

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0877822001](#)
Status: **Active**
Description: 0.60mm (.024") Pitch miniDIMM DDR2, Socket, Surface Mount, Vertical, 1.8V Voltage Key, 244 Circuits, 0.76µm (30µ") Gold (Au) Plating, Off- White Latches, without Pick-and-Place Cap, Type A Tray, Lead-free

Documents:

[3D Model](#) [Product Specification PS-87782-027 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

| | |
|----------------|--------------------------------|
| Product Family | Memory Module Sockets |
| Series | 87782 |
| Comments | Latches in Off-White Color |
| Component Type | Socket |
| JEDEC Outline | MO-244 |
| Product Name | MiniDIMM |

Physical

| | |
|--------------------------------|--------------------------------|
| Circuits (Loaded) | 244 |
| Color - Resin | Black |
| Durability (mating cycles max) | 25 |
| Entry Angle | Vertical (Top Entry) |
| Keying to Mating Part | Yes |
| Material - Metal | Copper Alloy |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| PCB Locator | Yes |
| PCB Retention | Yes |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.024 In |
| Pitch - Mating Interface (mm) | 0.60 mm |
| Pitch - Term. Interface (in) | 0.024 In |
| Pitch - Term. Interface (mm) | 0.60 mm |
| Plating min: Mating (µin) | 30 |
| Plating min: Mating (µm) | 0.76 |
| Plating min: Termination (µin) | 100 |
| Plating min: Termination (µm) | 2.54 |
| Temperature Range - Operating | -55°C to +85°C |
| Termination Interface: Style | Surface Mount |

Electrical

| | |
|-------------------------------|-----------|
| Current - Maximum per Contact | 1A |
| Voltage - Maximum | 30V (RMS) |
| Voltage Key | 1.8V |

Solder Process Data

| | |
|--|------------------------------|
| Duration at Max. Process Temperature (seconds) | 5 |
| Lead-free Process Capability | SMC & Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 2 |
| Process Temperature max. C | 260 |

Material Info

Reference - Drawing Numbers

| | |
|---------------------------|--------------|
| Application Specification | AS-87782-001 |
|---------------------------|--------------|

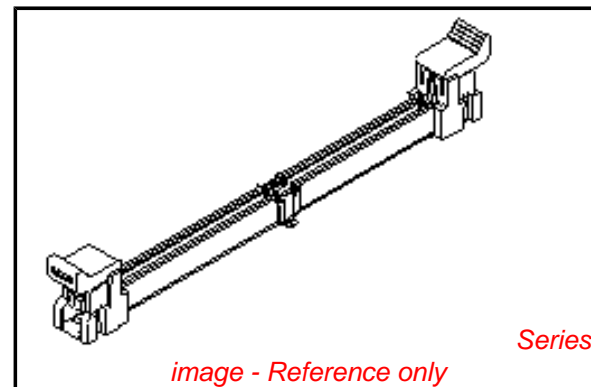


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status

China RoHS



Not Reviewed

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

[87782Series](#)

