

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0877582017](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Through Hole, Vertical, 20 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating, Pocket Tray 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 [87758](#)
 Application Board-to-Board
 Overview [milligrid](#)
 Product Name Milli-Grid™

Physical

Breakaway Yes
 Circuits (Loaded) 20
 Circuits (maximum) 20
 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) 0.157 In
 Mated Height (mm) 4.00 mm
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin Nylon
 Number of Rows 2
 Orientation Vertical
 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
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.76
 Polarized to Mating Part No
 Polarized to PCB No
 Shrouded No



image - Reference only

Series

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

[87758Series](#)

Mates With

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

| | |
|--------------------------------|-----------------|
| Stackable | No |
| 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) | 3 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 250 |

Material Info

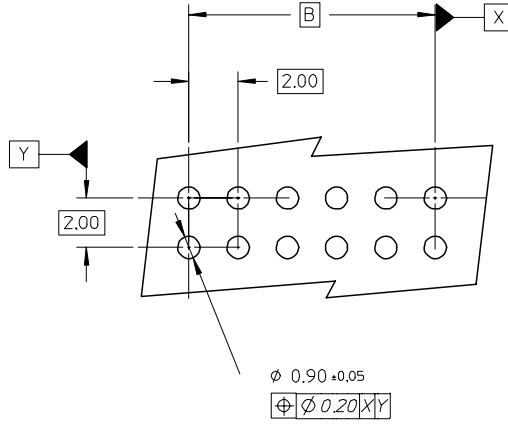
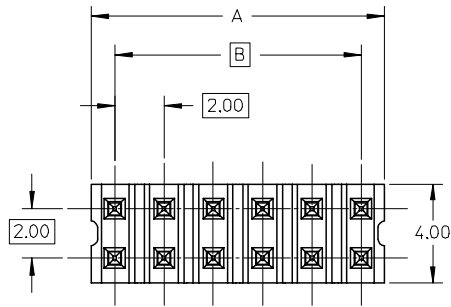
Reference - Drawing Numbers

| | |
|-----------------------|--------------|
| Product Specification | PS-87761-100 |
| Sales Drawing | SD-87758-107 |

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

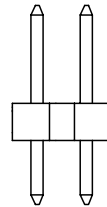
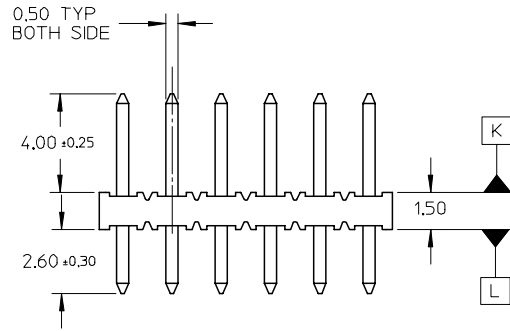
10 9 8 7 6 5 4 3 2 1



LEGEND
 87758- * * * *
 CKT SIZE (SEE SHT 2 TABLE) PLATING (SEE NOTE 2)

NOTES:

- MATERIAL:
 HOUSING: 30% G.F. NYLON 46, 94V-0, COLOR: BLACK
 PIN: 0.50mm SQ. PHOSPHOR BRONZE 510
- PLATING:
 **16 - 0.38um MIN GOLD IN CONTACT AREA.
 TIN IN SOLDER AREA, BOTH OVER
 NICKEL OVERALL.
 **17 - 0.76um MIN GOLD IN CONTACT AREA,
 TIN IN SOLDER AREA, BOTH OVER
 NICKEL OVERALL.
 **18 - 2.54um MIN TIN OVER
 NICKEL OVERALL.
- 12 CKT USED FOR ILLUSTRATION ONLY
- PACKED IN POCKET TRAY
- PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION
- CKT 4 AND 6 IS CUT FROM CKT 8 AND 12 RESPECTIVELY.
 CKT 2 ARE CUT FROM ANY LARGER CKT SIZE.ROUGH EDGES
 ARE EXPECTED ALONG THE CUTTING EDGES.
- PRODUCT SPEC PS-87761-100 APPLIES.
- RECOMMENDED PCB THICKNESS IS 1.60±0.10



