

# FEATURES SELECTION GUIDE



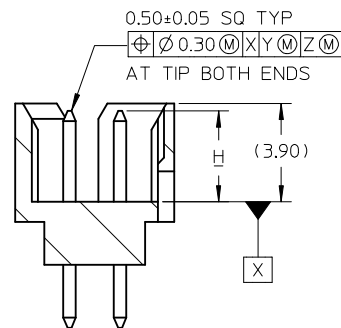
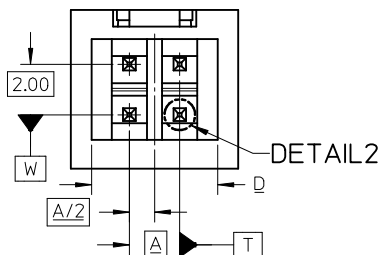
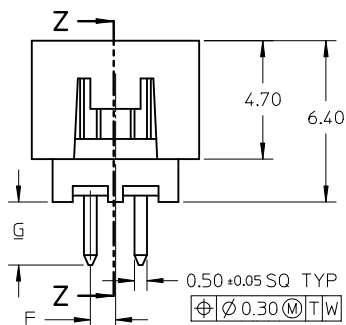
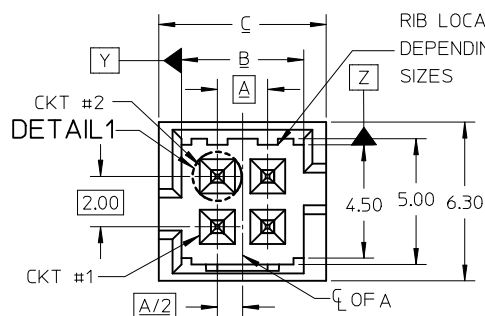
CIRCUIT SIZE	FEATURES						SHEET NO
	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	YES	
	N.A	YES	N.A	YES	N.A	YES	
	N.A	N.A	YES	N.A	YES	N.A	
8 TO 12	N.A	N.A	YES	N.A	YES	N.A	6 - 8
	N.A	N.A	YES	N.A	YES	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	N.A	
	N.A	YES	N.A	YES	N.A	YES	
14 TO 50	YES	N.A	YES	N.A	YES	N.A	9 - 13
	YES	N.A	YES	N.A	YES	YES	

## PACKAGING SPECIFICATION TABLE

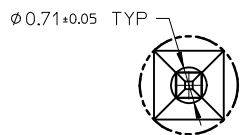
TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR:	PK-87831-002
87831-0419      87831-0645	
87831-5141      87831-0632	
87831-0443      87831-5119	
87831-5241      87831-1011	
87831-5242      87831-1420	
87831-0643	

<b>SEE SHEET 7 &amp; 10</b> EC NO: S2017-0526 DRW:GMENARLY 2017/03/22 CHK'D:CGOH 2017/04/17 APPR:KHLIM 2017/04/17 REV A7	QUALITY SYMBOLS $\nabla_{\sigma} = 0$ $\nabla_{\sigma} = 0$ $\nabla_{\sigma} = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED) <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>0 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	0 PLACE	± ---	± ---	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>NTS</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		mm	INCH																					
	4 PLACES	± ---	± ---																					
	3 PLACES	± ---	± ---																					
2 PLACES	± 0.20	± ---																						
1 PLACE	± ---	± ---																						
0 PLACE	± ---	± ---																						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °	DRAWN BY GMENARLY DATE 2015/04/15	CHECKED BY CGOH DATE 2015/06/29	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																			
MATERIAL NO.		SEE TABLE	APPROVED BY KHLIM DATE 2015/06/29	DOCUMENT NO. <b>SD-87831-0001</b>		SHEET NO. 1 OF 13																		
SIZE <b>A3</b>		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						

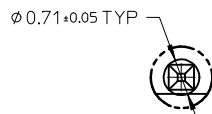
4 CIRCUITS



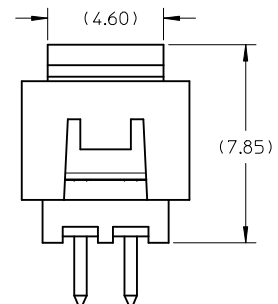
SECTION Z-Z



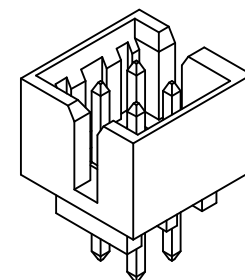
DETAIL1



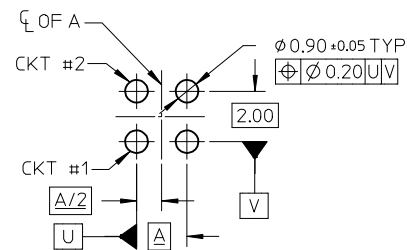
DETAIL2



VIEW FOR  
HEADER WITH CAP



VIEW FOR HEADER  
WITH ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

NOTES:

