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Part Number: [0877604017](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Through Hole, 40 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating, Tray, Lead-free

Documents:

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

Agency Certification

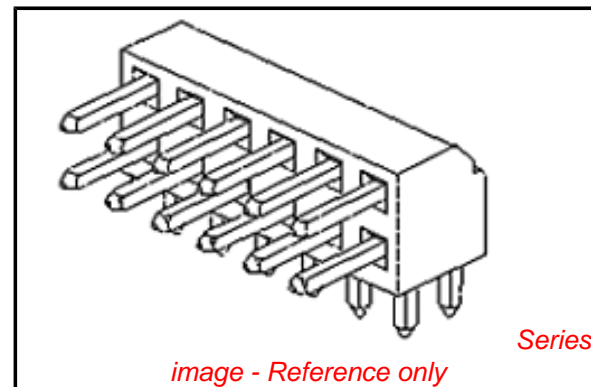
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [87760](#)
 Application Board-to-Board, Wire-to-Board
 Comments Lead-free version of 87049 series
 Overview [milligrid](#)
 Product Name Milli-Grid™

Physical

Breakaway No
 Circuits (Loaded) 40
 Circuits (maximum) 40
 Color - Resin Black
 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) 0.157 In
 Mated Height (mm) 4.00 mm
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Right Angle
 PC Tail Length (in) 0.102 In
 PC Tail Length (mm) 2.60 mm
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 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
 Polarized to Mating Part No
 Polarized to PCB No
 Shrouded No
 Stackable Yes



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

[87760Series](#)

Mates With

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

| | |
|--------------------------------|-----------------|
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -55°C to +105°C |
| Termination Interface: Style | Through Hole |

Electrical

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

Solder Process Data

| | |
|--|------------------------|
| Duration at Max. Process Temperature (seconds) | 14 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 265 |

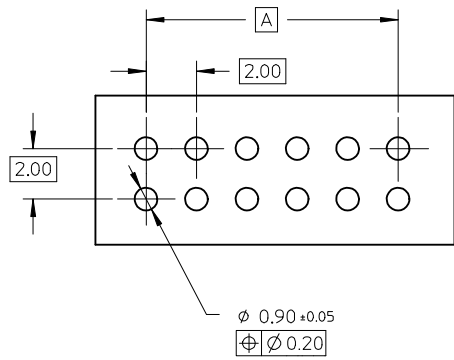
Material Info

Reference - Drawing Numbers

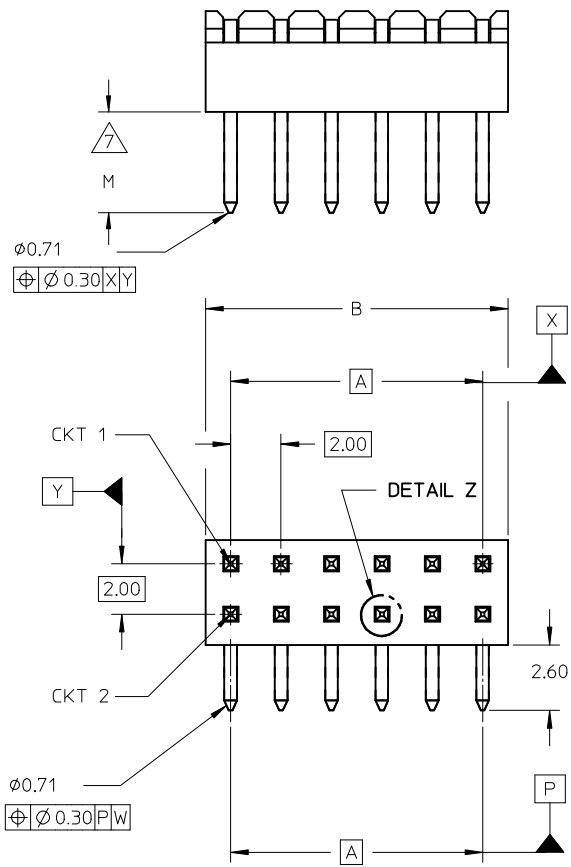
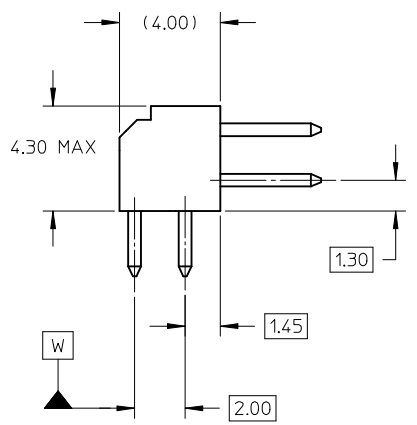
| | |
|-----------------------|--------------|
| Product Specification | PS-87761-100 |
| Sales Drawing | SD-87760-109 |