$\phi 0.71 \pm 0.07$
 $\phi \phi 0.30 \text{ (M) K}$



VIEW P

$\phi 0.71 \pm 0.07$
 $\phi \phi 0.30 \text{ (M) L}$



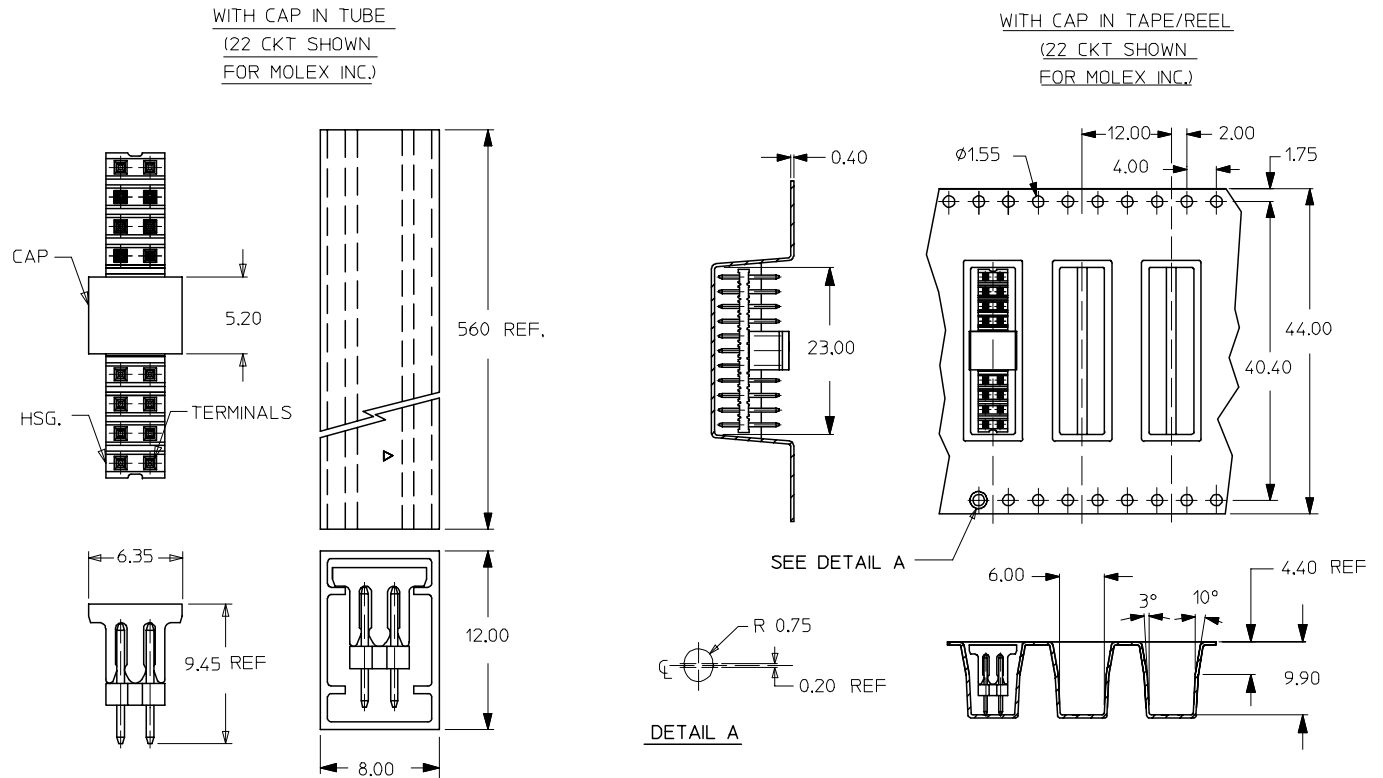
VIEW Q

| | | | | | | | | |
|---|-------------------------------|---|---------|---|--|------------------------|------------------------|--|
| EC NO: S2005-0715 2005/05/16 DRAWN:KCHO 2005/05/18 CHKD:PTLIM 2005/05/19 APPR:SCLOW | 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 ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° | mm INCH | DRAWN BY KSEE DATE 2003/10/30 | TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR | | | |
| A2 | REV | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | CHECKED BY KCL ING DATE 2004/01/05 | MOLEX INCORPORATED | | | |
| | | SEE TABLE | | APPROVED BY SKTOH DATE 2004/01/05 | DOCUMENT NO. SD-87758-107 | SHEET NO. 1 OF 2 | | |

9 8 7 6 5 4 3 2 1

| PART NUMBER | CKT SIZE | A | B |
|-------------|----------|-------|-------|
| 87758-02** | 2 | NA | NA |
| 87758-04** | 4 | NA | 2.00 |
| 87758-06** | 6 | NA | 4.00 |
| 87758-08** | 8 | 7.90 | 6.00 |
| 87758-10** | 10 | 9.90 | 8.00 |
| 87758-12** | 12 | 11.90 | 10.00 |
| 87758-14** | 14 | 13.90 | 12.00 |
| 87758-16** | 16 | 15.90 | 14.00 |
| 87758-18** | 18 | 17.90 | 16.00 |
| 87758-20** | 20 | 19.90 | 18.00 |
| 87758-22** | 22 | 21.90 | 20.00 |
| 87758-24** | 24 | 23.90 | 22.00 |
| 87758-26** | 26 | 25.90 | 24.00 |
| 87758-28** | 28 | 27.90 | 26.00 |
| 87758-30** | 30 | 29.90 | 28.00 |
| 87758-32** | 32 | 31.90 | 30.00 |
| 87758-34** | 34 | 33.90 | 32.00 |
| 87758-36** | 36 | 35.90 | 34.00 |
| 87758-38** | 38 | 37.90 | 36.00 |
| 87758-40** | 40 | 39.90 | 38.00 |
| 87758-42** | 42 | 41.90 | 40.00 |
| 87758-44** | 44 | 43.90 | 42.00 |
| 87758-46** | 46 | 45.90 | 44.00 |
| 87758-48** | 48 | 47.90 | 46.00 |
| 87758-50** | 50 | 49.90 | 48.00 |

| CKT SIZE | PART NO. WITH CAP IN TUBE | PART NO. WITH CAP IN TAPE/REEL | PLATING TYPE |
|----------|---------------------------|--------------------------------|--------------|
| 8 | 87758-0814 | 87758-0815 | **16 |
| 22 | 87758-5126 | 87758-5111 | MOLEX INC. |



| EC NO: S2005-0715 2005/05/16 DRAWN:KCHO 2005/05/18 CHKD:PTLIM 2005/05/19 APPR:SCLOW | DESCRIPTION REV | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE MM ONLY | SCALE NTS | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | | | | | | | | | | | | |
|---|---|--|---------------------------------------|----------------------------|--------------|------------------------|------------------------|-------|----------|-------|-------|----------|--------|-------|---------|-------|-------|--|--|-----------------------------|
| | | <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table> | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± 0.20 | ± --- | 1 PLACE | ± --- | ± --- | DRAWN BY KSEE DATE 2003/10/30 | TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR | MOLEX MOLEX INCORPORATED |
| | | | mm | INCH | | | | | | | | | | | | | | | | |
| | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.20 | ± --- | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY SKTOH DATE 2004/01/05 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-87758-107 | SHEET NO. 2 OF 2 | | | | | | | | | | | | | | | | |
| SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | |