

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0877594074](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 40 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, with Pick-and-Place Cap, Tape and Reel Packaging, without Press-fit Plastic Pegs, Lead-free

Documents:

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

Agency Certification

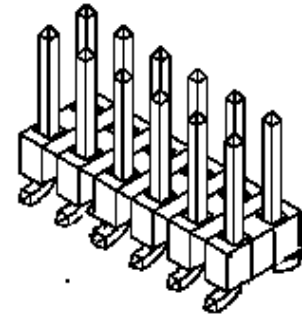
UL E29179

General

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

Physical

Breakaway Yes
 Circuits (Loaded) 40
 Circuits (maximum) 40
 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 Nylon
 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) 15
 Plating min: Mating (µm) 0.38
 Polarized to Mating Part No
 Polarized to PCB No
 Robotic Placement Pick and Place Cap
 Shrouded No
 Stackable No
 Temperature Range - Operating -55°C to +105°C



Series

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

Solder Process Data

Lead-free Process Capability

Reflow Capable (SMT only)

Process Temperature max. C

250

Material Info

Reference - Drawing Numbers

Packaging Specification

PK-89990-485

Product Specification

PS-87761-100

Sales Drawing

SD-87759-117

This document was generated on 05/25/2010

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F

E

D

C

B

A

F

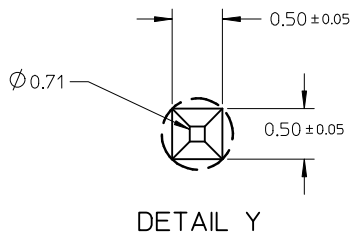
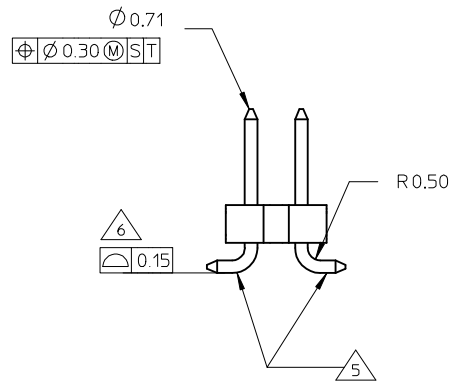
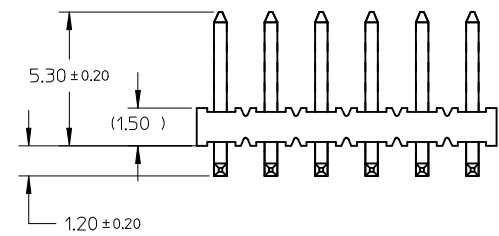
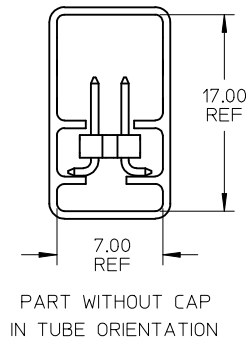
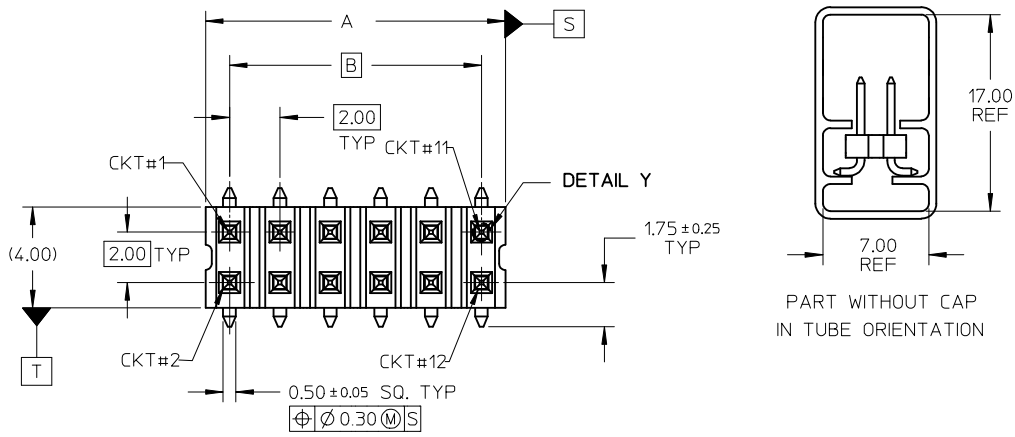
E

