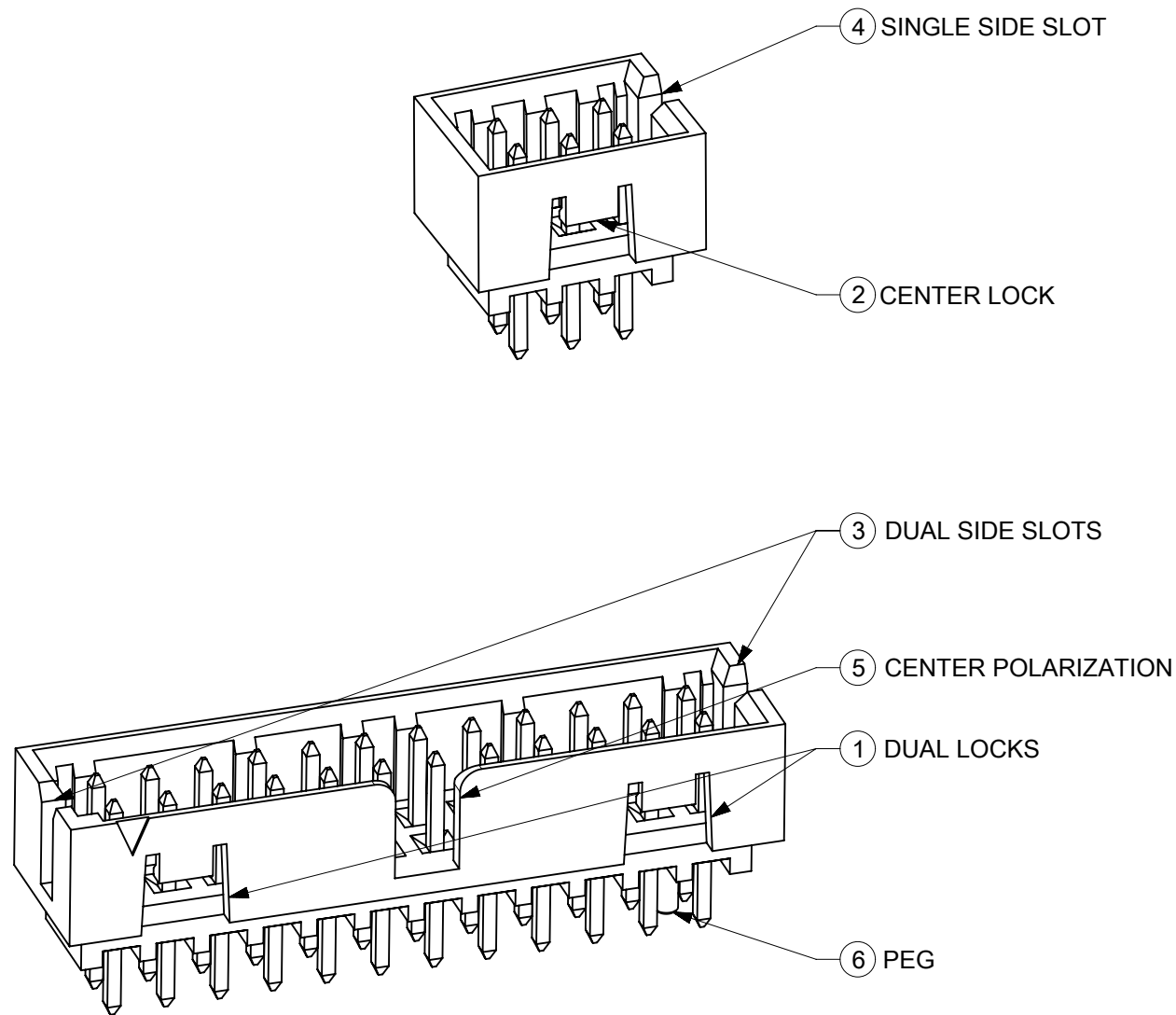


FEATURES SELECTION GUIDE



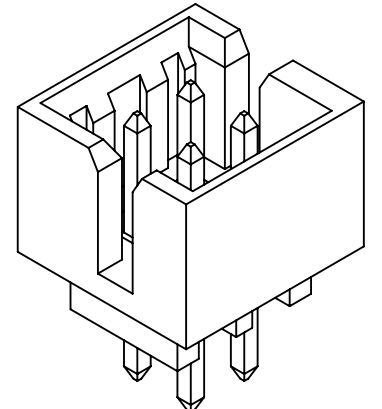
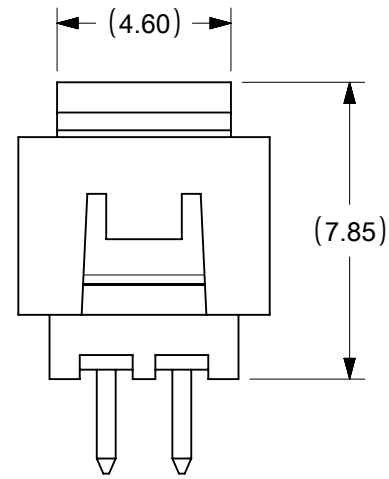
