

Excellent Integrated System Limited

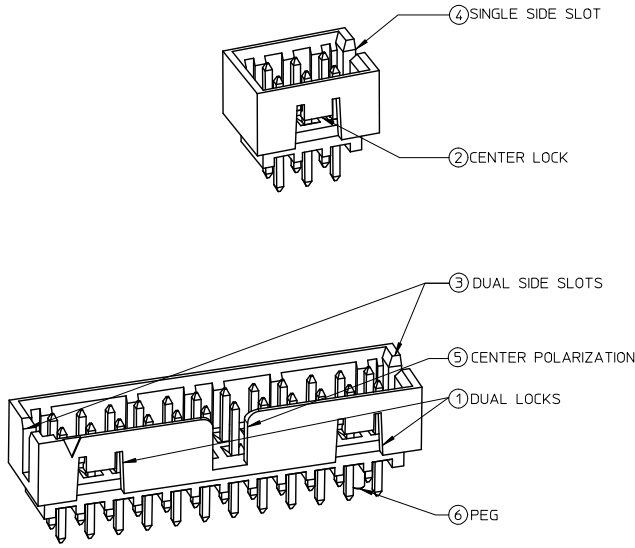
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)
[0878314010](#)

For any questions, you can email us directly:
sales@integrated-circuit.com

FEATURES SELECTION GUIDE



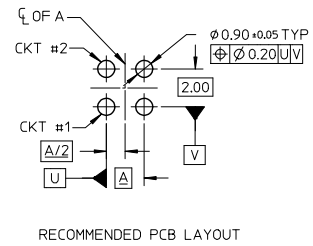
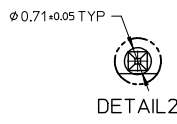
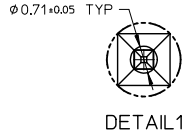
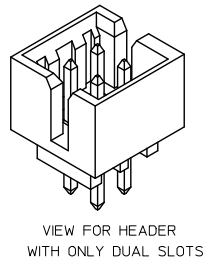
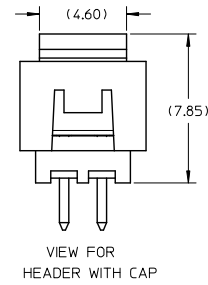
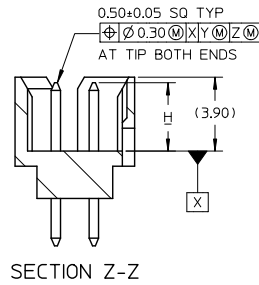
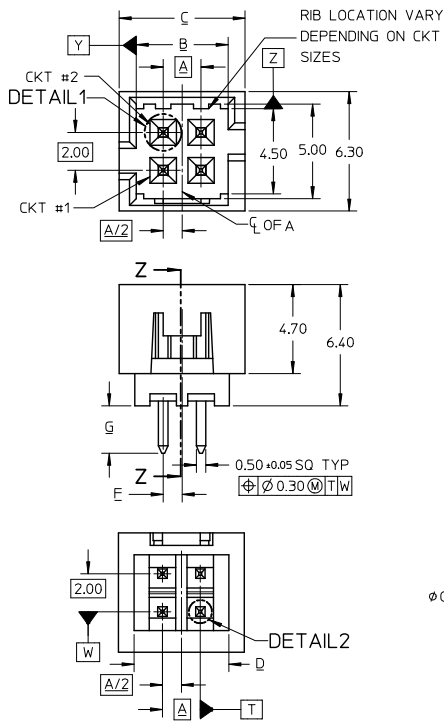
CIRCUIT SIZE	FEATURES						SHEET NO
	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	N.A	
	N.A	YES	N.A	YES	N.A	YES	
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	

ADD PK TABLE EC NO: S2017-0022 DRAWN BY: GEMENARLY CHECKED BY: CHYK-SICHEONG APPR: KHLIM 2016/07/04 2016/07/27 2016/07/28	QUALITY SYMBOLS $\nabla=0$ $\nabla=0$ $\nabla=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY	DATE	NTS		METRIC
		4 PLACES	±---	±---	GEMENARLY	2015/04/15			
		3 PLACES	±---	±---	CHECKED BY	DATE			
2 PLACES	±0.20	±---	CGOH	2015/06/29	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
1 PLACE	±---	±---	APPROVED BY	DATE					
0 PLACE	±---	±---	KHLIM	2015/06/29	DOCUMENT NO. SD-87831-0001				
ANGULAR ± 3° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SEE TABLE		SHEET NO. 1 OF 13			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

4 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: 5110 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)

EDIT NOTE 4 EC NO: S2017-0022 DRAWN: MENARLY 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV A5	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
	$\nabla=0$ $\nabla=0$ $\nabla=0$	<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> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	±---	±---	3 PLACES	±---	±---	2 PLACES	±0.20	±---	1 PLACE	±---	±---	0 PLACE	±---	±---	MM ONLY	NTS	METRIC	<input checked="" type="checkbox"/> 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 CHECKED BY: CGOH APPROVED BY: KHLIM DATE: 2015/04/15 DATE: 2015/06/29 DATE: 2015/06/29	TITLE	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																				
		SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO. 2 OF 13																			



10 9 8 7 6 5 4 3 2 1

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
E 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	1.00	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														
	87831-0442	N.A	N.A	3														
	87831-5141	N.A	N.A	2														
	87831-5142	N.A	N.A	3														
	87831-6141	N.A	N.A	2														
	87831-6142	N.A	N.A	3														
87831-6143	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	2.50	3.60 ^{+0.15} _{-0.30}							
87831-0444	N.A	N.A	3															

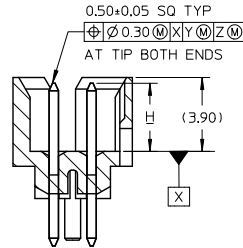
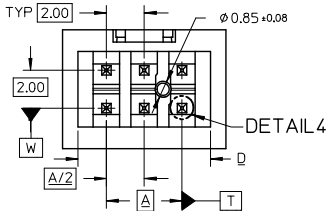
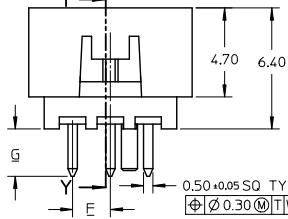
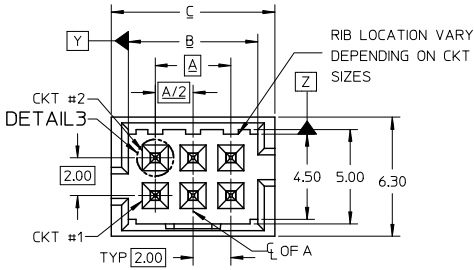
PLATING OPTIONS:

- 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. 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.

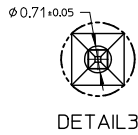
SEE SHEET 1,2,4,6,8-10 EC NO: S2017-0022 DRAWN BY: 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3°	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
	REV: A5	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	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	
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9 8 7 6 5 4 3 2 1

6 CIRCUITS



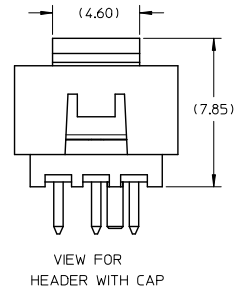
SECTION Y-Y



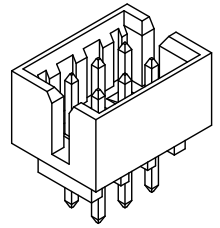
DETAIL 3



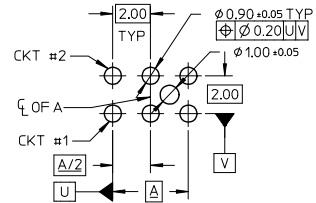
DETAIL 4



VIEW FOR HEADER WITH CAP



VIEW FOR HEADER WITH ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

NOTES:

- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50MM SQ PHOSPHOR BRONZE
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EDIT NOTE 4 EC NO: S2017-0022 DRAWN BY: GMENARLY 2016/07/06 CHECKED BY: CHYK-SCHONG 2016/07/27 APPR: KHL IM 2016/07/28 REV A5	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
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DESCRIPTION	ANGULAR ± 3°	DRAWN BY: GMENARLY DATE: 2015/04/15	TITLE	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																				
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10 9 8 7 6 5 4 3 2 1

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	N.A	N.A	YES	N.A	N.A	YES						N.A	N.A		N.A	N.A	N.A	2.50	3.60±0.15
	87831-0628	N.A	N.A	2																			
	87831-0629	N.A	N.A	3																			
	87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	2.50	3.60±0.10
	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						N.A	N.A		N.A	N.A	N.A	2.50	3.60±0.10
	87831-6241	N.A	N.A	2																			
	87831-6242	N.A	N.A	3																			
87831-6243	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	N.A	N.A	N.A	N.A	N.A	2.50	3.60±0.10							
87831-0644	N.A	N.A	3																				
87831-0645	N.A	N.A	2																				
87831-0646	N.A	N.A	3	N.A	YES	YES	N.A	N.A	YES	N.A	N.A	N.A	N.A	N.A	2.50	3.60±0.10							
87831-0632	N.A	N.A	2																				
87831-5119	N.A	N.A	1																				