Mates With

JEDEC MO-244 Modules

This document was generated on 05/27/2010

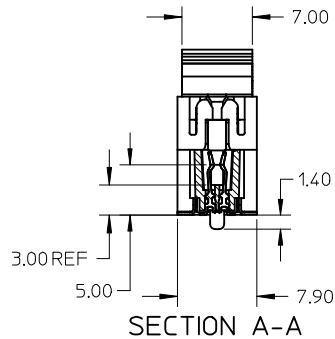
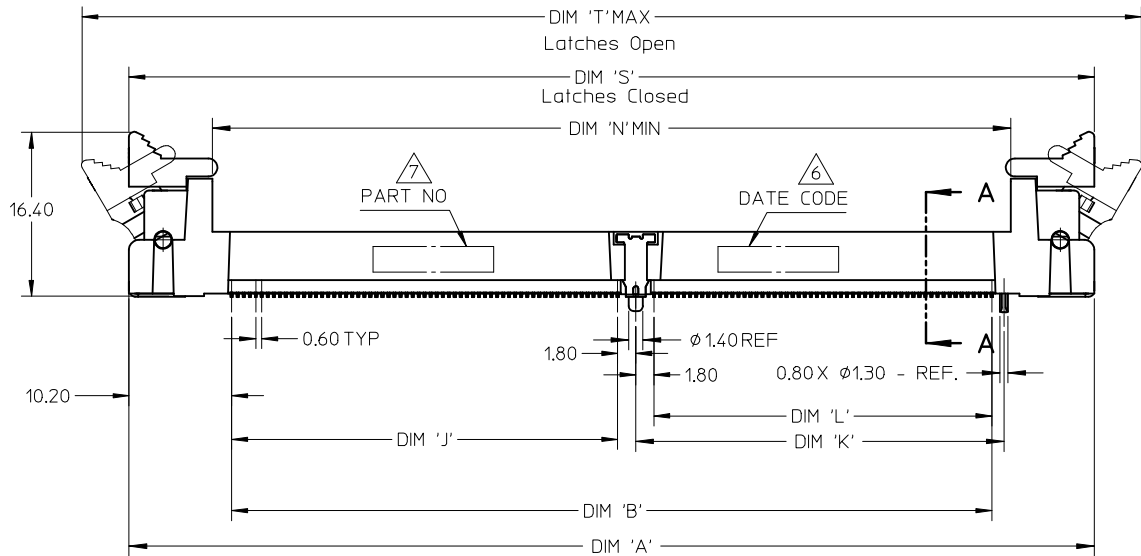
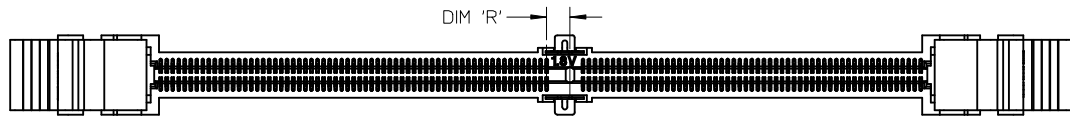
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NOTES :

1. MATERIAL :
 HOUSING : LIQUID CRYSTAL POLYMER, GLASS FILLED,
 UL 94V-0, COLOUR : BLACK
 CONTACTS : COPPER ALLOY
 LATCHES : HIGH TEMPERATURE NYLON, UL 94V-0
 COLOUR : NATURAL (OFF-WHITE)

2. FINISH
 CONTACT AREA : 0.76 MICROMETER (30 MICROINCH) MIN GOLD OVER
 1.25 MICROMETER (50 MICROINCH) MIN NICKEL
 SMT TAIL : 2.54 MICROMETER (100 MICROINCH) MIN TIN OVER
 1.25 MICROMETER (50 MICROINCH) MIN NICKEL.
 3. ACCEPTS 1.0 mm THICK MEMORY MODULE PER JEDEC MO-244
 FOR 244 CKTS AND MO-258 FOR 200 CKTS.
 4. PRODUCT SPECIFICATION : PS-87782-027
 5. PRODUCT SHALL BE PACKED IN TRAY. PLS REFER TO SHEET 5

6. DATE CODE SHALL BE MARKED LEGIBLY AS SHOWN : YYDD
 7. PART NUMBER SHALL BE MARKED LEGIBLY AS SHOWN.
 87782-XXXX (REFER TO TABLE)



| | | | | | | |
|--|-----------------------------------|--|---|-------|--------------|---|
| NEW COVER EC NO: S2010-0004 DRWN: TARUNUGHAM 2009/08/12 CHKD: CGTAN 2009/08/12 APPR: SILENI 2009/08/17 REV DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | $\nabla=0$ $\sphericalangle=0$ | mm INCH | MM ONLY | NTS | METRIC | |
| | | 4 PLACES ± --- ± --- | DRAWN BY DATE | | | TITLE |
| | | 3 PLACES ± --- ± --- | MLONG 2003/01/07 | | | MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL |
| | | 2 PLACES ± 0.13 ± --- | CHECKED BY DATE | | | |
| | 1 PLACE ± 0.25 ± --- | PTL IM 2003/07/16 | | | | |
| | ANGULAR ± 1 ° | APPROVED BY DATE | | | | |
| | | SKTOH 2003/07/17 | | | | |
| | | MATERIAL NO. | | | MATERIAL NO. | DOCUMENT NO. |
| | | SEE TABLE | | | SD-87782-001 | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | |
| | | | SIZE A3 | | | SHEET NO. 1 OF 6 |
| | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