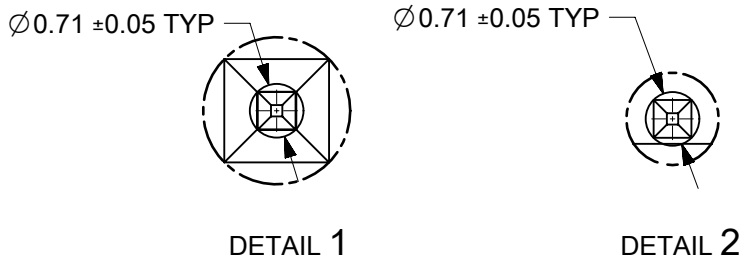
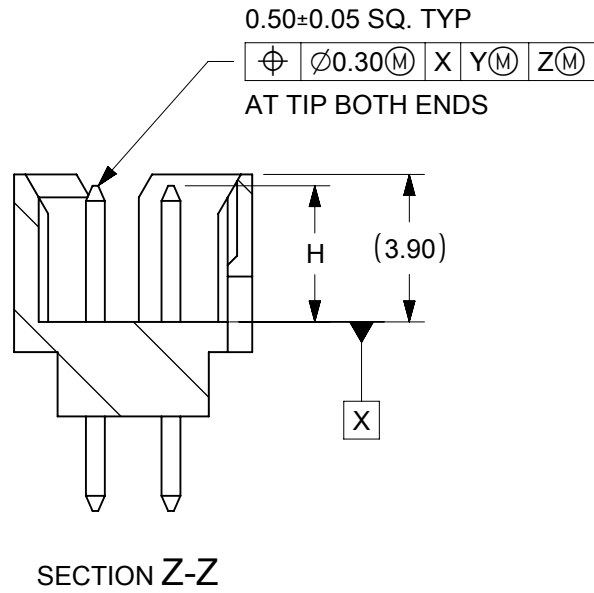
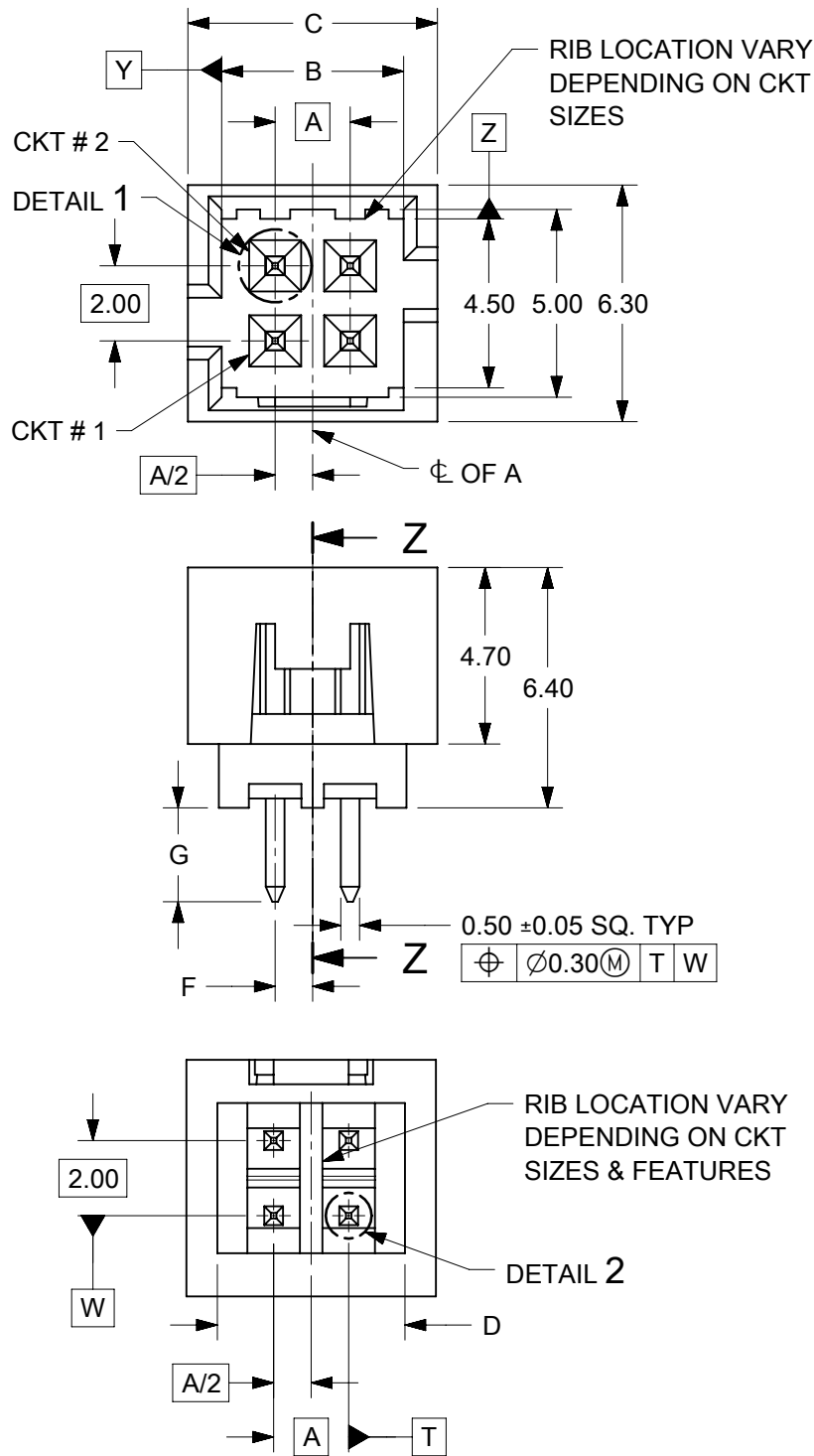
PACKAGING SPECIFICATION TABLE

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	

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	

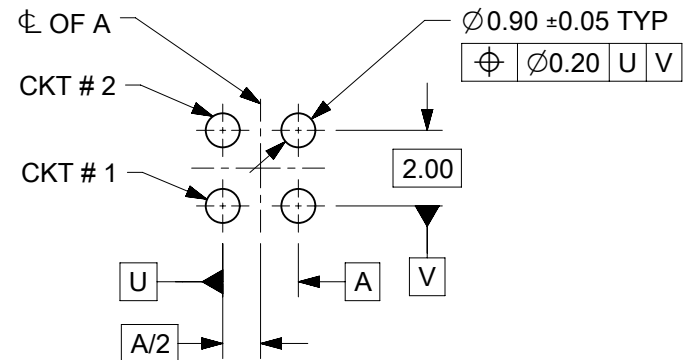
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex									
mm		NTS															
GENERAL TOLERANCES (UNLESS SPECIFIED)																	
	MM	INCH						MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER									
4 PLACES	±		±														
3 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR2023/08/14 CHK'D: GGA2023/09/11 APPR: GGA2023/09/11				PRODUCT CUSTOMER DRAWING									
2 PLACES	±	0.2	±														
1 PLACE	±		±	INITIAL REVISION: DRWN: GMENARLY2015/04/15 APPR: KHLIM2015/06/29				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION			
0 PLACES	±		±					SD-87831-0001		PSD		001		A24			
ANGULAR TOL ± 3.0 °				THIRD ANGLE PROJECTION 				MATERIAL NUMBER		CUSTOMER				SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								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)

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										
4 PLACES		±		±	EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
3 PLACES		±		±									
2 PLACES		±	0.2	±									
1 PLACE		±		±									
0 PLACES		±		±	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 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

