molex
one company > a world of innovation

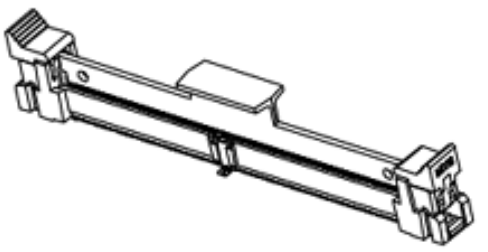
This document was generated on 05/20/2010

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

**Part Number:** 0877822009

**Status:** Active

**Description:** 0.60mm (.024") Pitch miniDIMM DDR2 Socket, Vertical, SMT, 0.76µm (30µ") Gold (Au) over Nickel, 1.8V, with Pick and Place Cover, 244 Circuits, Type D Tray, Lead free



*Series image - Reference only*

**Documents:**

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

## General

| | |
|---|---|
| Product Family | Memory Module Sockets |
| Series | 87782 |
| Comments | <LI>Latches in Off-White Color\|<LI>With Cap |
| 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 |
| Product Specification | PS-87782-027 |

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

**China RoHS**

**Need more information on product environmental compliance?**

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, click here

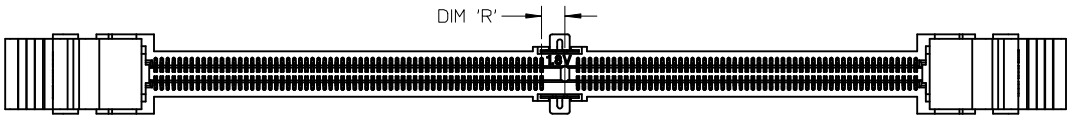
Please visit the Contact Us section for any non-product compliance questions.

**Search Parts in this Series**
87782Series

**Mates With**
JEDEC MO-244 Modules

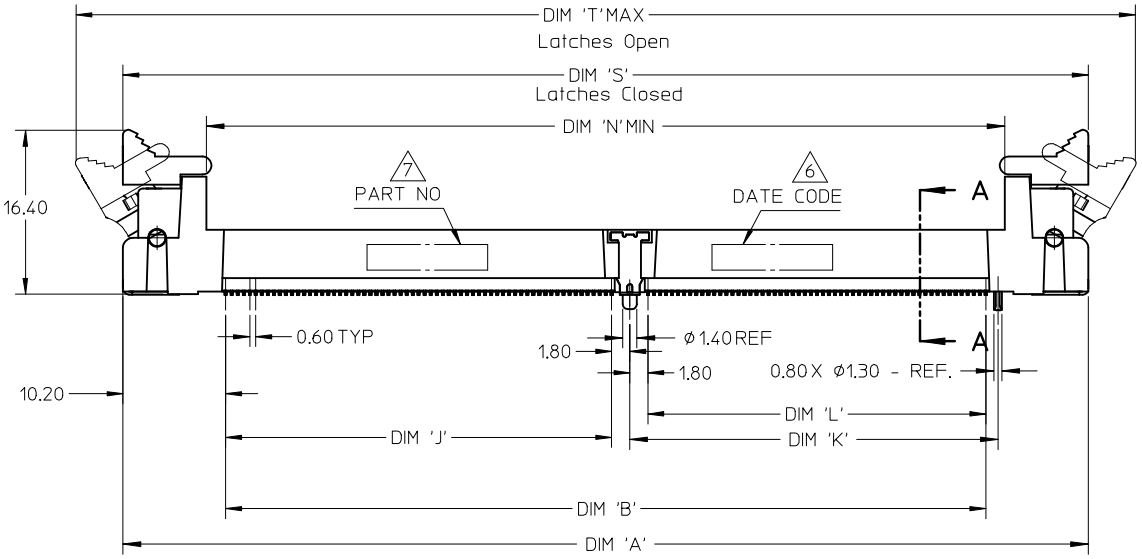
This document was generated on 05/20/2010

