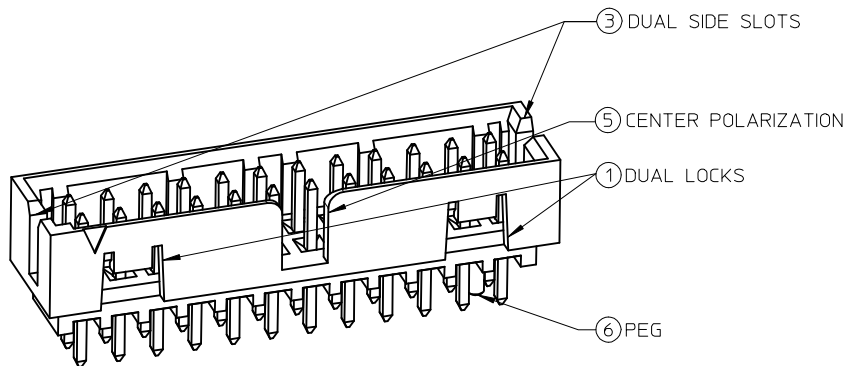
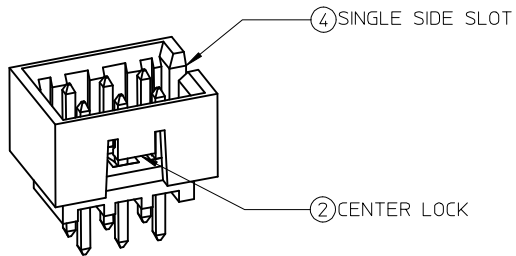


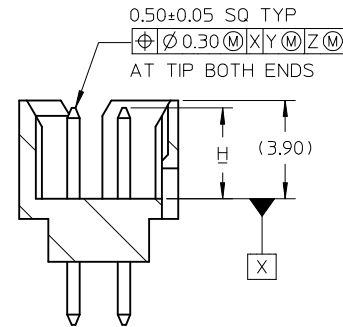
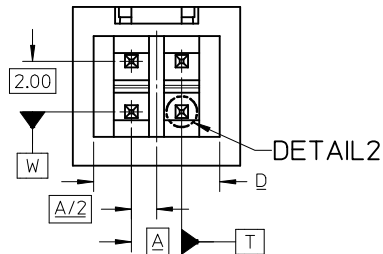
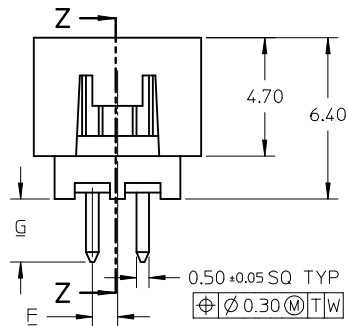
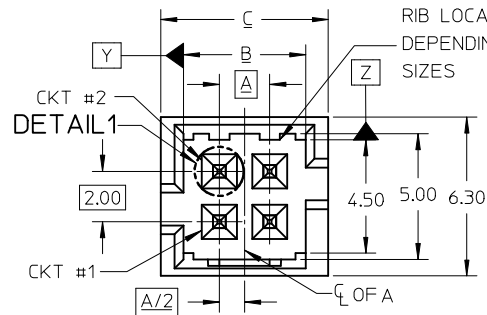
FEATURES SELECTION GUIDE



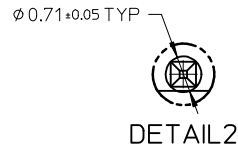
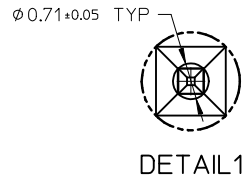
5		4		3		2		1	
CIRCUIT SIZE		FEATURES							
		FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO	
		① DUAL	② CENTER	③ DUAL	④ SINGLE				
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3		
	N.A	YES	YES	N.A	N.A	N.A			
	N.A	YES	N.A	YES	N.A	N.A			
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5		
	N.A	N.A	YES	N.A	N.A	YES	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

RELEASED EC NO: S2015-1188 DRAWN:GMENARLY CHK'D:CGOH APPR:KHLIM 2015/04/15 2015/06/29 2015/06/29	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_C=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION				
			4 PLACES 3 PLACES 2 PLACES 1 PLACE 0 PLACE	mm ± --- ± --- ± 0.20 ± --- ± ---	INCH ± --- ± --- ± --- ± --- ± ---	DRAWN BY GMENARLY		DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
						CHECKED BY		DATE						
						APPROVED BY KHLIM		DATE 2015/06/29						
						ANGULAR ± 3 °			MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-87831-0001		1 OF 13	
									SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

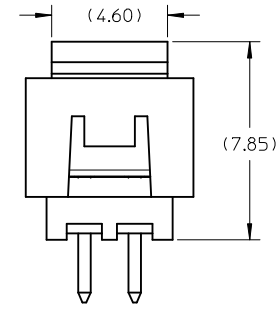
4 CIRCUITS



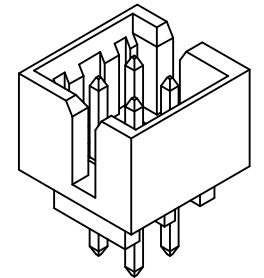
SECTION Z-Z



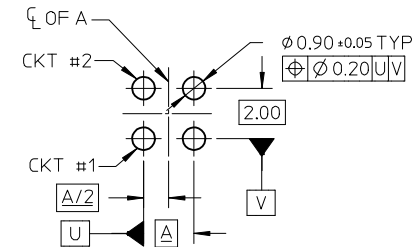
DETAIL2



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:

TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300

5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES

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

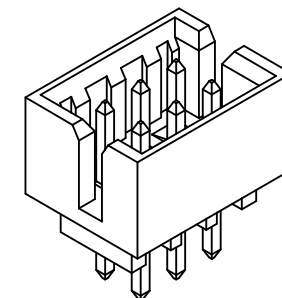
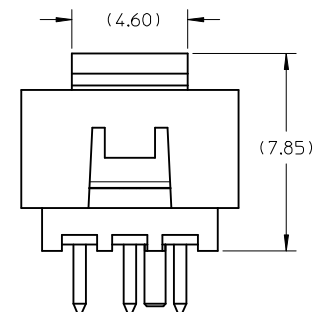
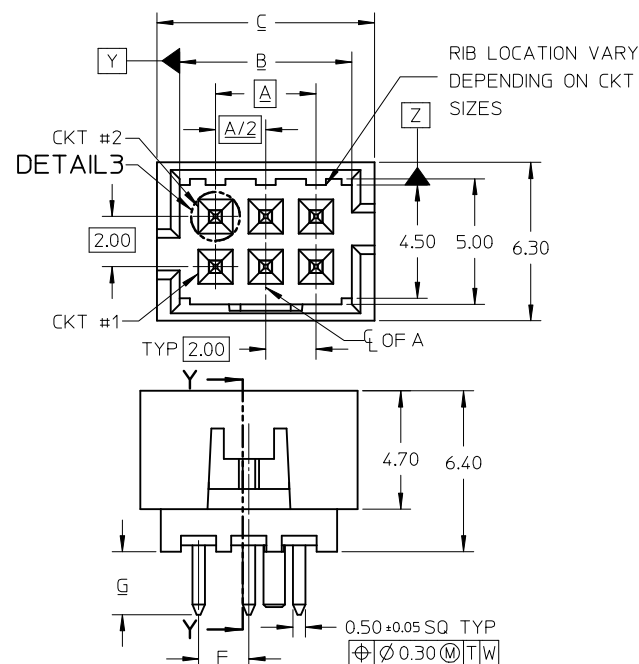
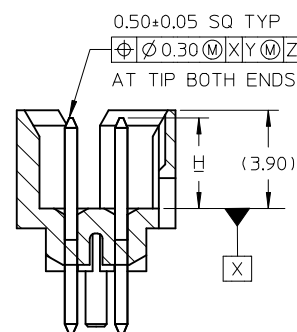
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE:

