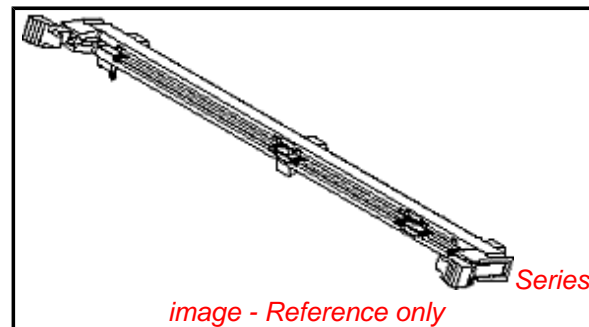


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0875872058](#)
Status: **Active**
Description: 1.27mm (.050") Pitch DIMM 8-Byte Socket, Low Profile (25°), Multi-Key, with Beveled Metal Pins and Plastic Peg, Center Function Key, 3.18mm (.125") Tail Length, 0.38µm (15µ") Gold (Au) Selective Plating, 168 Circuits, Leadfree

Documents:

[3D Model](#) [Product Specification PS-87587-007 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)



General

| | |
|----------------|-----------------------|
| Product Family | Memory Module Sockets |
| Series | 87587 |
| Component Type | Memory Module |
| JEDEC Outline | MO-161 |
| Product Name | DIMM |

Physical

| | |
|--------------------------------|--------------------------------|
| Circuits (Loaded) | 168 |
| Color - Resin | Black, Natural |
| Durability (mating cycles max) | 25 |
| Entry Angle | 25° Angle |
| Function Key | Center |
| Keying to Mating Part | Yes |
| Material - Metal | Phosphor Bronze |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| PC Tail Length (in) | 0.125 In |
| PC Tail Length (mm) | 3.18 mm |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.062 In |
| PCB Thickness Recommended (mm) | 1.60 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.050 In |
| Pitch - Mating Interface (mm) | 1.27 mm |
| Plating min: Mating (µin) | 15, 15.2 |
| Plating min: Mating (µm) | 0.38 |
| Plating min: Termination (µin) | 100, 101.6 |
| Plating min: Termination (µm) | 2.54 |
| Temperature Range - Operating | -40°C to +85°C |
| Termination Interface: Style | Through Hole |

Electrical

| | |
|-------------------------------|--------------|
| Current - Maximum per Contact | 1A |
| Voltage - Maximum | 50V |
| Voltage Key | 3.3V, Center |

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 | 2 |
| 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
 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

[87587Series](#)