1. MATERIALS:

HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE

2. FINISHES: REFER TO PLATING OPTIONS

3. PRODUCT SPECIFICATION: PS-87831-027

4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1  
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES  
AND CRIMP TERMINAL: 50394 SERIES

B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES

C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE:  
79107 (GOLD PLATED), 78787 (TIN PLATED)

SEE SHEET 7 & 10 EC NO: S2017-0526 DRWN:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHLIM 2017/04/17	QUALITY SYMBOLS F <sub>A</sub> =0 F <sub>E</sub> =0 F <sub>P</sub> =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	MM ONLY	NTS	METRIC		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	
		3 PLACES	± ---	± ---	CHECKED BY	DATE	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
		2 PLACES	± 0.20	± ---	APPROVED BY	DATE	molex	
		1 PLACE	± ---	± ---	KHLIM	2015/06/29		
		0 PLACE	± ---	± ---	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		ANGULAR ± 3 °		SEE TABLE		SD-87831-0001	2 OF 13	
A7	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

4 CIRCUITS

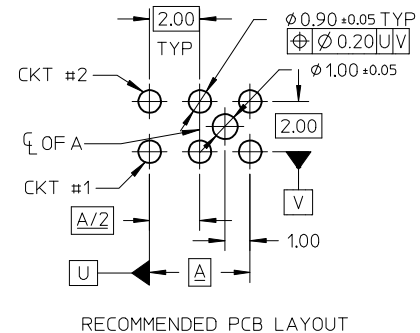
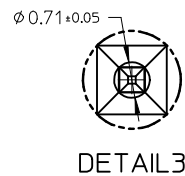
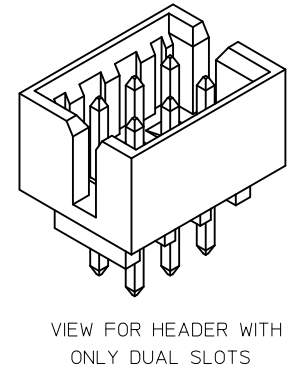
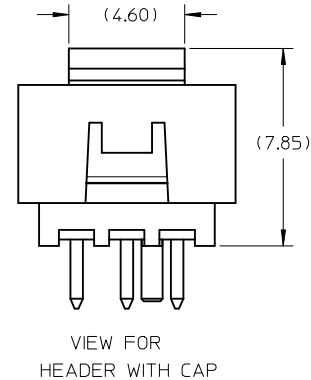
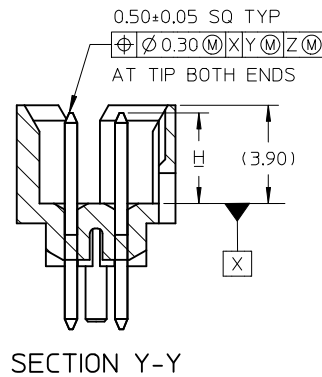
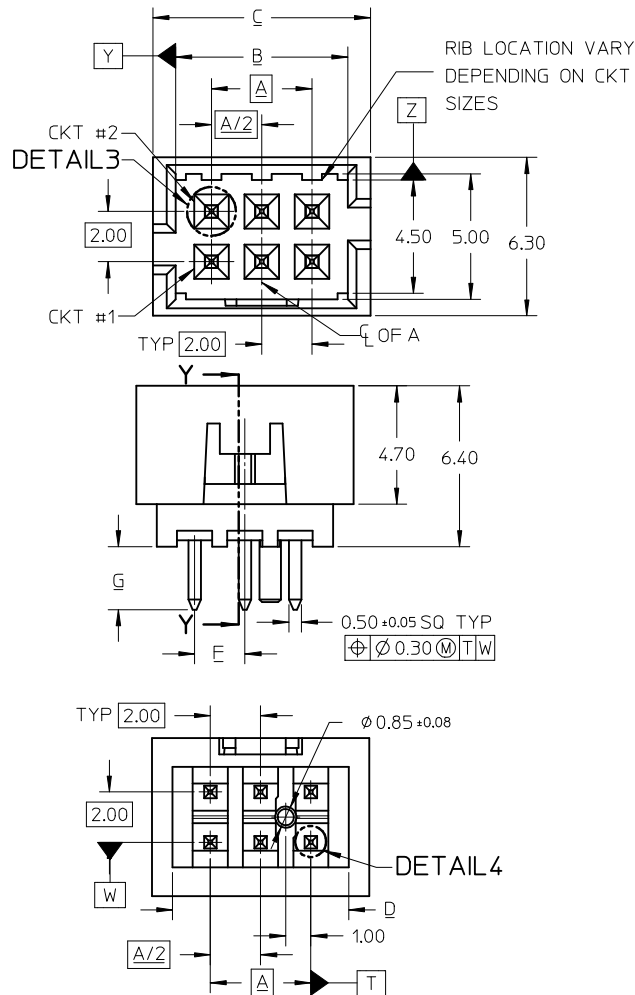
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
4	87831-0419	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	2.00	4.85	6.65	5.00	N.A	N.A	2.50	3.60±0.20
	87831-0420	N.A	N.A	2														
	87831-0421	N.A	N.A	3														
	87831-0436	N.A	N.A	4														
	87831-0441	87831-0456	N.A	2	N.A	YES	YES	N.A	N.A	N.A						1.00	2.50	
	87831-0442	N.A	N.A	3														
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						3.50		
	87831-5142	N.A	N.A	3														
	87831-6141	N.A	N.A	2														
	87831-6142	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						2.80		
87831-0443	N.A	N.A	2															
87831-0444	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>							

PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTETIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10 EC NO: S2017-0526 DRWN:GMENARLY 2017/03/22 CHYKD:CGOH 2017/04/17 APPR:KHLIM 2017/04/17	DESCRIPTION REV A7	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		$F_A=0$ $F_G=0$ $F_P=0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	NTS	METRIC	DRAWN BY: GMENARLY DATE: 2015/04/15 CHECKED BY: CGOH DATE: 2015/06/29 APPROVED BY: KHLIM DATE: 2015/06/29	TITLE: MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER <b>molex</b>	
		ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. DOCUMENT NO. SD-87831-0001 SHEET NO. 3 OF 13					
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

6 CIRCUITS



NOTES:

- MATERIALS:  
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES  
B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES  
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

SEE SHEET 7 & 10 IEC NO: S2017-0526 DRAWN: GEMENARLY 2017/03/22 CHKD: CGOH 2017/04/17 APPR: KHLIM 2017/04/17	QUALITY SYMBOLS F=0 E=0 E=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY GEMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
		4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2015/06/29	DOCUMENT NO. <b>molex</b> SD-87831-0001	
		3 PLACES	± ---	± ---	APPROVED BY KHLIM	DATE 2015/06/29		
			1 PLACE	± ---	± ---	MATERIAL NO.		
			0 PLACE	± ---	± ---	SEE TABLE		
			ANGULAR ± 3°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					