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

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

MATERIAL NUMBER

SEE TABLE

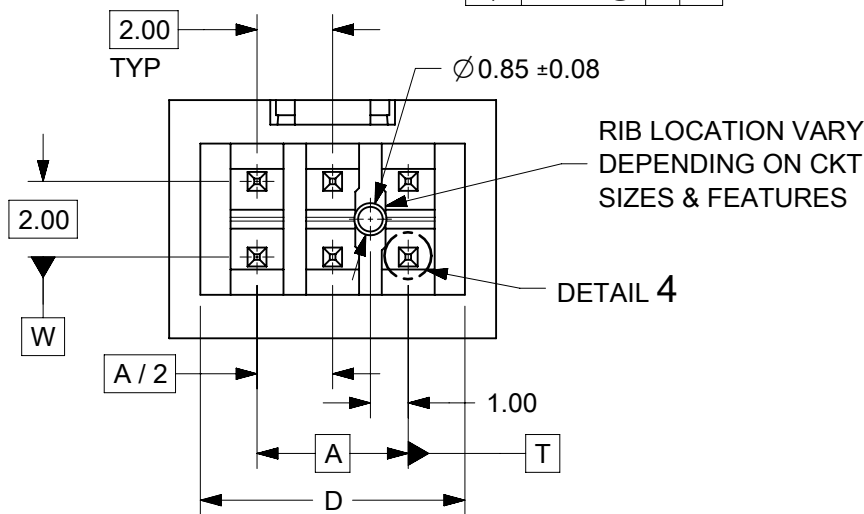
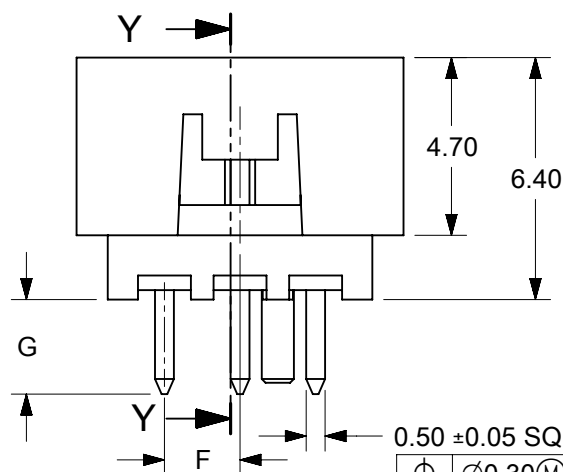
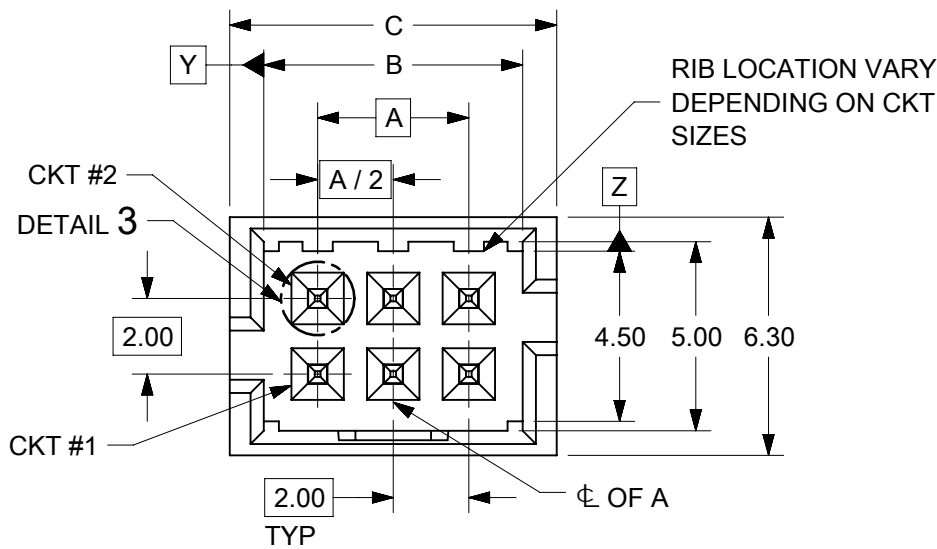
CUSTOMER

GENERAL MARKET

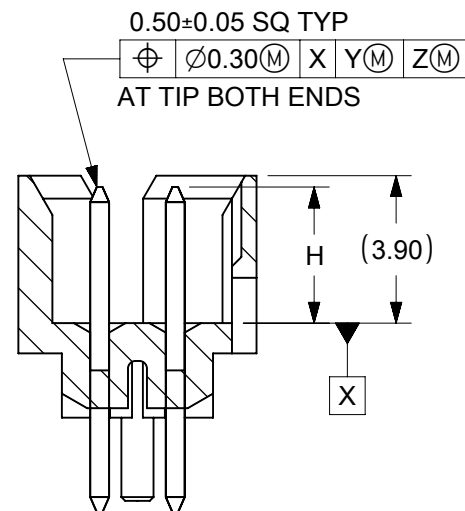
SHEET NUMBER

3 OF 14

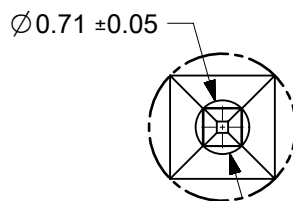
</



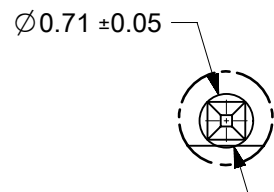
6 CIRCUITS



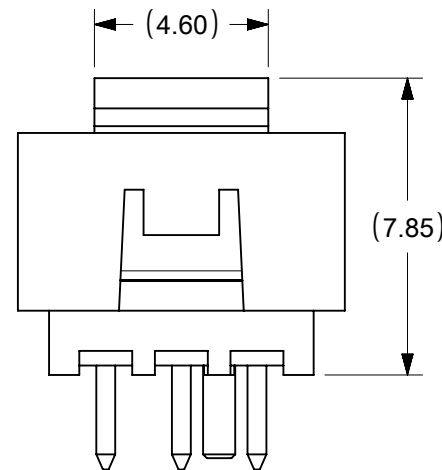
SECTION Y-Y



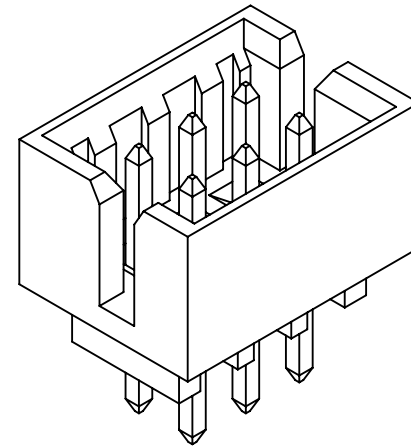
DETAIL 3



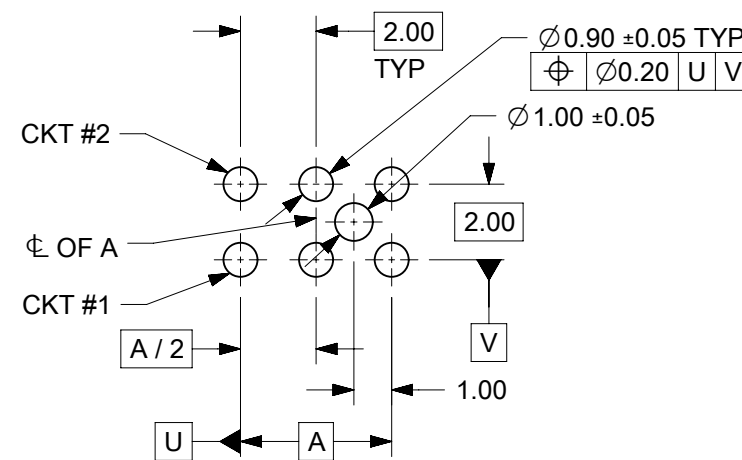
DETAIL 4



VIEW FOR
HEADER WITH CAP



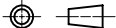
VIEW FOR HEADER WITH
ONLY DUAL SLOTS



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)