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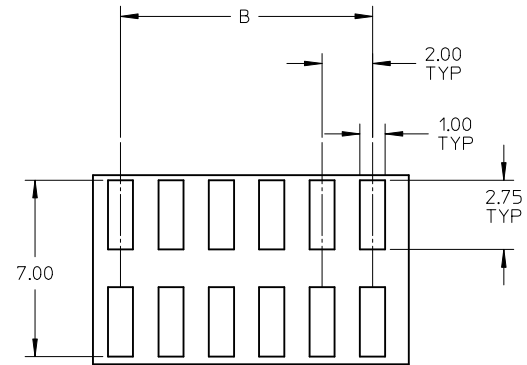
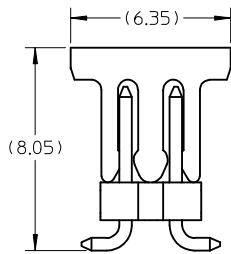


NOTE:

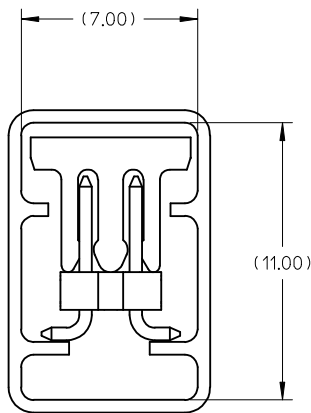
1. MATERIAL:
HSG & CAP - NYLON, GLASS FILLED
UL 94V-0, COLOUR BLACK

PIN - 0.50 SQ PHOSPHOR BRONZE
2. PLATING:
0.38um 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 ONLY.
11. TUBE LENGTH IS 560MM REF STANDARD.

| | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------|------------------------------|------------------------|---------------------|--|
| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 | QUALITY SYMBOLS ▽=0 ◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | mm | INCH | DRAWN BY | DATE | TITLE | | | |
| | | 4 PLACES ± --- | ± --- | KSEE | 2003/12/12 | CUSTOM HEADER | | | |
| | | 3 PLACES ± --- | ± --- | CHECKED BY | DATE | MGRID, 2MM DUAL ROW HDR. SMT | | | |
| 2 PLACES ± 0.2 | ± --- | APPROVED BY | DATE | MOLEX INCORPORATED | | | | | |
| 1 PLACE ± --- | ± --- | SKTOH | 2004/01/12 | DOCUMENT NO. | | | | | |
| ANGULAR ± 3 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | | SD-87759-117 | | SHEET NO. 1 OF 6 | |
| B2 | | SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