79107 (GOLD PLATED), 78787 (TIN PLATED)

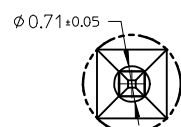
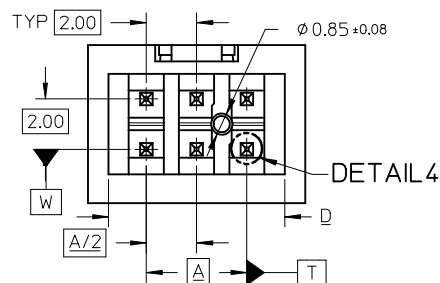
RELEASED EC NO: S2015-1188 DRWNG:GMENARLY CHKD:CGOH APPR:KHLIM 2015/04/15 2015/06/29 2015/06/29	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_G=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
					MM ONLY		NTS	METRIC			
					DRAWN BY DATE		TITLE				
					GMENARLY 2015/04/15						
					CHECKED BY DATE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
					APPROVED BY DATE		molex				
		KHLIM 2015/06/29									
		MATERIAL NO.		DOCUMENT NO.					SHEET NO.		
		SEE TABLE		SD-87831-0001					2 OF 13		
		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
		A3									

	10	9	8	7	6	5	4	3	2	1									
	4 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
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	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														
		87831-5142	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A							2.80	
		87831-6141	N.A	N.A	2														
		87831-6142	N.A	N.A	3														
87831-0443	N.A	N.A	2	N.A	YES							N.A	YES	N.A	N.A	2.50	3.60 ^{+0.15} _{-0.10}		
87831-0444	N.A	N.A	3																
D																			D
C																			C
B																			B
A	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. RELEASED EC NO: S2015-1188 DRWG:GMENARLY CHKD:CGOH APPR:KHLIM 2015/04/15 2015/06/29 2015/06/29 DESCRIPTION REV QUALITY SYMBOLS F_A=0 F_G=0 F_P=0 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 DRAWN BY GMENARLY CHECKED BY DATE 2015/04/15 DATE 2015/06/29 APPROVED BY KHLIM MATERIAL NO. SEE TABLE SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex 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 fb_frame_A3_P_AM_T Rev. G 2012/01/11 987654321																		A

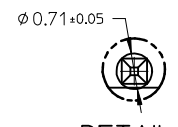
6 CIRCUITS

VIEW FOR
HEADER WITH CAPVIEW FOR HEADER WITH
ONLY DUAL SLOTS

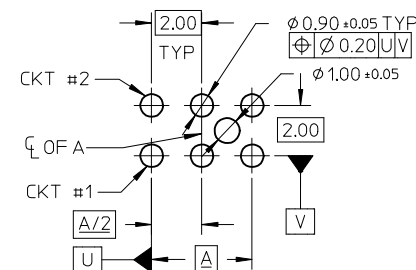
SECTION Y-Y



DETAIL3



DETAIL 4



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:

TUBE: PK-87831-001 , TAPE AND REEL: PK-87831-300

5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES

AND CRIMP TERMINAL: 50394 SERIES

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

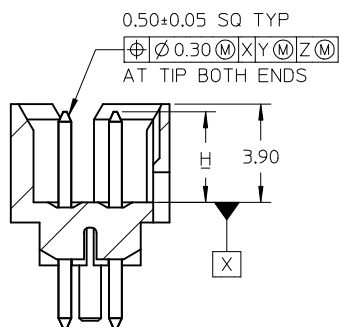
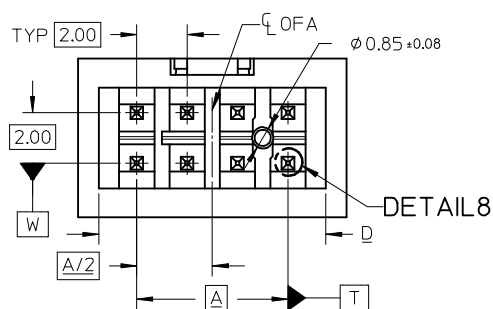
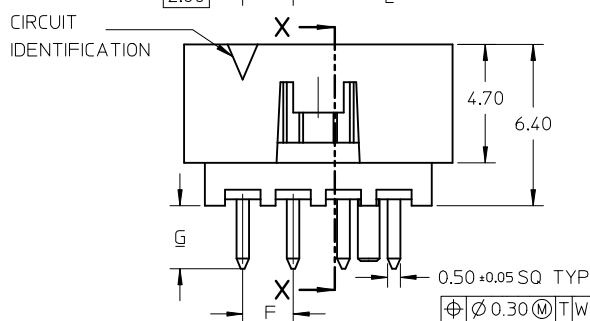
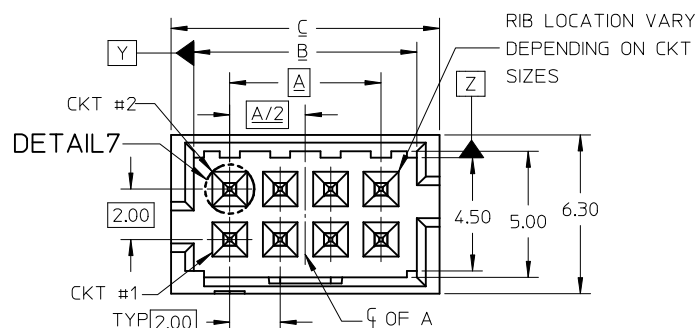
C. MOLEX 2MM MILLIGRID DUAL ROW RECEPTACLE:

79107 (GOLD PLATED), 78787 (TIN PLATED)

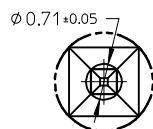
RELEASED EC NO: S2015-1188 2015/04/15 DRAWING: GEMNARLY 2015/06/29 CHK'D: CGOH 2015/06/29 APPR: KHL IM	DESCRIPTION	QUALITY SYMBOLS F_□=0 F_□=0 F_□=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION ⊙ ◻			
				mm	INCH	DRAWN BY GEMNARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
			4 PLACES ± ---	± ---		CHECKED BY	DATE					
			3 PLACES ± ---	± ---		APPROVED BY KHL IM	DATE 2015/06/29	DOCUMENT NO. SD-87831-0001 SHEET NO. 4 OF 13				
			2 PLACES ± 0.20	± ---								
			1 PLACE ± ---	± ---		ANGULAR ± 3 °		MATERIAL NO.				
			0 PLACE ± ---	± ---		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		
							SEE TABLE					

	10	9	8	7	6	5	4	3	2	1																			
	6 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										
E	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	E									
		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																								
		87831-0642	N.A	87831-5552	3	N.A	YES	YES	N.A	N.A	N.A						N.A	2.50			3.60±0.20								
		87831-5241	N.A	N.A	2																								
		87831-5242	N.A	N.A	3																								
D		87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	2.00	2.80	3.60 ^{+0.15} _{-0.10}	D									
		87831-6242	N.A	N.A	3																								
		87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A										N.A	2.50							
		87831-0644	N.A	N.A	3																								
		87831-0645	N.A	N.A	2																								
		87831-0646	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A						N.A	2.50											
		87831-0632	N.A	N.A	2																								
		87831-5119	N.A	N.A	1																N.A	N.A	YES	N.A	YES	N.A	N.A	2.50	3.60±0.20
		C																											
B																													
A																													