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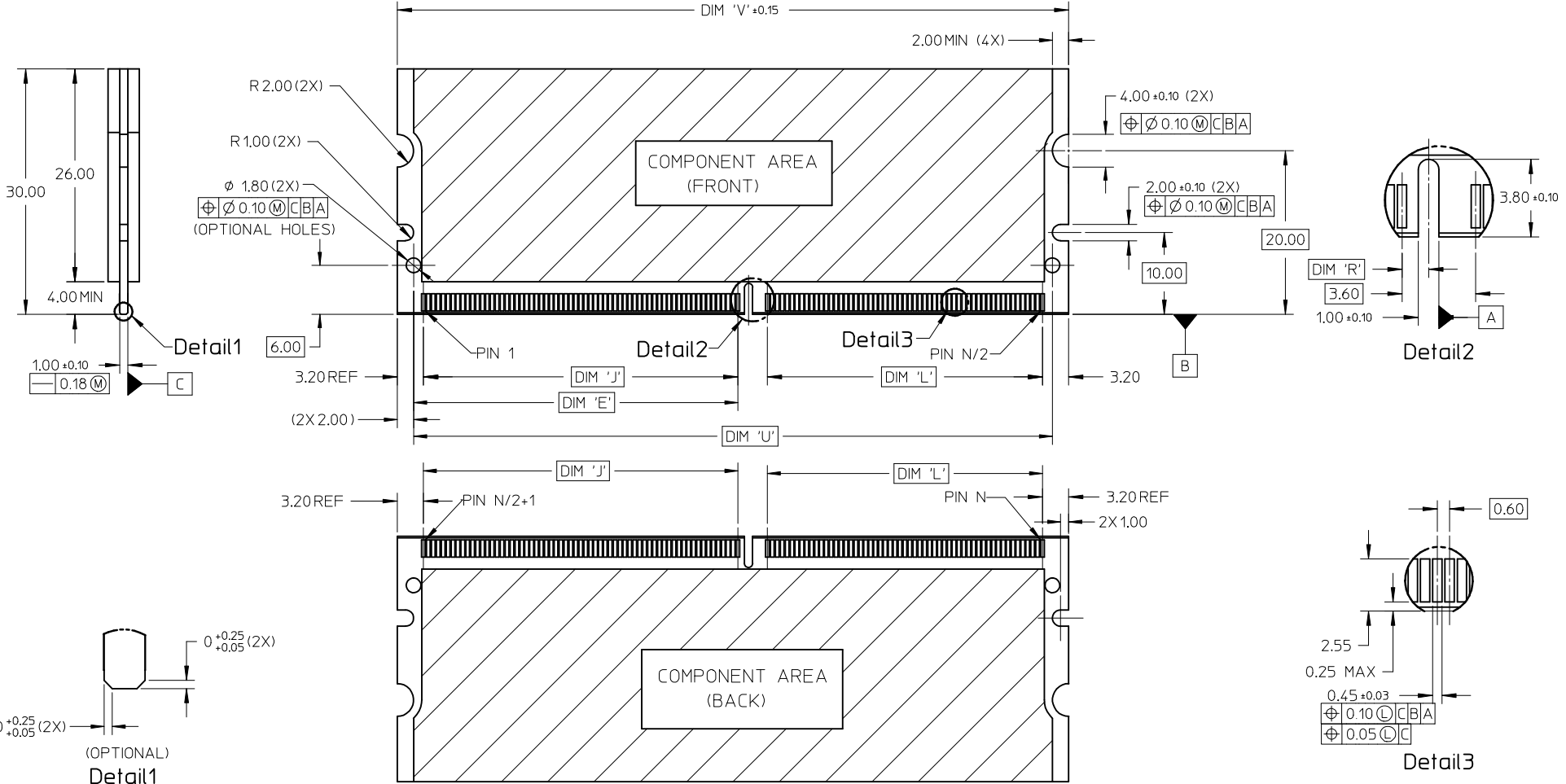
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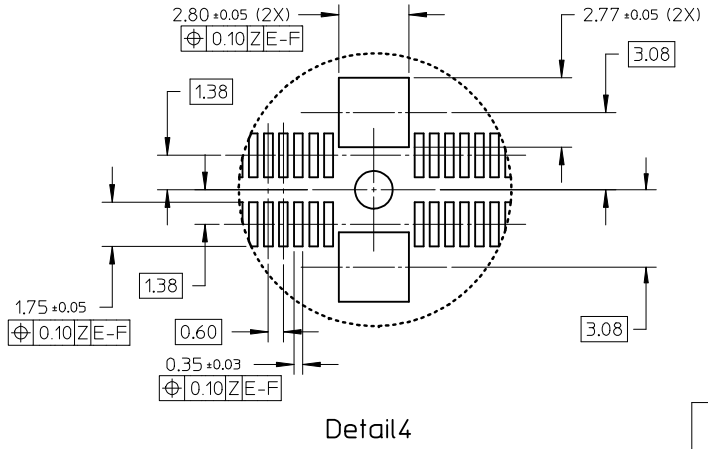
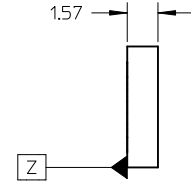
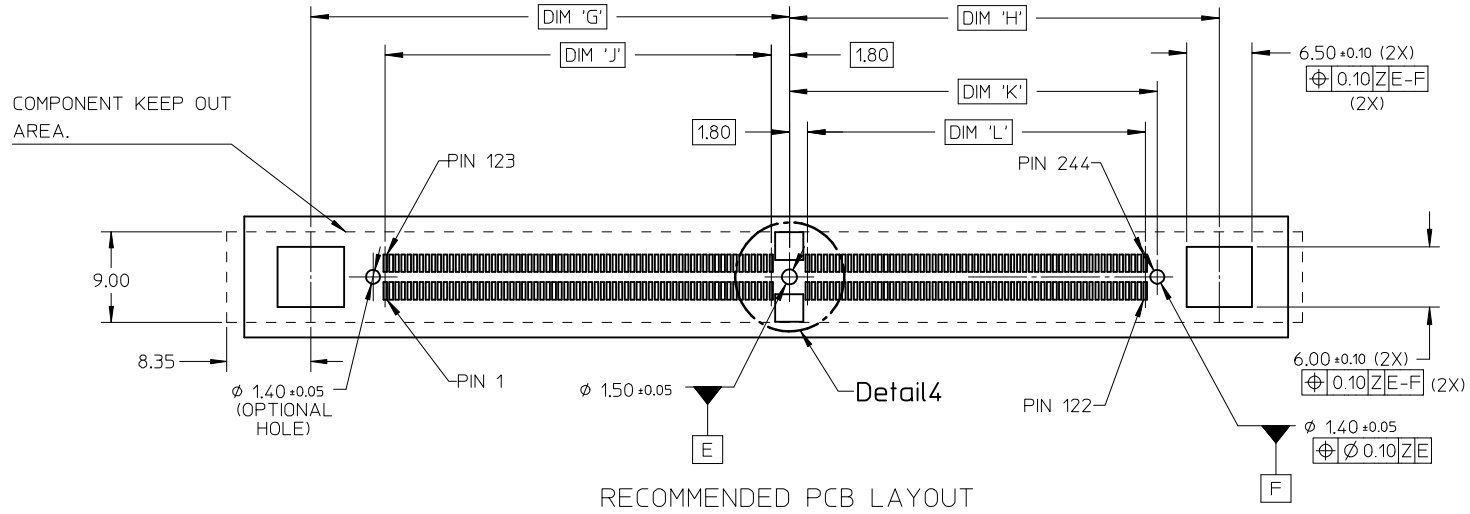
B

A



| | | | | | | | | | | | |
|--|--------------------------------------|---|--|-----------------------------------|--------------------|---|-------------------------------|------------------------|--|--|--|
| NEW COVER EC NO: S2010-0004 DRWN: TARUUGHAM 2009/08/12 CHKD: CGTAN 2009/08/12 APPR: SILENI 2009/08/17 | QUALITY SYMBOLS ▽=0 ◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | | |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- | mm INCH --- --- 0.13 --- 0.25 --- | DRAWN BY MLONG | DATE 2003/01/07 | TITLE MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL | | | | | |
| | | ANGULAR ± 1 ° | | CHECKED BY PTLIM | DATE 2003/07/16 | MOLEX INCORPORATED | | | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | APPROVED BY SKTOH | DATE 2003/07/17 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87782-001 | SHEET NO. 2 OF 6 | | | |

9 8 7 6 5 4 3 2 1

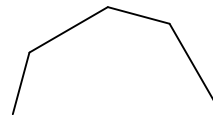
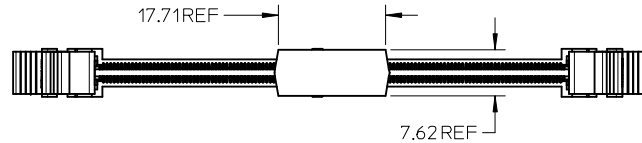
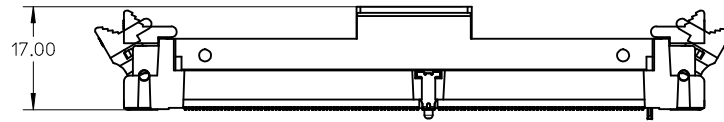


RECOMMENDED PCB LAYOUT

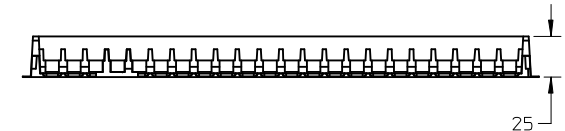
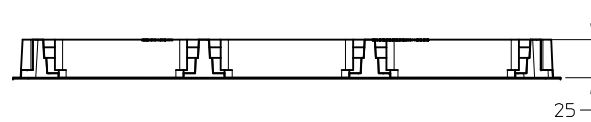
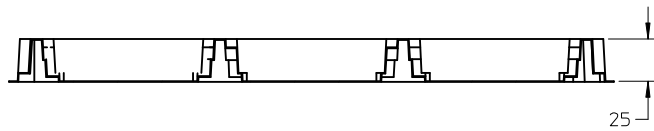
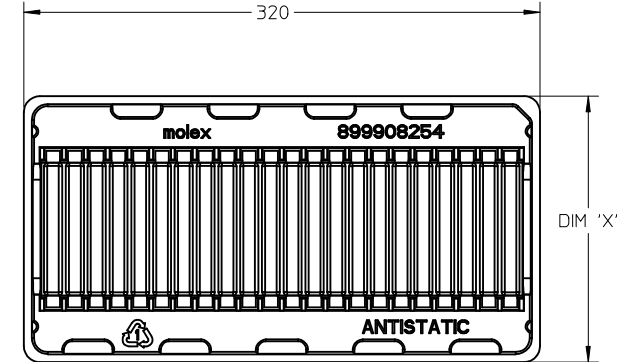
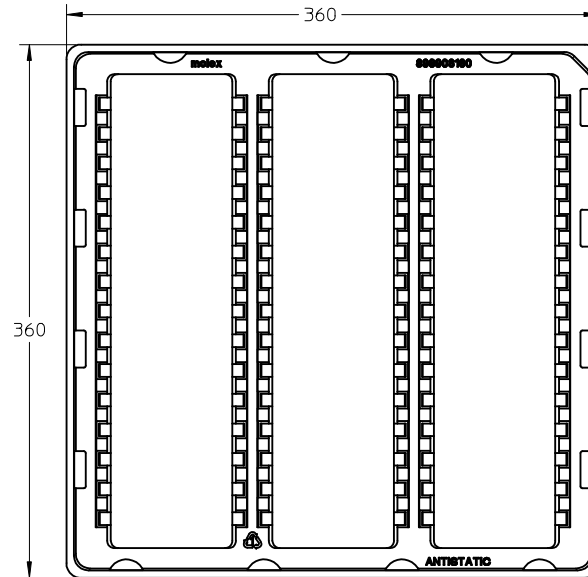
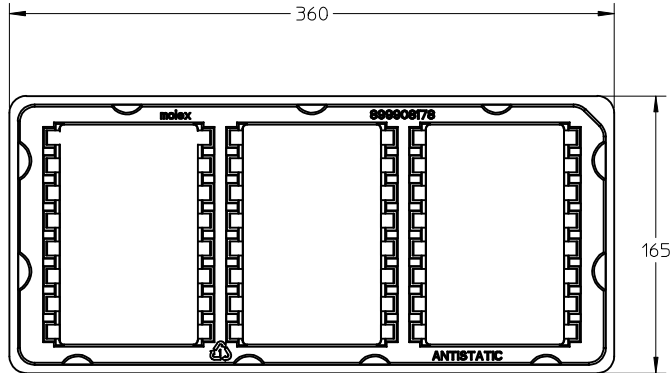
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| | ▽=0 ∠=0 | mm | INCH | DRAWN BY MLONG | DATE 2003/01/07 | TITLE MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL | | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± --- | CHECKED BY PTLIM | DATE 2003/07/16 | MOLEX INCORPORATED | | | |
| | | 2 PLACES ± 0.13 ± --- | 1 PLACE ± 0.25 ± --- | APPROVED BY SKTOH | DATE 2003/07/17 | DOCUMENT NO. SD-87782-001 | | SHEET NO. 3 OF 6 | |
| | ANGULAR ± 1 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

