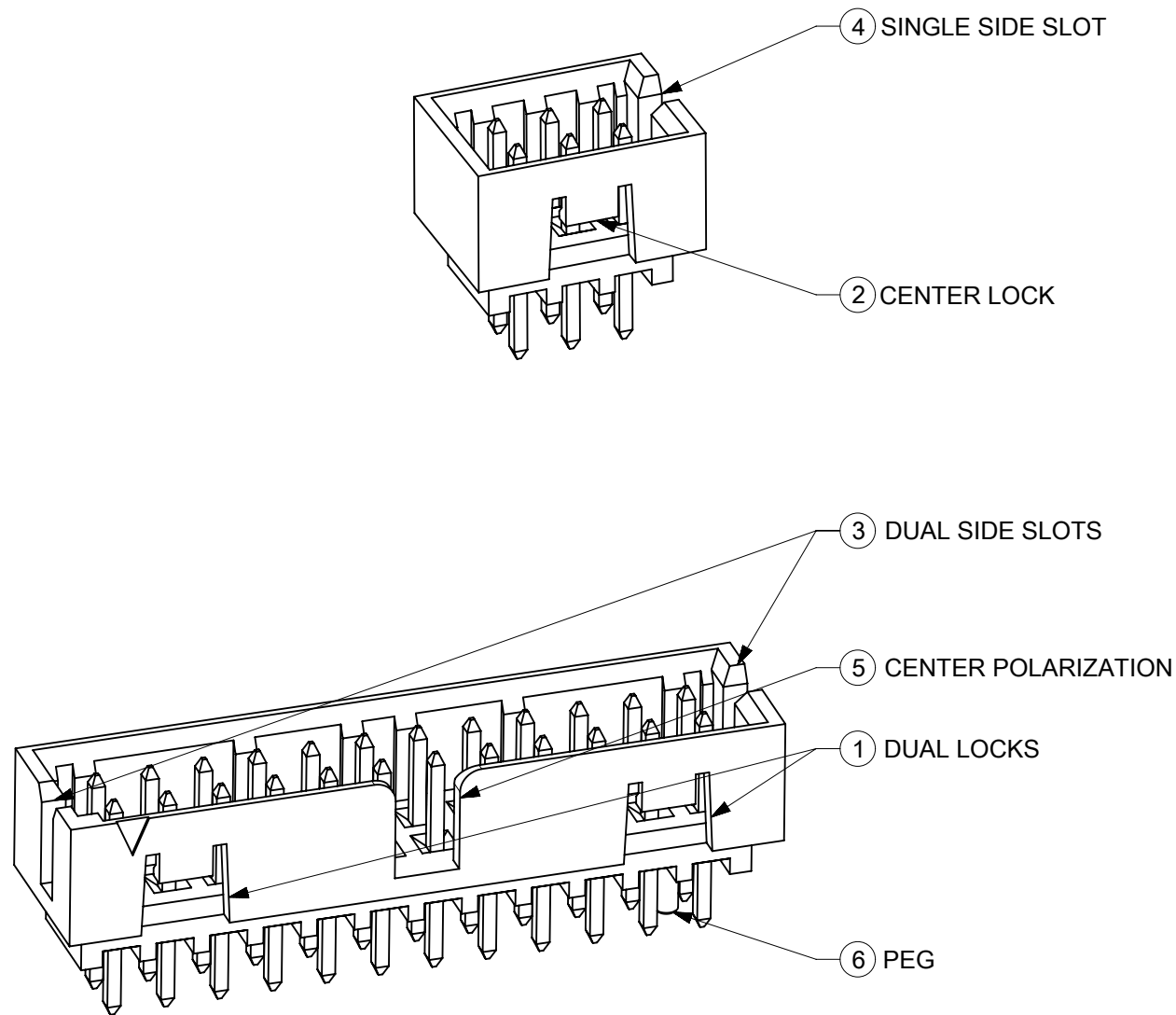


FEATURES SELECTION GUIDE



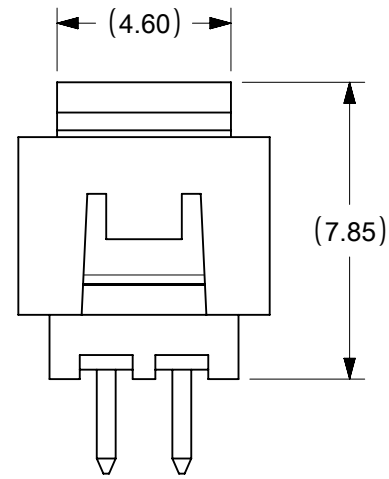
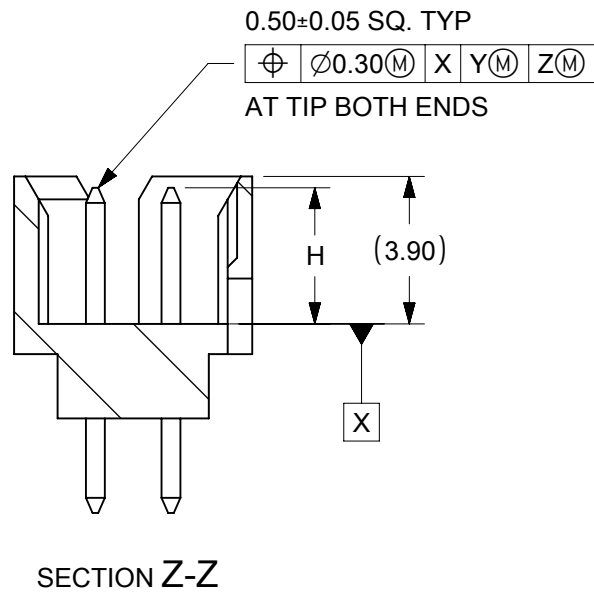
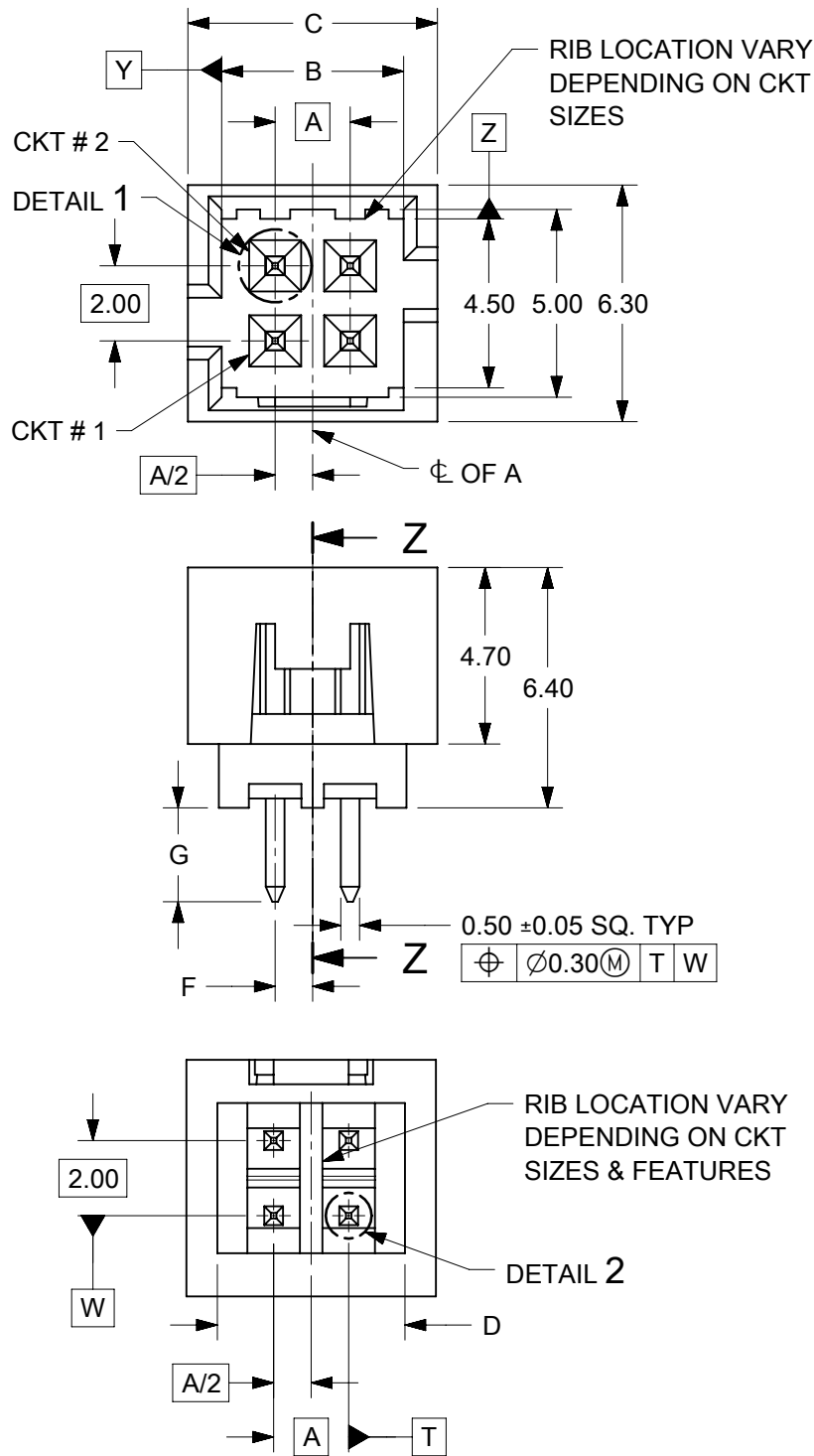
PACKAGING SPECIFICATION TABLE

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

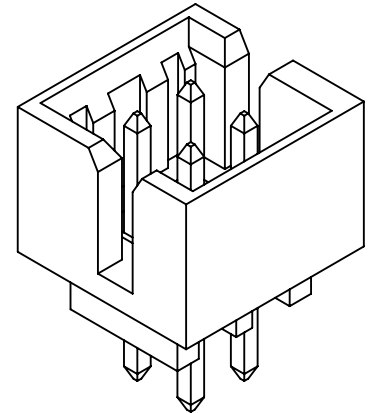
FEATURES							
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)								MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
	MM	INCH						PRODUCT CUSTOMER DRAWING							
4 PLACES	±		±												
3 PLACES	±		±	2023/08/14											
2 PLACES	±	0.2	±					2023/09/11							
1 PLACE	±		±	2023/09/11											
0 PLACES	±		±												
ANGULAR TOL				± 3.0 °				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION				SD-87831-0001		PSD		001		A24	
DRAWING				SERIES				MATERIAL NUMBER		CUSTOMER				SHEET NUMBER	
A3-SIZE				87831				SEE TABLE		GENERAL MARKET				1 OF 14	

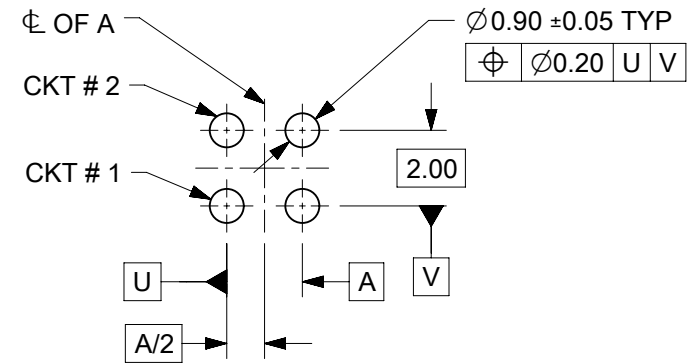
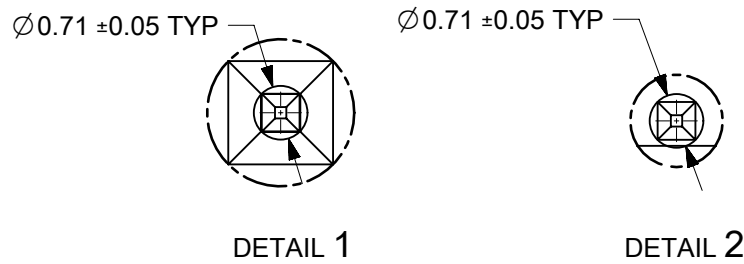
4 CIRCUITS



VIEW FOR
HEADER WITH CAP



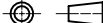
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

NOTES:

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

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DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
mm		NTS										
GENERAL TOLERANCES (UNLESS SPECIFIED)												
	MM	INCH		EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11			PRODUCT CUSTOMER DRAWING					
4 PLACES	±	±										
3 PLACES	±	±										
2 PLACES	±	0.2	±									
1 PLACE	±	±										
0 PLACES	±	±		INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
ANGULAR TOL		±	3.0 °				SD-87831-0001		PSD	001	A24	
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															
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	3.50									
	87831-5142	N.A	N.A	3															
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A								2.80		
	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
	87831-0444	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.

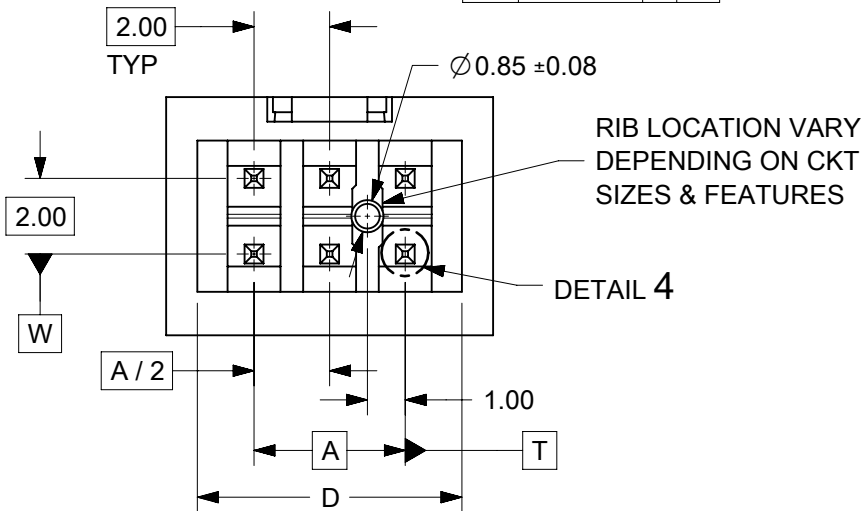
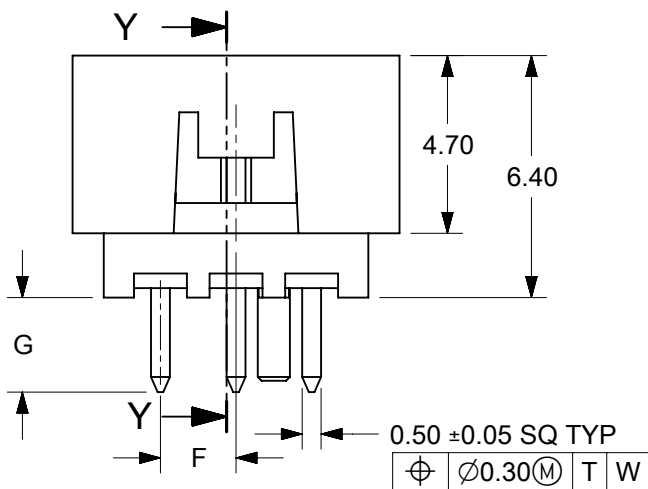
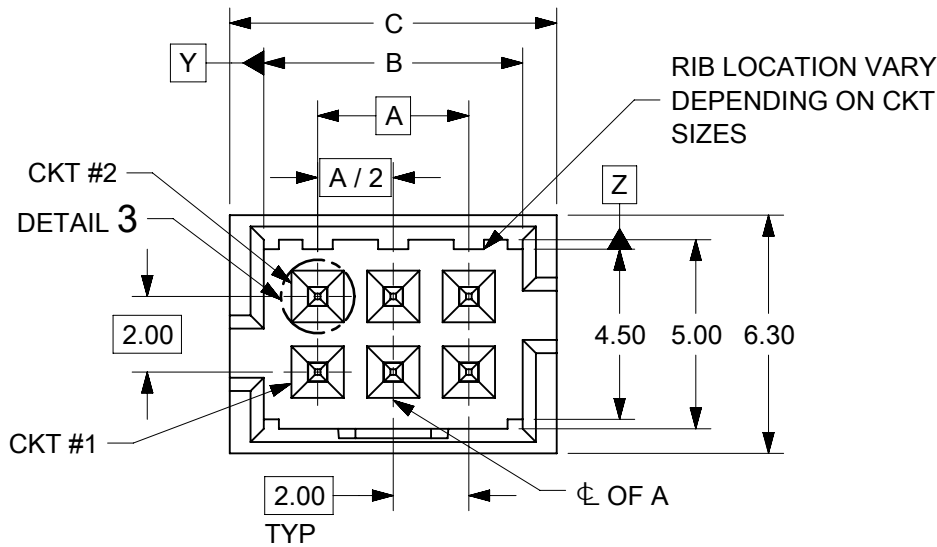
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTETIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

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

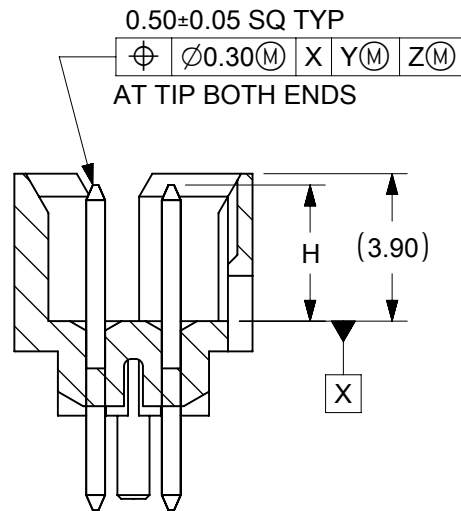
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex										
mm		NTS															
GENERAL TOLERANCES (UNLESS SPECIFIED)																	
		MM	INCH	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11			INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29			DOCUMENT NUMBER SD-87831-0001		DOC TYPE PSD		DOC PART 001		REVISION A24	
4 PLACES	±		±														
3 PLACES	±		±														
2 PLACES	±	0.2	±														
1 PLACE	±		±														
0 PLACES	±		±														
ANGULAR TOL ± 3.0 °				THIRD ANGLE PROJECTION			DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							A3-SIZE		87831		SEE TABLE		GENERAL MARKET		3 OF 14		