Mates With

JEDEC MO-161 modules

Reference - Drawing Numbers

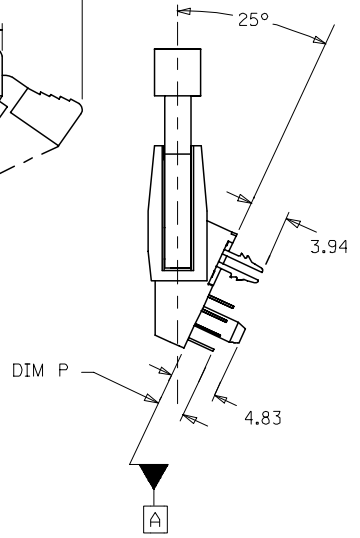
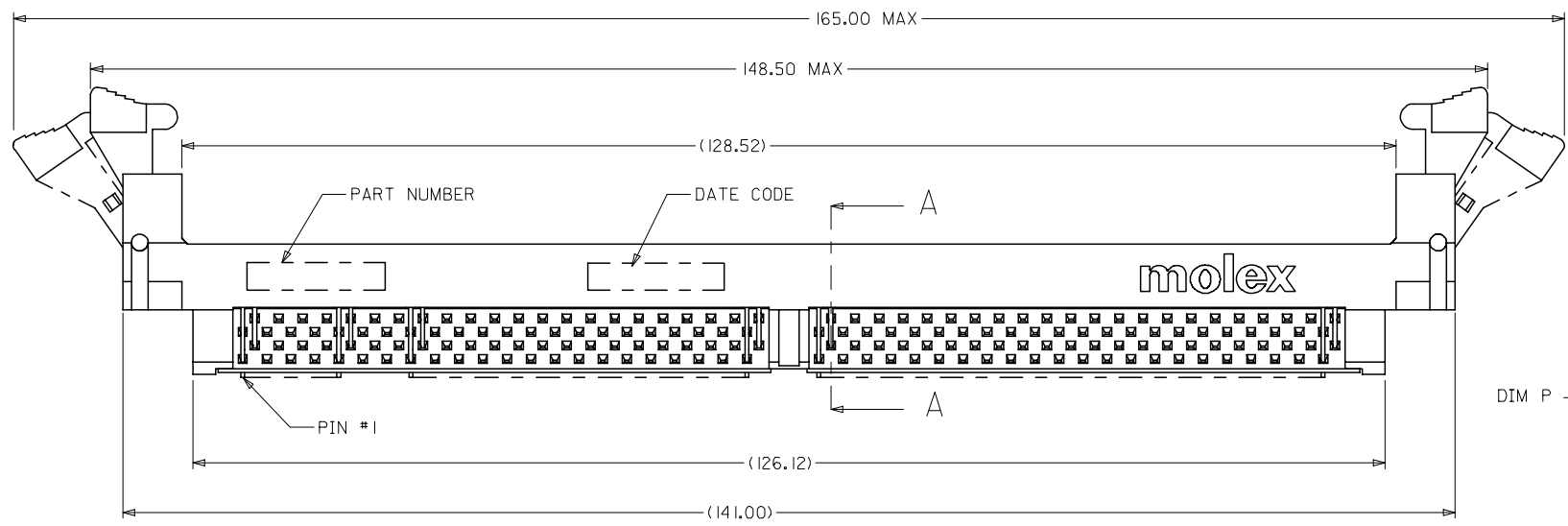
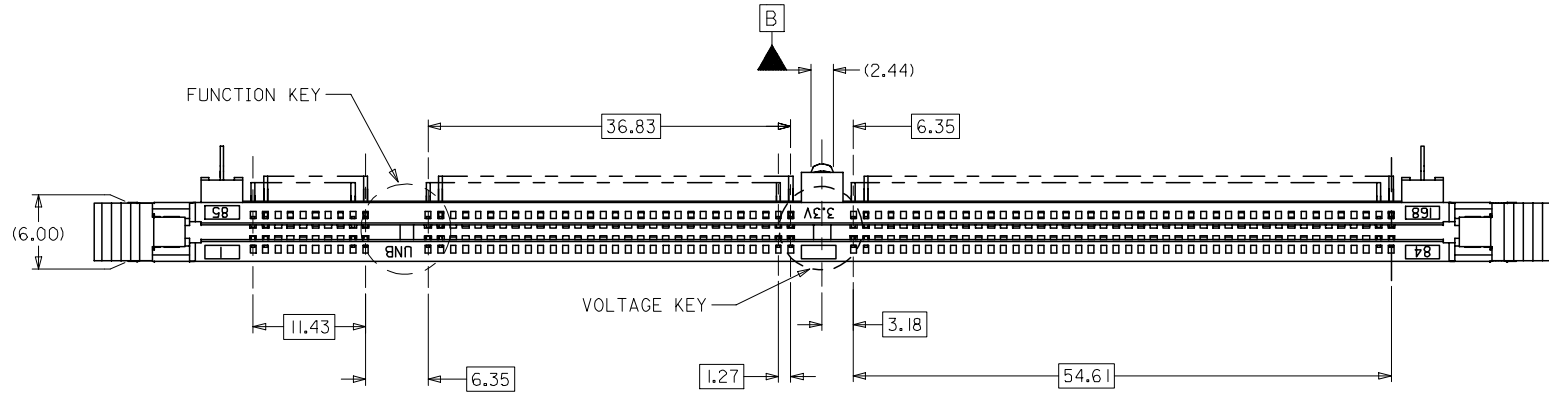
Product Specification
Sales Drawing

PS-87587-007
SD-87587-001

This document was generated on 04/13/2010

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10 9 8 7 6 5 4 3 2 1



- NOTES:
- MATERIALS: HOUSING - LCP, GLASS FILLED, UL 94V-0
COLOR: BLACK
LATCH - HIGH TEMP NYLON, GLASS FILLED, UL94V-0
COLOR: BEIGE
TERMINAL AND FORKLOCK - COPPER ALLOY
 - FINISHES: CONTACT AREA: SEE TABLE ON SHEET 4
SOLDER TAILS: 2.54UM/100UM MIN, TIN
 - PRODUCT SPECIFICATIONS: PS-87587-007 FOR PERFORMANCE SPECIFICATIONS.
 - DATE CODE SHALL BE MARKED LEGIBLY AS SHOWN: XX XXX
YEAR DAY
 - PART NUMBER SHALL BE MARKED LEGIBLY AS SHOWN: 87587-0XXX
REFER TO THE TABLE