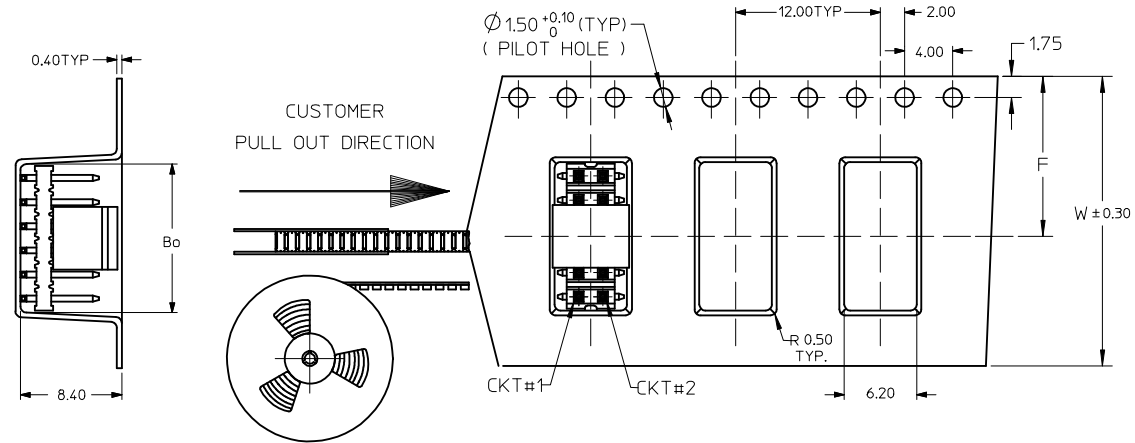


RECOMMENDED SOLDER PAD LAYOUT



| | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------|------------------------------|------------------------|--|--|
| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 | 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 ± 0.2 ± --- 1 PLACE ± --- ± --- | mm INCH | DRAWN BY DATE KSEE 2003/12/12 | TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT | | | | |
| | | ANGULAR ± 3 ° | | CHECKED BY DATE KCLING 2004/01/12 | MOLEX INCORPORATED | | | | |
| | B2 | DESCRIPTION REV | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY DATE SKTOH 2004/01/12 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87759-117 | SHEET NO. 2 OF 6 | | |

EMBOSSED CARRIER TAPE TYPE "A"

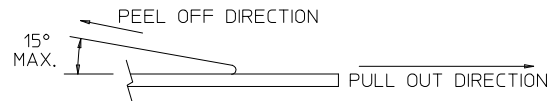


NOTES:

12. LEADER AND TRAILER TAPE



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



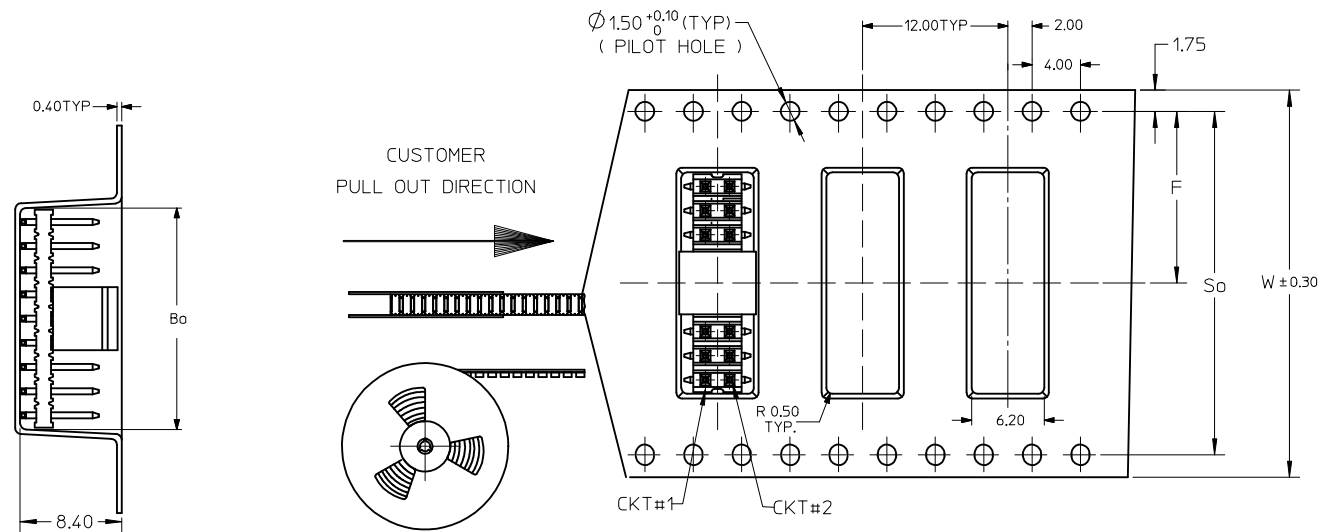
14. PACKAGING STANDARD IS AS PER EIA-481.

15. TAPE & REEL QUANTITY = 750 PCS/REEL

16. THE TAPE IS TREATED FOR ANTI-STATIC

| | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--|
| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 REV B2 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° | DIMENSION STYLE MM ONLY DRAWN BY: KSEE DATE: 2003/12/12 CHECKED BY: KCLING DATE: 2004/01/12 APPROVED BY: SKTOH DATE: 2004/01/12 | SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION | TITLE: CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT MOLEX INCORPORATED DOCUMENT NO. SD-87759-117 SHEET NO. 3 OF 6 | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE TABLE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |
| | | | | | | |
| | | | | | | |

EMBOSSED CARRIER TAPE TYPE "B"



| | | | | | |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------|
| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 | QUALITY SYMBOLS ▽=0 ◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° | DIMENSION STYLE MM ONLY DRAWN BY DATE KSEE 2003/12/12 CHECKED BY DATE KCLING 2004/01/12 APPROVED BY DATE SKTOH 2004/01/12 | SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION | TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE TABLE | MOLEX INCORPORATED DOCUMENT NO. SD-87759-117 | 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 | | | |
| | REV B2 | | | | |

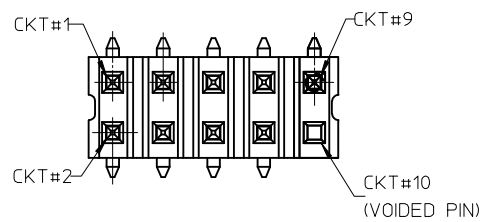
THIS TYPE OF CARRIER IS FOR CKT SIZE 8 AND BELOW.



| | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|------------------------------------------------------|------------|-----------------------------------|---------------------|---------------------------------------------------------------------------------|------------------------|-------------------|--|
| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 | DESCRIPTION REV | QUALITY SYMBOLS ▽=0 ◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | | mm | INCH | DRAWN BY | DATE | TITLE | | | |
| | | 4 PLACES | ± --- | ± --- | KSEE | 2003/12/12 | CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT | | | |
| | | 3 PLACES | ± --- | ± --- | CHECKED BY | DATE | | | | |
| | ± 0.2 | ± --- | KCLING | 2004/01/12 | MOLEX INCORPORATED | | | | | |
| 2 PLACES | ± --- | ± --- | APPROVED BY | DATE | | | | | | |
| 1 PLACE | ± --- | ± --- | SKTOH | 2004/01/12 | MATERIAL NO. SD-87759-117 | | | | | |
| ANGULAR ± 3 ° | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | SIZE A3 | |
| 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 | | |
|---|---------------------------------|------------------------------|----------------------------------------|----------|-----------|-------|-------|-------|-------|-------|-------|---------------|
| | PART NUMBER WITHOUT CAP IN TUBE | PART NUMBER WITH CAP IN TUBE | PART NUMBER WITH CAP IN TAPE AND REEL. | CKT SIZE | VOID CKTS | A | B | Bo | F | So | W | EMBOSSED TYPE |
| F | 87759-0414 | 87759-0464 | 87759-0474 | 4 | -- | NA | 2.00 | 5.40 | 11.50 | - | 24.00 | C |
| | 87759-0614 | 87759-0664 | 87759-0674 | 6 | -- | NA | 4.00 | 7.20 | 11.50 | - | 24.00 | C |
| | 87759-0814 | 87759-0864 | 87759-0874 | 8 | -- | 7.90 | 6.00 | 8.20 | 11.50 | - | 24.00 | C |
| | 87759-1014 | 87759-1064 | 87759-1074 | 10 | -- | 9.90 | 8.00 | 10.20 | 11.50 | - | 24.00 | A |
| | 87759-1002 | 87759-1003 | 87759-1004 | 10 | 10 | 9.90 | 8.00 | 10.20 | 11.50 | - | 24.00 | A |
| | 87759-1214 | 87759-1264 | 87759-1274 | 12 | -- | 11.90 | 10.00 | 12.20 | 11.50 | - | 24.00 | A |
| E | 87759-1414 | 87759-1464 | 87759-1474 | 14 | -- | 13.90 | 12.00 | 14.20 | 11.50 | - | 24.00 | A |
| | 87759-1614 | 87759-1664 | 87759-1674 | 16 | -- | 15.90 | 14.00 | 16.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-1814 | 87759-1864 | 87759-1874 | 18 | -- | 17.90 | 16.00 | 18.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-2014 | 87759-2064 | 87759-2074 | 20 | -- | 19.90 | 18.00 | 20.20 | 14.20 | 28.40 | 32.00 | B |
| | 87759-2214 | 87759-2264 | 87759-2274 | 22 | -- | 21.90 | 20.00 | 22.20 | 20.20 | 40.40 | 44.00 | B |
| D | 87759-2414 | 87759-2464 | 87759-2474 | 24 | -- | 23.90 | 22.00 | 24.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-2614 | 87759-2664 | 87759-2674 | 26 | -- | 25.90 | 24.00 | 26.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-2814 | 87759-2864 | 87759-2874 | 28 | -- | 27.90 | 26.00 | 28.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3014 | 87759-3064 | 87759-3074 | 30 | -- | 29.90 | 28.00 | 30.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3214 | 87759-3264 | 87759-3274 | 32 | -- | 31.90 | 30.00 | 32.20 | 20.20 | 40.40 | 44.00 | B |
| | 87759-3414 | 87759-3464 | 87759-3474 | 34 | -- | 33.90 | 32.00 | 34.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-3614 | 87759-3664 | 87759-3674 | 36 | -- | 35.90 | 34.00 | 36.20 | 26.20 | 52.40 | 56.00 | B |
| C | 87759-3814 | 87759-3864 | 87759-3874 | 38 | -- | 37.90 | 36.00 | 38.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4014 | 87759-4064 | 87759-4074 | 40 | -- | 39.90 | 38.00 | 40.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4214 | 87759-4264 | 87759-4274 | 42 | -- | 41.90 | 40.00 | 42.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4414 | 87759-4464 | 87759-4474 | 44 | -- | 43.90 | 42.00 | 44.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4614 | 87759-4664 | 87759-4674 | 46 | -- | 45.90 | 44.00 | 46.20 | 26.20 | 52.40 | 56.00 | B |
| | 87759-4814 | 87759-4864 | 87759-4874 | 48 | -- | 47.90 | 46.00 | 48.20 | 26.20 | 52.40 | 56.00 | B |
| B | 87759-5014 | 87759-5064 | 87759-5074 | 50 | -- | 49.90 | 48.00 | 50.20 | 34.20 | 68.40 | 72.00 | B |

NOTES:
 VOIDED PIN CKT#10 FOR PART#87759-1002



| ADD. OPTION EC NO: S2009-0510 DRWN:ATSEE 2009/01/23 CHKD:SKANG 2009/02/09 APPR:MLONG 2009/02/17 B2 | QUALITY SYMBOLS =0 =0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <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 | ± --- | ± --- | DIMENSION STYLE MM ONLY DRAWN BY: KSEE DATE: 2003/12/12 CHECKED BY: KCLING DATE: 2004/01/12 APPROVED BY: SKTOH DATE: 2004/01/12 MATERIAL NO.: SEE TABLE | SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION | TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR. SMT MOLEX INCORPORATED DOCUMENT NO.: SD-87759-117 SHEET NO.: 6 OF 6 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | mm | INCH | | | | | | | | | | | | | | | |
| | | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | |
| | | | 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.2 | ± --- | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | |