

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0877594475](#)
Status: **Active**
Overview: milligrd
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 44 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating, without Press-fit Plastic Pegs, with Pick-and-Place Cap, Tape and Reel Packaging, Lead-free

Documents:

[3D Model](#) [Product Specification PS-87761-100 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

UL E29179

General

Product Family PCB Headers
 Series [87759](#)
 Application Board-to-Board
 Overview [milligrd](#)
 Product Name Milli-Grid™

Physical

Breakaway Yes
 Circuits (Loaded) 44
 Circuits (maximum) 44
 Color - Resin Black
 Durability (mating cycles max) 100
 First Mate / Last Break No
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part No
 Keying to Mating Part None
 Lock to Mating Part None
 Mated Height (in) 0.150 In
 Mated Height (mm) 3.80 mm
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PCB Locator No
 PCB Retention None
 Packaging Type Embossed Tape on Reel
 Pitch - Mating Interface (in) 0.079 In
 Pitch - Mating Interface (mm) 2.00 mm
 Pitch - Term. Interface (in) 0.079 In
 Pitch - Term. Interface (mm) 2.00 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.76
 Polarized to Mating Part No
 Polarized to PCB No
 Robotic Placement Pick and Place Cap
 Shrouded No
 Stackable Yes
 Temperature Range - Operating -55°C to +105°C

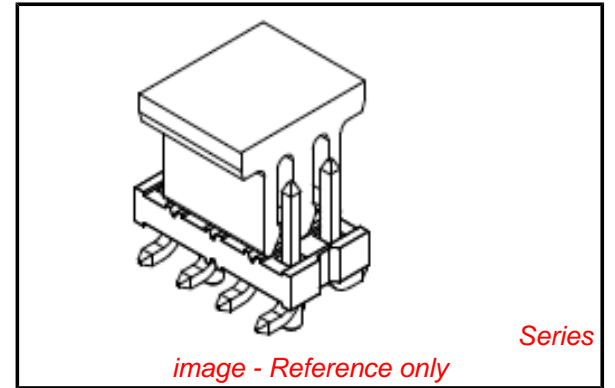


image - Reference only

EU RoHS

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

[87759Series](#)

Mates With

[79107](#) Milli-Grid™ Receptacle, Vertical, Through Hole. [79108](#) Milli-Grid™ Flex-to-Board, Vertical Receptacle. Milli-Grid™ Receptacle, Surface Mount. [79109](#). [87381](#)

Termination Interface: Style Surface Mount

Electrical

Current - Maximum per Contact 2A
Voltage - Maximum 125V

Material Info

Reference - Drawing Numbers

Packaging Specification PK-89990-485
Product Specification PS-87761-100
Sales Drawing SD-87759-118

This document was generated on 05/25/2010

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10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

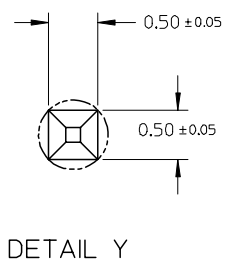
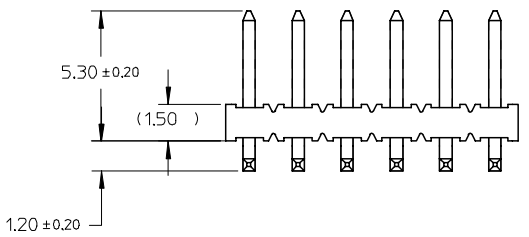
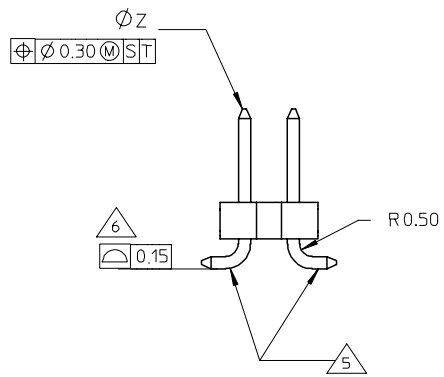
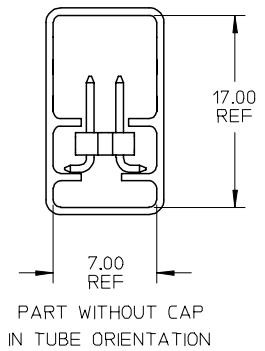
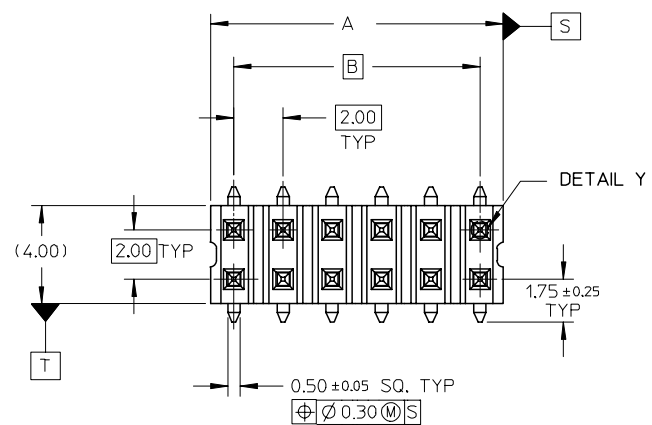
E

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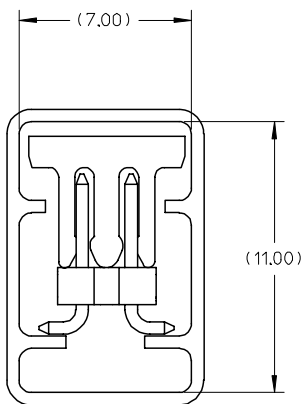
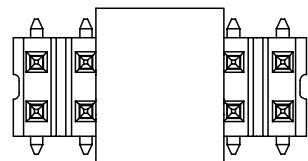
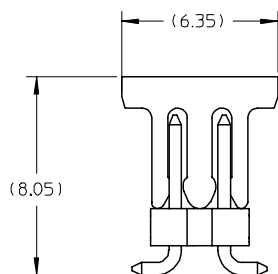
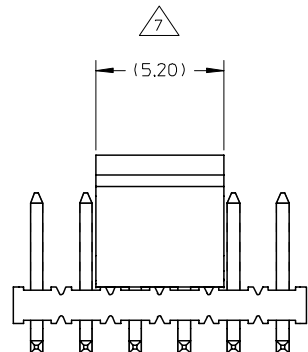


NOTE:

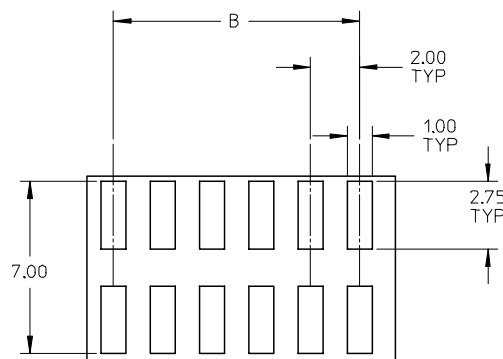
1. MATERIAL:
HSG & CAP - LCP,
UL 94V-0, COLOUR BLACK
- PIN - 0.50 SQ PHOSPHOR BRONZE
2. PLATING:
0.76um MIN GOLD PLATE AT CONTACT AREA,
TIN PLATE AT SOLDER AREA,
BOTH OVER NICKEL UNDERPLATE
3. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION
4. PRODUCT SPEC PS-87761-100 APPLIES.
5. BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF TAIL.
6. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A FLAT SURFACE.
7. CAP TO BE LOCATED AS CENTRAL OF PART AS POSSIBLE
TOP SURFACE OF CAP TO BE FLAT FOR THE PURPOSE OF PICK & PLACE BY VACUUM SUCTION NOZZLE.
8. FOR ILLUSTRATION PURPOSES, 12CKT IS SHOWN.
9. CKT 4 & 6 IS CUT FROM CKT 8 & 12 RESPECTIVELY
ROUGH EDGES ARE EXPECTED ALONG THE CUTTING EDGES.
10. PART TO BE PACKED IN TRAY 10 ONLY.
11. TUBE LENGTH IS 560MM REF STANDARD.

| REVISED TUBE SPEC EC NO: S2007-0829 DRWNS:SKLIM01 CHKD:CLAM APPR:KWLEE | 2007/04/10 2007/04/12 2007/04/17 | DESCRIPTION REV | 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>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 3 °</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.2 | ± --- | 1 PLACE | ± --- | ± --- | ANGULAR ± 3 ° | | | DIMENSION STYLE MM ONLY | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
|--|--|--|------------------------------|--|-------|-------|------|----------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|---------------|--|--|----------------------------|--------------|------------------------|------------------------|
| | | | | | mm | INCH | | | | | | | | | | | | | | | | | | | | |
| | | | 4 PLACES | | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | |
| | | | 3 PLACES | | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.2 | ± --- | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ± 3 ° | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWN BY KSEE | DATE 2003/12/17 | TITLE MGRID, 2MM DUAL ROW HEADER, SMT | | | | | | | | | | | | | | | | | | | | | | | | |
| CHECKED BY KCLING | DATE 2004/01/12 | MOLEX INCORPORATED | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROVED BY SKTOH | DATE 2004/01/12 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87759-118 | SHEET NO. 1 OF 4 | | | | | | | | | | | | | | | | | | | | | | |

9 8 7 6 5 4 3 2 1



PART WITH CAP IN TUBE ORIENTATION



RECOMMENDED SOLDER PAD LAYOUT

| | |
|-------------------|-------------|
| REVISED TUBE SPEC | DESCRIPTION |
| EC NO: S2007-0829 | 2007/04/10 |
| DRWN:SKL/M01 | 2007/04/12 |
| CHKD:C/LAM | 2007/04/17 |
| APPR:K/LEE | |
| REV | REV |

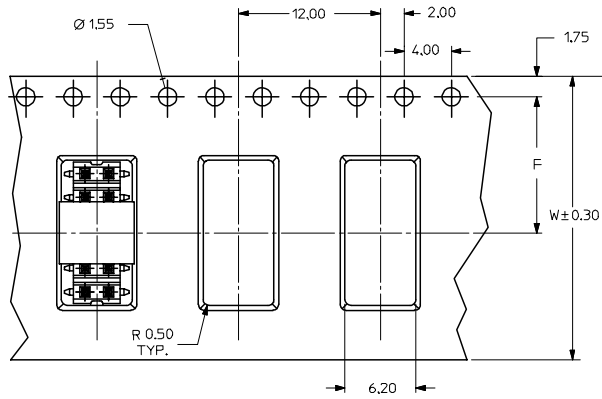
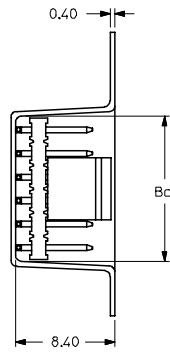
| | |
|-----------------|-------------|
| QUALITY SYMBOLS | DESCRIPTION |
| ▽=0 | |
| ∇=0 | |

| | | |
|--|---------|---------|
| GENERAL TOLERANCES (UNLESS SPECIFIED) | | |
| | mm | INCH |
| 4 PLACES | ± .005 | ± .0004 |
| 3 PLACES | ± .008 | ± .0003 |
| 2 PLACES | ± 0.015 | ± .0006 |
| 1 PLACE | ± .030 | ± .0012 |
| ANGULAR ± 3° | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | |

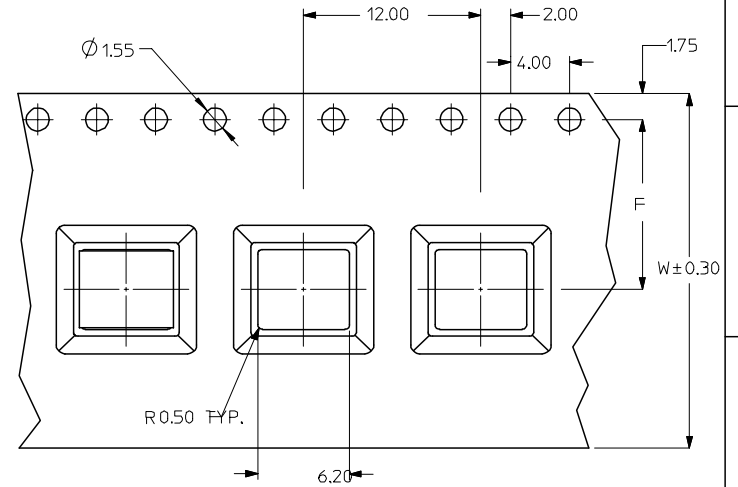
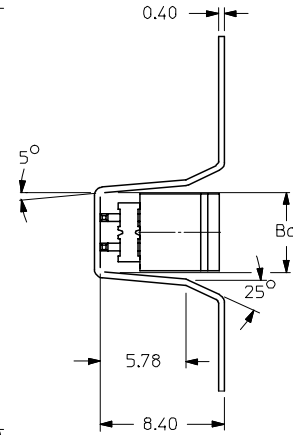
| | | | | |
|-----------------|---|---------------------------------|--------------|------------------------|
| DIMENSION STYLE | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| MM ONLY | | NTS | METRIC | |
| DRAWN BY | DATE | TITLE | | |
| KSEE | 2003/12/17 | MGRID, 2MM DUAL ROW HEADER, SMT | | |
| CHECKED BY | DATE | | | |
| KCLING | 2004/01/12 | | | |
| APPROVED BY | DATE | | | |
| SKTOH | 2004/01/12 | | | |
| MATERIAL NO. | | DOCUMENT NO. | SHEET NO. | |
| | | SD-87759-118 | 2 OF 4 | |
| SIZE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |
| A3 | | | | |

| | | | | |
|--------------|---|--------------|---------------------------------|--|
| DRAWN BY | | DATE | TITLE | |
| KSEE | | 2003/12/17 | MGRID, 2MM DUAL ROW HEADER, SMT | |
| CHECKED BY | | DATE | | |
| KCLING | | 2004/01/12 | | |
| APPROVED BY | | DATE | | |
| SKTOH | | 2004/01/12 | | |
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| | | SD-87759-118 | 2 OF 4 | |
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| A3 | | | | |

