

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

**Part Number:** [0878681601](#)  
**Status:** **Active**  
**Description:** 1.60mm (.063") Pitch Board-to-Board Panel Detachable, PCB Receptacle, Right Angle, 16 Circuits, Gold (Au) Plating, Lubrication, Tray Packaging, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87868-004 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Receptacles
Series	<a href="#">87868</a>
Application	Board-to-Board
Comments	Panel Detachable
Product Name	N/A

**Physical**

Circuits (Loaded)	16
Durability (mating cycles max)	10,000
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.138 In
PC Tail Length (mm)	3.50 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.063 In
Pitch - Mating Interface (mm)	1.60 mm
Polarized to Mating Part	No
Polarized to PCB	Yes
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-30°C to +85°C
Termination Interface: Style	Through Hole

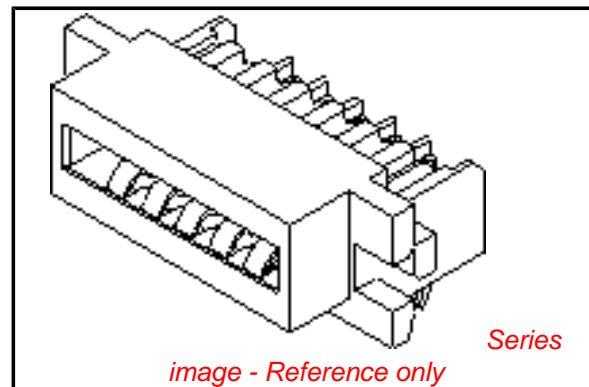
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification	PS-87868-004, RPS-87868-007
Sales Drawing	SD-87868-007



**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](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

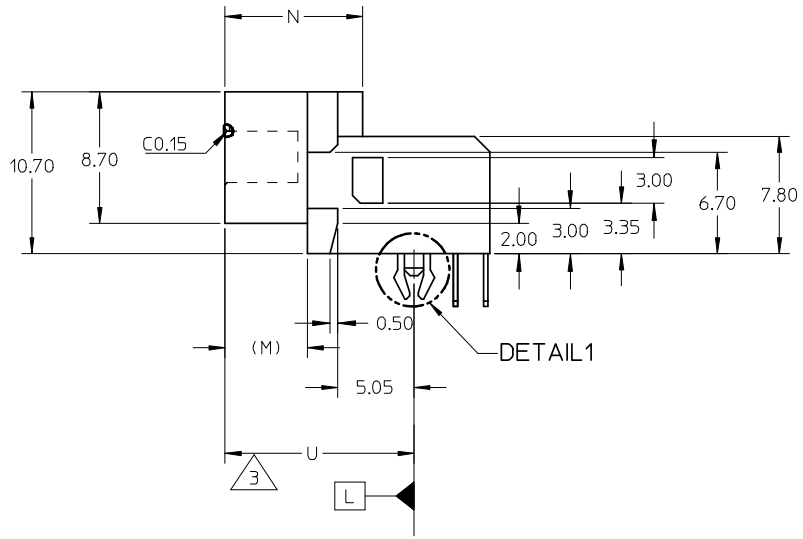
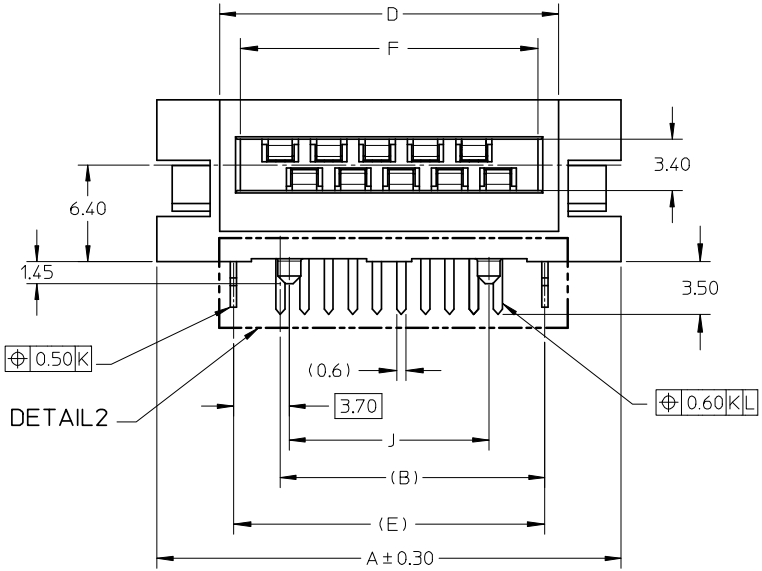
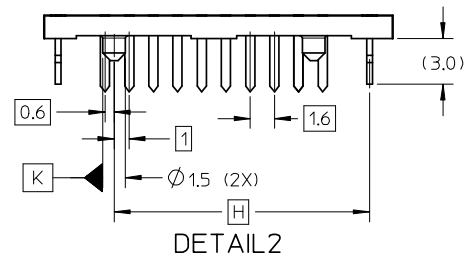
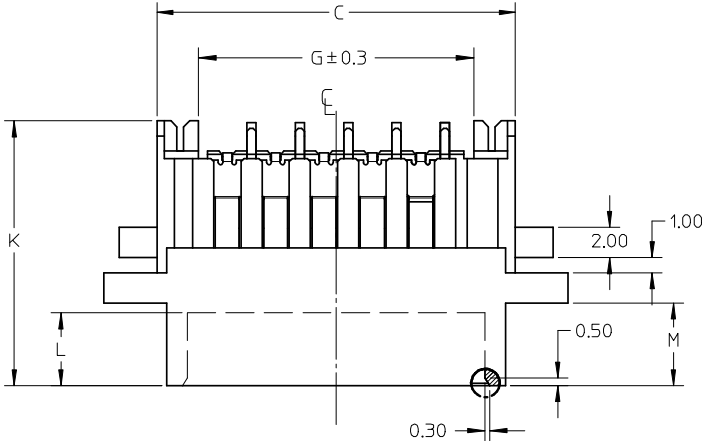
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[87868Series](#)