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51				
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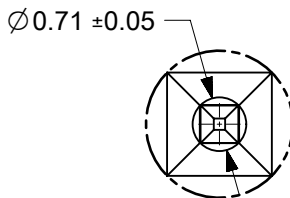
FORMAT: Mol-lega-master-4b-prod-A3
REVISION: E1
DATE: 2021/05/01



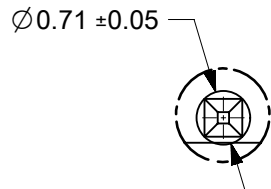
6 CIRCUITS



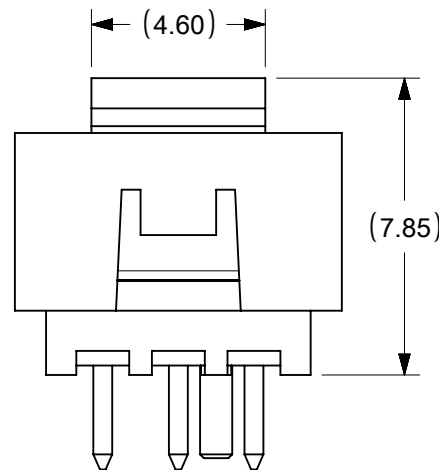
SECTION Y-Y



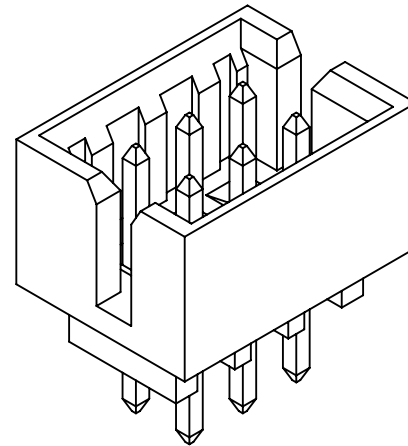
DETAIL 3



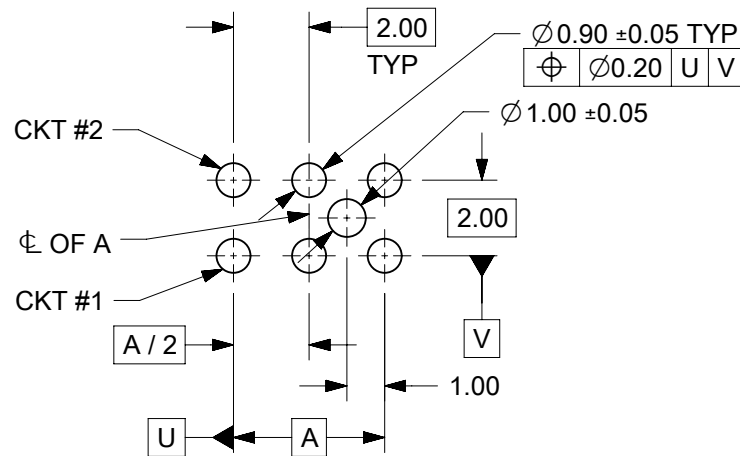
DETAIL 4



VIEW FOR
HEADER WITH CAP



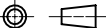
VIEW FOR HEADER WITH
ONLY DUAL SLOTS



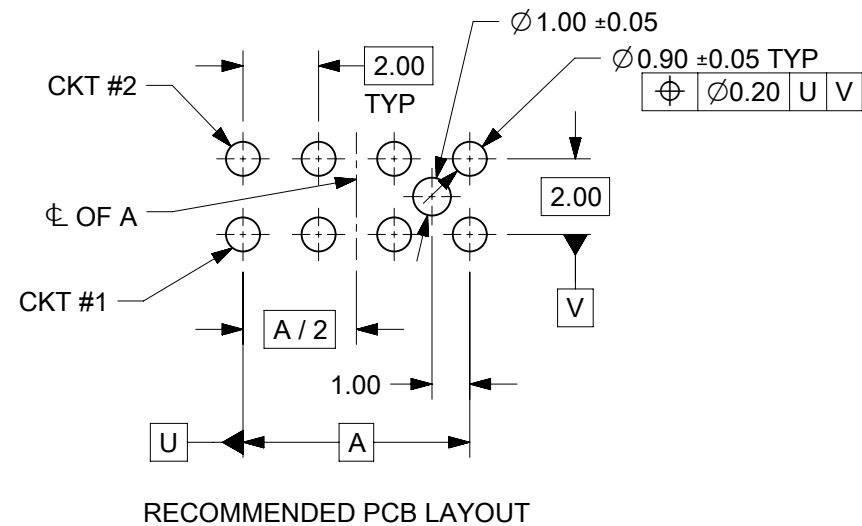
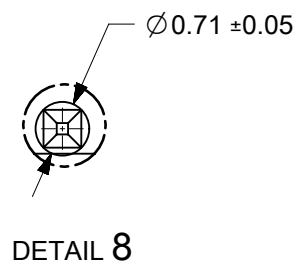
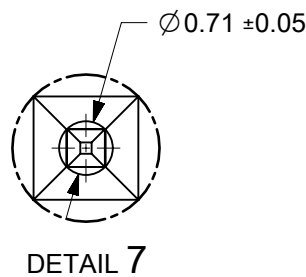
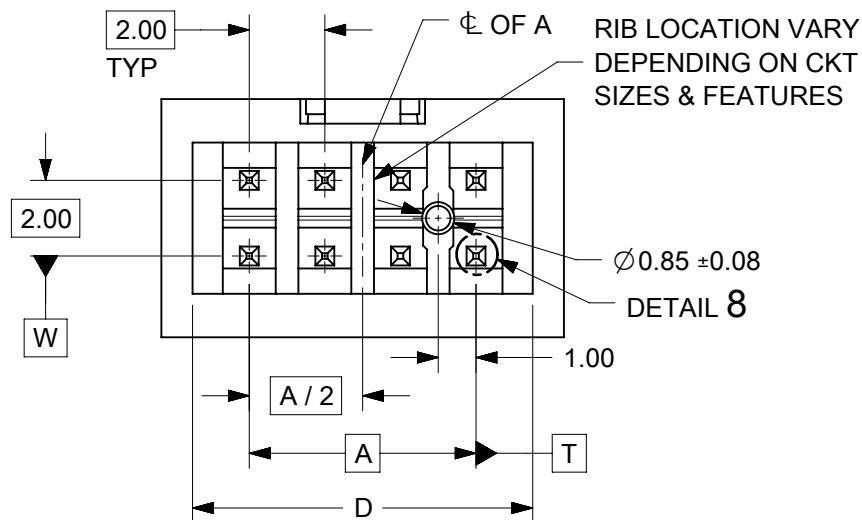
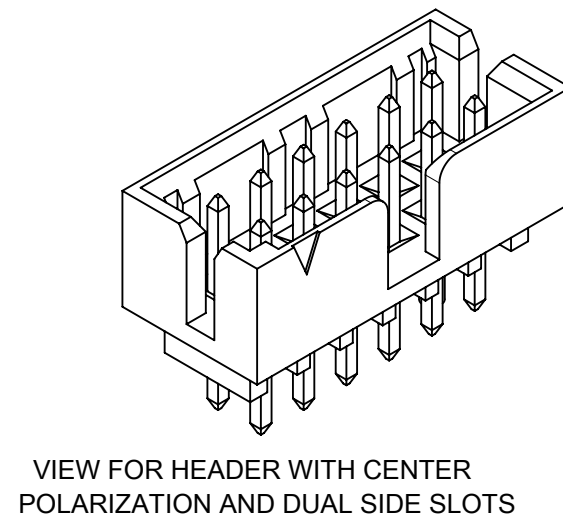
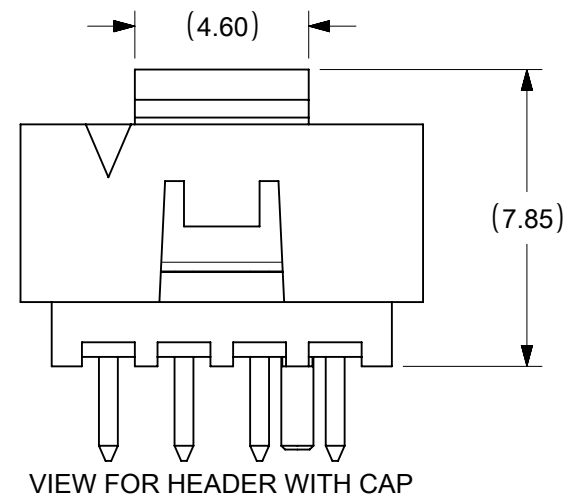
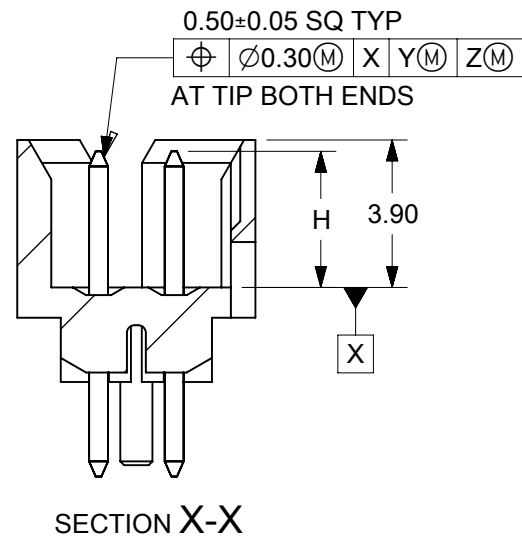
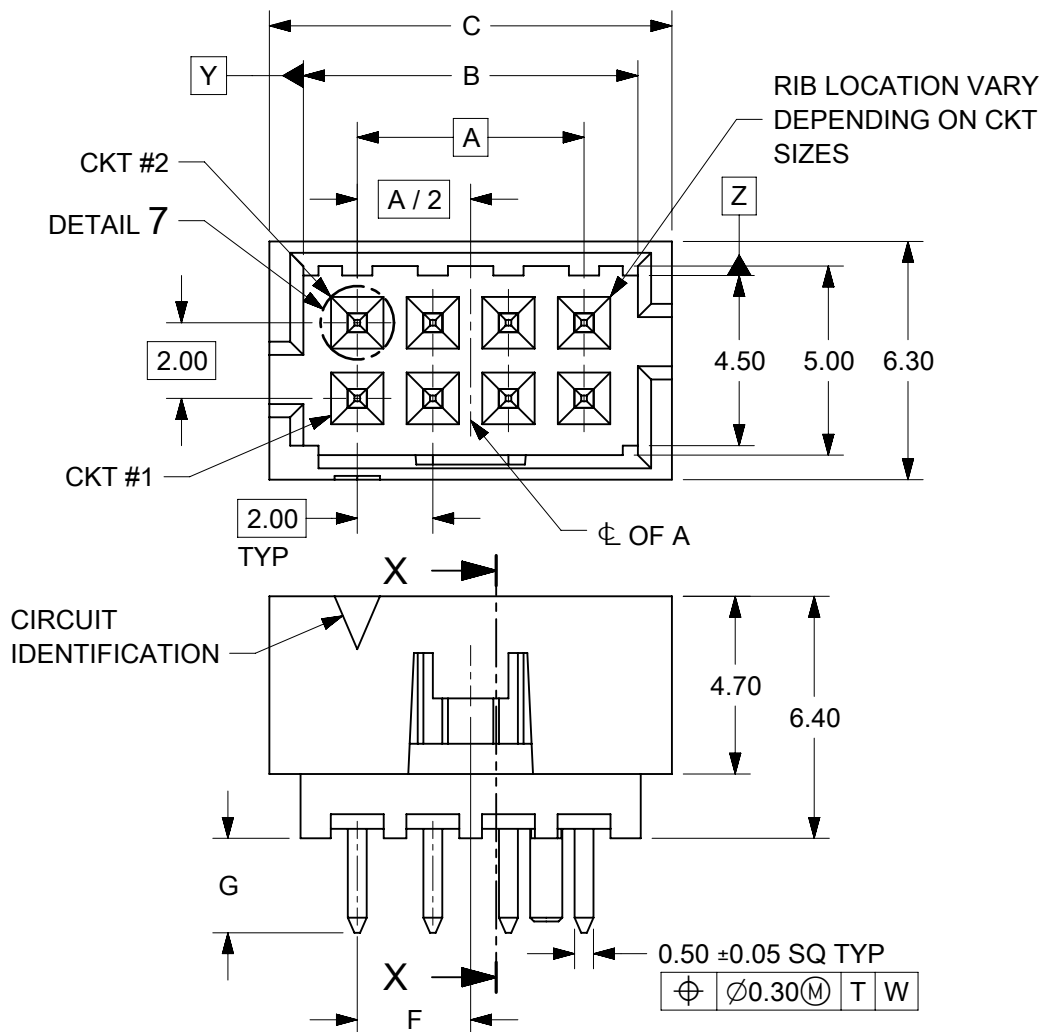
RECOMMENDED PCB LAYOUT

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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.		molex			
mm		NTS							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
	MM	INCH							
4 PLACES	±					EC NO: 761863	2023/08/14 2023/09/11 2023/09/11	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
3 PLACES	±			DRWN: SUAIFR					
2 PLACES	±	0.2	±	CHK'D: GGA					
1 PLACE	±			APPR: GGA					
0 PLACES	±			INITIAL REVISION:	2015/04/15 2015/06/29	PRODUCT CUSTOMER DRAWING			
ANGULAR TOL ± 3.0 °				DRWN: GMENARLY		DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
APPR: KHLIM						SD-87831-0001	PSD	001	A24
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 OF 14

8 TO 12 CIRCUITS



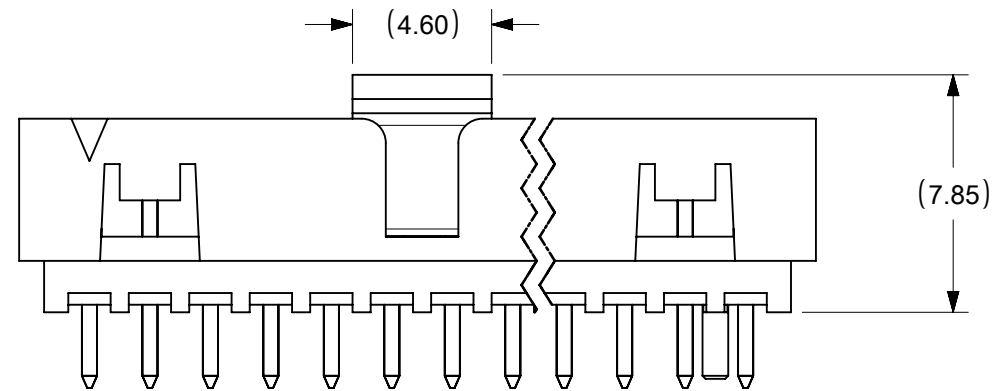
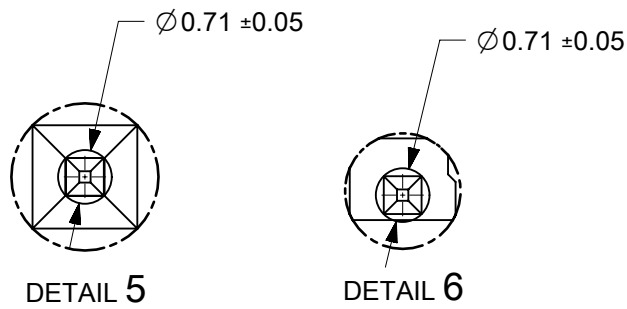
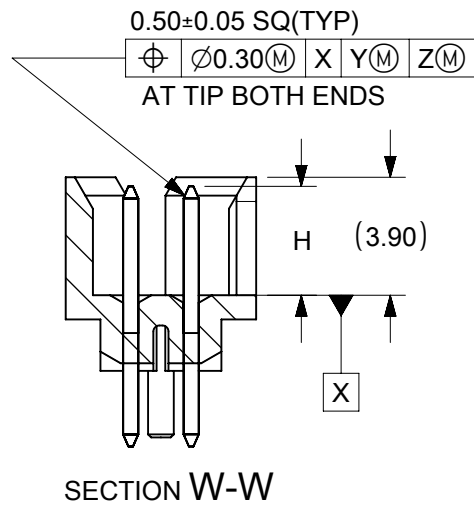
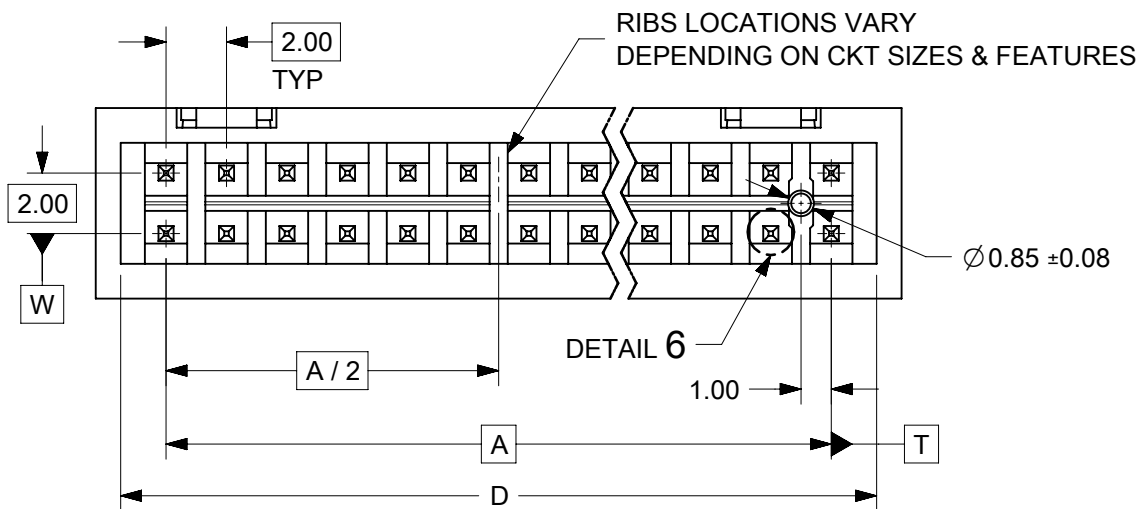
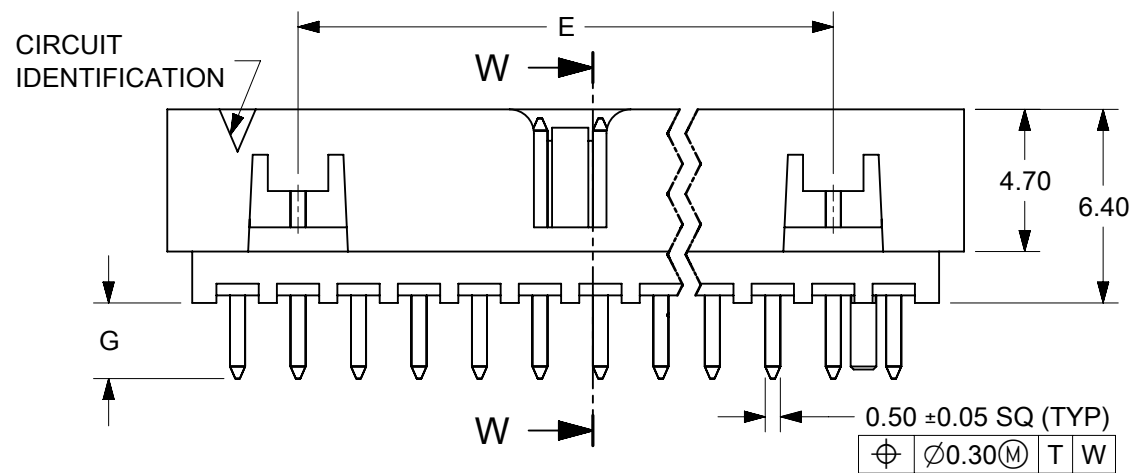
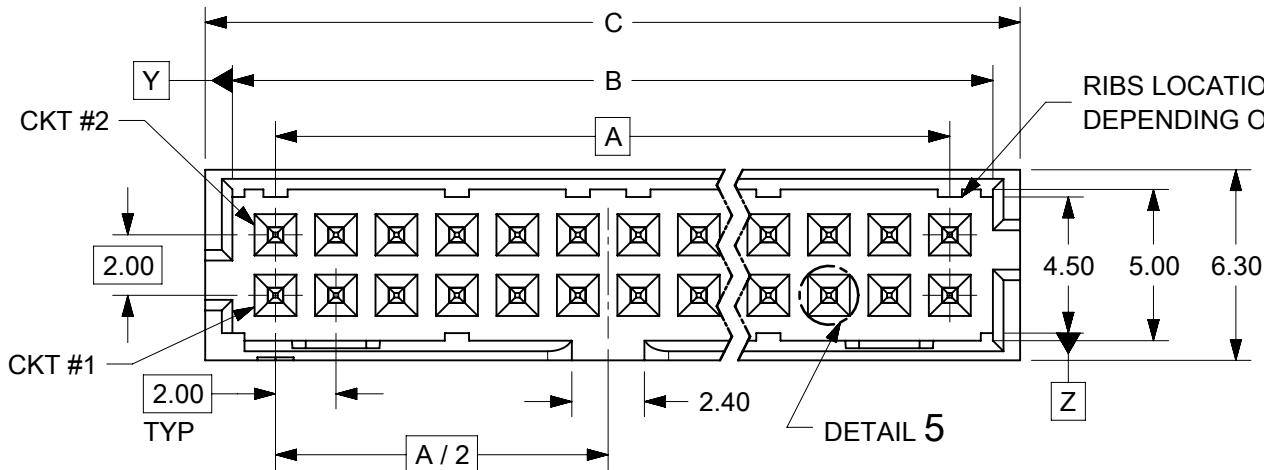
- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES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

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mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)															
		MM	INCH	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
4 PLACES	±		±												
3 PLACES	±		±												
2 PLACES	±	0.2	±												
1 PLACE	±		±												
0 PLACES	±		±	INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29				PRODUCT CUSTOMER DRAWING							
ANGULAR TOL								± 3.0 °							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		6 OF 14	
										SD-87831-0001		PSD		001 A24	

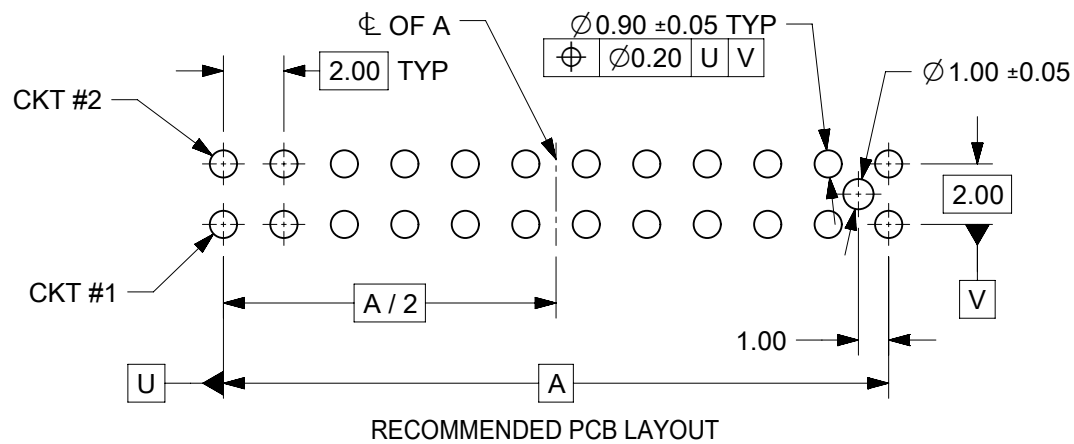
DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
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10	9	8	7	6	5	4	3	2	1											
10 TO 12 CIRCUITS																				
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTE R POLARI ZATION	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	N.A	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															
	87831-1029	N.A	87831-5557		3	N.A	N.A	YES	N.A	YES	YES									3.50
	87831-1035	N.A	N.A		3															
	87831-1041	N.A	N.A		2	N.A	YES	YES	N.A	N.A	N.A						2.50			
	87831-1042	N.A	87831-5553		3															
	87831-1032	N.A	N.A		2	N.A	YES	YES	N.A	N.A	YES							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															
	87831-1046	N.A	N.A		3	N.A	YES	N.A	YES	N.A	YES							2.50		3.60 ^{+0.15} -0.10
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	
	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								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 mm SCALE NTS GENERAL TOLERANCES (UNLESS SPECIFIED) MM INCH 4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.2 ± 1 PLACE ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DRAWING A3-SIZE SERIES 87831 MATERIAL NUMBER SEE TABLE CUSTOMER GENERAL MARKET SHEET NUMBER 8 OF 14 EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581. 2023/08/14 2023/09/11 2023/09/11 2015/04/15 2015/06/29 DOCUMENT NUMBER SD-87831-0001 DOC TYPE PSD DOC PART 001 REVISION A24 PRODUCT CUSTOMER DRAWING DOCUMENT STATUS P1 RELEASE DATE 2023/09/11 04:36:51																				
10	9	8	7	6	5	4	3	2	1											

