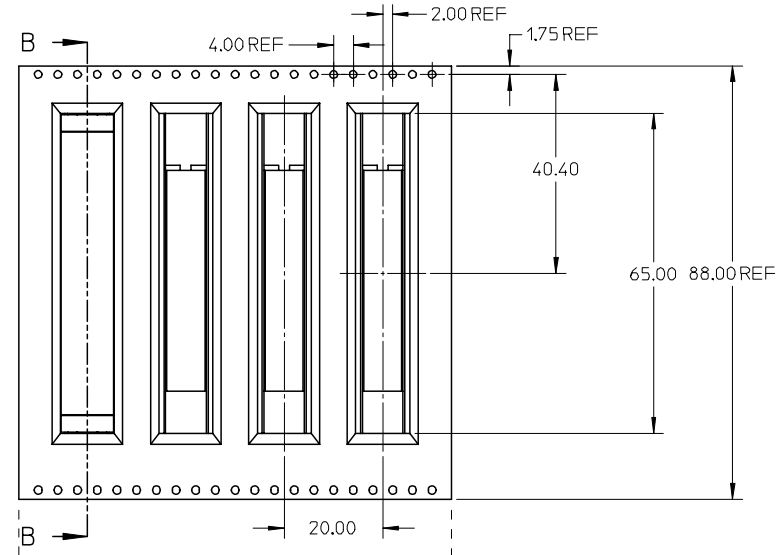
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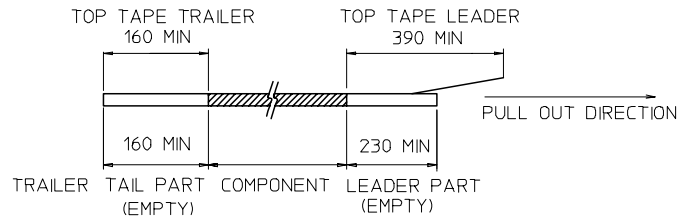


SECTION B-B

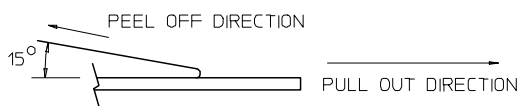


NOTES: (CONT'D)

6. LEADER AND TRAILER TAPE

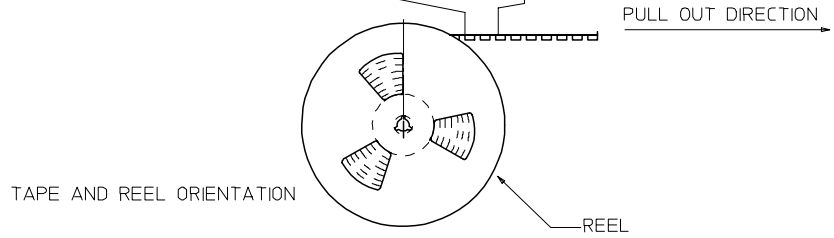


7. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



8. PACKAGING QTY PCS/REEL : 150 PCS/REEL

9. PACKAGING STANDRAD IS AS EIA-481.



|   |                    |                            |  |   |              |              |  |       |  |
|---|--------------------|----------------------------|--|---|--------------|--------------|--|-------|--|
| REVISE DESIGN<br>EC NO: S2008-0403<br>2007/11/29<br>DRWN:TYANG01<br>2007/11/29<br>CHKD:CGTAN<br>2007/11/30<br>APPR:SHLENI<br>2007/11/30 | DESCRIPTION<br>REV | QUALITY SYMBOLS            | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE   | SCALE        | DESIGN UNITS | THIRD ANGLE PROJECTION   |       |  |
|   |                    | $\nabla=0$<br>$\nabla C=0$ | mm      INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.13 ± ---<br>1 PLACE ± 0.25 ± ---<br>ANGULAR ± 1 ° | MM ONLY   | NTS          | METRIC       | DRAWN BY      DATE<br>MLONG      2003/09/30<br>CHECKED BY      DATE<br>KCL ING      2003/10/07<br>APPROVED BY      DATE<br>SKTOH      2003/10/07 | TITLE | MINI DIMM, 0.60MM PITCH<br>140 CKTS, VERTICAL, SMT |
|   |                    |                            | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | MATERIAL NO.  | DOCUMENT NO. | SHEET NO.    | MOLEX INCORPORATED<br>SD-87838-001<br>5 OF 5   |       |  |
|   |                    |                            | SIZE A3  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |              |  |       |  |

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