10 9 8 7 6 5 4 3 2 1

FOR OPTIONS WITH COVER



| NEW COVER EC NO: S2010-0004 DRWN: TARUMUGHAM 2009/08/12 CHKD: CGTAN 2009/08/12 APPR: SHLENI 2009/08/17 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|---|-------|--------------|------------------------|-------|-------|----------|-------|-------|----------|--------|-------|---------|--------|-------|--|----|------|--------|---------|--------|---------|--------|---------|--------|---------|---------|-----|--------|--|
| | ▼=0 □=0 | <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>± 0.13</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 | ± 0.13 | ± --- | 1 PLACE | ± 0.25 | ± --- | <table border="1"> <thead> <tr> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>± 0.13</td> <td>± 0.005</td> </tr> <tr> <td>± 0.25</td> <td>± 0.010</td> </tr> <tr> <td>± 0.50</td> <td>± 0.020</td> </tr> <tr> <td>± 1.00</td> <td>± 0.040</td> </tr> </tbody> </table> | mm | INCH | ± 0.13 | ± 0.005 | ± 0.25 | ± 0.010 | ± 0.50 | ± 0.020 | ± 1.00 | ± 0.040 | MM ONLY | NTS | METRIC | |
| | | mm | INCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.13 | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± --- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| mm | INCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ± 0.13 | ± 0.005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ± 0.25 | ± 0.010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ± 0.50 | ± 0.020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ± 1.00 | ± 0.040 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DESCRIPTION | DRAWN BY: MLONG CHECKED BY: PTLIM APPROVED BY: SKTOH DATE: 2003/01/07 DATE: 2003/07/16 DATE: 2003/07/17 | TITLE | MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REV | MATERIAL NO. | SEE TABLE | MOLEX INCORPORATED DOCUMENT NO. SD-87782-001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIZE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



TRAY TYPE A
 QTY OF CAVITY: 3 X 8 = 24 PCS
 COLOUR: TRANSPARENT

TRAY TYPE B
 QTY OF CAVITY: 3 X 15 = 45 PCS
 COLOUR: TRANSPARENT

TRAY TYPE AND COLOUR - SEE TABLE
 QTY OF CAVITY: 1 X 22 = 22 PCS
 COLOUR - SEE TABLE

| TRAY TYPE | DIM 'X' | TRAY COLOUR |
|-----------|---------|-------------|
| C | 165 | TRANSPARENT |
| D | 160 | WHITE |