This document was generated on 05/26/2010

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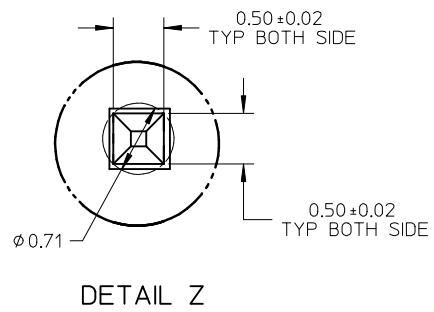
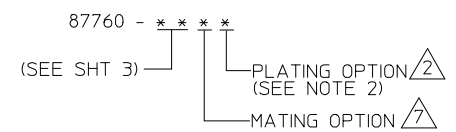
RECOMMENDED PCB LAYOUT



NOTES:

1. MATERIAL:
 - HSG: PCT, 30% GLASS FILLED, UL 94V-0, COLOUR BLACK.
 - PIN: 0.50MM SQ PHOSPHOR BRONZE 510
 2. PLATING:
 - ***6 - 0.38um MIN GOLD IN CONTACT AREA, 1.90um MIN TIN IN SOLDERTAIL AREA, BOTH OVER 1.27um MIN NICKEL OVERALL
 - ***7 - 0.76um MIN GOLD IN CONTACT AREA, 1.90um MIN TIN IN SOLDERTAIL AREA, BOTH OVER 1.27um MIN NICKEL OVERALL
 - ***8 - 2.54um MIN TIN OVER 1.27um MIN NICKEL OVERALL
 3. 12 CKT USED FOR ILLUSTRATION ONLY
 4. PART TO BE PACKED IN POCKET TRAY/TUBE (SEE TABLE).
 5. PRODUCT SPEC PS-87761-100 APPLIES.
 6. RECOMMENDED PCB BOARD THK 1.60±0.10 MM.
7. MATING LENGTH: 1 - 4.00MM
2 - 3.50MM
3 - 3.06MM
4 - 5.75MM

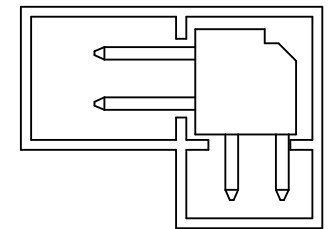
LEGEND:



DETAIL Z

| | | | | | | |
|---|-----------------|--|--------------------|---|--------------|------------------------|
| 0047-DW-SIRIUS EC NO: S2010-0177 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2009/10/21 2009/10/22 2009/10/23 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | ▼=0 ∇=0 | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° | MM ONLY | NTS | METRIC | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY DATE | TITLE | | |
| | | | KSEE 2003/10/15 | MGRID, 2MM DUAL ROW HDR. R/A | | |
| | | | CHECKED BY DATE | | | |
| | | | KCL ING 2003/12/02 | | | |
| | | | APPROVED BY DATE | | | |
| | | | SKTOH 2003/12/11 | MOLEX INCORPORATED | | |
| | | | MATERIAL NO. | DOCUMENT NO. | SHEET NO. | |
| | | | SEE TABLE | SD-87760-109 | 1 OF 2 | |
| | | | 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 | VOID PIN LOCATION | CKT SIZE | A | B | M | PACKAGING TYPE | | | | | | | |
| F | 87760-04** | - | 04 | 2.00 | 4.00 | REFER TO NOTE 7. | TRAY | | | | | | | |
| | 87760-06** | - | 06 | 4.00 | 6.00 | | | | | | | | | |
| | 87760-08** | - | 08 | 6.00 | 8.00 | | | | | | | | | |
| | 87760-10** | - | 10 | 8.00 | 10.00 | | | | | | | | | |
| E | 87760-12** | - | 12 | 10.00 | 12.00 | | | | | | | | | |
| | 87760-14** | - | 14 | 12.00 | 14.00 | | | | | | | | | |
| | 87760-16** | - | 16 | 14.00 | 16.00 | | | | | | | | | |
| | 87760-18** | - | 18 | 16.00 | 18.00 | | | | | | | | | |
| D | 87760-20** | - | 20 | 18.00 | 20.00 | | | | | | | | | |
| | 87760-22** | - | 22 | 20.00 | 22.00 | | | | | | | | | |
| | 87760-24** | - | 24 | 22.00 | 24.00 | | | | | | | | | |
| | 87760-26** | - | 26 | 24.00 | 26.00 | | | | | | | | | |
| C | 87760-28** | - | 28 | 26.00 | 28.00 | | | | | | | | | |
| | 87760-30** | - | 30 | 28.00 | 30.00 | | | | | | | | | |
| | 87760-32** | - | 32 | 30.00 | 32.00 | | | | | | | | | |
| | 87760-34** | - | 34 | 32.00 | 34.00 | | | | | | | | | |
| B | 87760-36** | - | 36 | 34.00 | 36.00 | | | | | | TUBE | | | |
| | 87760-38** | - | 38 | 36.00 | 38.00 | | | | | | | | | |
| | 87760-40** | - | 40 | 38.00 | 40.00 | | | | | | | | | |
| | 87760-42** | - | 42 | 40.00 | 42.00 | | | | | | | | | |
| A | 87760-44** | - | 44 | 42.00 | 44.00 | | | | | | | | | |
| | 87760-46** | - | 46 | 44.00 | 46.00 | | | | | | | | | |
| | 87760-48** | - | 48 | 46.00 | 48.00 | | | | | | | | | |
| | 87760-50** | - | 50 | 48.00 | 50.00 | | | | | | | | | |
| | 87760-5116 | 5, 6 & 26 | 50 | 48.00 | 50.00 | | | | | | | | | |
| | 87760-5248 | - | 28 | 26.00 | 28.00 | | | | | | | | | |



PART IN TUBE

| 0047-DW-SIRIUS EC NO: S2010-0177 DRWN:SKANG 2009/10/21 CHKD:ATSEE 2009/10/22 APPR:MLONG 2009/10/23 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | |
|--|--|---|-----------------|---|--------------|------------------------|------------------------------|------------|----------|-------|--------|------------|-------|-------------|---------|-------|-------|------------|-----|--------------------|--|--|--|
| | $\nabla=0$ $\square=0$ | <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 | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| DESCRIPTION | <table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> <td>TITLE</td> </tr> <tr> <td>KSEE</td> <td>2003/10/15</td> <td>MGRID, 2MM DUAL ROW HDR. R/A</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>KCLING</td> <td>2003/12/02</td> <td></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> <td></td> </tr> <tr> <td>SKTOH</td> <td>2003/12/11</td> <td></td> </tr> </table> | DRAWN BY | DATE | TITLE | KSEE | 2003/10/15 | MGRID, 2MM DUAL ROW HDR. R/A | CHECKED BY | DATE | | KCLING | 2003/12/02 | | APPROVED BY | DATE | | SKTOH | 2003/12/11 | | MOLEX INCORPORATED | | | |
| DRAWN BY | DATE | TITLE | | | | | | | | | | | | | | | | | | | | | |
| KSEE | 2003/10/15 | MGRID, 2MM DUAL ROW HDR. R/A | | | | | | | | | | | | | | | | | | | | | |
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| | | | A3 | SD-87760-109 | | | 2 OF 2 | | | | | | | | | | | | | | | | |