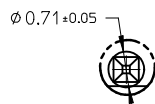
8 TO 12 CIRCUITS



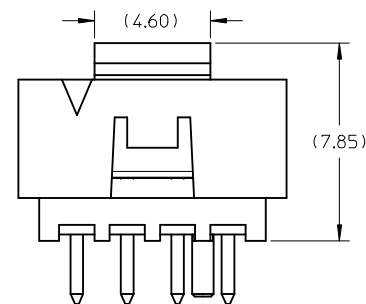
SECTION X-X



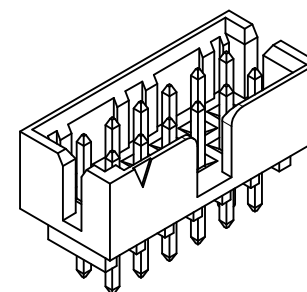
DETAIL7



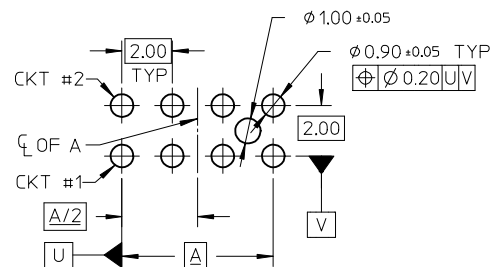
DETAIL8



VIEW FOR HEADER WITH CAP



VIEW FOR HEADER WITH CENTER POLARIZATION AND DUAL SIDE 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:

TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300

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)

RELEASED EC NO: S2015-1188 DRWN:GMENARLY CHKD:CGOH APPR:KHLIM	2015/04/15 2015/06/29 2015/06/29	DESCRIPTION REV	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
						DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex				
						CHECKED BY	DATE					
						APPROVED BY KHLIM	DATE 2015/06/29	DOCUMENT NO. SD-87831-0001				
						MATERIAL NO.						
						ANGULAR ± 3 °		SEE TABLE				
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						
				SIZE A3								

10		9		8		7		6		5		4		3		2		1											
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								F									
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H										
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	3.60±0.20	E									
		87831-0820	N.A	N.A	2																								
		87831-0821	N.A	N.A	3																								
		87831-0836	N.A	N.A	4																								
		87831-0828	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES							N.A			N.A	N.A	3.00	2.50	3.60±0.15 -0.10				
		87831-0829	N.A	N.A	3																								
		87831-0841	N.A	87831-5551	2																								
		87831-0842	N.A	N.A	3																								
		87831-5441	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A			N.A	3.00	2.50	3.60±0.15 -0.10					
		87831-5442	N.A	N.A	3																								
		N.A	87831-5541	N.A	2																								
		N.A	87831-5542	N.A	3																								
		D		87831-5741	N.A	N.A	2	N.A	YES	YES	N.A						N.A	N.A			6.00	8.85	10.65	9.00	N.A	3.00	2.50	3.60±0.15 -0.10	D
				87831-5742	N.A	N.A	3																						
87831-0832	N.A			N.A	2																								
87831-0843	N.A			N.A	2																								
87831-0844	N.A			N.A	3	N.A	YES	N.A	YES	N.A	YES	N.A	N.A	N.A	3.00	2.50	3.60±0.15 -0.10												
87831-0845	N.A			N.A	2																								
87831-0846	N.A			N.A	3																								