PLATING OPTIONS:

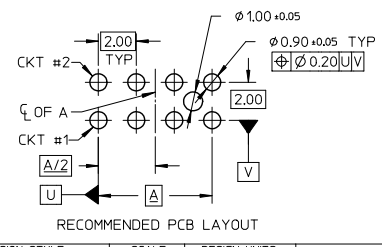
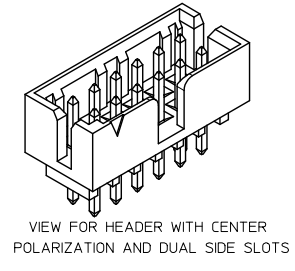
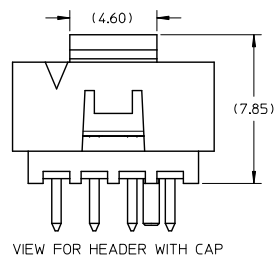
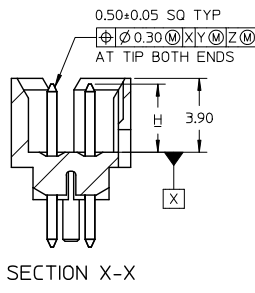
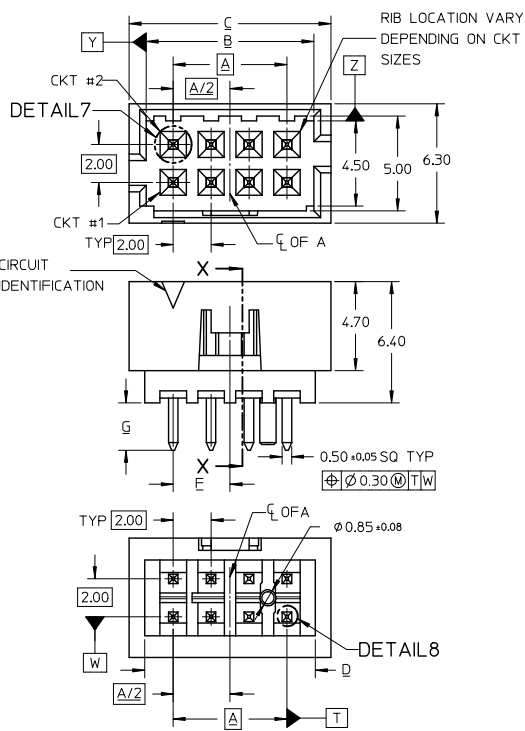
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SEE SHEET 1.2,4,6,8-10 EC NO: S2017-0022 DRAWN BY: 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
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	DRAWN BY: GMENARLY DATE: 2015/04/15 CHECKED BY: CGOH DATE: 2015/06/29 APPROVED BY: KHLIM DATE: 2015/06/29	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	SEE TABLE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SD-87831-0001	5 OF 13	

1b_frame_A3_P_AM_T Rev. G 2012/01/11 9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

8 TO 12 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)

EDIT NOTE 4 EC NO: S2017-0022 DRAWN: MENARLY 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KILLIM 2016/07/28 REV A5	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3°	MM ONLY	NTS	METRIC	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: GMENARLY CHECKED BY: CGOH APPROVED BY: KHLIM DATE: 2015/04/15 DATE: 2015/06/29 DATE: 2015/06/29	TITLE			
		MATERIAL NO. SEE TABLE 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. 6 OF 13			

9 8 7 6 5 4 3 2 1



10 9 8 7 6 5 4 3 2 1

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	FRICITION 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									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	N.A	N.A	YES	N.A	YES	N.A										
	87831-1036	N.A	N.A	4																
	87831-1010	N.A	N.A	2																
	87831-1011	N.A	N.A	3	N.A	N.A	YES	N.A	YES	N.A										
	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	N.A	N.A	YES	N.A	YES	YES										
	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	N.A	YES	YES	N.A	N.A	YES										
	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	N.A	YES	N.A	YES	N.A	YES											
12	87831-1219	N.A	N.A	1									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	N.A	N.A	YES	N.A	YES	N.A										
	87831-1236	N.A	N.A	4																
	87831-1228	N.A	N.A	2																
	87831-1229	N.A	87831-5558	3	N.A	N.A	YES	N.A	YES	YES										
	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	N.A	YES	YES	N.A	N.A	N.A										
	87831-1232	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES										
	87831-1243	N.A	N.A	2																
	87831-1244	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A										
	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.

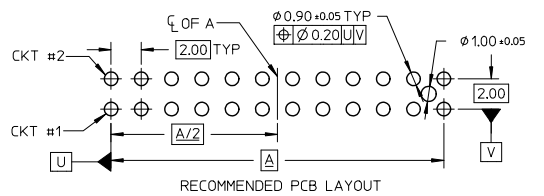
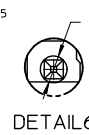
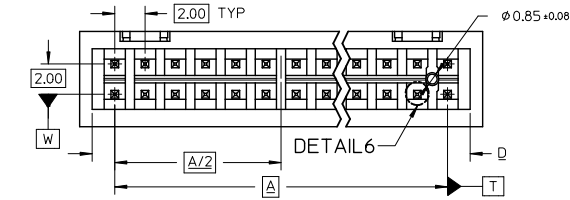
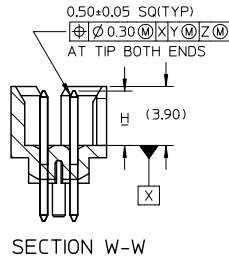
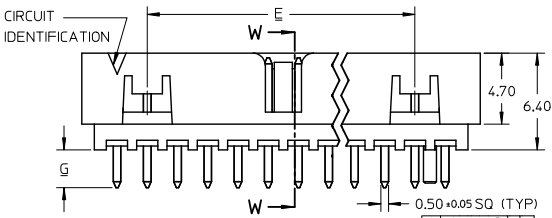
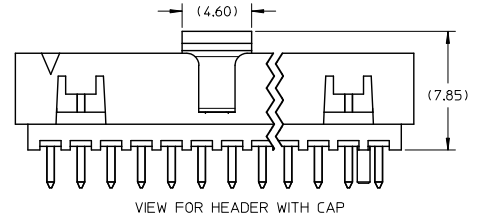
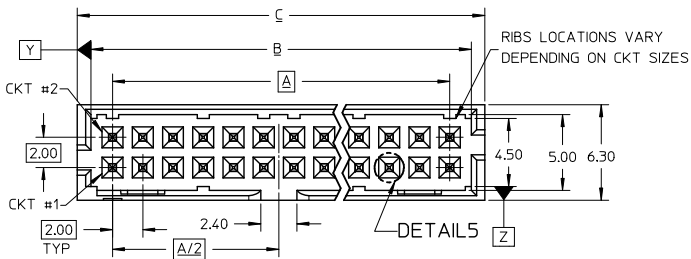
ADD: 87831-5557-5558 EC NO: S2017-0022 DRAWN BY: CHYK-SCHONG CHECKED BY: KHLIM APPR: KHLIM REV: A5	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
				MM ONLY		NTS	METRIC				
				DRAWN BY: GMENARLY DATE: 2015/04/15		CHECKED BY: CGOH DATE: 2015/06/29		APPROVED BY: KHLIM DATE: 2015/06/29		TITLE: MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
				ANGULAR ± 3°		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87831-0001		SHEET NO. 8 OF 13	

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Rev. G 2012/01/11

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

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)

EDIT NOTE 4 EC NO: S2017-0022 DRAWN BY: G MENARLY CHKD: SCHEONG APPR: KHLIM 2016/07/04 2016/07/21 2016/07/28	QUALITY SYMBOLS ∇=0 ∇=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 ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3°	DRAWN BY: G MENARLY CHECKED BY: CGOH APPROVED BY: KHLIM DATE: 2015/04/15 DATE: 2015/06/29 DATE: 2015/06/29	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87831-0001
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						

9 8 7 6 5 4 3 2 1



10 9 8 7 6 5 4 3 2 1

14 TO 20 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
14	87831-1419	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A								
	87831-1421	N.A	N.A	3														
	87831-1436	N.A	N.A	4														
	87831-1428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES								
	87831-1429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								
	87831-1435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								
87831-1410	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									
87831-1411	N.A	N.A	3															
16	87831-1619	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A								
	87831-1621	N.A	N.A	3														
	87831-1636	N.A	N.A	4														
	87831-1628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES								
	87831-1629	N.A	87831-5559	3	YES	N.A	YES	N.A	YES	YES								
87831-1635	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES									
18	87831-1819	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A								
	87831-1821	N.A	N.A	3														
	87831-1836	N.A	N.A	4														
	87831-1828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES								
87831-1829	N.A	N.A	3															
20	87831-2019	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A								
	87831-2021	N.A	N.A	3														
	87831-2036	N.A	N.A	4														
	87831-2028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES								
	87831-2029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								
	87831-2035	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								
87831-2010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A									
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 87831-5559 EC NO. S2017-0022 DRAWN: MENARLY 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV A5	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 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 DRAWN BY DATE GMENARLY 2015/04/15 CHECKED BY DATE CGOH 2015/06/29 APPROVED BY DATE KHLIM 2015/06/29	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex	MATERIAL NO. SEE TABLE 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					
	SIZE A3					
	DRAWING NO. SD-87831-0001					

9 8 7 6 5 4 3 2 1



10 9 8 7 6 5 4 3 2 1

22 TO 30 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
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														
22	87831-2229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	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															
24	87831-2429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	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	
	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															
26	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	
	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															
28	87831-2829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	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															
30	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:

- 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 1.2.4.6.8-10
 IEC NO: S2017-0022
 DRAWN BY: CHYK-SCHONG
 CHECKED BY: KHLIM
 APPROVED BY: KHLIM
 DATE: 2016/07/28

QUALITY SYMBOLS
 ∇=0
 ∇=0
 ∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm
4 PLACES	±---
3 PLACES	±---
2 PLACES	±0.20
1 PLACE	±---
0 PLACE	±---

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
G MENARLY	2015/04/15
CHECKED BY	DATE
CGOH	2015/06/29
APPROVED BY	DATE
KHLIM	2015/06/29

SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION

MILLIGRID
 2MM PITCH, THROUGH HOLE
 VERTICAL SHROUDED HEADER

molex

MATERIAL NO. SEE TABLE DOCUMENT NO. SD-87831-0001 SHEET NO. 11 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

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32 TO 40 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
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														
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														
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														
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														
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														

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 12.4.6.8-10 EC. NO. S2017-0022 DRAWN BY: 2016/07/04 CHYK: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV: A5	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 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 DRAWN BY: G MENARLY CHECKED BY: CGOH APPROVED BY: KHLIM DATE: 2015/04/15 DATE: 2015/06/29 DATE: 2015/06/29	SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex MATERIAL NO. SEE TABLE DOCUMENT NO. SD-87831-0001	SHEET NO. 12 OF 13
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	SEE TABLE					
	SEE TABLE					

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

42 TO 50 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	
42	87831-4219	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A									
	87831-4221	N.A	N.A	3															
	87831-4236	N.A	N.A	4															
	87831-4228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									2.50
87831-4229	N.A	N.A	3																
44	87831-4419	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A									
	87831-4421	N.A	N.A	3															
	87831-4436	N.A	N.A	4															
	87831-4428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									2.50
87831-4429	N.A	N.A	3																
87831-4435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	YES									
46	87831-4619	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A									
	87831-4621	N.A	N.A	3															
	87831-4636	N.A	N.A	4															
	87831-4628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									2.50
87831-4629	N.A	N.A	3																
48	87831-4819	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A									
	87831-4821	N.A	N.A	3															
	87831-4836	N.A	N.A	4															
	87831-4828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									2.50
87831-4829	N.A	N.A	3																
50	87831-5019	N.A	N.A	1							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	YES	N.A	YES	N.A	YES	N.A									
	87831-5021	N.A	N.A	3															
	87831-5036	N.A	N.A	4															
	87831-5028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES									2.50
87831-5029	N.A	N.A	3																
87831-5035	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	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 1.2.4.6.8-10 IEC NO. S2017-0022 DRAWN BY: G.MENARLY 2016/07/16 CHECKED BY: CHIKO-SCHEONG 2016/07/27 APPR: KHL IM 2016/07/28 REV: A5	QUALITY SYMBOLS √=0 √=0 √=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	DIMENSION STYLE MM ONLY DRAWN BY: G.MENARLY DATE: 2015/04/15 CHECKED BY: CGOH DATE: 2015/06/29 APPROVED BY: KHL IM DATE: 2015/06/29	SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex MATERIAL NO. SEE TABLE DOCUMENT NO. SD-87831-0001 SHEET NO. 13 OF 13
	ANGULAR ± 3° 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		

9 8 7 6 5 4 3 2 1