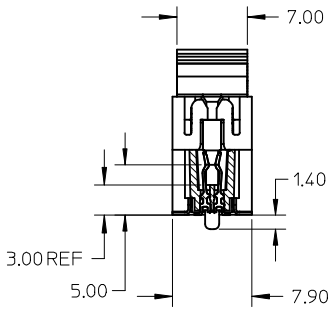
**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**




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 : YYDDD
7. PART NUMBER SHALL BE MARKED LEGIBLY AS SHOWN. 87782-XXXX (REFER TO TABLE)



SECTION A-A

NEW COVER
EC NO: S2010-0004
DRWN: TARUMUGHAM 2009/08/12
CH'KD: CGTAN 2009/08/12
APPR: SHLEN 2009/08/17
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

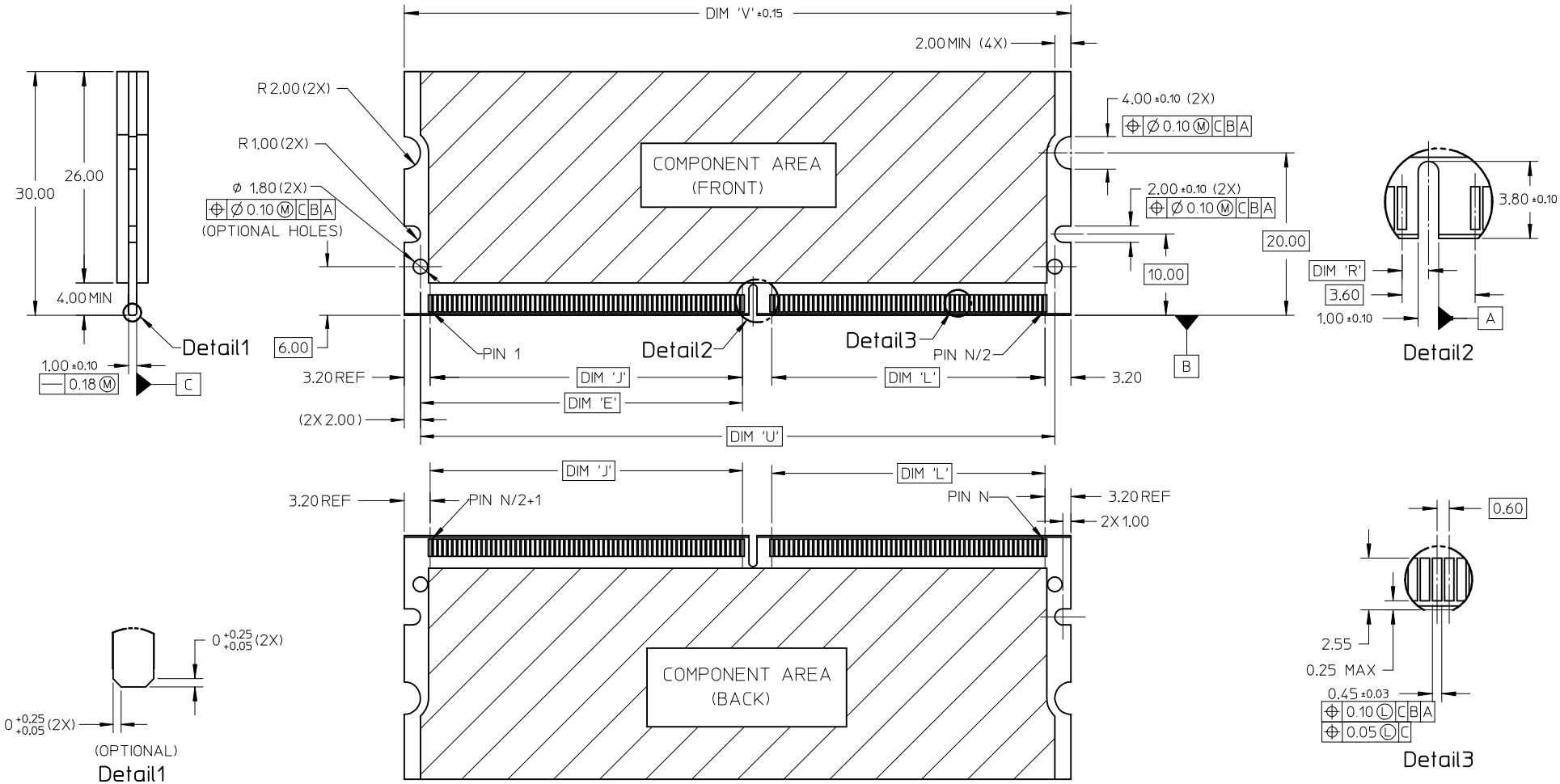
GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

| | |
|---|---|
| DIMENSION STYLE | MM ONLY |
| SCALE | NTS |
| DESIGN UNITS | METRIC |
| | THIRD ANGLE PROJECTION |
| DRAWN BY | MLONG |
| DATE | 2003/01/07 |
| CHECKED BY | PTLIM |
| DATE | 2003/07/16 |
| APPROVED BY | SKTOH |
| DATE | 2003/07/17 |
| MATERIAL NO. | SEE TABLE |
| TITLE | MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL |
| | MOLEX INCORPORATED |
| DOCUMENT NO. | SD-87782-001 |
| SHEET NO. | 1 OF 6 |
| SIZE | A3 |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION




NEW COVER
EC NO: S2010-0004
DRWN:TARUMUGHAM 2009/08/12
CHKD:CGTAN 2009/08/12
APPR:SHLENI 2009/08/17
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

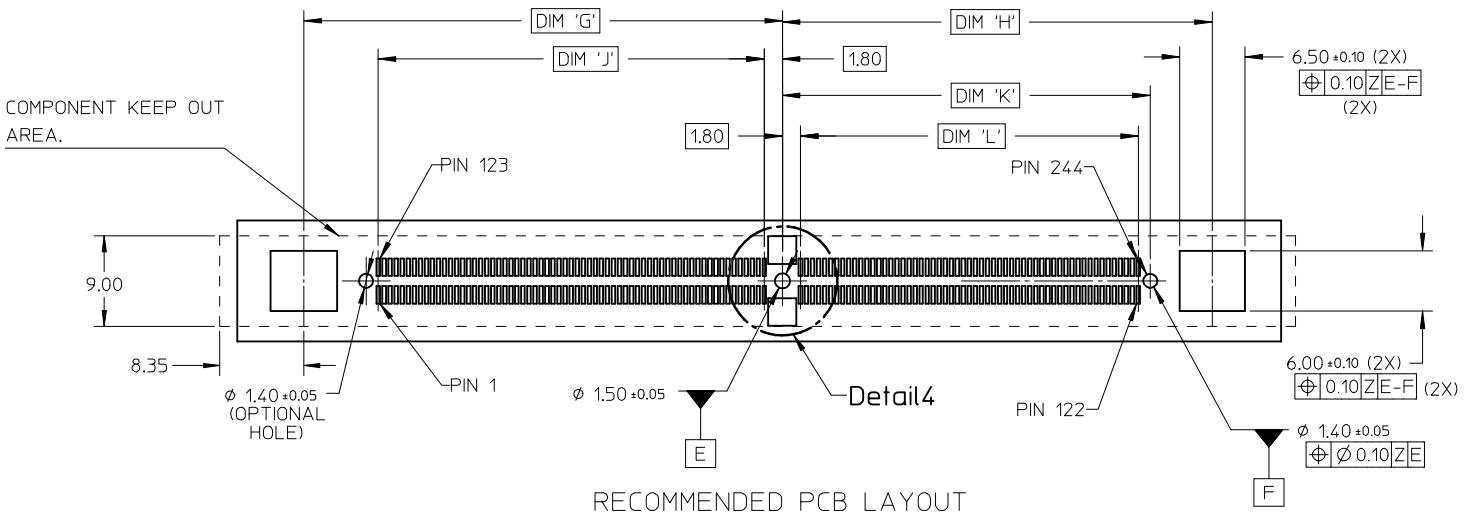
| | | DATE |
|---|---|---|
| DRAWN BY | MLONG | 2003/01/07 |
| CHECKED BY | PTLIM | 2003/07/16 |
| APPROVED BY | SKTOH | 2003/07/17 |

