

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0875681494](#)  
**Status:** **Active**  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Cable-to-Board Receptacle, Dual Row, IDT, Lead-free, 14 Circuits, 0.76mm (.030") Gold (Au) Selective Plating, with Center Polarization Key and Locking Friction Ramp

**Documents:**

[3D Model](#) [Product Specification PS-87568-004 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family IDT and Solder Connectors  
 Series [87568](#)  
 Crimp Quality Equipment Yes  
 Product Name Milli-Grid™  
 Use With [87569-1014](#) Strain Relief (Optional)

**Physical**

Circuits (Loaded) 14  
 Color - Resin Black  
 Durability (mating cycles max) 100  
 Flammability 94V-0  
 Gender Female  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Metal Copper Alloy  
 Material - Resin Polyester  
 Number of Rows 2  
 Packaging Type Tray  
 Panel Mount No  
 Pitch - Mating Interface (in) 0.079 In  
 Pitch - Mating Interface (mm) 2.00 mm  
 Polarized to Mating Part Yes  
 Stackable No  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style IDT or Pierce  
 Wire Size AWG 28

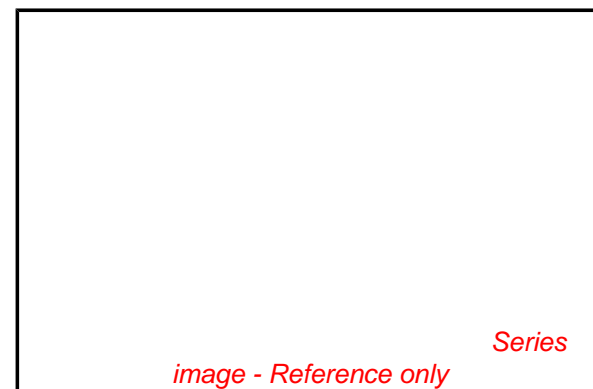
**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 125V

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-87568-004  
 Sales Drawing SD-87568-003



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**China RoHS**



**Not Halogen-Free**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[87568Series](#)

**Mates With**

[87831](#) Vertical PCB Header, [87832](#) Surface Mount PCB Header, [87833](#) Right Angle PCB Header

**Application Tooling | FAQ**

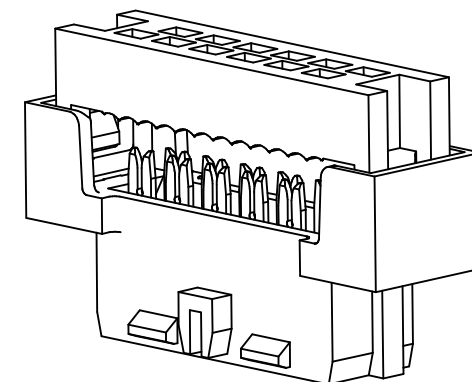
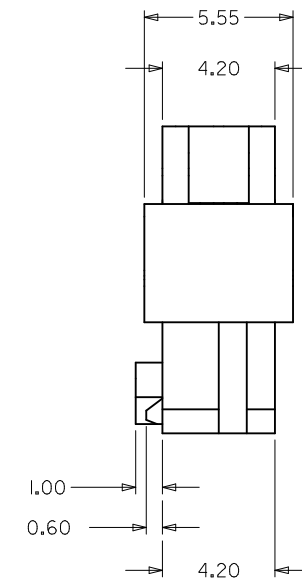
*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

| Description   | Product #                  |
|---|----------------------------|
| IDT Ribbon Cable Adapter Kit For 2.00mm Milli-Grid™ | <a href="#">0621002400</a> |
| IDT - Manual - Handtool                             | <a href="#">0621002000</a> |
| Manual Press with IDT Ribbon Cable Tool Kit         | <a href="#">0621002200</a> |