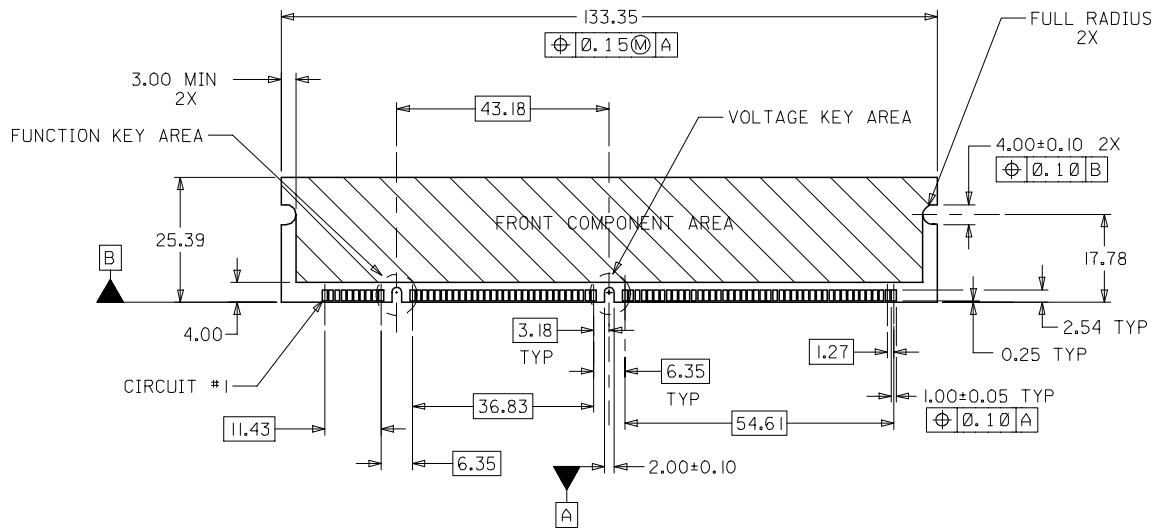
| | | | |
|---|------------|-------------------------------|-------------|
| OBS TIN/LEAD P/N EC NO: S2006-0734 DRWN:MLONG CHKD:HO APPR:GGLLEE | 2006/02/27 | QUALITY SYMBOLS ▽=0 ▽=0 | DESCRIPTION |
| | 2006/02/28 | | |
| | 2006/03/01 | | |
| | REV | | |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|---|-------|
| mm | INCH |
| 4 PLACES ± --- | ± --- |
| 3 PLACES ± --- | ± --- |
| 2 PLACES ± 0.25 | ± --- |
| 1 PLACE ± --- | ± --- |
| ANGULAR ± 5 ° | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

