

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

**Part Number:** [0878712221](#)  
**Status:** **Active**  
**Description:** 1.25mm (.049") Pitch Board-to-Board Receptacle, Through Hole, Friction Lock, with Kinked PC Tails, 21 Circuits, Tin (Sn) Overall, Tube Packaging, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87871-006 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Receptacles
Series	<a href="#">87871</a>
Application	Board-to-Board
Comments	ZIGZAG
Product Name	N/A

**Physical**

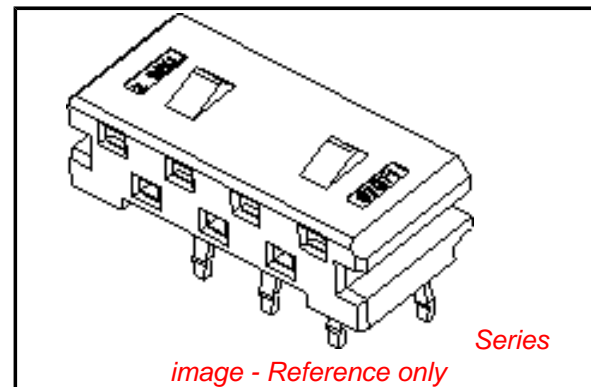
Circuits (Loaded)	21
Color - Resin	Natural
Durability (mating cycles max)	10
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Mated Height (in)	0.154 In
Mated Height (mm)	3.90 mm
Material - Metal	Copper
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.138 In
PC Tail Length (mm)	3.50 mm
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tube
Pitch - Mating Interface (in)	0.049 In
Pitch - Mating Interface (mm)	1.25 mm
Plating min: Mating (µin)	120
Plating min: Mating (µm)	3.00
Plating min: Termination (µin)	120
Plating min: Termination (µm)	3.00
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole - Kinked Pin

**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**



*image - Reference only*

**EU RoHS**

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

**China RoHS**



**Not Reviewed**

**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**

[87871Series](#)

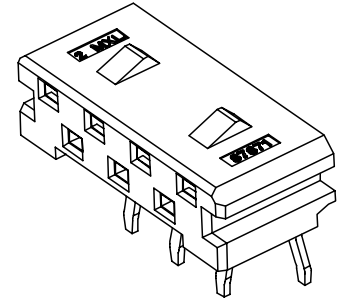
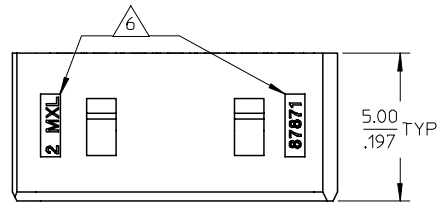
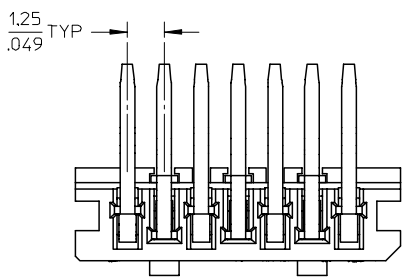
**Mates With**

[87872-1121](#)

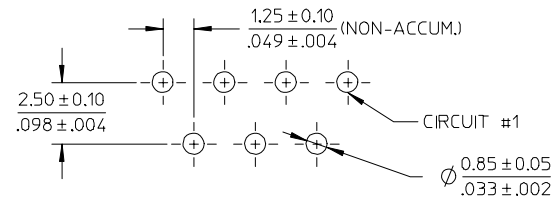
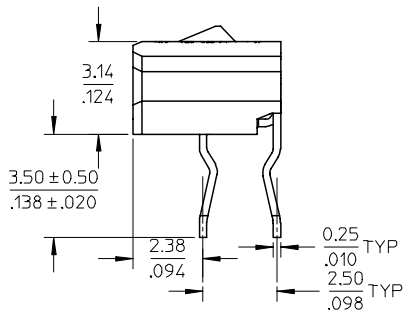
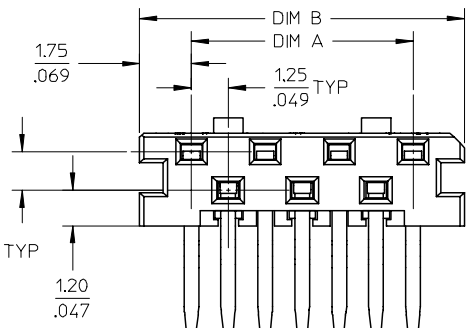
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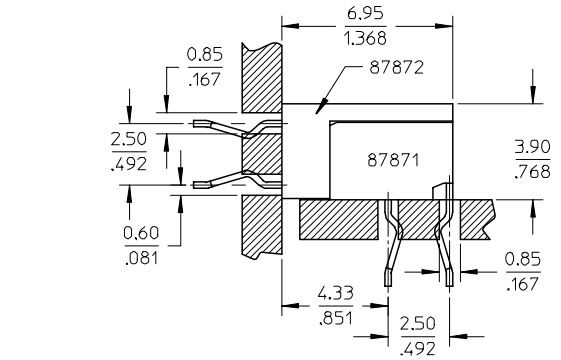