This document was generated on 04/20/2010

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1. MATERIALS:  
HOUSING - PBT, GLASS FILLED UL94V-0 BLACK  
TERMINAL - COPPER ALLOY
2. FINISHES  
PLATING 3 - 15uin (0.38um) SELECTIVE GOLD IN CONTACT AREA  
AND 75uin (1.88um) TIN IN IDT AREA OVER 50uin (1.25um)  
NICKEL OVERALL.  
PLATING 4 - 30uin (0.76um) SELECTIVE GOLD IN CONTACT AREA  
AND 75uin (1.88um) TIN IN IDT AREA OVER 50uin (1.25um)  
NICKEL OVERALL.
3. PRODUCT SPEC PS-87568-004 APPLIES
4. FOR ILLUSTRATION PURPOSES, 12 CKT IS SHOWN
5. PART MATES WITH ALL MILLIGRID HEADERS WITH MATING LENGTH  
BETWEEN 2.50mm AND 4.20mm
6. PART IS DESIGNED FOR 1.00mm PITCH FLAT CABLE, 7 STRANDS,  
AWG #28, UL2651 AND UL2678
7. ALL OTHER CIRCUIT SIZES, CONTACT FACTORY.
8. STRAIN RELIEF TO BE PURCHASED SEPERATELY,  
REFER TO SD-87569-008

|   |            |             |                 |
|---|------------|-------------|-----------------|
| ADD 32CKT OPTION<br>EC NO: S2010-0273<br>DRWN:SKANG<br>CHKD:ATSEE<br>APPR:MLONG<br>H1 | 2009/09/28 | DESCRIPTION | QUALITY SYMBOLS |
|   | 2009/11/13 |             | $\nabla_{FA}=0$ |
|   | 2009/11/17 |             | $\nabla_{FE}=0$ |
|   |            |             | $\nabla_{FI}=0$ |

|  |                      |
|--|----------------------|
| GENERAL TOLERANCES (UNLESS SPECIFIED)                      |                      |
|  | mm INCH              |
| 4 PLACES   | $\pm$ --- $\pm$ ---  |
| 3 PLACES   | $\pm$ --- $\pm$ ---  |
| 2 PLACES   | $\pm 0.15$ $\pm$ --- |
| 1 PLACE  | $\pm$ --- $\pm$ ---  |
| ANGULAR $\pm 3^\circ$                                      |                      |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                      |

|                            |            |
|----------------------------|------------|
| DIMENSION STYLE<br>MM ONLY |            |
| DRAWN BY                   | DATE       |
| AGARWAL                    | 1997/08/05 |
| CHECKED BY                 | DATE       |
| SQUEK                      | 1997/09/03 |
| APPROVED BY                | DATE       |
| MLONG                      | 2009/11/13 |
| MATERIAL NO.               |            |
| SEE TABLE                  |            |
| SIZE                       |            |
| A3                         |            |

|  |                        |                           |
|--|------------------------|---------------------------|
| SCALE<br>NTS   | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |
| MGRID<br>2MM DUAL ROW<br>IDT RECEPTACLE  |                        |                           |
| MOLEX INCORPORATED   |                        |                           |
| DOCUMENT NO.<br>SD-87568-003   |                        | SHEET NO.<br>1 OF 3       |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                           |



87568-\*\*\*4\*  
POLARIZATION ONLY  
(APPLICABLE FOR 14 TO 50 CKT)



87568-\*\*\*9\*  
POLARIZATION AND RAMP LOCKING  
(APPLICABLE FOR 14 TO 50 CKT)



87568-\*\*\*6\*  
NO POLARIZATION/RAMP FEATURE  
(APPLICABLE FOR 10 TO 50 CKT)



87568-\*\*\*7\*  
SINGLE RAMP LOCKING ONLY  
(APPLICABLE FOR 10 TO 12 CKT)

| ENGINEERING NUMBER | CKT. SIZE | A     | B     | C     | D     | E     |
|--------------------|-----------|-------|-------|-------|-------|-------|
| 87568-10**         | 10        | 16.65 | 8.00  | 14.90 | 11.65 | 10.55 |
| 87568-12**         | 12        | 18.65 | 10.00 | 16.90 | 13.65 | 12.55 |
| 87568-14**         | 14        | 20.65 | 12.00 | 18.90 | 15.65 | 14.55 |
| 87568-16**         | 16        | 22.65 | 14.00 | 20.90 | 17.65 | 16.55 |
| 87568-20**         | 20        | 26.65 | 18.00 | 24.90 | 21.65 | 20.55 |
| 87568-22**         | 22        | 28.65 | 20.00 | 26.90 | 23.65 | 22.55 |
| 87568-24**         | 24        | 30.65 | 22.00 | 28.90 | 25.65 | 24.55 |
| 87568-26**         | 26        | 32.65 | 24.00 | 30.90 | 27.65 | 26.55 |
| 87568-30**         | 30        | 36.65 | 28.00 | 34.90 | 31.65 | 30.55 |
| 87568-32**         | 32        | 38.65 | 30.00 | 36.90 | 33.65 | 32.55 |
| 87568-34**         | 34        | 40.65 | 32.00 | 38.90 | 35.65 | 34.55 |
| 87568-36**         | 36        | 42.65 | 34.00 | 40.90 | 37.65 | 36.55 |
| 87568-40**         | 40        | 46.65 | 38.00 | 44.90 | 41.65 | 40.55 |
| 87568-44**         | 44        | 50.65 | 42.00 | 48.90 | 45.65 | 44.55 |
| 87568-50**         | 50        | 56.65 | 48.00 | 54.90 | 51.65 | 50.55 |



- 4 - WITH POLARIZATION ONLY FOR 14 - 50 CKT
- 6 - WITHOUT POLARIZATION AND RAMP LOCKING
- 7 - WITH SINGLE RAMP LOCKING ONLY FOR 10 & 12 CKT
- 9 - WITH POLARIZATION AND RAMP LOCKING FOR 14 - 50 CKT

10-12 CIRCUIT SIZE HAS ONLY ONE RAMP FOR LOCKING (OPTIONAL)

14-50 CIRCUIT SIZE HAS BOTH POLARIZATION AND RAMP LOCKING (OPTIONAL)

|   |   |   |   |  |  |   |
|---|---|---|---|--|--|---|
| ADD 32CKT OPTION<br>EC NO: S2010-0273<br>DRWN:SKANG<br>CHKD:ATSEE<br>APPR:MLONG | 2009/09/28<br>2009/11/13<br>2009/11/17  | QUALITY SYMBOLS<br>FA=0<br>FE=0<br>FI=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.15 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 3 ° | DIMENSION STYLE<br>MM ONLY<br>DRAWN BY DATE<br>AGARWAL 1997/08/05<br>CHECKED BY DATE<br>SQUEK 1997/09/03<br>APPROVED BY DATE<br>MLONG 2009/11/13 | SCALE<br>NTS<br>DESIGN UNITS<br>METRIC<br>THIRD ANGLE PROJECTION | MGRID<br>2MM DUAL ROW<br>IDT RECEPTACLE<br>MOLEX INCORPORATED |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | SEE TABLE                               | MATERIAL NO.<br>DOCUMENT NO.<br>SD-87568-003  | SHEET NO.<br>2 OF 3  |  |   |
|   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |   |  |  |   |
|   | SIZE<br>A3  |   |   |  |  |   |
|   | REV<br>H1   |   |   |  |  |   |

F

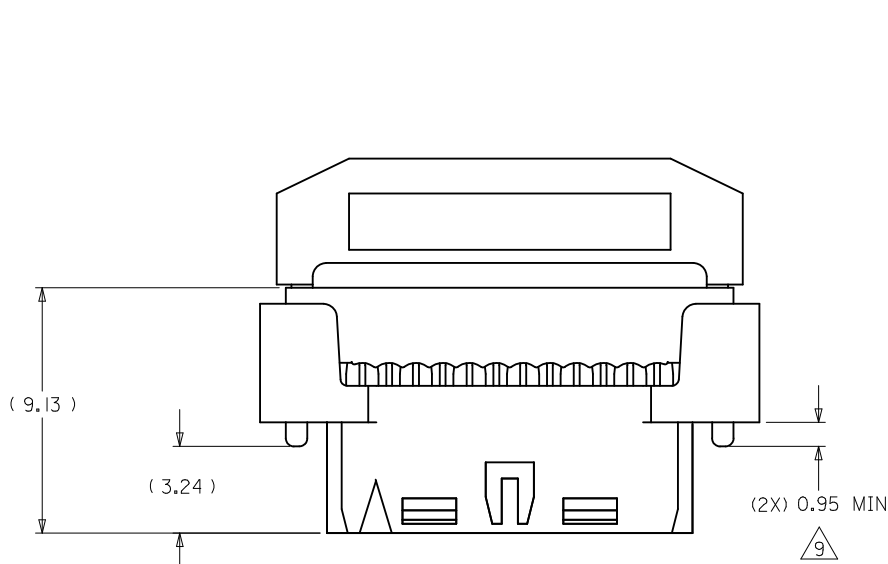
E

D

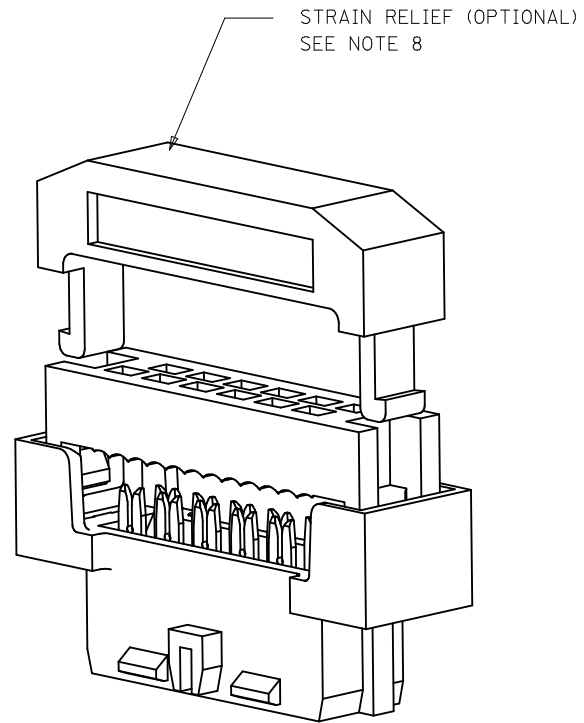
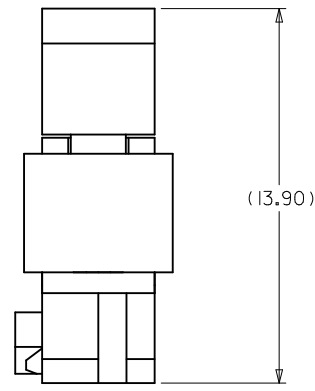
C

B

A



CABLE LOADED ASSEMBLY WITH STRAIN RELIEF



3D VIEW  
(12 CKT SHOWN FOR ILLUSTRATION ONLY)

NOTES

9 THIS DIMENSION IS TO ENSURE GOOD CABLE TERMINATION.

|   |  |                   |  |                                       |            |   |                    |  |                        |                        |  |  |  |
|---|--|-------------------|--|---------------------------------------|------------|---|--------------------|--|------------------------|------------------------|--|--|--|
| ADD 32CKT OPTION<br>EC NO: S2010-0273<br>DRWN:SKANG<br>CHKD:ATSEE<br>APPR:MLONG | 2009/09/28<br>2009/11/13<br>2009/11/17 | DESCRIPTION<br>H1 | QUALITY SYMBOLS                                      | GENERAL TOLERANCES (UNLESS SPECIFIED) |            | DIMENSION STYLE<br>MM ONLY  |                    | SCALE<br>NTS   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |  |  |
|   |  |                   | $\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_F = 0$   | mm                                    | INCH       | DRAWN BY<br>AGARWAL   | DATE<br>1997/08/05 | TITLE<br>MGRID<br>2MM DUAL ROW<br>IDT RECEPTACLE<br>MOLEX INCORPORATED |                        |                        |  |  |  |
|   |  |                   |  | 4 PLACES ± ---                        | ± ---      | CHECKED BY<br>SQUEK   | DATE<br>1997/09/03 |  |                        |                        |  |  |  |
|   |  |                   |  | 3 PLACES ± ---                        | ± ---      | APPROVED BY<br>MLONG  | DATE<br>2009/11/13 | MATERIAL NO.   | DOCUMENT NO.           | SHEET NO.              |  |  |  |
|   | 2 PLACES ± 0.15                        | ± ---             | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                                       | SEE TABLE  | SD-87568-003  | 3 OF 3             |  |                        |                        |  |  |  |
|   | 1 PLACE ± ---                          | ± ---             |  |                                       | SIZE<br>A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |  |                        |                        |  |  |  |
|   |  |                   | ANGULAR ± 3 °  |                                       |            |   |                    |  |                        |                        |  |  |  |