TITLE: MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL

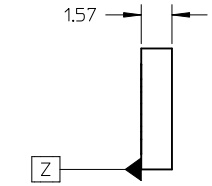
MOLEX INCORPORATED

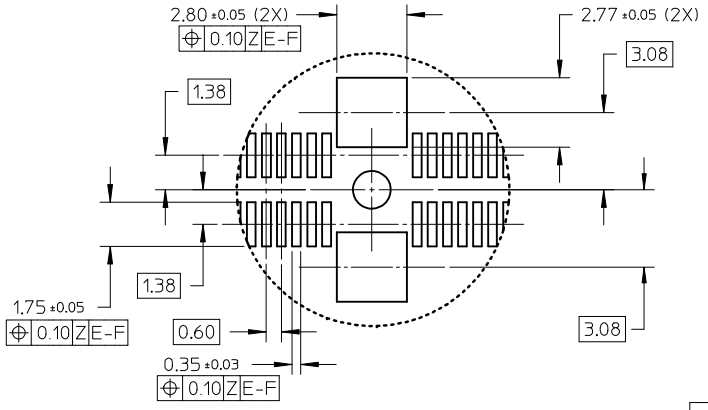
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87782-001
SHEET NO.: 2 OF 6
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION




RECOMMENDED PCB LAYOUT




Detail4

NEW COVER
EC NO: S2010-0004
DRWN:TARUMUGHAM 2009/08/12
CHKD:CGTAN 2009/08/12
APPR:SHLENI 2009/08/17
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | MLONG | 2003/01/07 |
| CHECKED BY | PTLIM | 2003/07/16 |
| APPROVED BY | SKTOH | 2003/07/17 |

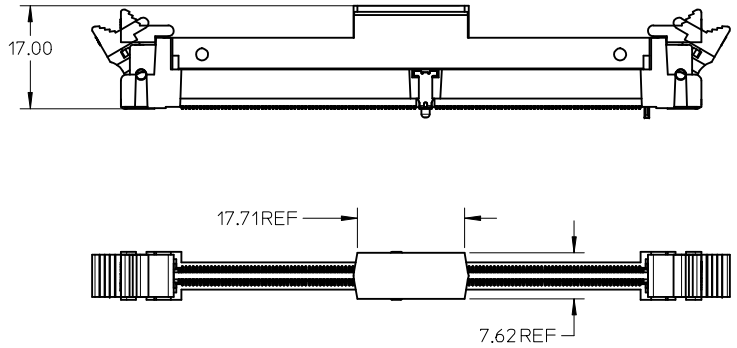
TITLE: MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL

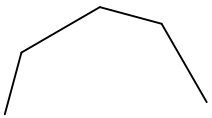
MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87782-001
SHEET NO.: 3 OF 6
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

FOR OPTIONS WITH COVER



NEW COVER
EC NO: S2010-0004
DRWN:TARUMUGHAM 2009/08/12
CH'KD:CGTAN 2009/08/12
APPR:SHLENI 2009/08/17
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

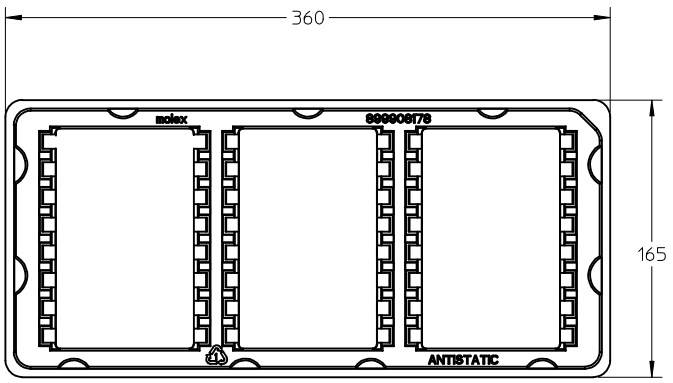
DRAWN BY: MLONG DATE: 2003/01/07
CHECKED BY: PTLIM DATE: 2003/07/16
APPROVED BY: SKTOH DATE: 2003/07/17