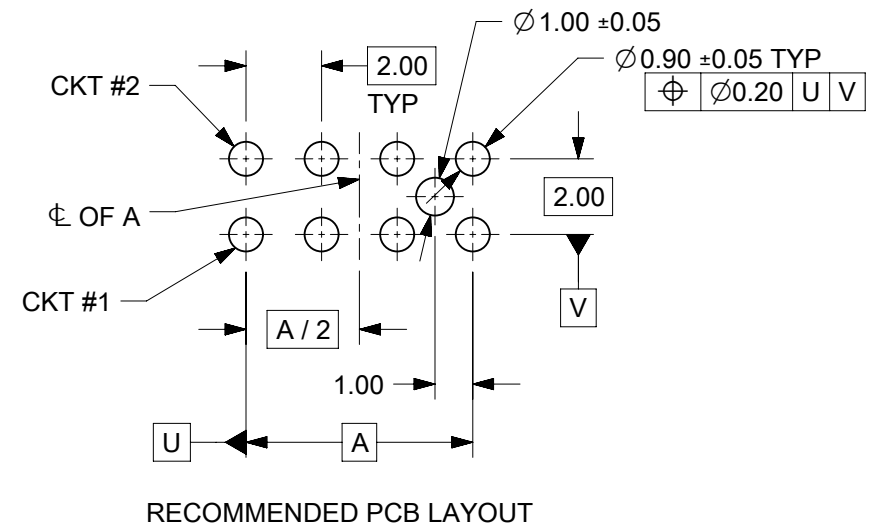
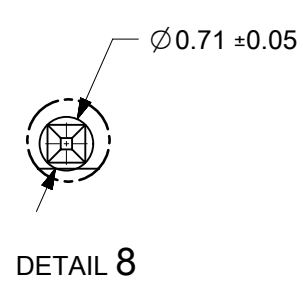
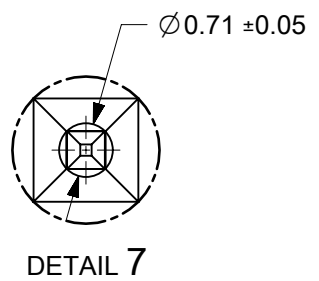
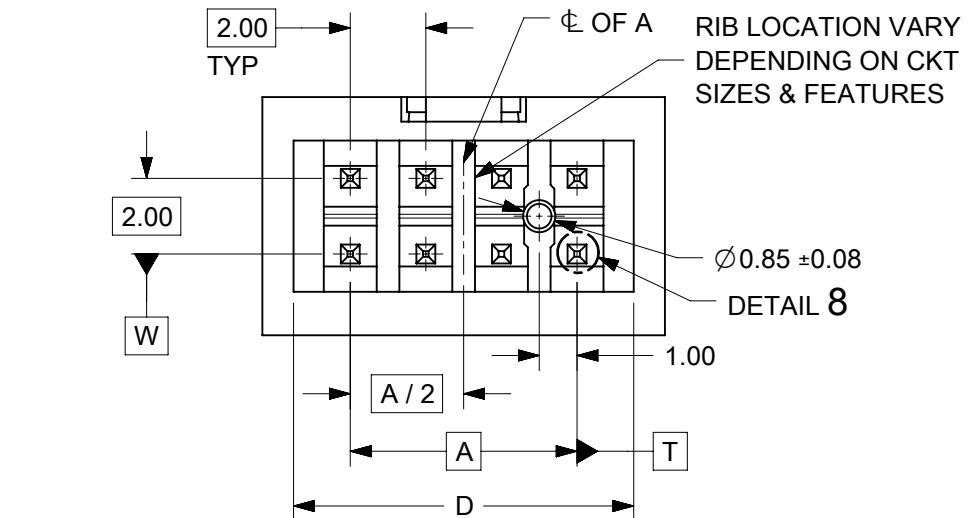
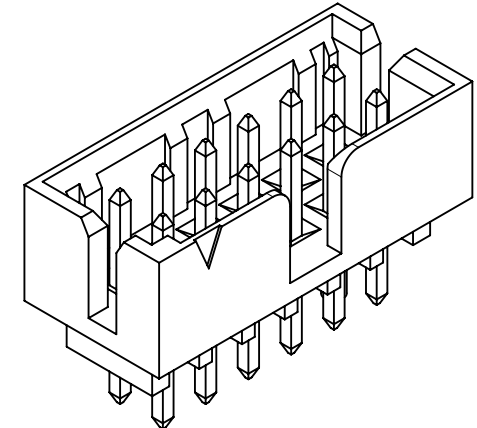
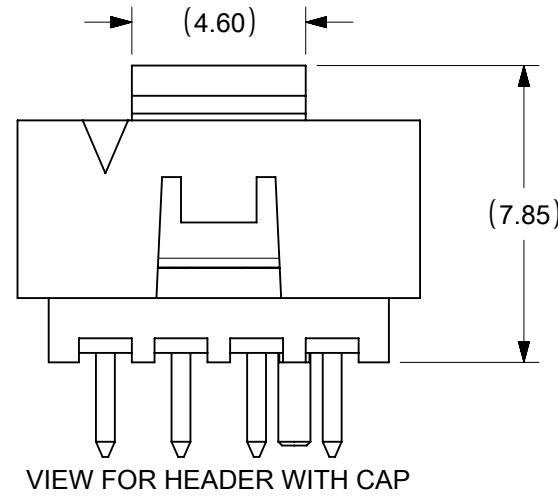
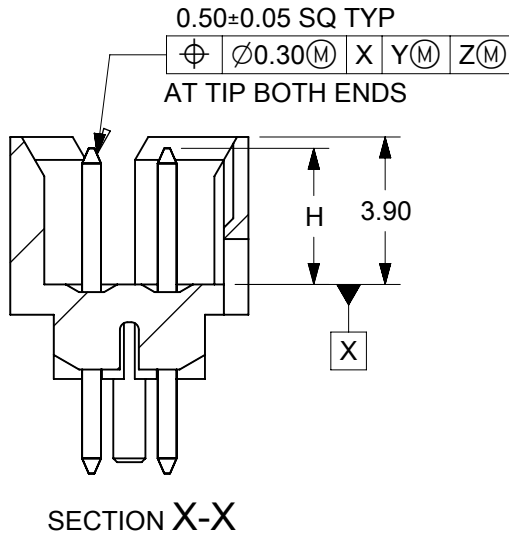
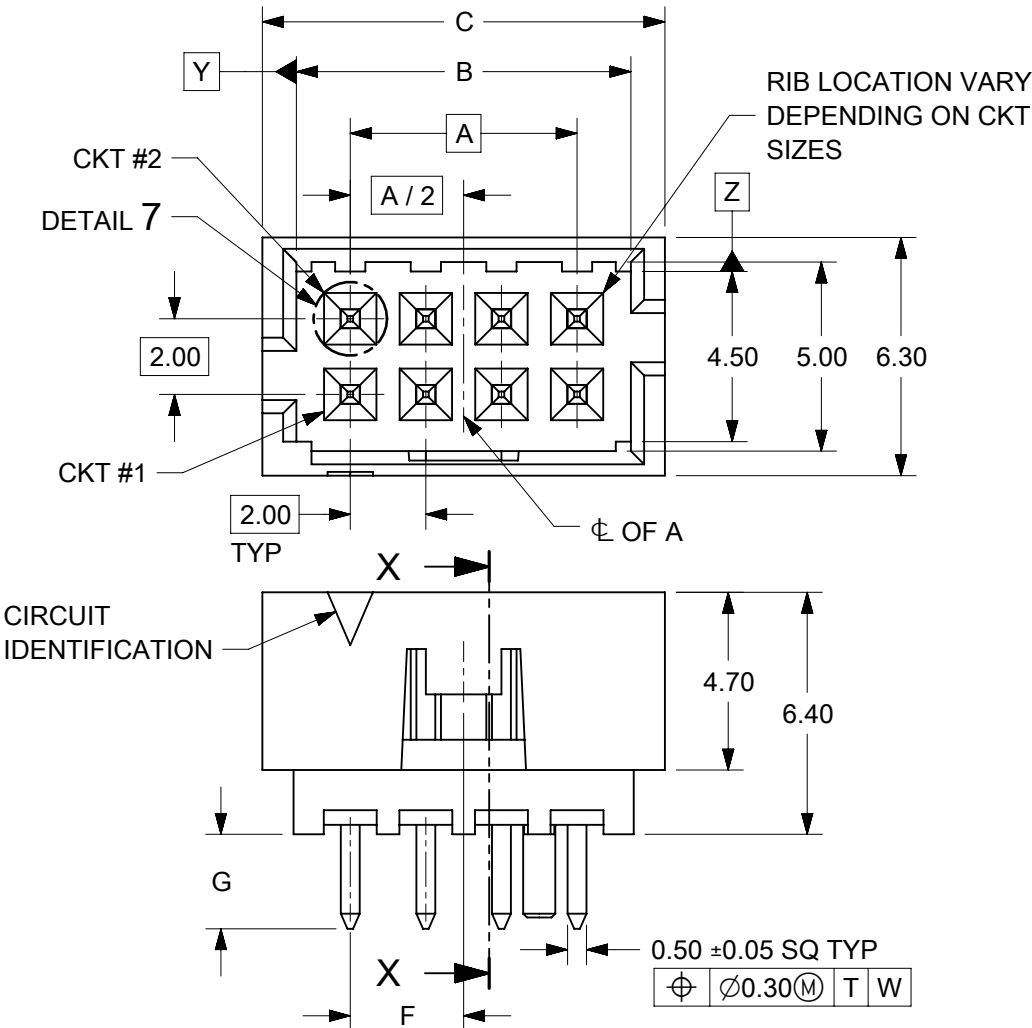
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.					
mm		NTS							
GENERAL TOLERANCES (UNLESS SPECIFIED)				molex MILLGRID 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					
3 PLACES	±		±						
2 PLACES	±	0.2	±						
1 PLACE	±		±	PRODUCT CUSTOMER DRAWING					
0 PLACES	±		±						
ANGULAR TOL ± 3.0 °				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
				SD-87831-0001		PSD	001	A24	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION	DRAWING	SHEET NUMBER			
					A3-SIZE	87831		4 OF 14	
				MATERIAL NUMBER		CUSTOMER			
				SEE TABLE		GENERAL MARKET			