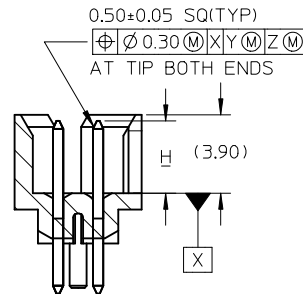
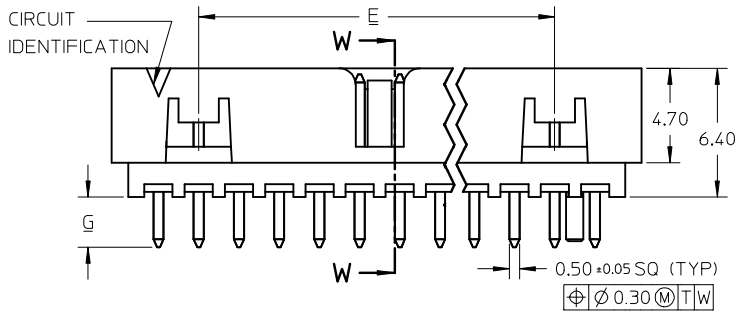
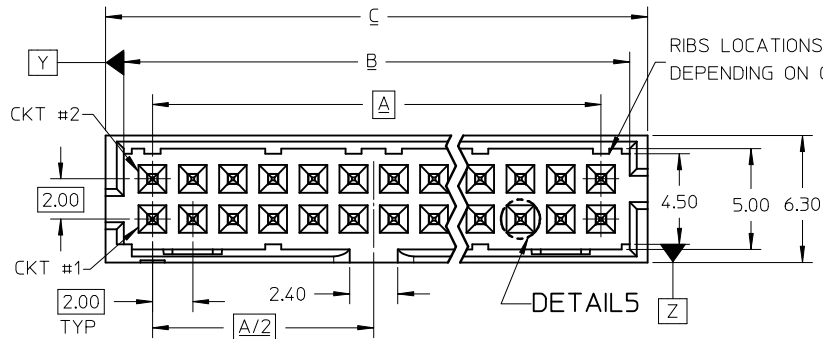
PLATING OPTIONS:	
1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.	
2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.	
3 - 0.76um/30uin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

RELEASED EC NO: S2015-1188 DRWN:GMENARLY 2015/04/15 CHKD:GCOH 2015/06/29 APPR:KHLIM 2015/06/29	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION					
			4 PLACES ± ---	mm	INCH	DRAWN BY GMENARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						
										3 PLACES ± ---	mm	INCH	CHECKED BY	DATE
1 PLACE ± ---		mm	INCH	MATERIAL NO.		DOCUMENT NO.		SHEET NO.						
0 PLACE ± ---		mm	INCH	SEE TABLE		SD-87831-0001		7 OF 13						
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									

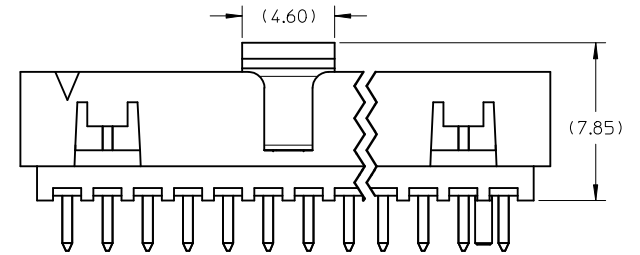
fb_frame_A3_P_AM_T Rev. G 2012/01/11		9		8		7		6		5		4		3		2		1	
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	10	9	8	7	6	5	4	3	2	1																		
	10 TO 12 CIRCUITS																											
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION						F										
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F		G	H								
E	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	E								
		87831-1020	N.A	N.A	2																							
		87831-1021	N.A	N.A	3																							
		87831-1036	N.A	N.A	4	N.A	N.A	YES	N.A	YES	N.A										3.50							
		87831-1010	N.A	N.A	2																							
		87831-1011	N.A	N.A	3																							
		87831-1028	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES							2.50										
		87831-1029	N.A	N.A	3																							
		87831-1035	N.A	N.A	3																N.A	N.A	YES	N.A	YES	YES	3.50	
		87831-1041	N.A	N.A	2																							
87831-1042	N.A	87831-5553	3	N.A	YES	YES	N.A	N.A	N.A	4.00	2.50																	
87831-1032	N.A	N.A	2														N.A	YES	N.A		YES	N.A	N.A	2.50				
87831-1043	N.A	N.A	2																									
87831-1044	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A																2.50			
87831-1045	N.A	N.A	2							N.A	YES						N.A	YES	N.A		YES	2.50						
87831-1046	N.A	N.A	3																									
D	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	D
		87831-1220	N.A	N.A	2																							
		87831-1221	N.A	N.A	3																							
		87831-1236	N.A	N.A	4	N.A	N.A	YES	N.A	YES	YES	2.50																
		87831-1228	N.A	N.A	2																							
		87831-1229	N.A	N.A	3																							
		87831-1241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A		5.00				2.50	3.60±0.15 -0.10										
		87831-1242	N.A	N.A	3																							
		87831-1255	87831-1256	N.A	2							N.A							YES		YES	N.A		N.A	N.A	2.50		
		87831-1232	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES																	
87831-1243	N.A	N.A	2	N.A	YES								N.A				YES										N.A	
87831-1244	N.A	N.A	3									N.A							YES		N.A	YES		N.A	N.A			
87831-1245	N.A	N.A	2			N.A	YES	N.A	YES	N.A	YES							2.50										
87831-1246	N.A	N.A	3																									
C		PLATING OPTIONS:																									C	
		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.																										
B <td rowspan="10"></td> <td colspan="10">4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.</td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10"></td> <td rowspan="10">B</td>		4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.																				B						
A																						A						
</																												

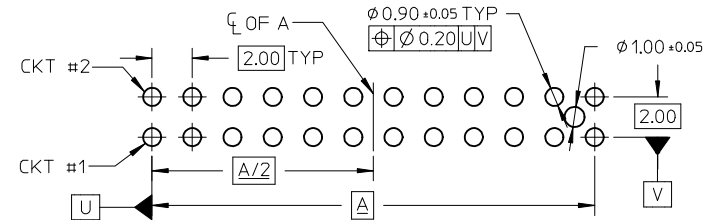
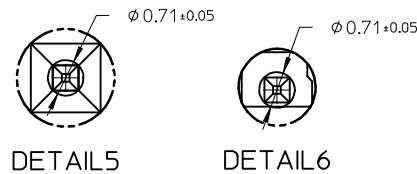
14 TO 50 CIRCUITS



SECTION W-W



VIEW FOR HEADER WITH CAP



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:

TUBE: PK-87831-001, TAPE AND REEL: PK-87831-300

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)

RELEASED EC NO: S2015-1188 DRAWN:GMENARLY CHKD:CGOH APPR:KHL IM REV A	2015/04/15 2015/06/29 2015/06/29 DESCRIPTION REV	QUALITY SYMBOLS F_A=0 F_G=0 F_P=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	DATE						
			3 PLACES	± ---	± ---	APPROVED BY KHL IM		DATE 2015/06/29	DOCUMENT NO. SD-87831-0001 SHEET NO. 9 OF 13				
			2 PLACES	± 0.20	± ---	MATERIAL NO.		SEE TABLE					
			1 PLACE	± ---	± ---	ANGULAR ± 3 °							
			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				