6 CIRCUITS

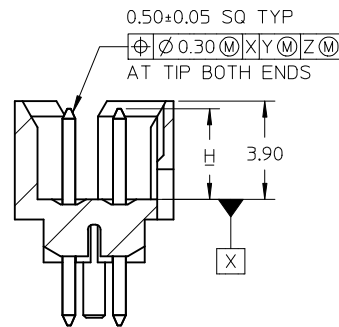
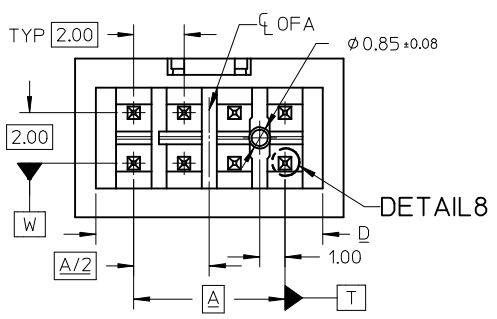
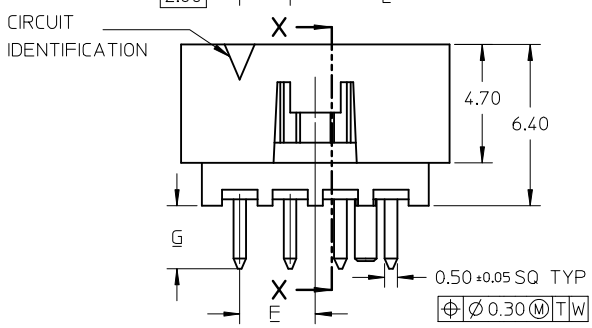
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	N.A	2.50	3.60±0.20
	87831-0620	N.A	N.A	2														
	87831-0621	N.A	N.A	3														
	87831-0636	N.A	N.A	4														
	87831-0628	N.A	N.A	2	N.A	N.A	YES	N.A	N.A	YES						N.A	2.50	
	87831-0629	N.A	N.A	3														
	87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						2.50		
	87831-0642	N.A	87831-5552	3														
	87831-5241	N.A	N.A	2														
	87831-5242	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						3.50		
	87831-6241	N.A	N.A	2														
	87831-6242	N.A	N.A	3														
	87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						2.80		
	87831-0644	N.A	N.A	3														
	87831-0645	N.A	N.A	2														
	87831-0646	N.A	N.A	3														
87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES	2.50								
87831-5119	N.A	N.A	1															
					N.A	N.A	YES	N.A	YES	N.A	N.A	2.50	N.A	2.50	3.60±0.20			

PLATING OPTIONS:

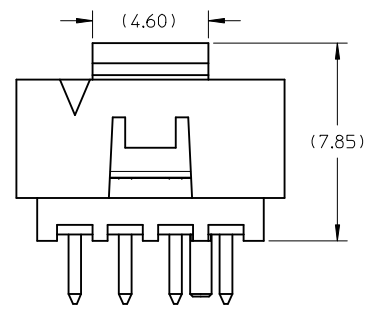
- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
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- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10 EC NO: S2017-0526 DRW:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHLIM 2017/04/17	DESCRIPTION QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	NTS	METRIC		
		mm	INCH	DRAWN BY	DATE	TITLE		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	GMENARLY	2015/04/15	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
		2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	CHECKED BY	DATE			
		0 PLACE ± --- ± ---	ANGULAR ± 3 °	CGOH	2015/06/29			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	APPROVED BY	DATE			
			SEE TABLE	KHLIM	2015/06/29			
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
				DOCUMENT NO. SD-87831-0001			SHEET NO. 5 OF 13	

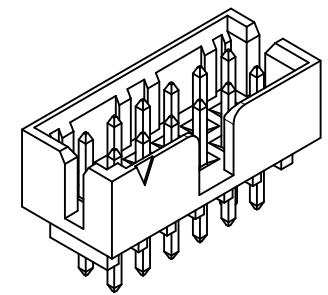
8 TO 12 CIRCUITS



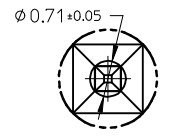
SECTION X-X



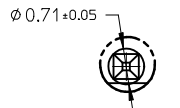
VIEW FOR HEADER WITH CAP



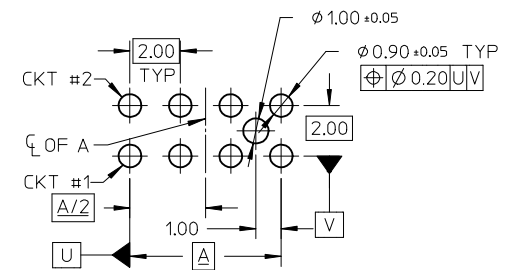
VIEW FOR HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



DETAIL 7



DETAIL 8



RECOMMENDED PCB LAYOUT

- NOTES:
- MATERIALS:  
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE
  - FINISHES: REFER TO PLATING OPTIONS
  - PRODUCT SPECIFICATION: PS-87831-027
  - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
  - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES  
B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES  
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

SEE SHEET 7 & 10 EC NO: S2017-0526 DRAWN: GMENARLY 2017/03/22 CHKD: CGOH 2017/04/17 APPR: KHL IM 2017/04/17	QUALITY SYMBOLS FA=0 FE=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
		4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2015/06/29	molex		
		3 PLACES	± ---	± ---	APPROVED BY KHL IM	DATE 2015/06/29			
	2 PLACES	± 0.20	± ---	MATERIAL NO.		DOCUMENT NO.	SHEET NO.		
	1 PLACE	± ---	± ---	SEE TABLE		SD-87831-0001	6 OF 13		
	0 PLACE	± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
A7	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3					