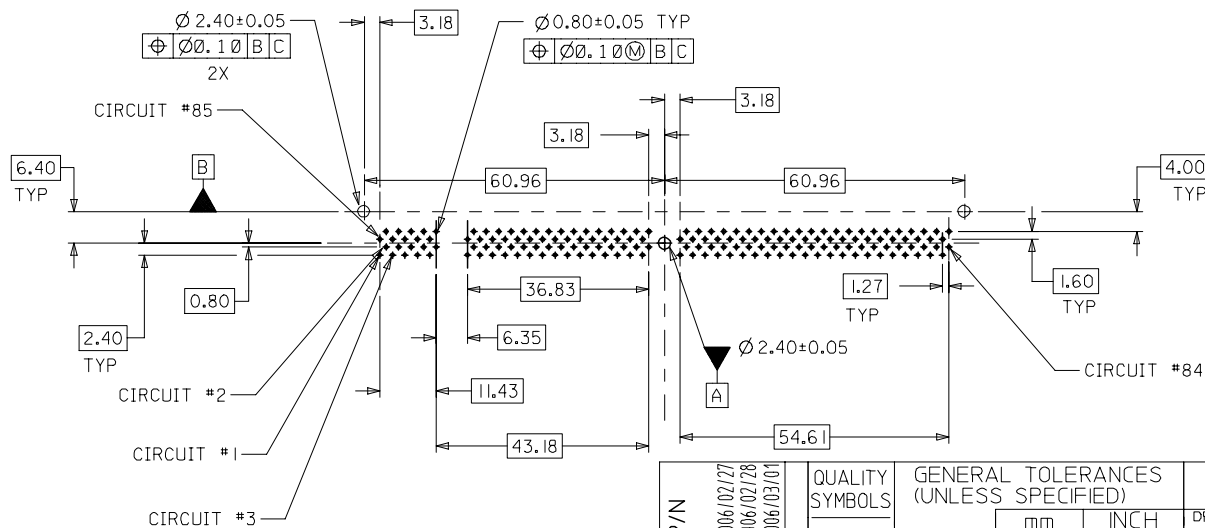
| DIMENSION STYLE MM ONLY | |
|----------------------------|------------|
| DRAWN BY | DATE |
| LPL IM | 1999/03/19 |
| CHECKED BY | DATE |
| KCL ING | 1999/06/14 |
| APPROVED BY | DATE |
| SKTOH | 1999/06/15 |
| MATERIAL NO. | |
| SEE TABLE | |

| SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
|---|------------------------|------------------------|
| | | |
| DIMM, 1.27MM PITCH 168 CKTS, MULTI-KEY 25 DEG | | |
| MOLEX INCORPORATED | | |
| DOCUMENT NO. | SHEET NO. | |
| SD-87587-001 | 1 OF 4 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

9 8 7 6 5 4 3 2 1

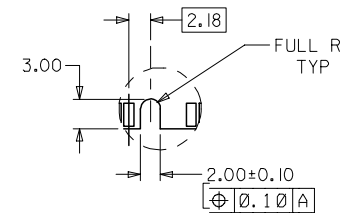


RECOMMENDED MODULE LAYOUT
(PER JEDEC STANDARD MO-161, 168 CKT. 3.3V)

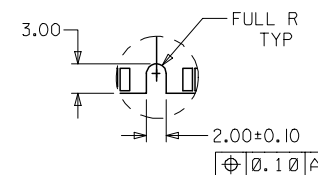


RECOMMENDED
P.C. BOARD HOLE PATTERN
(CONNECTOR SIDE)

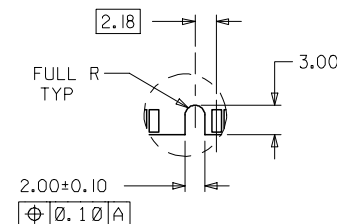
FUNCTION KEY AREA OPTIONS
(REFER ALSO TO TABLE ON SHT. 3)



OFFSET LEFT KEY



CENTERED KEY



OFFSET RIGHT KEY

| | | |
|--------|--------------|------------|
| OBS | TIN/LEAD P/N | 2006/02/27 |
| EC NO: | S2006-0734 | 2006/02/28 |
| DRWN: | MJL | 2006/02/28 |
| CHKD: | HO | 2006/03/01 |
| APPR: | GLEE | |
| REV | DESCRIPTION | |