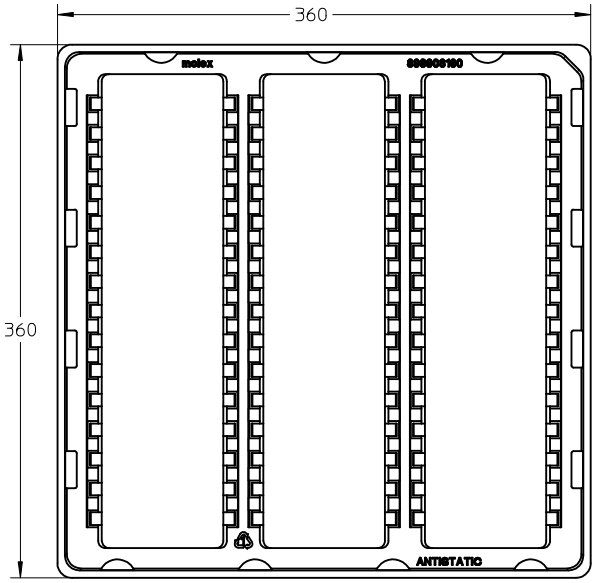
TITLE: MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL

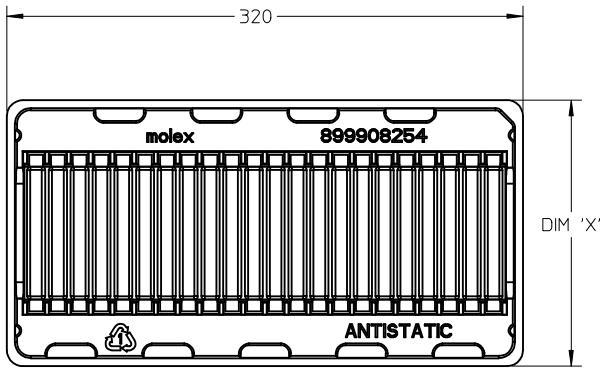
MOLEX INCORPORATED

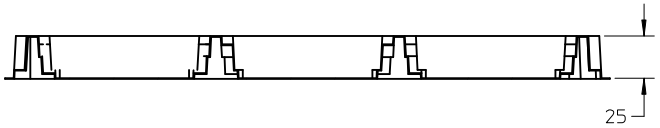
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87782-001
SHEET NO.: 4 OF 6
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

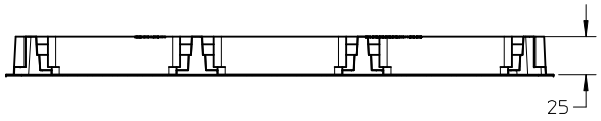


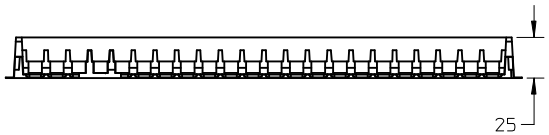




TRAY TYPE A
QTY OF CAVITY: 3 X 8 = 24 PCS
COLOUR: TRANSPARENT




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
CH'KD:CGTAN 2009/08/12
APPR:SHLENI 2009/08/17
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: MLONG DATE: 2003/01/07
CHECKED BY: PTLIM DATE: 2003/07/16
APPROVED BY: SKTOH DATE: 2003/07/17
MATERIAL NO.: SEE TABLE

TITLE: MINI DIMM, 0.60MM PITCH 200/244 CKTS, VERTICAL

MOLEX INCORPORATED

DOCUMENT NO.: SD-87782-001
SHEET NO.: 5 OF 6

SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | |

NEW COVER
EC NO: S2010-0004 2009/08/12
DRWN:TARUMUGHAM 2009/08/12
CH'KD:CGTAN 2009/08/17
APPR:SHLENI
DESCRIPTION
REV

QUALITY SYMBOLS
▼=0
Ⓒ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.13 | ± --- |
| 1 PLACE | ± 0.25 | ± --- |
| ANGULAR ± 1 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

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

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87782-001
SHEET NO.: 6 OF 6
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION