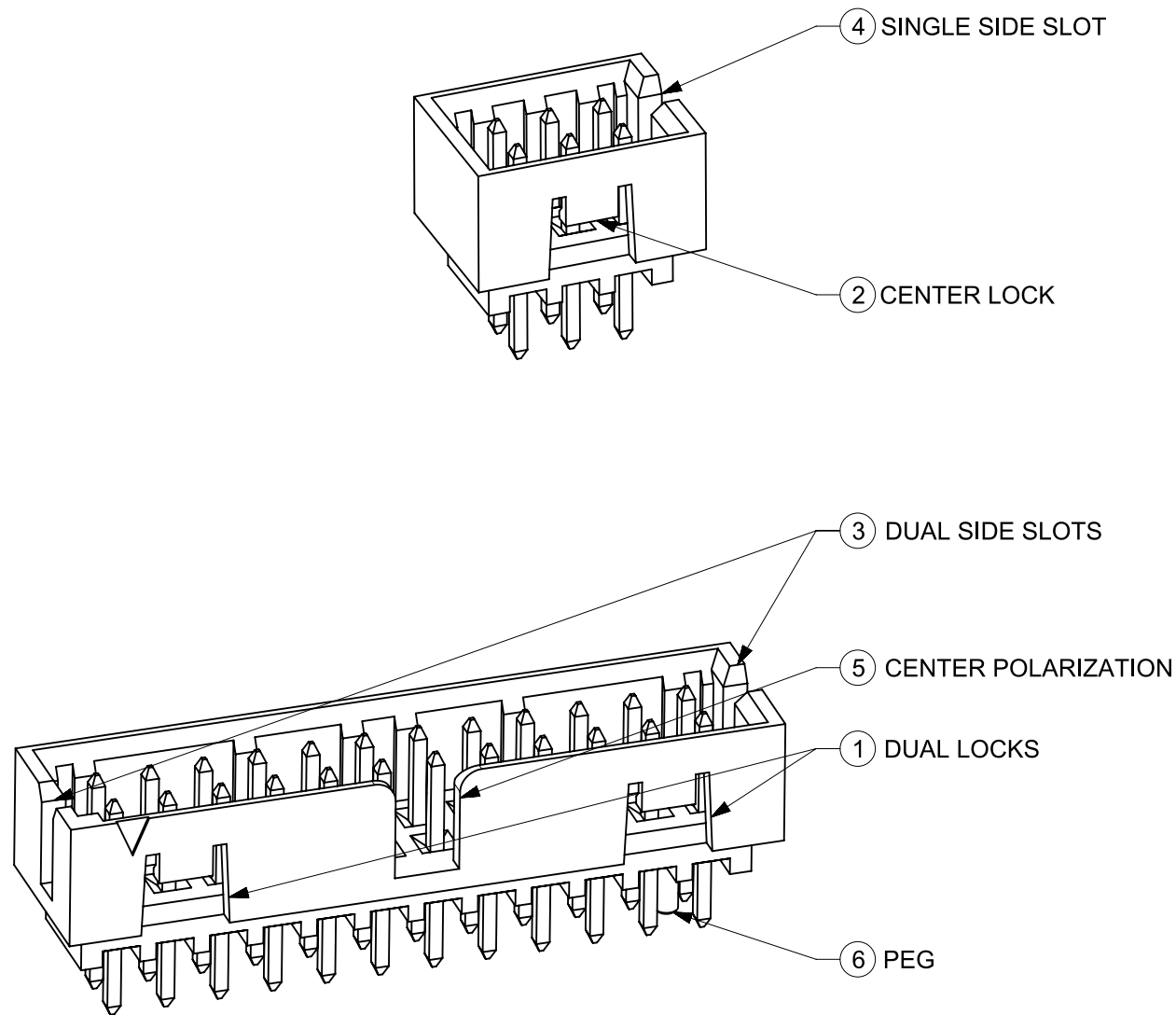


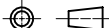
FEATURES SELECTION GUIDE



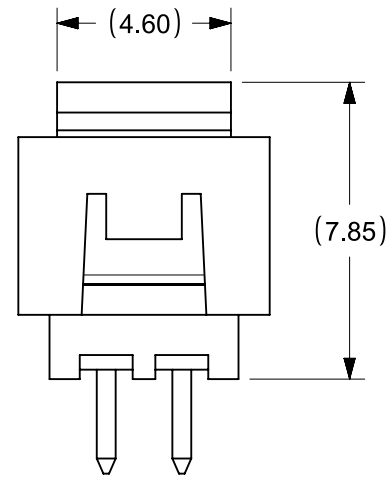
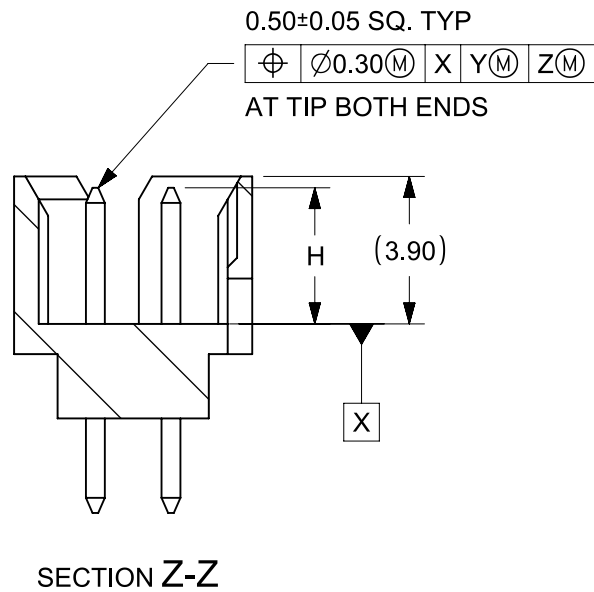
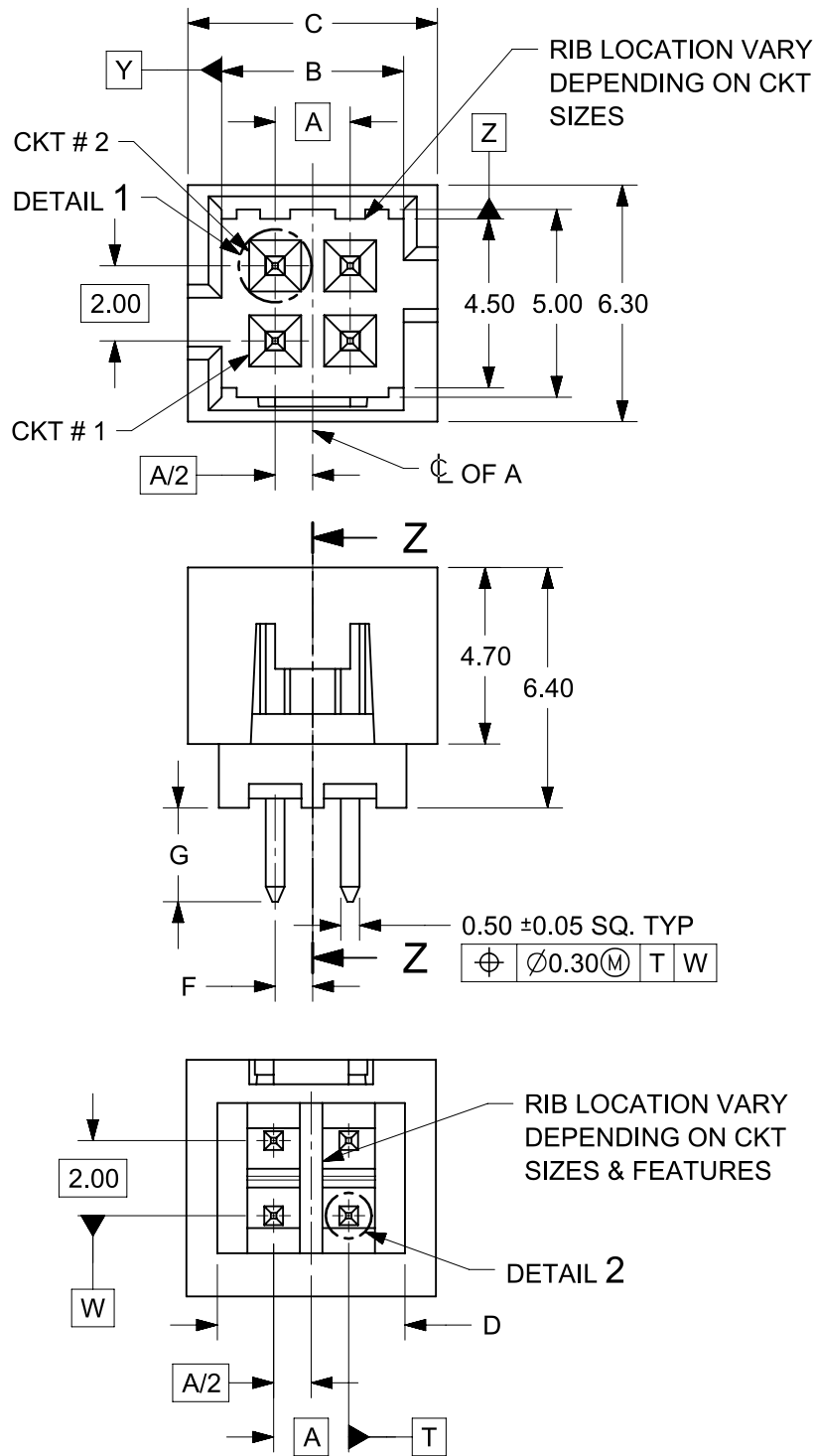
PACKAGING SPECIFICATION TABLE

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 87831-5119	
87831-0443 87831-1011	
87831-5241 87831-1420	
87831-5242	
87831-0643	

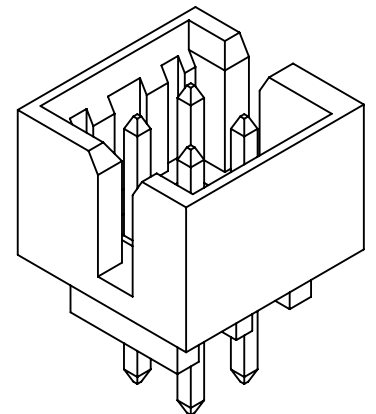
CIRCUIT SIZE		FEATURES						
		FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
		① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3	
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	N.A	YES	N.A	N.A		
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5	
	N.A	N.A	YES	N.A	N.A	YES		
	N.A	YES	YES	N.A	N.A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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers		molex					
mm		NTS									
GENERAL TOLERANCES (UNLESS SPECIFIED)				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
	MM	INCH									
4 PLACES	± 0	± 0									
3 PLACES	± 0	± 0									
2 PLACES	± 0.2	± 0									
1 PLACE	± 0	± 0		PRODUCT CUSTOMER DRAWING							
0 PLACES	± 0	± 0									
ANGULAR TOL		± 3°		DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
				A3-SIZE		87831		SEE TABLE		GENERAL MARKET	

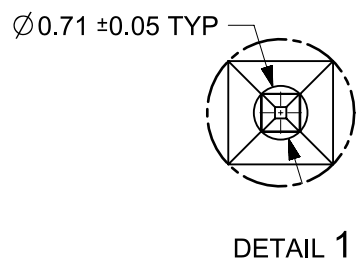
4 CIRCUITS



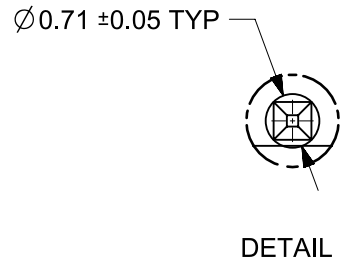
VIEW FOR
HEADER WITH CAP



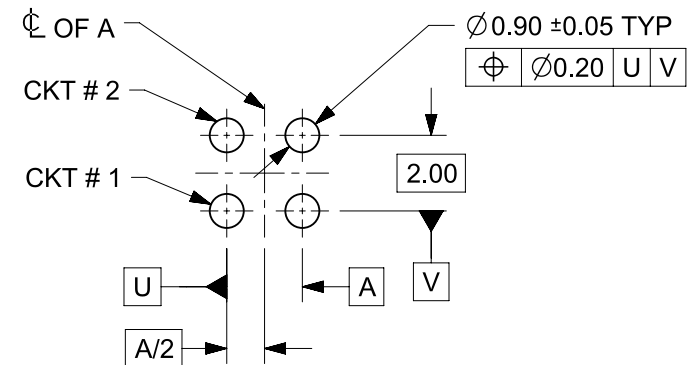
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



DETAIL 1



DETAIL 2



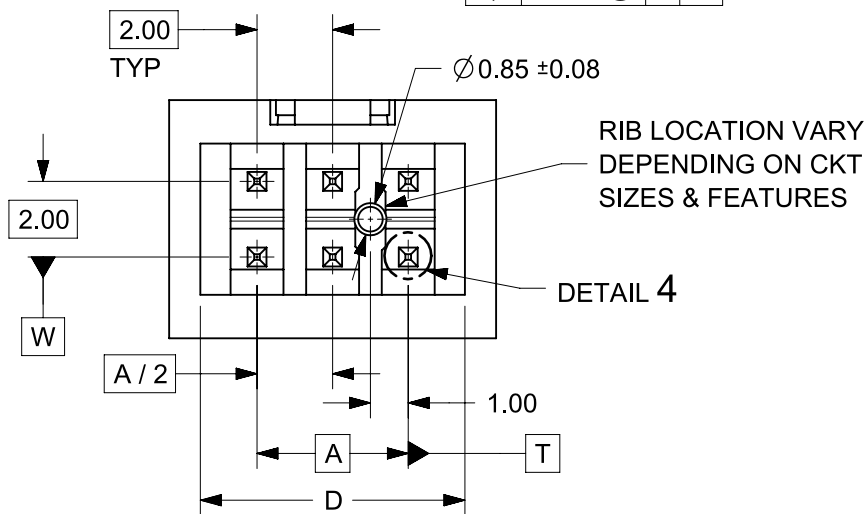
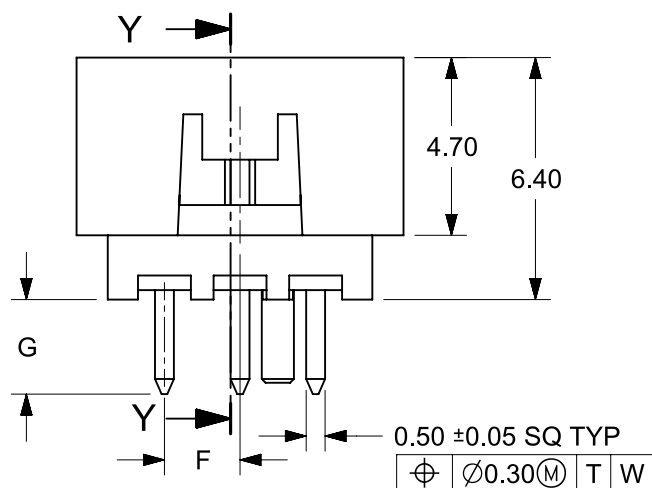
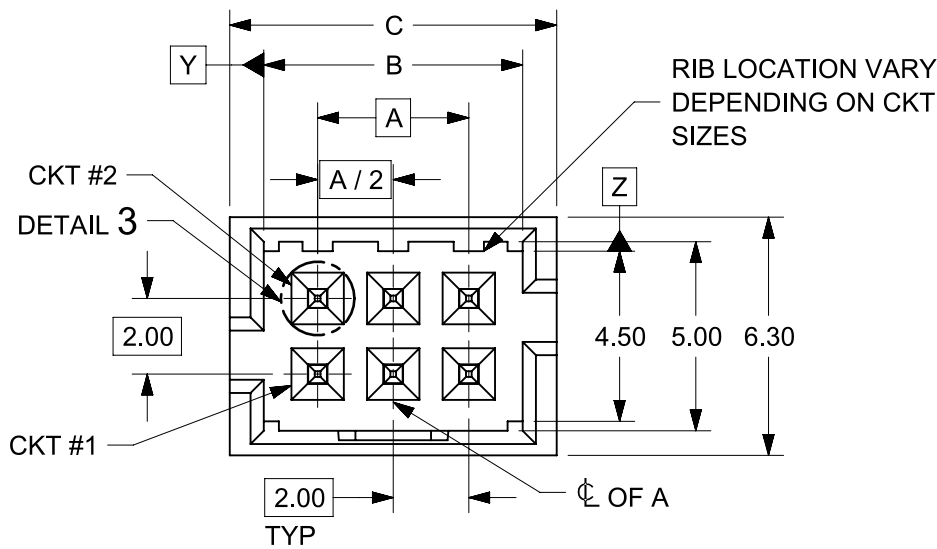
RECOMMENDED PCB LAYOUT

NOTES:

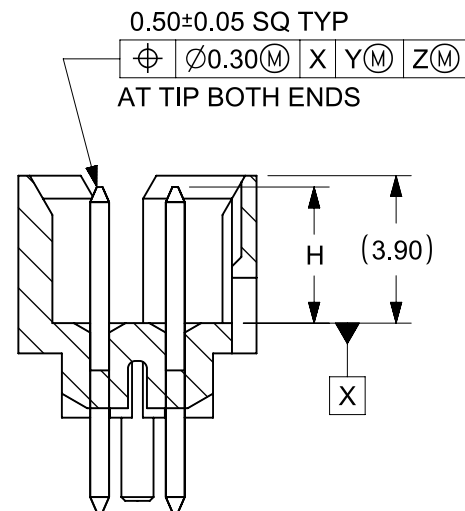
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES
AND 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)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex	
mm	NTS								
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
	MM	INCH							
4 PLACES	± 0	± 0							
3 PLACES	± 0	± 0							
2 PLACES	± 0.2	± 0							
1 PLACE	± 0	± 0							
0 PLACES	± 0	± 0						PRODUCT CUSTOMER DRAWING	
ANGULAR TOL	± 3°			DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
					A3-SIZE	87831	SEE TABLE	GENERAL MARKET	2 OF 14

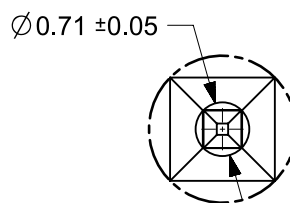
10	9	8	7	6	5	4	3	2	1																																																																																																																																						
4 CIRCUITS																																																																																																																																															
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																																																																																																																													
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	87831-5565	3															2.50																																																																																																																												
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	3.50																																																																																																																																					
	87831-5142	N.A	N.A	3																2.80																																																																																																																											
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A								2.50																																																																																																																														
	87831-6142	N.A	N.A	3															3.60 ^{+0.15} -0.10																																																																																																																												
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A																																																																																																																																					
	87831-0444	N.A	N.A	3																																																																																																																																											
<u>PLATING OPTIONS:</u> 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTETIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.										<table><tr><td colspan="10">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr><tr><td colspan="2">DIMENSION UNITS</td><td colspan="2">SCALE</td><td colspan="6" rowspan="3">CURRENT REV DESC: Adding New Part Numbers</td><td colspan="4" rowspan="3"> molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER </td></tr><tr><td colspan="2">mm</td><td colspan="2">NTS</td></tr><tr><td colspan="4">GENERAL TOLERANCES (UNLESS SPECIFIED)</td></tr><tr><td></td><td></td><td>MM</td><td>INCH</td><td colspan="6" rowspan="5">EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29</td><td colspan="2" rowspan="5">DOCUMENT NUMBER</td><td rowspan="5">PSD</td><td rowspan="5">001</td><td rowspan="5">A25</td></tr><tr><td>4 PLACES</td><td>± 0</td><td>± 0</td><td></td></tr><tr><td>3 PLACES</td><td>± 0</td><td>± 0</td><td></td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± 0</td><td></td></tr><tr><td>1 PLACE</td><td>± 0</td><td>± 0</td><td></td></tr><tr><td>0 PLACES</td><td>± 0</td><td>± 0</td><td></td><td colspan="6"></td><td colspan="4"></td></tr><tr><td colspan="4">ANGULAR TOL ± 3 °</td><td colspan="6"></td><td colspan="4"></td></tr><tr><td colspan="4">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">THIRD ANGLE PROJECTION</td><td colspan="2">DRAWING</td><td colspan="2">SERIES</td><td colspan="2">MATERIAL NUMBER</td><td colspan="2">CUSTOMER</td><td colspan="2">SHEET NUMBER</td></tr><tr><td colspan="2"></td><td colspan="2" rowspan="2"></td><td colspan="2" rowspan="2"></td><td colspan="2">A3-SIZE</td><td colspan="2">87831</td><td colspan="2">SEE TABLE</td><td colspan="2">GENERAL MARKET</td><td colspan="2">3 OF 14</td></tr></table>										THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers						molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				mm		NTS		GENERAL TOLERANCES (UNLESS SPECIFIED)						MM	INCH	EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29						DOCUMENT NUMBER		PSD	001	A25	4 PLACES	± 0	± 0		3 PLACES	± 0	± 0		2 PLACES	± 0.2	± 0		1 PLACE	± 0	± 0		0 PLACES	± 0	± 0												ANGULAR TOL ± 3 °														DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER								A3-SIZE		87831		SEE TABLE		GENERAL MARKET		3 OF 14		
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DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers						molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																																																																																																																																					
mm		NTS																																																																																																																																													
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2 PLACES	± 0.2	± 0																																																																																																																																													
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER																																																																																																																																	
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		3 OF 14																																																																																																																																	
DOCUMENT STATUS	Production					RELEASE DATE	08-Jun-2026 04:36:51																																																																																																																																								
9	8	7	6	5	4	3	2	1																																																																																																																																							



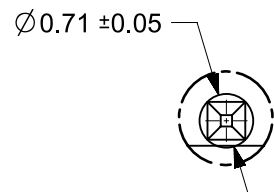
6 CIRCUITS



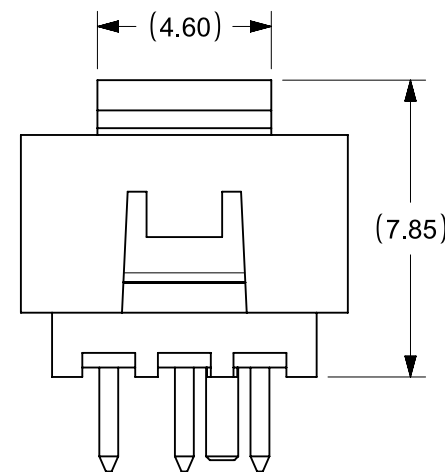
SECTION Y-Y



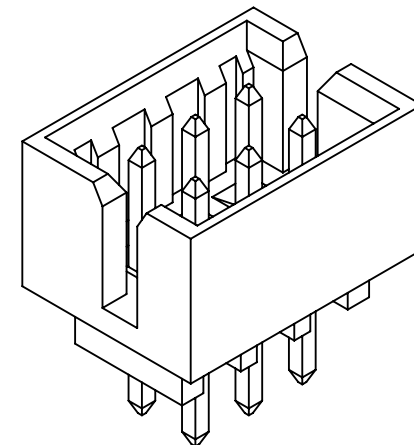
DETAIL 3



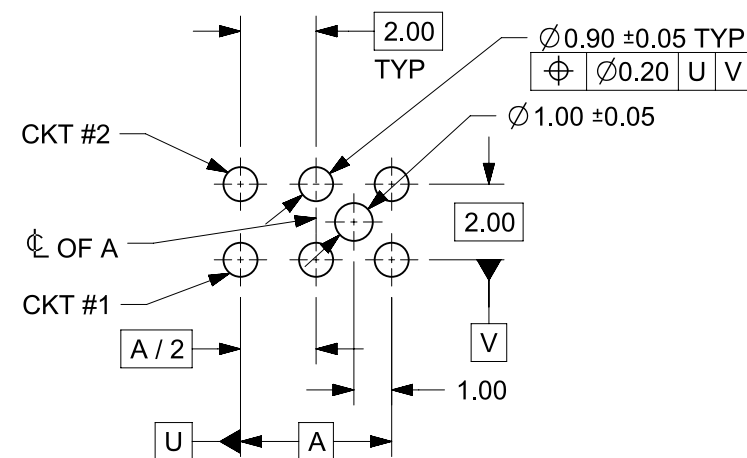
DETAIL 4



VIEW FOR
HEADER WITH CAP



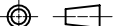
VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

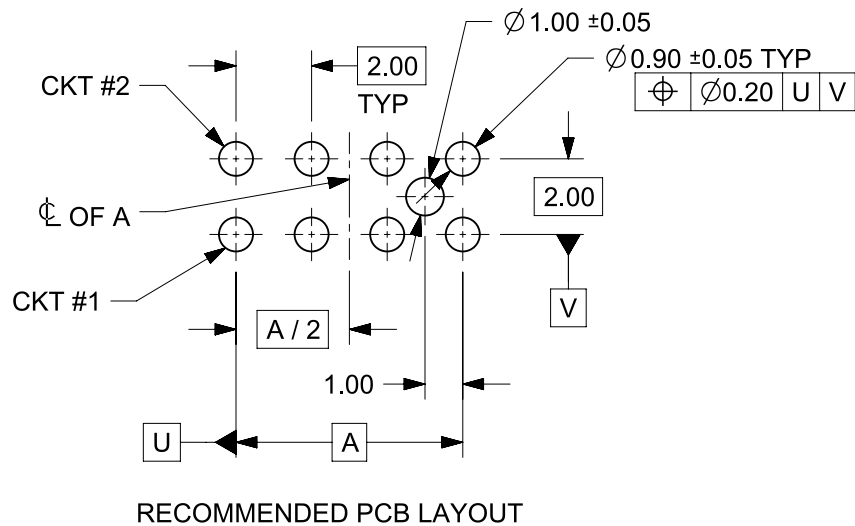
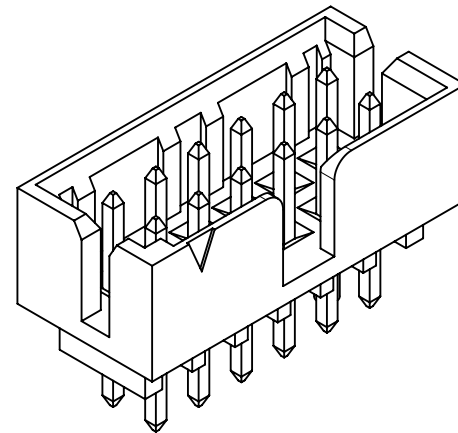
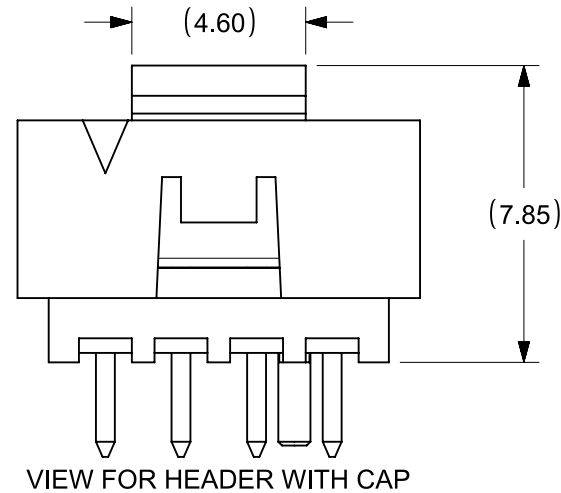
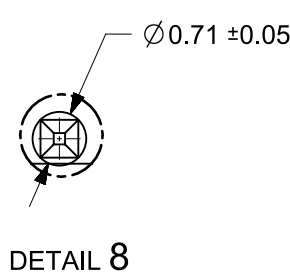
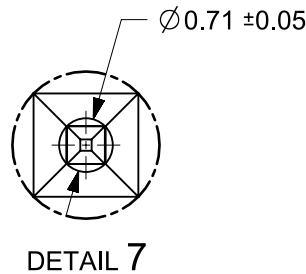
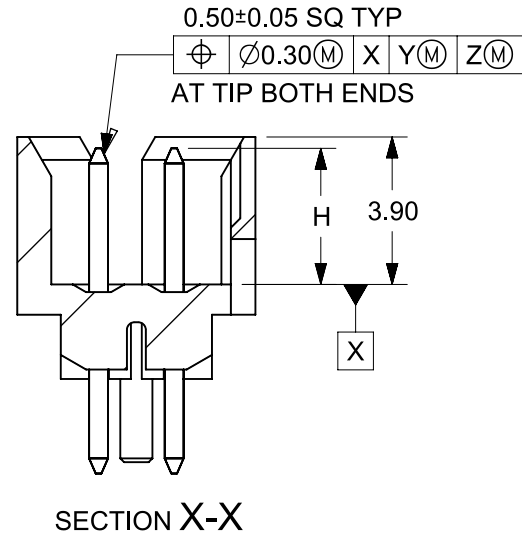
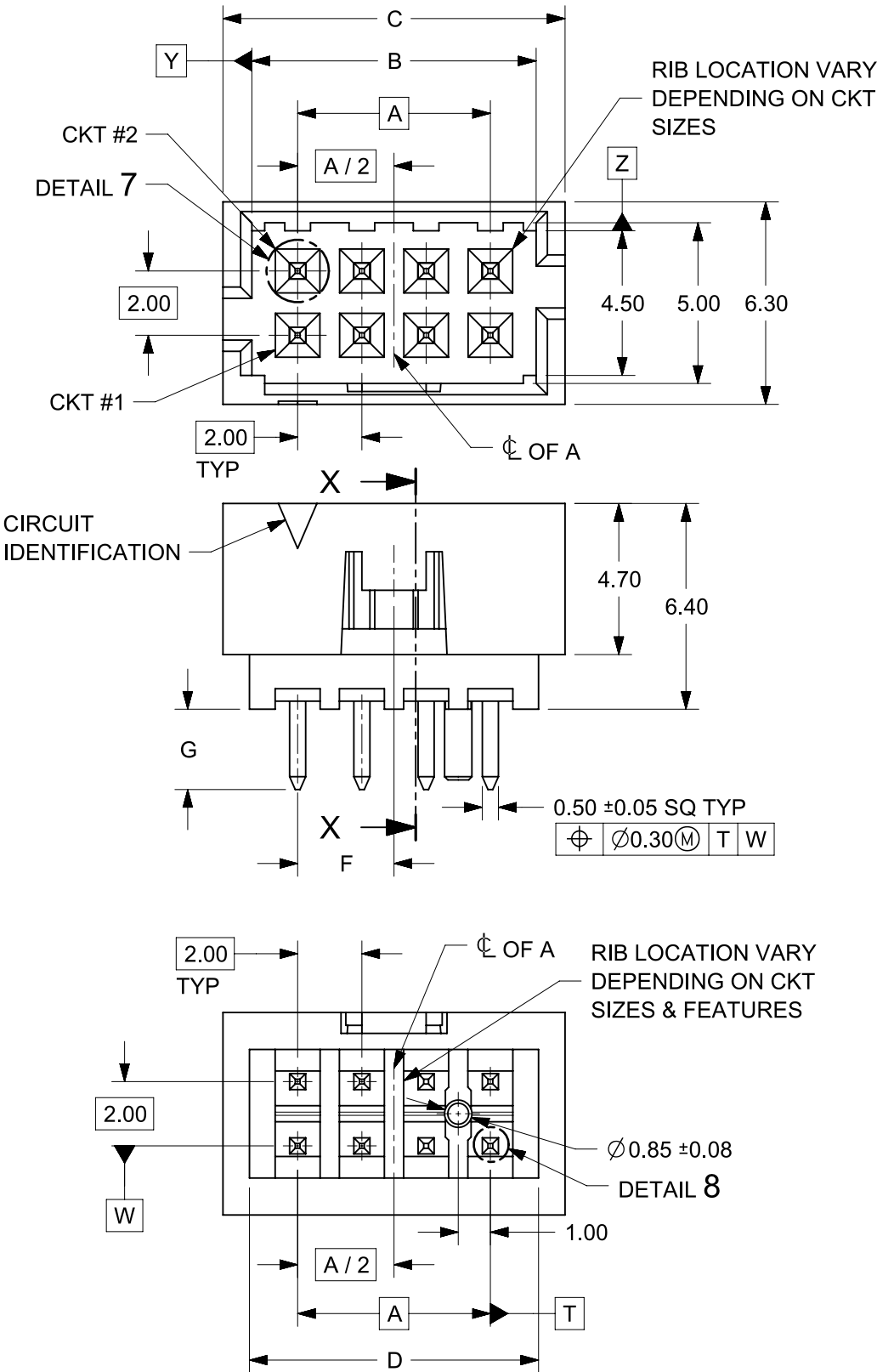
NOTES:

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

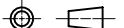
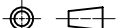
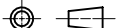
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DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29											
	MM	INCH													
4 PLACES	± 0	± 0													
3 PLACES	± 0	± 0													
2 PLACES	± 0.2	± 0													
1 PLACE	± 0	± 0													
0 PLACES	± 0	± 0		PRODUCT CUSTOMER DRAWING DOCUMENT NUMBERSD-87831-0001DOC TYPEPSDDOC PART001REVISIONA25											
ANGULAR TOL ± 3 °															
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION 		DRAWING A3-SIZE		SERIES 87831		MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 4 OF 14	

10	9	8	7	6	5	4	3	2	1
6 CIRCUITS									
F	E	D	C	B	A				
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	6	6	6	6	6	6	6	6	6
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	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
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	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6	6	6	6	6	6	6	6
	6	6							

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)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER PRODUCT CUSTOMER DRAWING	
mm		NTS							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
	MM	INCH							
4 PLACES	± 0	± 0							
3 PLACES	± 0	± 0							
2 PLACES	± 0.2	± 0							
1 PLACE	± 0	± 0							
0 PLACES	± 0	± 0							
ANGULAR TOL ± 3°				EC NO: CO-000042098		DRWN: Meghraj Boodagatti		22-Apr-2026	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				EC NO: CO-000042098		DRWN: Meghraj Boodagatti		22-Apr-2026	
				CHK'D: Meghraj Boodagatti		08-Jun-2026			
				APPR: Saravanakumar Murugesan		08-Jun-2026			
INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM				2015/04/15		2015/06/29		DOCUMENT NUMBER	
				2015/06/29		SD-87831-0001		DOC TYPE	
THIRD ANGLE PROJECTION 				DRAWING		SERIES		DOC PART	
				A3-SIZE		87831		001	
				MATERIAL NUMBER		CUSTOMER		REVISION	
				SEE TABLE		GENERAL MARKET		A25	
				SHEET NUMBER		6 OF 14			

10	9	8	7	6	5	4	3	2	1																
8 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							
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							
	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	YES		N.A	YES	N.A	N.A	2.50	3.60±0.20	
	87831-0829	N.A	N.A	3																					
	87831-0841	N.A	87831-5551	2																					
	87831-0842	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						YES	N.A		YES	N.A	N.A	N.A	2.50	3.60±0.20	
	87831-5841	N.A	N.A	2																					
	87831-5441	N.A	N.A	2																					
	87831-5442	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						YES	N.A		YES	N.A	N.A	N.A	2.80	3.60±0.20	
	87831-5541	N.A	N.A	2																					
	87831-5542	N.A	N.A	3																					
	87831-5741	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	YES		N.A	YES	N.A	N.A	N.A	2.50	3.60±0.20
	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	N.A						N.A	YES		N.A	YES	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0845	N.A	N.A	2																					
87831-0846	N.A	N.A	3																						

PLATING OPTIONS:

1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

2 - 0.38µm/15µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

3 - 0.76µm/30µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

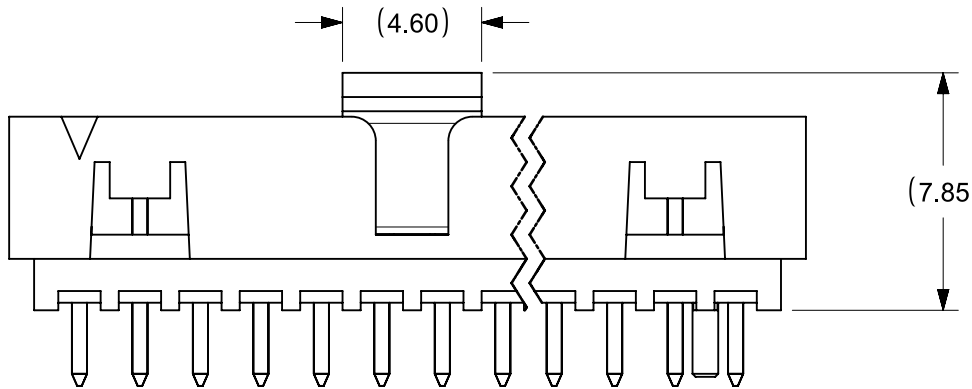
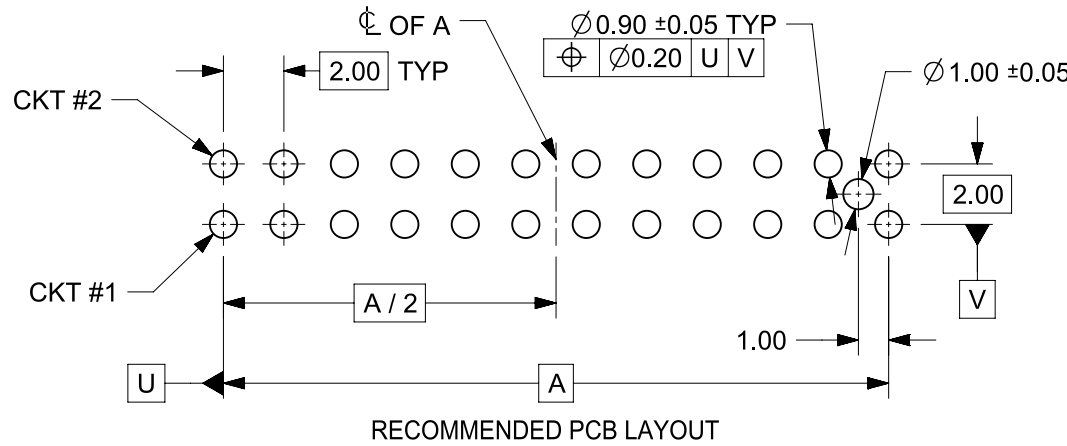
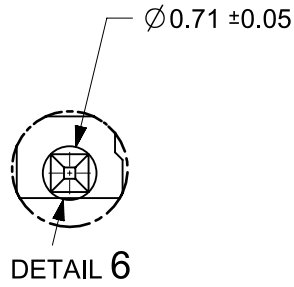
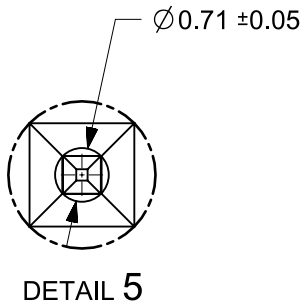
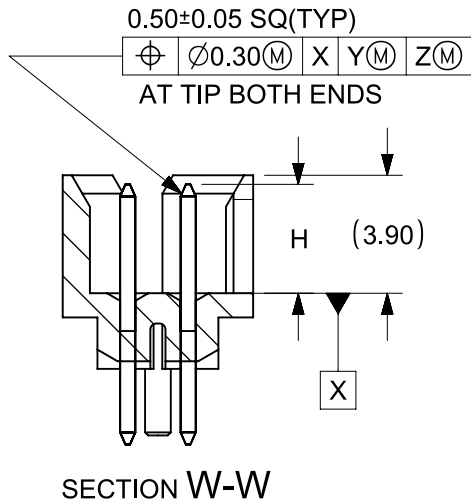
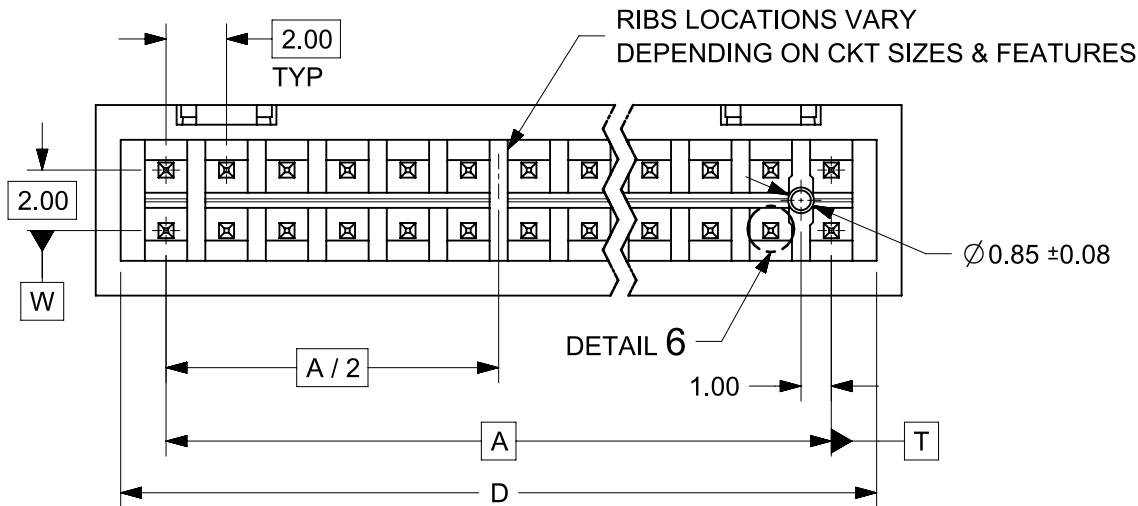
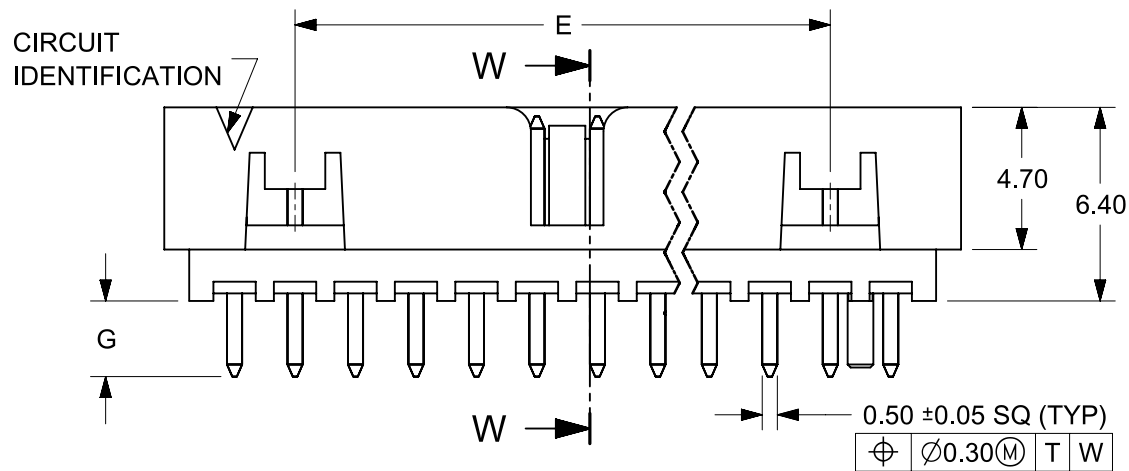
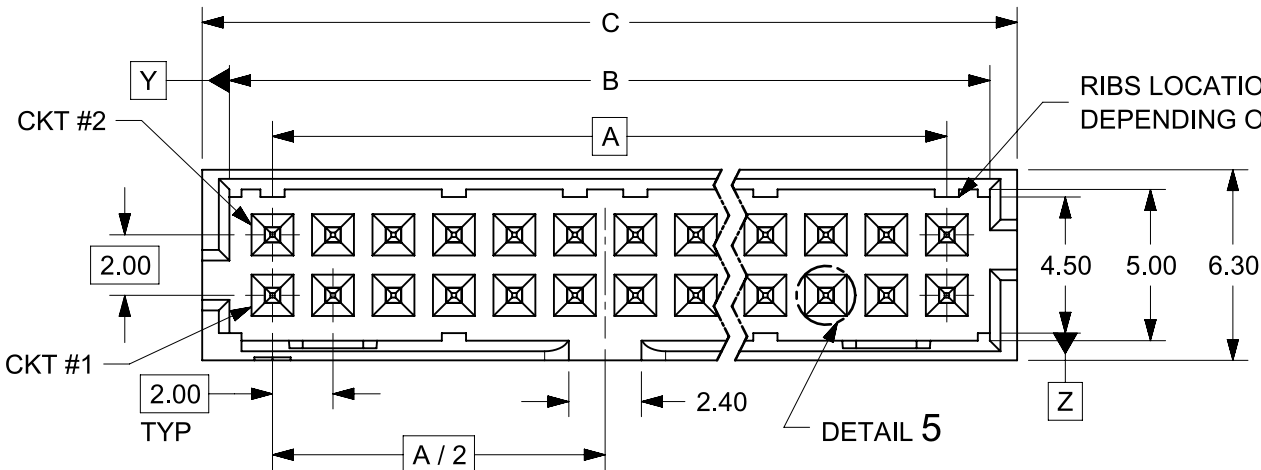
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						
mm		NTS												
GENERAL TOLERANCES (UNLESS SPECIFIED)				PRODUCT CUSTOMER DRAWING										
		MM	INCH	EC NO: CO-000042098				DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION
4 PLACES	± 0	± 0	± 0	DRWN: Meghraj Boodagatti 22-Apr-2026				SD-87831-0001				PSD	001	A25
3 PLACES	± 0	± 0	± 0	CHK'D: Meghraj Boodagatti 08-Jun-2026										
2 PLACES	± 0.2	± 0	± 0	APPR: Saravanakumar Murugesan 08-Jun-2026										
1 PLACE	± 0	± 0	± 0	INITIAL REVISION:										
0 PLACES	± 0	± 0	± 0	DRWN: GMENARLY 2015/04/15										
ANGULAR TOL ± 3 °				APPR: KHLIM 2015/06/29										
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
						A3-SIZE	87831	SEE TABLE		GENERAL MARKET		7 OF 14		

DOCUMENT STATUS	Production	RELEASE DATE	08-Jun-2026	04:36:51				
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	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		#####	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	87831-1070		2																
	87831-1021	N.A	87831-5562		3																
	87831-1036	N.A	N.A		4																
	87831-1010	87831-1030	87831-5561		2	N.A	N.A	YES	N.A	YES	N.A							3.50			
	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	87831-5557		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																
	87831-1043	N.A	N.A		2	N.A	YES	N.A	YES	N.A	N.A						2.50				
	87831-1044	N.A	N.A		3																
	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																
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							3.50			
	87831-1229	N.A	87831-5558		3																
	87831-1258	N.A	87831-5567		2																
	87831-1241	N.A	N.A		2	N.A	YES	YES	N.A	N.A	N.A								5.00	2.50	
	87831-1242	N.A	N.A		3																
	87831-1255	87831-1256	N.A		2	N.A	YES	YES	N.A	N.A	N.A						3.50				
	87831-1232	N.A	N.A		2																
	87831-1243	N.A	N.A		2	N.A	YES	N.A	YES	N.A	N.A							2.50			
	87831-1244	N.A	N.A		3																
	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																
	PLATING OPTIONS:																				
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																					
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				mo lex													
mm		NTS																			
GENERAL TOLERANCES (UNLESS SPECIFIED)																					
	MM	INCH																			
4 PLACES	± 0	± 0		EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026				PRODUCT CUSTOMER DRAWING													
3 PLACES	± 0	± 0																			
2 PLACES	± 0.2	± 0																			
1 PLACE	± 0	± 0																			
0 PLACES	± 0	± 0		INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION									
ANGULAR TOL		± 3 °		DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				SD-87831-0001		PSD	001	A25									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER									
				A3-SIZE		87831		SEE TABLE		GENERAL MARKET		8 OF 14									
DOCUMENT STATUS	Production	RELEASE DATE	08-Jun-2026	04:36:51																	
	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)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: Adding New Part Numbers		molex			
DIMENSION UNITS		SCALE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
mm		NTS		PRODUCT CUSTOMER DRAWING			
GENERAL TOLERANCES (UNLESS SPECIFIED)		MM		DOCUMENT NUMBER			
		INCH		SD-87831-0001			
4 PLACES	± 0	± 0		EC NO: CO-000042098	22-Apr-2026	DOC TYPE	DOC PART
3 PLACES	± 0	± 0		DRWN: Meghraj Boodagatti	08-Jun-2026	PSD	001
2 PLACES	± 0.2	± 0		CHK'D: Meghraj Boodagatti	08-Jun-2026		A25
1 PLACE	± 0	± 0		APPR: Saravanakumar Murugesan	08-Jun-2026		
0 PLACES	± 0	± 0		INITIAL REVISION:			
ANGULAR TOL		± 3°		DRWN: GMENARLY	2015/04/15		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		APPR: KHLIM	2015/06/29		
		DRAWING		SERIES		MATERIAL NUMBER	CUSTOMER
		A3-SIZE		87831		SEE TABLE	GENERAL MARKET
							SHEET NUMBER
							9 OF 14

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	ASSY P/N WITHOUT 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	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	N.A	2															
	87831-1421	87831-5530	87831-5560	N.A	3															
	87831-1436	N.A	N.A	N.A	4															
	87831-1428	N.A	87831-5564	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1429	N.A	87831-5563	N.A	3															
	87831-1435	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES									3.50
	87831-1410	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A									
87831-1411	N.A	N.A	N.A	3																
16	87831-1619	N.A	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	N.A	2															
	87831-1621	N.A	N.A	N.A	3															
	87831-1636	N.A	N.A	N.A	4															
	87831-1628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1629	N.A	87831-5559	N.A	3															
	87831-1635	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50		
18	87831-1819	N.A	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	87831-5566	87831-1830	2															
	87831-1821	N.A	N.A	N.A	3															
	87831-1836	N.A	N.A	N.A	4															
	87831-1828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1829	N.A	N.A	N.A	3															
20	87831-2019	N.A	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	87831-2050	2															
	87831-2021	N.A	N.A	N.A	3															
	87831-2036	N.A	N.A	N.A	4															
	87831-2028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2029	N.A	N.A	N.A	3															
	87831-2035	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50		
	87831-2010	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50		
	87831-2011	N.A	87831-2041	87831-2051	3															
PLATING OPTIONS:																				
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																				
DOCUMENT STATUS		Production	RELEASE DATE		08-Jun-2026	04:36:51														
		9	8		7		6		5		4		3		2		1			
FORMAT: Molex-aga-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		9	8		7		6		5		4		3		2		1			

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DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

10 OF 14

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	ASSY P/N WITHOUT 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	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	N.A	2														
	87831-2221	N.A	N.A	N.A	3														
	87831-2236	N.A	N.A	N.A	4														
	87831-2228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2229	N.A	N.A	N.A	3														
24	87831-2419	N.A	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	87831-7420	2														
	87831-2421	N.A	N.A	N.A	3														
	87831-2436	N.A	N.A	N.A	4														
	87831-2428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2429	N.A	N.A	N.A	3														
	87831-2435	N.A	N.A	N.A	3														
	87831-2445	N.A	N.A	N.A	3														
	87831-2410	N.A	N.A	N.A	2													YES	
26	87831-2619	N.A	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	N.A	2														
	87831-2621	N.A	N.A	N.A	3														
	87831-2636	N.A	N.A	N.A	4														
	87831-2628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2629	N.A	N.A	N.A	3														
	87831-2610	N.A	N.A	N.A	2														
28	87831-2819	N.A	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	N.A	2														
	87831-2821	N.A	N.A	N.A	3														
	87831-2836	N.A	N.A	N.A	4														
	87831-2828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2829	N.A	N.A	N.A	3														
30	87831-3019	N.A	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	N.A	2														
	87831-3021	N.A	N.A	N.A	3														
	87831-3036	N.A	N.A	N.A	4														
	87831-3028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3029	N.A	N.A	N.A	3														
	87831-3035	N.A	N.A	N.A	3														
	87831-3037	N.A	N.A	N.A	3														
	87831-3010	87831-3030	87831-3050	N.A	2													YES	
PLATING OPTIONS:																			
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																			
DOCUMENT STATUS		Production	RELEASE DATE		08-Jun-2026	04:36:51													
FORMAT: Mol-jpgs-master-db-prod-A3 REVISION: E1 DATE: 2021/05/01		9	8	7	6	5	4	3	2	1									

10	9	8	7	6	5	4	3	2	1											
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	YES	N.A	YES	N.A	YES	YES							2.50			
	87831-3229	N.A	N.A	3																
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																
	87831-3435	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	87831-5564	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																
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																
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																
	87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50			
PLATING OPTIONS:																				
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																				
DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51															
		9	8		7		6		5		4		3		2		1			

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0

ANGULAR TOL

± 3 °

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

12 OF 14

A3-SIZE

87831

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

SERIES

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

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INITIAL REVISION:

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PRODUCT CUSTOMER DRAWING

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SD-87831-0001

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MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

12 OF 14

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	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATI ON	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
42	87831-4219	N.A	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	87831-4230	2														
	87831-4221	N.A	N.A	N.A	3														
	87831-4236	N.A	N.A	N.A	4														
	87831-4228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4229	N.A	N.A	N.A	3														
44	87831-4419	N.A	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	N.A	2														
	87831-4421	N.A	N.A	N.A	3														
	87831-4436	N.A	N.A	N.A	4														
	87831-4428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4429	N.A	N.A	N.A	3														
	87831-4435	N.A	N.A	N.A	3														
46	87831-4619	N.A	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	N.A	2														
	87831-4621	N.A	N.A	N.A	3														
	87831-4636	N.A	N.A	N.A	4														
	87831-4628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4629	N.A	N.A	N.A	3														
48	87831-4819	N.A	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	N.A	2														
	87831-4821	N.A	N.A	N.A	3														
	87831-4836	N.A	N.A	N.A	4														
	87831-4828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4829	N.A	N.A	N.A	3														
50	87831-5019	N.A	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	N.A	2														
	87831-5021	N.A	N.A	N.A	3														
	87831-5036	N.A	N.A	N.A	4														
	87831-5028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-5029	N.A	N.A	N.A	3														
	87831-5035	N.A	N.A	N.A	3														
PLATING OPTIONS:																			
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																			
DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51														
		9	8		7		6		5		4		3		2		1		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

13 OF 14

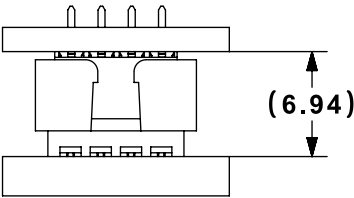
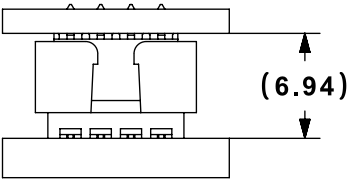
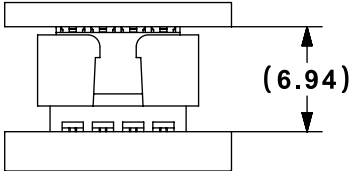
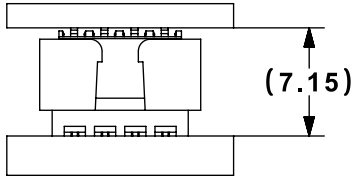
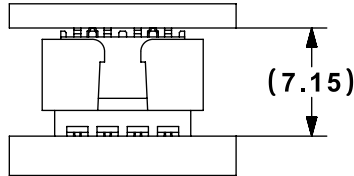
DRAWING

A3-SIZE

SERIES

87831

BOARD TO BOARD (BTB) DISTANCE

HEADER	MATES WITH (RECEPTACLE)	BTB DIST.	PICTORIAL VIEW
87831	79107	6.94	
	78787	6.94	
	79108	6.94	
	79109	7.15	
	78788	7.15	

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DIMENSION UNITS		SCALE	
mm		NTS	
GENERAL TOLERANCES (UNLESS SPECIFIED)			
	MM	INCH	
4 PLACES	± 0	± 0	
3 PLACES	± 0	± 0	
2 PLACES	± 0.2	± 0	
1 PLACE	± 0	± 0	
0 PLACES	± 0	± 0	
ANGULAR TOL		± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098
DRWN: Meghraj Boodagatti
CHK'D: Meghraj Boodagatti
APPR: Saravanakumar Murugesan

22-Apr-2026
08-Jun-2026
08-Jun-2026

INITIAL REVISION:
DRWN: DRWN BY
APPR: APPR BY

XXXX/XX/XX
XXXX/XX/XX

DOCUMENT NUMBER
SD-87831-0001

DOC TYPE
PSD

DOC PART
001

REVISION
A25

SHEET NUMBER
14 OF 14

A3-SIZE

87831

MATERIAL NUMBER

CUSTOMER

GENERAL MARKET

DOCUMENT STATUS

Production

RELEASE DATE

08-Jun-2026 04:36:51