| NEW COVER EC NO: S2010-0004 DRWN: TARUMUGHAM 2009/08/12 CHKD: CGTAN 2009/08/12 APPR: SHLENI 2009/08/17 | QUALITY SYMBOLS | 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>± 0.13</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 | ± 0.13 | ± --- | 1 PLACE | ± 0.25 | ± --- | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|---|---|--|---|-------|------|----------|-------|-------|----------|-------|-------|----------|--------|-------|---------|--------|-------|-----------------|-------|--------------|------------------------|
| | | | mm | INCH | | | | | | | | | | | | | | | | | |
| | 4 PLACES | | ± --- | ± --- | | | | | | | | | | | | | | | | | |
| | 3 PLACES | | ± --- | ± --- | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.13 | ± --- | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± --- | | | | | | | | | | | | | | | | | | | |
| DESCRIPTION | MM ONLY | NTS | METRIC | | | | | | | | | | | | | | | | | | |
| REV | DRAWN BY | DATE | TITLE | | | | | | | | | | | | | | | | | | |
| | MLONG | 2003/01/07 | MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL | | | | | | | | | | | | | | | | | | |
| | CHECKED BY | DATE | | | | | | | | | | | | | | | | | | | |
| | PTL IM | 2003/07/16 | | | | | | | | | | | | | | | | | | | |
| | APPROVED BY | DATE | | | | | | | | | | | | | | | | | | | |
| | SKTOH | 2003/07/17 | | | | | | | | | | | | | | | | | | | |
| | MATERIAL NO. | | | | | | | | | | | | | | | | | | | | |
| | SEE TABLE | | | | | | | | | | | | | | | | | | | | |
| | SIZE | | | | | | | | | | | | | | | | | | | | |
| | A3 | | | | | | | | | | | | | | | | | | | | |
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| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | | | | | | | | | |
|---|--------------|-------------|-------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|--------|---|
| F | CKT SIZE 'N' | PART NUMBER | MODULE CARD | VOLTAGE KEY | DIM 'R' | DIM 'J' | DIM 'K' | DIM 'L' | DIM 'N' | DIM 'A' | DIM 'S' | DIM 'T' | DIM 'E' | DIM 'U' | DIM 'V' | DIM 'G' | DIM 'H' | DIM 'B' | COVER | TRAY | F |
| | 244 | 87782-2001 | DDR2 | 1.8 V | 1.30 | 38.40 | 36.60 | 33.60 | 79.00 | 96.0 | 96.0 | 106.20 | 39.60 | 78.00 | 82.00 | 47.60 | 42.75 | 75.60 | NIL | TYPE A | |
| | 244 | 87782-2003 | DDR2 | 1.8 V | 1.30 | 38.40 | 36.60 | 33.60 | 79.00 | 96.0 | 96.0 | 106.20 | 39.60 | 78.00 | 82.00 | 47.60 | 42.75 | 75.60 | YES | TYPE B | |
| | | 87782-3003 | DDR3 | 1.5 V | 2.30 | | | | | | | | | | | | | | YES | TYPE B | |
| E | 244 | 87782-2005 | DDR2 | 1.8 V | 1.30 | 38.40 | 36.60 | 33.60 | 79.00 | 96.0 | 96.0 | 106.20 | 39.60 | 78.00 | 82.00 | 47.60 | 42.75 | 75.60 | YES | TYPE A | |
| | | 87782-3005 | DDR3 | 1.5 V | 2.30 | | | | | | | | | | | | | | YES | TYPE A | |
| | 244 | 87782-2007 | DDR2 | 1.8 V | 1.30 | 38.40 | 36.60 | 33.60 | 79.00 | 96.0 | 96.0 | 106.20 | 39.60 | 78.00 | 82.00 | 47.60 | 42.75 | 75.60 | YES | TYPE C | |
| | | 87782-3007 | DDR3 | 1.5 V | 2.30 | | | | | | | | | | | | | | YES | TYPE C | |
| D | 244 | 87782-2009 | DDR2 | 1.8 V | 1.30 | 38.40 | 36.60 | 33.60 | 79.00 | 96.0 | 96.0 | 106.20 | 39.60 | 78.00 | 82.00 | 47.60 | 42.75 | 75.60 | YES | TYPE D | |
| | | 87782-3009 | DDR3 | 1.5 V | 2.30 | | | | | | | | | | | | | | YES | TYPE D | |
| | 200 | 87782-2201 | DDR2 | 1.8 V | 1.30 | 23.40 | 38.40 | 35.40 | 65.80 | 82.8 | 82.8 | 93.00 | 24.60 | 64.80 | 68.80 | 32.60 | 44.55 | 62.40 | NIL | TYPE A | |
| | | 87782-2202 | DDR | 2.5 V | 2.30 | | | | | | | | | | | | | | NIL | TYPE A | |
| C | 200 | 87782-2203 | DDR2 | 1.8 V | 1.30 | 23.40 | 38.40 | 35.40 | 65.80 | 82.8 | 82.8 | 93.00 | 24.60 | 64.80 | 68.80 | 32.60 | 44.55 | 62.40 | YES | TYPE A | |
| | | 87782-2204 | DDR | 2.5 V | 2.30 | | | | | | | | | | | | | | YES | TYPE A | |

| | | | | | | | |
|--|--------------------|--|--|--|---|--------------|------------------------|
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| | | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1 ° | DRAWN BY: MLONG DATE: 2003/01/07 CHECKED BY: PTLIM DATE: 2003/07/16 APPROVED BY: SKTOH DATE: 2003/07/17 | TITLE: MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. DOCUMENT NO. SHEET NO. SEE TABLE SD-87782-001 6 OF 6 | | | | |