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

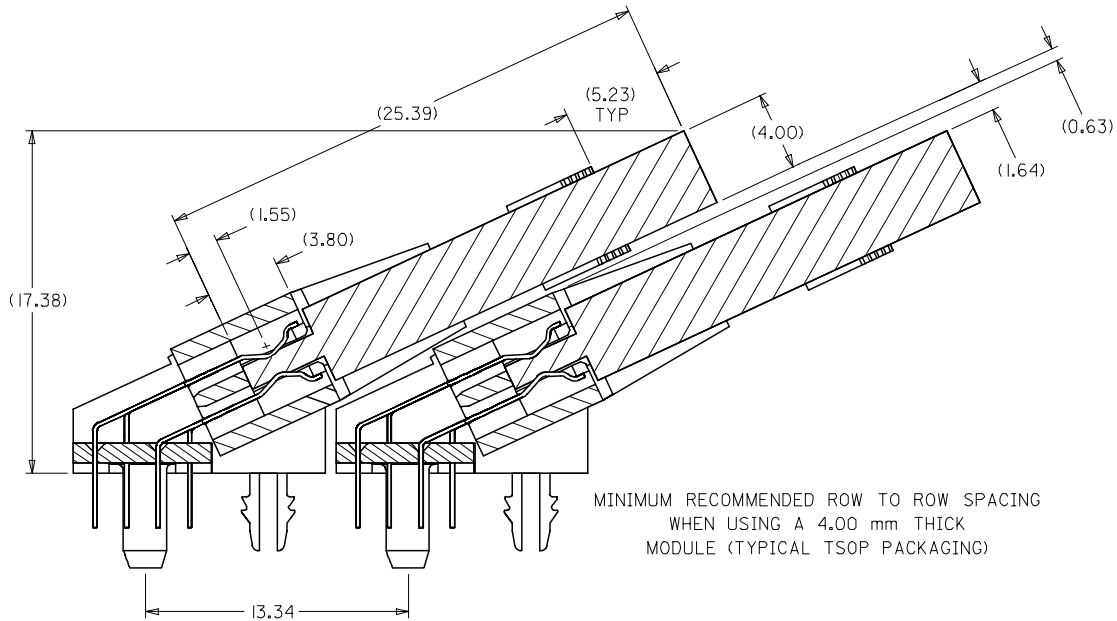
| | |
|--|--------------|
| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
| | mm INCH |
| 4 PLACES | ± --- ± --- |
| 3 PLACES | ± --- ± --- |
| 2 PLACES | ± 0.25 ± --- |
| 1 PLACE | ± --- ± --- |
| ANGULAR ± 5 ° | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

| | | | |
|-----------------|--------------|---------------------|--|
| DIMENSION STYLE | | MM ONLY | |
| DRAWN BY | DATE | TITLE | |
| LPL IM | 1999/03/19 | DIMM, 1.27MM PITCH | |
| CHECKED BY | DATE | 168 CKTS, MULTI-KEY | |
| KCL ING | 1999/06/14 | 25 DEG | |
| APPROVED BY | DATE | MOLEX INCORPORATED | |
| SKTOH | 1999/06/15 | MOLEX INCORPORATED | |
| MATERIAL NO. | DOCUMENT NO. | SHEET NO. | |
| SEE TABLE | SD-87587-001 | 2 OF 4 | |

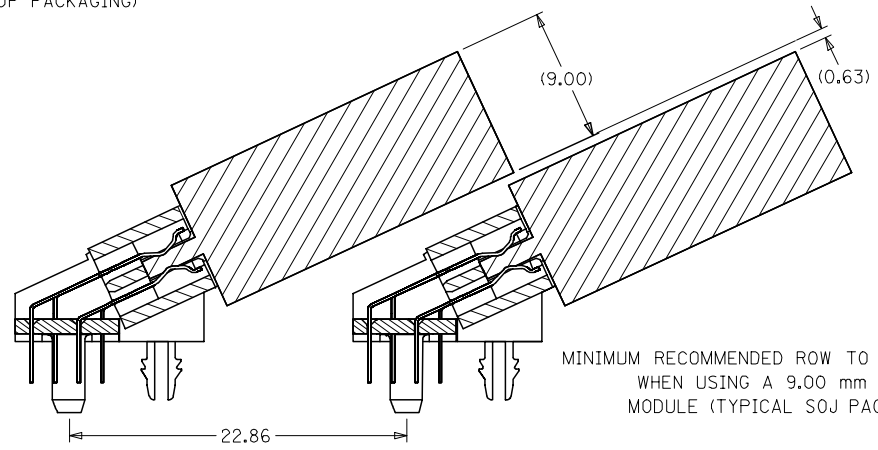
| | | |
|---|--------------|------------------------|
| SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| NTS | METRIC | |
| MOLEX INCORPORATED | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

10 9 8 7 6 5 4 3 2 1

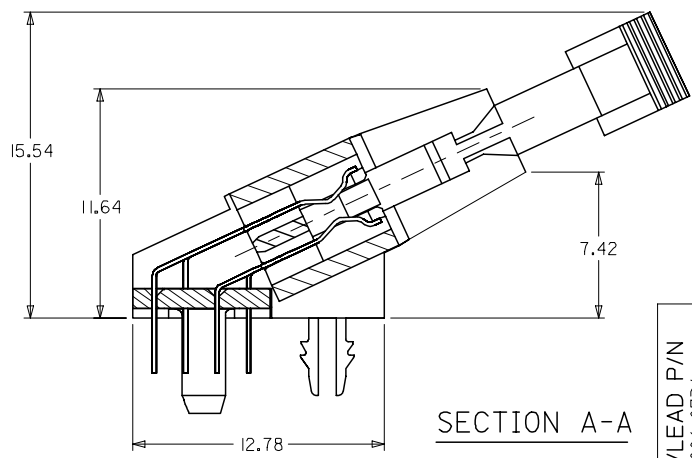
F
E
D
C
B
A



MINIMUM RECOMMENDED ROW TO ROW SPACING
WHEN USING A 4.00 mm THICK
MODULE (TYPICAL TSOP PACKAGING)



MINIMUM RECOMMENDED ROW TO ROW SPACING
WHEN USING A 9.00 mm THICK
MODULE (TYPICAL SOJ PACKAGING)



SECTION A-A

| | | | | | | | | | | |
|---|------------|-------------------------------|---------------------------------------|--|----------------------------|---|--|------------------------|------------------------|--------------------|
| OBS TIN/LEAD P/N EC NO: S2006-0734 DRWN:MLONG CHKD:IHO APPR:GJLEE | 2006/02/27 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 2006/02/28 | | mm | INCH | DRAWN BY LPL IM | | TITLE DIMM, 1.27MM PITCH 168 CKTS, MULTI-KEY 25 DEG | | | |
| | 2006/03/01 | | 4 PLACES ± --- | ± --- | DATE 1999/03/19 | | CHECKED BY KCL ING | | DATE 1999/06/14 | |
| | REV | | DESCRIPTION | 3 PLACES ± --- | ± --- | DATE 1999/06/15 | | APPROVED BY SKT0H | | DATE 1999/06/15 |
| | | 2 PLACES ± 0.25 | ± --- | MATERIAL NO. | | DOCUMENT NO. | | SHEET NO. | | |
| | | 1 PLACE ± --- | ± --- | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | | SD-87587-001 | | |
| | | ANGULAR ± 5 ° | | SIZE A3 | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

| PART NUMBER | FUNCTION KEY | DATUM VOLTAGE KEY | TAIL LENGTH P±0.25 | FINISHES: CONTACT AREA |
|-------------|--------------|-------------------|--------------------|---|
| 87587-2048 | LEFT | CENTER (3.3V) | 2.79 | SELECTIVE GOLD 0.38µm/15µ" MIN. GOLD OVER 1.27µm/50µ" MIN. NICKEL |
| 87587-2049 | CENTER | | ↓ | |
| 87587-2050 | RIGHT | | ↓ | |
| 87587-2057 | LEFT | | 3.18 | |
| 87587-2058 | CENTER | | ↓ | |
| 87587-2059 | RIGHT | | ↓ | SELECTIVE GOLD 0.76µm/30µ" MIN. GOLD OVER 1.27µm/50µ" MIN. NICKEL |
| 87587-2148 | LEFT | | 2.79 | |
| 87587-2149 | CENTER | | ↓ | |
| 87587-2150 | RIGHT | | ↓ | |
| 87587-2157 | LEFT | | 3.18 | |
| 87587-2158 | CENTER | | ↓ | |
| 87587-2159 | RIGHT | | ↓ | |

| | | | | | | | | | | |
|---|--|--------------------|-----------------|---|-----------------|-----------|---|------------------------|--|--|
| OBS TIN/LEAD P/N EC NO: S2006-0734 DRWN:MLONG CHKD:IHO APPR:GJLEE | 2006/02/27 2006/02/28 2006/03/01 | DESCRIPTION REV | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | |
| | | | ▽=0 ▽=0 | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 5 ° | MM ONLY | NTS | METRIC | | | |
| | | | | | DRAWN BY | DATE | TITLE | | | |
| | | | | | CHECKED BY | DATE | DIMM, 1.27MM PITCH 168 CKTS, MULTI-KEY 25 DEG | | | |
| | | | | | APPROVED BY | DATE | MOLEX INCORPORATED | | | |
| | | | | MATERIAL NO. | DOCUMENT NO. | SHEET NO. | | | | |
| | | | | SEE TABLE | SD-87587-001 | 4 OF 4 | | | | |
| | | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | |
| | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

9 8 7 6 5 4 3 2 1