10		9		8		7		6		5		4		3		2		1		
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								F
						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	E
		87831-1420	N.A	87831-5554	2															
		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							2.50	3.60±0.20	
		87831-1429	N.A	N.A	3															
		87831-1435	N.A	N.A	3															
		87831-1410	N.A	N.A	2															
87831-1411	N.A	N.A	3	YES	N.A	YES	N.A	YES	N.A	3.50										
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	D
		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	YES	N.A	YES	N.A	YES	YES							2.50	3.60±0.20	
		87831-1629	N.A	N.A	3															
		87831-1635	N.A	N.A	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	C
		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	YES	N.A	YES	N.A	YES	YES							2.50	3.60±0.20	
		87831-1829	N.A	N.A	3															
		87831-1829	N.A	N.A	3															
		87831-1829	N.A	N.A	3															
B	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	B
		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	YES	N.A	YES	N.A	YES	YES							2.50	3.60±0.20	
		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	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.																				
RELEASED EC NO: S2015-1188 2015/04/15 DRAWN:GEMARLY 2015/06/29 CHKD:CGOH APPR:KHL IM 2015/06/29 A																				
QUALITY SYMBOLS F=0 F=0 F=0																				
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 DRAWN BY DATE GMENARLY 2015/04/15 CHECKED BY DATE APPROVED BY DATE KHL IM 2015/06/29 MATERIAL NO. SEE TABLE SIZE A3																				
SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex 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																				
fb_frame_A3_P_AM.T Rev. G 2012/01/11		9		8		7		6		5		4		3		2		1		

tb_frame_A3_P_AM_T
Rev. G 2012/01/11

		10	9	8	7	6	5	4	3	2	1											
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						F				
						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	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-3228	N.A	N.A	2																	
		87831-3229	N.A	N.A	3																	
E	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	E		
		87831-3420	N.A	N.A	2																	
		87831-3421	N.A	N.A	3																	
		87831-3436	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-3428	N.A	N.A	2																	
		87831-3429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50				
		87831-3435	N.A	N.A	3																	
D	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	D		
		87831-3620	N.A	N.A	2																	
		87831-3621	N.A	N.A	3																	
		87831-3636	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-3628	N.A	N.A	2																	
		87831-3629	N.A	N.A	3																	
C	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	C		
		87831-3820	N.A	N.A	2																	
		87831-3821	N.A	N.A	3																	
		87831-3836	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-3828	N.A	N.A	2																	
		87831-3829	N.A	N.A	3																	
A	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	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-4028	N.A	N.A	2																	
		87831-4029	N.A	N.A	3																	
		87831-4010	N.A	N.A	2																YES	N.A
B	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.																			B		
	A	RELEASED EC NO: S2015-1188 DRWNG:GMENARLY CHKD:CGOH APPR:KHLIM 2015/04/15 2015/06/29 2015/06/29	QUALITY SYMBOLS F=0 F=0 F=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex						SHEET NO. 12 OF 13				
				mm		INCH		DRAWN BY GMENARLY	DATE 2015/04/15	TITLE												
				4 PLACES ± --- ± ---		3 PLACES ± --- ± ---		CHECKED BY		DATE	APPROVED BY KHLIM								DATE 2015/06/29			
				2 PLACES ± 0.20 ± ---		1 PLACE ± --- ± ---		0 PLACE ± --- ± ---		ANGULAR ± 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						
										SEE TABLE		MATERIAL NO.		DOCUMENT NO.		SD-87831-0001						

		10		9		8		7		6		5		4		3		2		1										
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	YES	N.A	YES	N.A	YES	YES							2.50													
	87831-4229	N.A	N.A	3																										
E	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	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	3.50																				
D	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	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	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	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	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	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	3.50																				
B																														
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/10uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.																														
A	RELEASED EC NO: S2015-1188 DRWN:GMEARLY 2015/04/15 CHKD:GGOH 2015/06/29 APPR:KHL IM 2015/06/29				QUALITY SYMBOLS F A = 0 F E = 0 F F = 0	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex						SHEET NO. 13 OF 13							
	mm		INCH				DRAWN BY GMENARLY	DATE 2015/04/15	TITLE																					
	mm		INCH				CHECKED BY	DATE																						
	mm		INCH				APPROVED BY KHL IM	DATE 2015/06/29																						
	ANGULAR ± 3 °						MATERIAL NO.		DOCUMENT NO.																					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						SIZE A3		SEE TABLE										SD-87831-0001											
															THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
	tb_frame_A3_P_AM.T Rev. G 2012/01/11																													
			9				8		7		6		5		4		3		2		1									