PART NUMBER IN T&R	PART NUMBER IN TUBE	CKT SIZE	DIM A	DIM B
87871-2403	87871-2203	3	2.5	6.0
87871-2405	87871-2205	5	5.0	8.5
87871-2407	87871-2207	7	7.5	11.0
87871-2409	87871-2209	9	10.0	13.5
87871-2411	87871-2211	11	12.5	16.0
87871-2413	87871-2213	13	15.0	18.5
87871-2415	87871-2215	15	17.5	21.0
87871-2417	87871-2217	17	20.0	23.5
87871-2419	87871-2219	19	22.5	26.0
87871-2421	87871-2221	21	25.0	28.5
87871-2423	87871-2223	23	27.5	31.0



RECOMMENDED PCB LAYOUT  
(BOARD THICKNESS : 1.6MM)

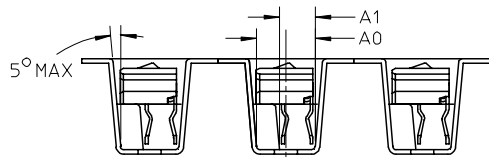
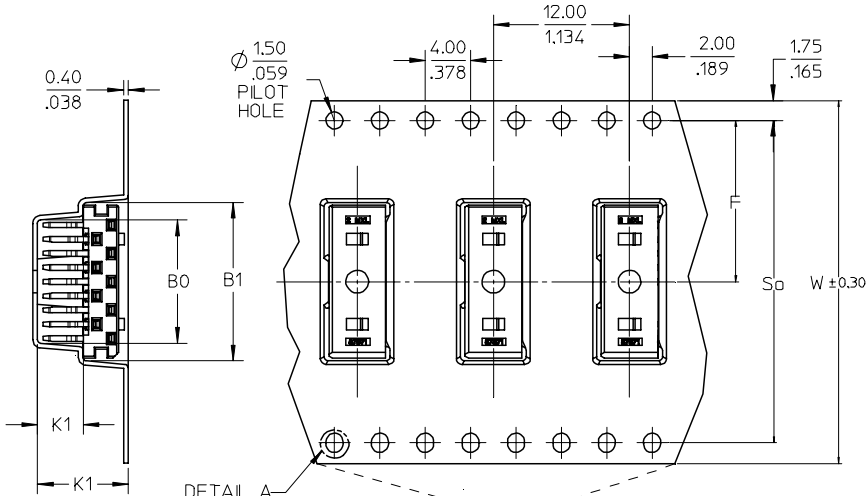
- NOTES
- MATERIAL : HOUSING - HIGH TEMP THERMOPLASTIC, GLASS FILLED, UL94 V-0, COLOR : NATURAL  
TERMINAL - PHOSPHOR BRONZE
  - FINISHES : TERMINAL - TIN OVERALL  
THICKNESS=3.0 MICROMETER/118 MICRONCH MINIMUM
  - PRODUCT SPECIFICATION : PS-87871-006
  - PART MATEABLE TO 87872-11\*\*
  - PARTS ARE PACKED IN TUBE.
  - PART NUMBER & CAVITY IDENTIFICATION NUMBER