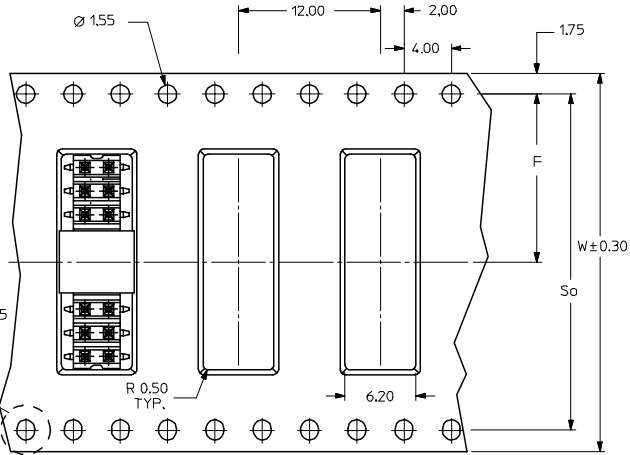
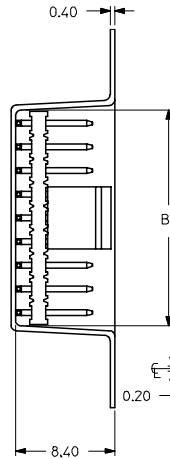
EMBOSSED CARRIER TAPE TYPE "A"



EMBOSSED CARRIER TAPE TYPE "C"



EMBOSSED CARRIER TAPE TYPE "B"






THIS TYPE OF CARRIER IS FOR CKT SIZE 8 AND BELOW.



| | |
|-------------------|-----------------|
| REVISED TUBE SPEC | QUALITY SYMBOLS |
| EC NO: S2007-0829 | ▽=0 |
| DRWN:SKL/M01 | ▽C=0 |
| CHKD:CLAM | |
| APPR:KWLEE | |
| REV | DESCRIPTION |
| B | |

| | |
|--|---------|
| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
| | MM ONLY |
| 4 PLACES | ± 0.15 |
| 3 PLACES | ± 0.20 |
| 2 PLACES | ± 0.25 |
| 1 PLACE | ± 0.30 |
| ANGULAR ± 3° | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

| | |
|-----------------|------------|
| DIMENSION STYLE | |
| MM ONLY | |
| DRAWN BY | DATE |
| KSEE | 2003/12/17 |
| CHECKED BY | DATE |
| KCLING | 2004/01/12 |
| APPROVED BY | DATE |
| SKTOH | 2004/01/12 |
| MATERIAL NO. | |
| SEE TABLE | |
| SIZE | |
| A3 | |

| | | |
|---------------------------------|--------------|------------------------|
| SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| NTS | METRIC | |
| TITLE | | |
| MGRID, 2MM DUAL ROW HEADER, SMT | | |
| MOLEX INCORPORATED | | |
| DOCUMENT NO. | SHEET NO. | |
| SD-87759-118 | 3 OF 4 | |

| | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
|---|--|------------------------------|--|----------|-------|-------|-------|-------|-------|-------|---------------|
| F | PART NUMBER WITHOUT CAP IN TUBE | PART NUMBER WITH CAP IN TUBE | PART NUMBER WITH CAP IN TAPE AND REEL. | CKT SIZE | A | B | Bo | F | So | W | EMBOSSED TYPE |
| | 87759-0415   | 87759-0465 | 87759-0475 | 4 | NA | 2.00 | 5.40 | 11.50 | - | 24.00 | C |
| | 87759-0615  | 87759-0665 | 87759-0675 | 6 | NA | 4.00 | 7.20 | 11.50 | - | 24.00 | C |
| | 87759-0815 | 87759-0865 | 87759-0875 | 8 | 7.90 | 6.00 | 8.20 | 11.50 | - | 24.00 | C |
| | 87759-1015 | 87759-1065 | 87759-1075 | 10 | 9.90 | 8.00 | 10.20 | 11.50 | - | 24.00 | A |
| | 87759-1215 | 87759-1265 | 87759-1275 | 12 | 11.90 | 10.00 | 12.20 | 11.50 | - | 24.00 | A |
| E | 87759-1415 | 87759-1465 | 87759-1475 | 14 | 13.90 | 12.00 | 14.20 | 11.50 | - | 24.00 | A |
| | 87759-1615 | 87759-1665 | 87759-1675 | 16 | 15.90 | 14.00 | 16.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-1815 | 87759-1865 | 87759-1875 | 18 | 17.90 | 16.00 | 18.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-2015 | 87759-2065 | 87759-2075 | 20 | 19.90 | 18.00 | 20.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-2215 | 87759-2265 | 87759-2275 | 22 | 21.90 | 20.00 | 22.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-2415 | 87759-2465 | 87759-2475 | 24 | 23.90 | 22.00 | 24.20 | 20.20 | 40.40 | 44.00 | B |
| D | 87759-2615 | 87759-2665 | 87759-2675 | 26 | 25.90 | 24.00 | 26.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-2815 | 87759-2865 | 87759-2875 | 28 | 27.90 | 26.00 | 28.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3015 | 87759-3065 | 87759-3075 | 30 | 29.90 | 28.00 | 30.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3215 | 87759-3265 | 87759-3275 | 32 | 31.90 | 30.00 | 32.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3415 | 87759-3465 | 87759-3475 | 34 | 33.90 | 32.00 | 34.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-3615 | 87759-3665 | 87759-3675 | 36 | 35.90 | 34.00 | 36.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-3815 | 87759-3865 | 87759-3875 | 38 | 37.90 | 36.00 | 38.20 | 26.20 | 52.40 | 56.00 | B |
| C | 87759-4015 | 87759-4065 | 87759-4075 | 40 | 39.90 | 38.00 | 40.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4215 | 87759-4265 | 87759-4275 | 42 | 41.90 | 40.00 | 42.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4415 | 87759-4465 | 87759-4475 | 44 | 43.90 | 42.00 | 44.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4615 | 87759-4665 | 87759-4675 | 46 | 45.90 | 44.00 | 46.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4815 | 87759-4865 | 87759-4875 | 48 | 47.90 | 46.00 | 48.20 | 26.20 | 52.40 | 56.00 | B |
| B | 87759-5015 | 87759-5065 | 87759-5075 | 50 | 49.90 | 48.00 | 50.20 | 34.20 | 68.40 | 72.00 | B |

| REVISED TUBE SPEC EC NO: S2007-0829 DRWNS:KLI M01 2007/04/10 CHKD:CWAM 2007/04/12 APPR:KWLEE 2007/04/17 | DESCRIPTION REV | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | |
|---|---|---|---|-----------------|-------|------------------------------|---------------------------------|------------|-------|----------|--------|------------|----------|-------------|-------|---------|-------|------------|---------|-----|--------|---|--|
| | | $\nabla = 0$ $\nabla \square = 0$ | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.2 | ± --- | 1 PLACE | ± --- | ± --- | MM ONLY | NTS | METRIC |  | |
| | | | mm | INCH | | | | | | | | | | | | | | | | | | | |
| | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.2 | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td>TITLE</td> </tr> <tr> <td>KSEE</td> <td>2003/12/17</td> <td>MGRID, 2MM DUAL ROW HEADER, SMT</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>KCLING</td> <td>2004/01/12</td> <td></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>SKTOH</td> <td>2004/01/12</td> <td></td> </tr> </table> | DRAWN BY | DATE | TITLE | KSEE | 2003/12/17 | MGRID, 2MM DUAL ROW HEADER, SMT | CHECKED BY | DATE | | KCLING | 2004/01/12 | | APPROVED BY | DATE | | SKTOH | 2004/01/12 | | | | |  MOLEX INCORPORATED |
| DRAWN BY | DATE | TITLE | | | | | | | | | | | | | | | | | | | | | |
| KSEE | 2003/12/17 | MGRID, 2MM DUAL ROW HEADER, SMT | | | | | | | | | | | | | | | | | | | | | |
| CHECKED BY | DATE | | | | | | | | | | | | | | | | | | | | | | |
| KCLING | 2004/01/12 | | | | | | | | | | | | | | | | | | | | | | |
| APPROVED BY | DATE | | | | | | | | | | | | | | | | | | | | | | |
| SKTOH | 2004/01/12 | | | | | | | | | | | | | | | | | | | | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE TABLE | | | DOCUMENT NO. SD-87759-118 | SHEET NO. 4 OF 4 | | | | | | | | | | | | | | | | |