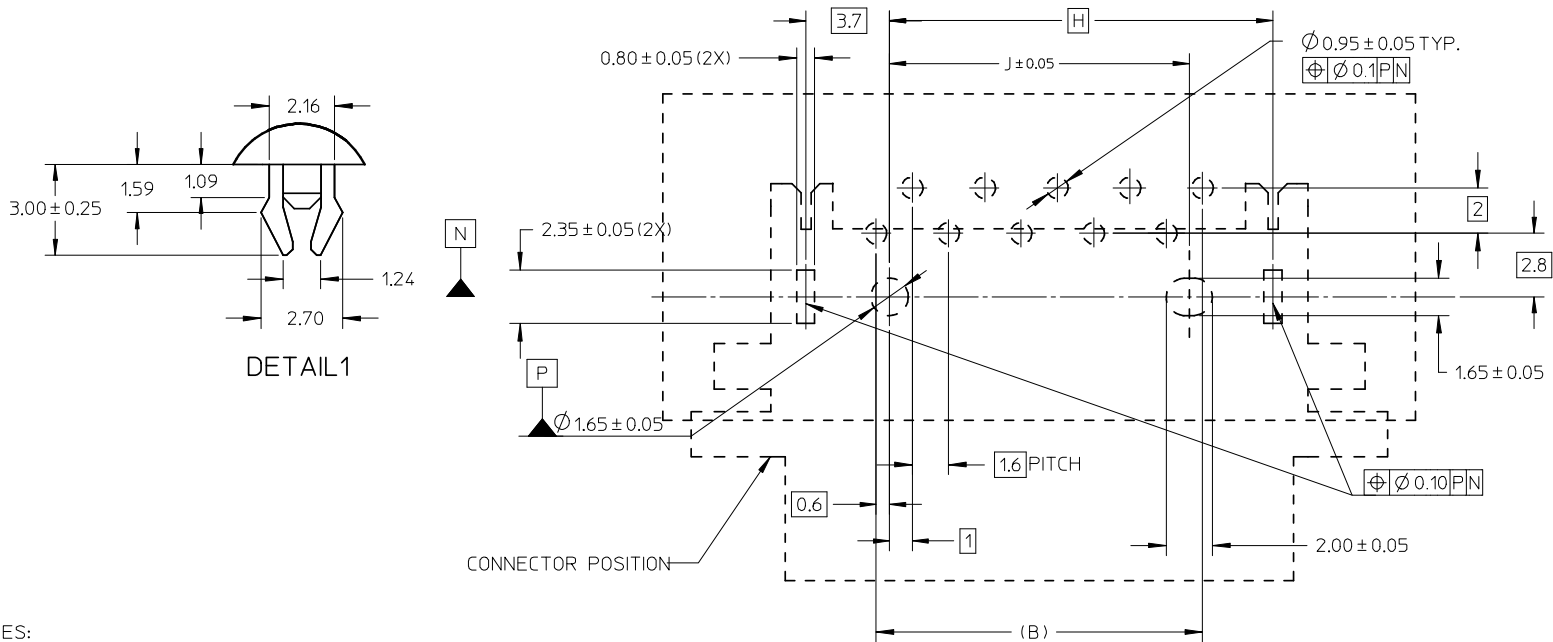
**Mates With**

[87869 PCB Header](#)



INITIAL RELEASE EC NO: S2008-0879 DRWN:CGOH 2008/04/17 CHKD:KHLIM 2008/04/18 APPR:BOKOK 2008/04/18	DESCRIPTION A	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▼=0 ∇=0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1 °	MM ONLY	NTS	METRIC		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: CGOH    DATE: 2008/03/26 CHECKED BY: KHLIM    DATE: 2008/04/17 APPROVED BY: BOKOK    DATE: 2008/04/18	TITLE 1.6 PANEL DETACHABLE TYPE RECEPTACLE CONNECTOR		MOLEX INCORPORATED	SHEET NO. 1 OF 3
			SEE TABLE	MATERIAL NO.    DOCUMENT NO. SD-87868-007				
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

PART NUMBER	DIM'A'	DIM'B'	DIM'C'	DIM'D'	DIM'E'	DIM'F'	DIM'G'	DIM'H'	DIM'J'	DIM'K'	DIM'L'	DIM'M'	DIM'N'	DIM'P'	DIM'Q'	DIM'R'	DIM'S'	DIM'T'	DIM'U'	NUMBER OF CONTACTS	LUBRICATION
87868-1001	30.70	14.40	23.70	22.40	20.60	19.70	18.20	16.90	13.20	17.50	4.80	5.45	9.10	2.65	1.80	4.80	15.30	7.05	12.50	10	YES
87868-1401	37.10	20.80	30.10	28.80	27.00	26.10	24.60	23.30	19.60	17.65	4.95	5.60	9.25	2.50	1.65	4.95	15.45	7.20	12.65	14	
87868-1601	40.30	24.00	33.30	32.00	30.20	29.30	27.80	26.50	22.80	17.65	4.95	5.60	9.25	2.50	1.65	4.95	15.45	7.20	12.65	16	

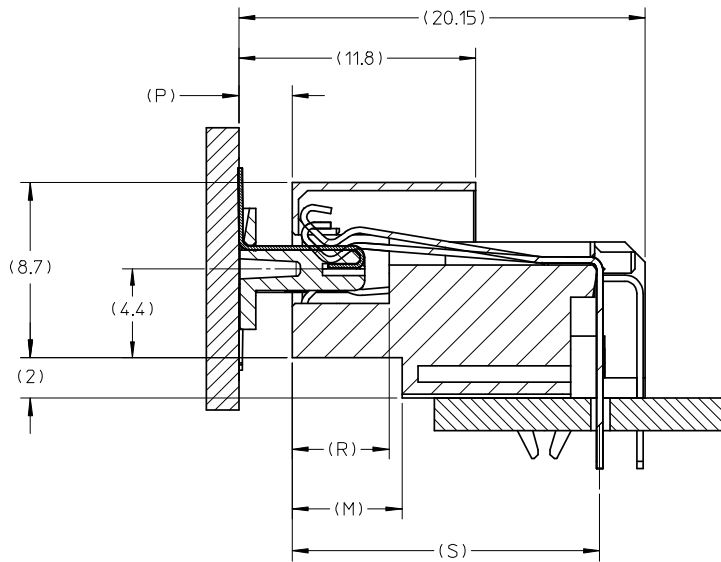


RECOMMENDED P.C.BOARD  
THICKNESS 1.6MM

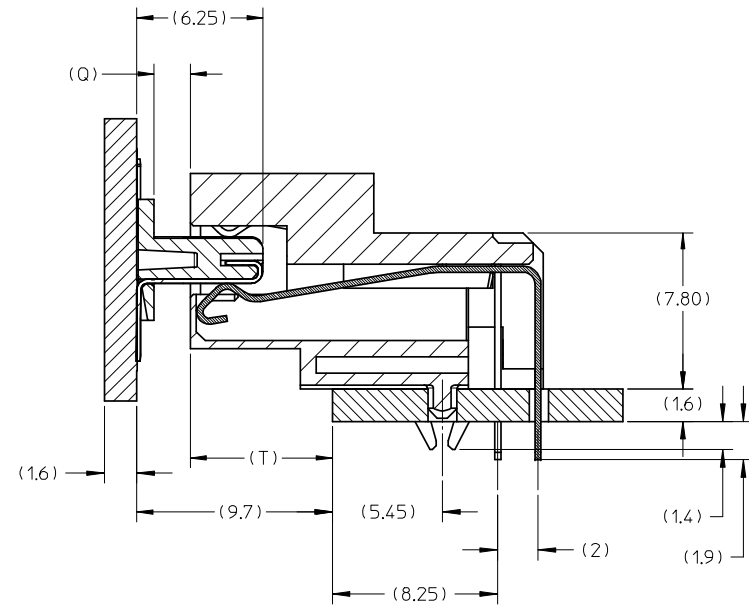
NOTES:

- MATE WITH 87869.
- MATERIAL:
  - HOUSING : GLASS FILLED NYLON, UL94V-0 (FOR WAVE SOLDERING ONLY)
  - TERMINALS : COPPER ALLOY
- BASIC PLANE  $\square$  IS THE CENTRE OF 2 BOSSES ( $\phi 1.5$ )
- PLATING :
  - GOLD ON CONTACT AREA : 0.54 $\mu$ m MINIMUM
  - TIN ON SOLDER TAIL AREA : 24 $\mu$ m MINIMUM
  - OVERALL NICKEL UNDERPLATING : 1.54 $\mu$ m MINIMUM
- REFER TO PS-87868-004 FOR PERFORMANCE SPECIFICATIONS.
- CONTACT MOLEX FOR AVAILABILITY OF PRODUCT OPTIONS.
- PART SHALL BE PACKED IN TRAYS.

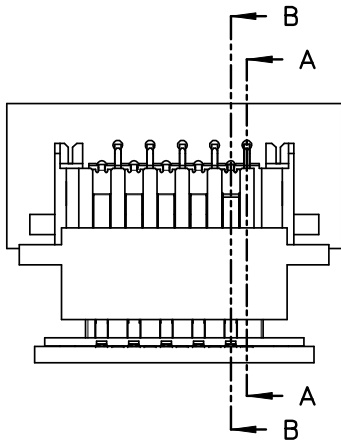
INITIAL RELEASE EC NO: S2008-0879 DRWN: CGOH 2008/04/17 CHKD: KHLIM 2008/04/18 APPR: BOKOK 2008/04/18	QUALITY SYMBOLS $\blacktriangledown = 0$ $\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	CGOH	2008/03/26	<b>1.6 PANEL DETACHABLE TYPE RECEPTACLE CONNECTOR</b>			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.20	± ---	KHLIM	2008/04/17	<b>MOLEX INCORPORATED</b>					
1 PLACE	± 0.25	± ---	APPROVED BY	DATE						
ANGULAR ± 1 °				BOKOK	2008/04/18	MATERIAL NO.		DOCUMENT NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE TABLE		SD-87868-007		SHEET NO. 2 OF 3		
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



SECTION B-B



SECTION A-A



NOTES:

1. THE ALLOWABLE TOLERANCE RANGE OFF MISALIGNMENT WHEN MATED
  - 1) PITCH DIRECTION:  $\pm 1$
  - 2) A RIGHT PITCH DIRECTION:  $\pm 0.5$
  - 3) MATING DIRECTION:  $\pm 0.7$

INITIAL RELEASE EC NO: S2008-0879 DRWN: CGOH 2008/04/17 CHKD: KHL IM 2008/04/18 APPR: BOKOK 2008/04/18	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$\nabla = 0$ $\text{C} = 0$	mm    INCH 4 PLACES $\pm \text{---}$ $\pm \text{---}$ 3 PLACES $\pm \text{---}$ $\pm \text{---}$ 2 PLACES $\pm 0.20$ $\pm \text{---}$ 1 PLACE $\pm 0.25$ $\pm \text{---}$	MM ONLY	NTS	METRIC	DRAWN BY: CGOH    DATE: 2008/03/26 CHECKED BY: KHL IM    DATE: 2008/04/17 APPROVED BY: BOKOK    DATE: 2008/04/18	TITLE 1.6 PANEL DETACHABLE TYPE RECEPTACLE CONNECTOR
			ANGULAR $\pm 1^\circ$	SEE TABLE	MOLEX MOLEX INCORPORATED	MATERIAL NO. DOCUMENT NO.	SHEET NO. 3 OF 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			