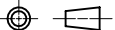
14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



- 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex		
mm		NTS								
GENERAL TOLERANCES (UNLESS SPECIFIED)										
	MM	INCH	EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11							
4 PLACES	±	±								
3 PLACES	±	±								
2 PLACES	±	0.2					±			
1 PLACE	±	±								
0 PLACES	±	±	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29							
ANGULAR TOL ± 3.0 °										
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
						A3-SIZE	87831	SEE TABLE	GENERAL MARKET	9 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.																			
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FORMAT: Mcl-lega-master 4b-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																																								
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION																												
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																					
	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																																					
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																					
		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																						
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																					
		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																																			
	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																				
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																																			
B		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		P1	RELEASE DATE	2023/09/11	04:36:51	7		6		5		4		3		2		1																						
FORMAT: Met-lega-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		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) <table><tr><td></td><td>MM</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>±</td><td>±</td></tr><tr><td>3 PLACES</td><td>±</td><td>±</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>±</td></tr><tr><td>1 PLACE</td><td>±</td><td>±</td></tr><tr><td>0 PLACES</td><td>±</td><td>±</td></tr><tr><td>ANGULAR TOL</td><td>± 3.0 °</td><td></td></tr></table> DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIRD ANGLE PROJECTION DRAWING A3-SIZE SERIES 87831 MATERIAL NUMBER SEE TABLE CUSTOMER GENERAL MARKET SHEET NUMBER 12 OF 14 CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581. EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11 INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER SD-87831-0001 DOC TYPE PSD DOC PART 001																					MM	INCH	4 PLACES	±	±	3 PLACES	±	±	2 PLACES	± 0.2	±	1 PLACE	±	±	0 PLACES	±	±	ANGULAR TOL	± 3.0 °	
	MM	INCH																																						
4 PLACES	±	±																																						
3 PLACES	±	±																																						
2 PLACES	± 0.2	±																																						
1 PLACE	±	±																																						
0 PLACES	±	±																																						
ANGULAR TOL	± 3.0 °																																							

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		P1	RELEASE DATE	2023/09/11	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	±	±
3 PLACES	±	±
2 PLACES	± 0.2	±
1 PLACE	±	±
0 PLACES	±	±
ANGULAR TOL	± 3.0 °	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

CURRENT REV DESC: REMOVED OBSOLETE PART
NUMBERS AS PER PCN#512581.

EC NO: 761863
DRWN: SUAIFR
CHK'D: GGA
APPR: GGA

2023/08/14
2023/09/11
2023/09/11

INITIAL REVISION:
DRWN: GMENARLY
APPR: KHLIM

2015/04/15
2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A24

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

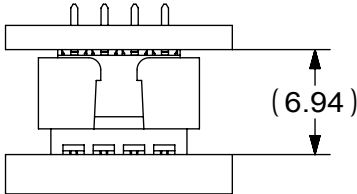
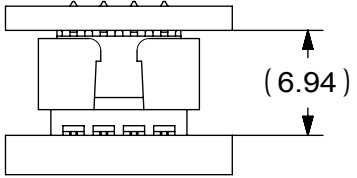
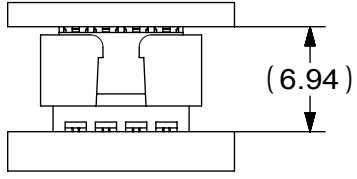
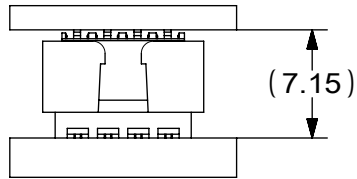
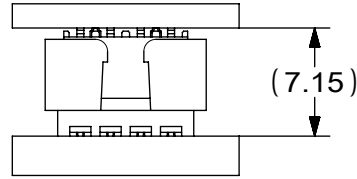
SHEET NUMBER

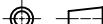
13 OF 14

MILLIGRID
2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

FORMAT: Mx1-lega-master 4b-prod-A3
REVISION: E1
DATE: 2021/05/01

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	

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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex									
mm		NTS															
GENERAL TOLERANCES (UNLESS SPECIFIED)								MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER									
														MM		INCH	
4 PLACES		±		±	EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11				PRODUCT CUSTOMER DRAWING								
3 PLACES		±		±													
2 PLACES		±	0.2	±													
1 PLACE		±		±													
0 PLACES		±		±	INITIAL REVISION: DRWN: DRWN BY XXXX/XX/XX APPR: APPR BY XXXX/XX/XX				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION		
ANGULAR TOL				±					3.0 °	SD-87831-0001				PSD		001	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
						A3-SIZE		87831				GENERAL MARKET		14 OF 14			