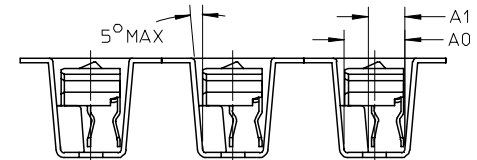
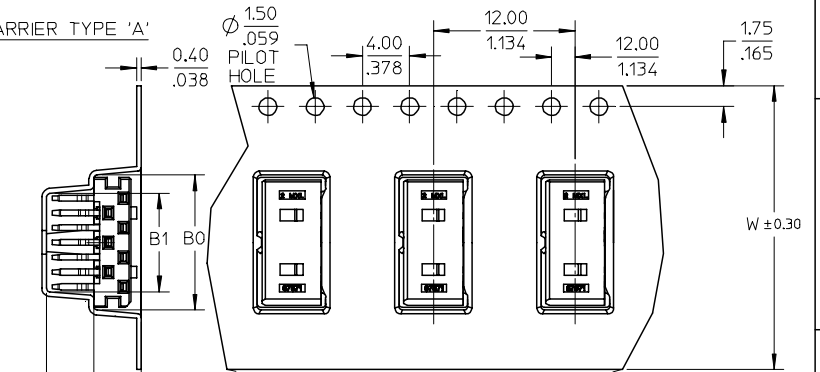
ADD PART NO. EC NO: S2006-0462 DRWN:KFLM 2005/10/26 CHKD:BLW 2005/10/26 APPR:PTLIM 2005/10/27	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
				MM/IN		NTS	METRIC				
						DRAWN BY		DATE		TITLE	
						CHECKED BY		DATE		SALES, ZIGZAG, 1.25MM BTB, RECEPTACLE WITH FRICTION LOCK (LEADFREE)	
A2	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO.		DOCUMENT NO.			
				ANGULAR ± 3 °		SCLOW 2004/04/14		SD-87871-001			
				APPROVED BY		DATE		SHEET NO.			
				PTLIM 2004/04/14		2004/04/14		1 OF 2			
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
				A3							

9 8 7 6 5 4 3 2 1

EMBOSSED CARRIER TYPE 'B'



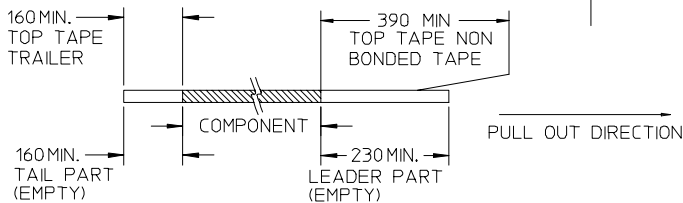
EMBOSSED CARRIER TYPE 'A'



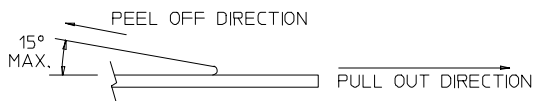
P/N IN T&R	CKT SIZE	W	F	B1	B0	S0	A1	A0	K1	K0	TYPE
87871-2403	3	24	11.50	3.30	6.40	-	3.10	5.10	4.00	8.00	A
87871-2405	5	24	11.50	5.80	8.90	-	3.10	5.10	4.00	8.00	A
87871-2407	7	24	11.50	8.30	11.40	-	3.10	5.10	4.00	8.00	A
87871-2409	9	32	14.20	10.80	13.90	28.4	3.10	5.10	4.00	8.00	B
87871-2411	11	32	14.20	13.30	16.40	28.4	3.10	5.10	4.00	8.00	B
87871-2413	13	32	14.20	15.80	18.90	28.4	3.10	5.10	4.00	8.00	B
87871-2415	15	32	14.20	18.30	21.40	28.4	3.10	5.10	4.00	8.00	B
87871-2417	17	44	20.20	20.80	23.90	40.40	3.10	5.10	4.00	8.00	B
87871-2419	19	44	20.20	23.30	26.40	40.40	3.10	5.10	4.00	8.00	B
87871-2421	21	44	20.20	25.80	28.90	40.40	3.10	5.10	4.00	8.00	B
87871-2423	23	44	20.20	28.30	31.40	40.40	3.10	5.10	4.00	8.00	B

NOTES:

1. LEADER AND TRAILER TAPE



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



3. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.

4. THE TAPE IS TREATED FOR ANTI-STATIC.

ADD NEW SHEET	EC NO: S2006-0462	2005/10/26	QUALITY SYMBOLS
	DRWN:KELIM	2005/10/26	
A2	CHKD:BLHOW	2005/10/27	▽=0
REV	APPR:PTLIM	2005/10/27	∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.20	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN		NTS	METRIC	
DRAWN BY	DATE	TITLE		
BHLOW	2004/03/03	SALES, ZIGZAG, 1.25MM BTB, RECEPTACLE WITH FRICTION LOCK (LEADFREE)		
CHECKED BY	DATE	MOLEX INCORPORATED		
PTLIM	2004/04/14	SD-87871-001		
APPROVED BY	DATE	SHEET NO. 2 OF 2		
SCLOW	2004/04/14			
MATERIAL NO.	DOCUMENT NO.			
SEE TABLE	SD-87871-001			
SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			