8 CIRCUITS

F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION						
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G
E	8	87831-0819	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	6.00	8.85	10.65	9.00	N.A	N.A	2.50
	87831-0820	N.A	N.A	2														
	87831-0821	N.A	N.A	3														
	87831-0836	N.A	N.A	4	N.A	N.A	YES	N.A	YES	YES	YES						N.A	2.50
	87831-0828	N.A	N.A	2														
	87831-0829	N.A	N.A	3														
	87831-0841	N.A	87831-5551	2	N.A	YES	YES	N.A	N.A	N.A	N.A						3.00	2.50
	87831-0842	N.A	N.A	3														
	87831-5841	N.A	N.A	2														
	87831-5441	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A	N.A						3.50	3.60±0.20
	87831-5442	N.A	N.A	3														
	87831-5541	N.A	N.A	2														
	87831-5542	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A	N.A						2.80	4.70
	87831-5741	N.A	N.A	2														
	87831-5742	N.A	N.A	3														
87831-0832	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A	YES	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>						
87831-0843	N.A	N.A	2															
87831-0844	N.A	N.A	3															
87831-0845	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	YES	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>						
87831-0846	N.A	N.A	3															

PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

ADD P/N 87831-5841 EC NO: S2017-0526 DRWNG: GEMEARLY 2017/03/22 CHK'D: CGOH 2017/04/17 APPR: KHL IM 2017/04/17	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$F_A=0$ $F_G=0$ $F_P=0$	mm	INCH	MM ONLY		NTS	METRIC	
		4 PLACES ± --- ± ---		DRAWN BY	DATE	TITLE		
		3 PLACES ± --- ± ---		GMENARLY	2015/04/15	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
		2 PLACES ± 0.20 ± ---		CHECKED BY	DATE			
	1 PLACE ± --- ± ---		CGOH	2015/06/29	<b>molex</b>			
	0 PLACE ± --- ± ---		APPROVED BY	DATE				
			KHL IM	2015/06/29	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			ANGULAR ± 3 °		SEE TABLE	SD-87831-0001	7 OF 13	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

10 TO 12 CIRCUITS

CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
10	87831-1019	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	N.A	N.A	2.50	3.60±0.20
	87831-1020	N.A	N.A	2														
	87831-1021	N.A	N.A	3														
	87831-1036	N.A	N.A	4														
	87831-1010	N.A	N.A	2	N.A	N.A	YES	N.A	YES	N.A								
	87831-1011	N.A	N.A	3														
	87831-1028	N.A	N.A	2														
	87831-1029	N.A	87831-5557	3	N.A	N.A	YES	N.A	YES	YES								
	87831-1035	N.A	N.A	3														
	87831-1041	N.A	N.A	2														
	87831-1042	N.A	87831-5553	3	N.A	YES	YES	N.A	N.A	N.A								
	87831-1032	N.A	N.A	2														
87831-1043	N.A	N.A	2															
87831-1044	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A									
87831-1045	N.A	N.A	2															
87831-1046	N.A	N.A	3															
12	87831-1219	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	10.00	12.85	14.65	13.00	N.A	N.A	2.50	3.60±0.20
	87831-1220	N.A	87831-5556	2														
	87831-1221	N.A	N.A	3														
	87831-1236	N.A	N.A	4														
	87831-1228	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES								
	87831-1229	N.A	87831-5558	3														
	87831-1241	N.A	N.A	2														
	87831-1242	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A								
	87831-1255	87831-1256	N.A	2														
	87831-1232	N.A	N.A	2														
	87831-1243	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A								
	87831-1244	N.A	N.A	3														
87831-1245	N.A	N.A	2															
87831-1246	N.A	N.A	3	N.A	YES	N.A	YES	N.A	YES									

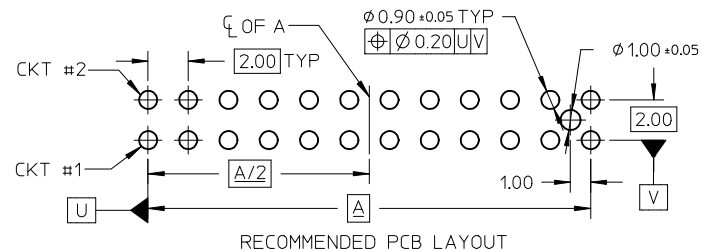
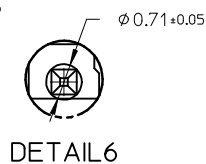
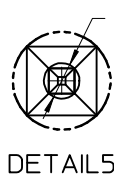
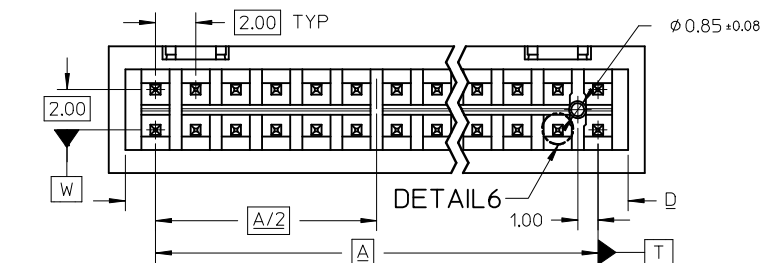
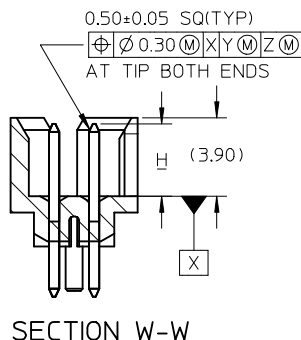
PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10 EC NO: S2017-0526 DRWN:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHL IM 2017/04/17	QUALITY SYMBOLS FA=0 FG=0 FB=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER <b>molex</b> DOCUMENT NO. SD-87831-0001 SHEET NO. 8 OF 13			
		4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2015/06/29				
		3 PLACES	± ---	± ---	APPROVED BY KHL IM	DATE 2015/06/29				
2 PLACES	± 0.20	± ---	MATERIAL NO.	DOCUMENT NO.						
1 PLACE	± ---	± ---	SEE TABLE							
0 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



14 TO 50 CIRCUITS



NOTES:

- MATERIALS:  
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK  
PIN: 0.50MM SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES  
B. MOLEX 2MM MILLIGRID DUAL ROW IDT: 87568 SERIES  
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

SEE SHEET 7 & 10 EC NO: S2017-0526 DRWN:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHL IM 2017/04/17	QUALITY SYMBOLS F <sub>A</sub> =0 F <sub>C</sub> =0 F <sub>P</sub> =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
		4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2015/06/29	<b>molex</b>			
		3 PLACES	± ---	± ---	APPROVED BY KHL IM	DATE 2015/06/29				
	ANGULAR ± 3 °		MATERIAL NO.	DOCUMENT NO.		SHEET NO.				
	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						

14 TO 20 CIRCUITS

F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
E	14	87831-1419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	12.00	14.85	16.65	15.00	8.00	N.A	2.50	3.60±0.20
		87831-1420	87831-1430	87831-5554	2														
		87831-1421	N.A	87831-5560	3														
		87831-1436	N.A	N.A	4														
		87831-1428	N.A	N.A	2														
		87831-1429	N.A	N.A	3														
		87831-1435	N.A	N.A	3														
D	16	87831-1619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	14.00	16.85	18.65	17.00	10.00	N.A	2.50	3.60±0.20
		87831-1620	N.A	N.A	2														
		87831-1621	N.A	N.A	3														
		87831-1636	N.A	N.A	4														
		87831-1628	N.A	N.A	2														
		87831-1629	N.A	87831-5559	3														
		87831-1635	N.A	N.A	3														
C	18	87831-1819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	16.00	18.85	20.65	19.00	12.00	N.A	2.50	3.60±0.20
		87831-1820	N.A	N.A	2														
		87831-1821	N.A	N.A	3														
		87831-1836	N.A	N.A	4														
		87831-1828	N.A	N.A	2														
		87831-1829	N.A	N.A	3														
A	20	87831-2019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	18.00	20.85	22.65	21.00	14.00	N.A	2.50	3.60±0.20
		87831-2020	N.A	N.A	2														
		87831-2021	N.A	N.A	3														
		87831-2036	N.A	N.A	4														
		87831-2028	N.A	N.A	2														
		87831-2029	N.A	N.A	3														
		87831-2035	N.A	N.A	3														
		87831-2010	N.A	N.A	2														
87831-2011	N.A	N.A	3																

PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

ADD 87831-5560 EC NO: S2017-0526 DRWG:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHLIM 2017/04/17	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		$F_A=0$ $F_G=0$ $F_P=0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	NTS	METRIC	DRAWN BY: GMENARLY DATE: 2015/04/15 CHECKED BY: CGOH DATE: 2015/06/29 APPROVED BY: KHLIM DATE: 2015/06/29	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
		ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. DOCUMENT NO. SD-87831-0001 SHEET NO. 10 OF 13					
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

22 TO 30 CIRCUITS

F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
22	87831-2219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	20.00	22.85	24.65	23.00	16.00	N.A	2.50	3.60±0.20							
	87831-2220	N.A	N.A	2																					
	87831-2221	N.A	N.A	3																					
	87831-2236	N.A	N.A	4																					
	87831-2228	N.A	N.A	2																					
87831-2229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50															
24	87831-2419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	22.00	24.85	26.65	25.00	18.00	N.A	2.50	3.60±0.20							
	87831-2420	N.A	N.A	2																					
	87831-2421	N.A	N.A	3																					
	87831-2436	N.A	N.A	4																					
	87831-2428	N.A	N.A	2																					
	87831-2429	N.A	N.A	3																					
	87831-2435	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
87831-2410	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A	3.50															
26	87831-2619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	24.00	26.85	28.65	27.00	20.00	N.A	2.50	3.60±0.20							
	87831-2620	87831-2630	87831-5555	2																					
	87831-2621	N.A	N.A	3																					
	87831-2636	N.A	N.A	4																					
	87831-2628	N.A	N.A	2																					
	87831-2629	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
87831-2610	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A	3.50															
28	87831-2819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	26.00	28.85	30.65	29.00	22.00	N.A	2.50	3.60±0.20							
	87831-2820	N.A	N.A	2																					
	87831-2821	N.A	N.A	3																					
	87831-2836	N.A	N.A	4																					
	87831-2828	N.A	N.A	2																					
87831-2829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50															
30	87831-3019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	28.00	30.85	32.65	31.00	24.00	N.A	2.50	3.60±0.20							
	87831-3020	N.A	N.A	2																					
	87831-3021	N.A	N.A	3																					
	87831-3036	N.A	N.A	4																					
	87831-3028	N.A	N.A	2																					
	87831-3029	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
	87831-3035	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
87831-3010	87831-3030	87831-3050	2	YES	N.A	YES	N.A	YES	N.A	3.50															

- PLATING OPTIONS:**
- 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
  - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
  - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
  - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10  
 IEC NO: S2017-0526  
 DRWN:GMENARLY 2017/03/22  
 CH'KD:CGOH 2017/04/17  
 APPR:KHL IM 2017/04/17

QUALITY SYMBOLS  
 F<sub>A</sub>=0  
 F<sub>B</sub>=0  
 F<sub>C</sub>=0

DESCRIPTION  
 REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
0 PLACE	± ---	± ---

ANGULAR ± 3 °  
 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE  
**MM ONLY**

SCALE  
 NTS

DESIGN UNITS  
 METRIC

THIRD ANGLE PROJECTION

DRAWN BY: GMENARLY  
 DATE: 2015/04/15

CHECKED BY: CGOH  
 DATE: 2015/06/29

APPROVED BY: KHL IM  
 DATE: 2015/06/29

MATERIAL NO.  
**SEE TABLE**

TITLE  
 MILLIGRID  
 2MM PITCH, THROUGH HOLE  
 VERTICAL SHROUDED HEADER

**molex**

DOCUMENT NO.  
 SD-87831-0001

SHEET NO.  
 11 OF 13

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

32 TO 40 CIRCUITS

CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION														
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H							
32	87831-3219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20							
	87831-3220	N.A	N.A	2																					
	87831-3221	N.A	N.A	3																					
	87831-3236	N.A	N.A	4																					
	87831-3228	N.A	N.A	2																					
87831-3229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50															
34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20							
	87831-3420	N.A	N.A	2																					
	87831-3421	N.A	N.A	3																					
	87831-3436	N.A	N.A	4																					
	87831-3428	N.A	N.A	2															YES	N.A	YES	N.A	YES	YES	2.50
	87831-3429	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20							
	87831-3620	N.A	N.A	2																					
	87831-3621	N.A	N.A	3																					
	87831-3636	N.A	N.A	4																					
	87831-3628	N.A	N.A	2															YES	N.A	YES	N.A	YES	YES	2.50
	87831-3629	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	36.00	38.85	40.65	39.00	32.00	N.A	2.50	3.60±0.20							
	87831-3820	N.A	N.A	2																					
	87831-3821	N.A	N.A	3																					
	87831-3836	N.A	N.A	4																					
	87831-3828	N.A	N.A	2															YES	N.A	YES	N.A	YES	YES	2.50
	87831-3829	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
40	87831-4019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	38.00	40.85	42.65	41.00	34.00	N.A	2.50	3.60±0.20							
	87831-4020	N.A	N.A	2																					
	87831-4021	N.A	N.A	3																					
	87831-4036	N.A	N.A	4																					
	87831-4028	N.A	N.A	2															YES	N.A	YES	N.A	YES	YES	2.50
	87831-4029	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50
	87831-4010	N.A	N.A	2															YES	N.A	YES	N.A	YES	N.A	3.50

PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10 EC NO: S2017-0526 DRW:GMENARLY 2017/03/22 CHKD:CGOH 2017/04/17 APPR:KHLIM 2017/04/17	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$F_A=0$	mm	INCH	MM ONLY		NTS	METRIC		
	$F_G=0$	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE			
	$F_P=0$	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	GMENARLY	2015/04/15	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER <b>molex</b>			
	0 PLACE ± --- ± ---	CHECKED BY	DATE	CGOH	2015/06/29				
	ANGULAR ± 3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		SEE TABLE		KHLIM	2015/06/29				
				MATERIAL NO.					

42 TO 50 CIRCUITS

F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION						F							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F		G	H					
42	87831-4219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	40.00	42.85	44.65	43.00	36.00	N.A	2.50	3.60±0.20							
	87831-4220	N.A	N.A	2																					
	87831-4221	N.A	N.A	3																					
	87831-4236	N.A	N.A	4																					
	87831-4228	N.A	N.A	2																					
87831-4229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50															
44	87831-4419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	42.00	44.85	46.65	45.00	38.00	N.A	2.50	3.60±0.20							
	87831-4420	N.A	N.A	2																					
	87831-4421	N.A	N.A	3																					
	87831-4436	N.A	N.A	4																					
	87831-4428	N.A	N.A	2																					
	87831-4429	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
87831-4435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	3.50															
46	87831-4619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	44.00	46.85	48.65	47.00	40.00	N.A	2.50	3.60±0.20							
	87831-4620	N.A	N.A	2																					
	87831-4621	N.A	N.A	3																					
	87831-4636	N.A	N.A	4																					
	87831-4628	N.A	N.A	2																					
	87831-4629	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
48	87831-4819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	46.00	48.85	50.65	49.00	42.00	N.A	2.50	3.60±0.20							
	87831-4820	N.A	N.A	2																					
	87831-4821	N.A	N.A	3																					
	87831-4836	N.A	N.A	4																					
	87831-4828	N.A	N.A	2																					
	87831-4829	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
50	87831-5019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	48.00	50.85	52.65	51.00	44.00	N.A	2.50	3.60±0.20							
	87831-5020	N.A	N.A	2																					
	87831-5021	N.A	N.A	3																					
	87831-5036	N.A	N.A	4																					
	87831-5028	N.A	N.A	2																					
	87831-5029	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	2.50
	87831-5035	N.A	N.A	3															YES	N.A	YES	N.A	YES	YES	3.50

PLATING OPTIONS:

- 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.

SEE SHEET 7 & 10 EC NO: S2017-0526 DRAWN: GEMENARLY 2017/03/22 CHKD: CGOH 2017/04/17 APPR: KHL IM 2017/04/17	QUALITY SYMBOLS ▽ <sub>A</sub> =0 ▽ <sub>B</sub> =0 ▽ <sub>C</sub> =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
		4 PLACES	±---	±---	CHECKED BY CGOH	DATE 2015/06/29	molex DOCUMENT NO. SD-87831-0001 SHEET NO. 13 OF 13			
		3 PLACES	±---	±---	APPROVED BY KHL IM	DATE 2015/06/29				
2 PLACES	±0.20	±---	MATERIAL NO.		SEE TABLE					
1 PLACE	±---	±---	ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
0 PLACE	±---	±---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							