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

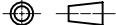
	10	9	8	7	6	5	4	3	2	1														
F	6 CIRCUITS										F													
	6	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION											
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H					
		87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	N.A	2.50	3.60±0.20					
		87831-0620	N.A	N.A	2																			
		87831-0621	N.A	N.A	3																			
E		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	87831-0647	2	N.A	YES	YES	N.A	N.A	N.A									2.00	2.50			
		87831-0642	N.A	87831-5552	3																	N.A	YES	YES
D		87831-5241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						2.80							
		87831-5242	N.A	N.A	3													N.A	YES		YES			
		87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						3.60 ^{+0.15} -0.10							
		87831-6242	N.A	N.A	3													N.A	YES		N.A	YES	N.A	YES
		87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES													
		87831-0644	N.A	N.A	3												N.A	YES	N.A		YES	N.A	YES	2.50
C		87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES													
		87831-0646	N.A	N.A	3												N.A	YES	N.A		YES	N.A	YES	2.50
		87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES													
		87831-5119	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A													
		87831-5121	N.A	N.A	3																			
		87831-5136	N.A	N.A	4																			
B																					B			
A	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.																				A			
	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		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													
4 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA				2023/08/14 2023/09/11 2023/09/11							
3 PLACES	±		±												
2 PLACES	±	0.2	±												
1 PLACE	±		±												
0 PLACES	±		±	INITIAL REVISION:				DOCUMENT NUMBER							
ANGULAR TOL ± 3.0 °				DRWN: GMENARLY APPR: KHLIM				2015/04/15 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		5 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)

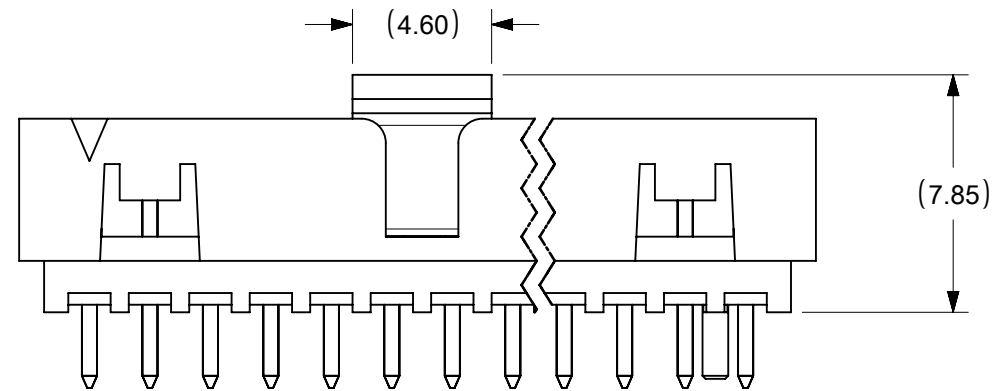
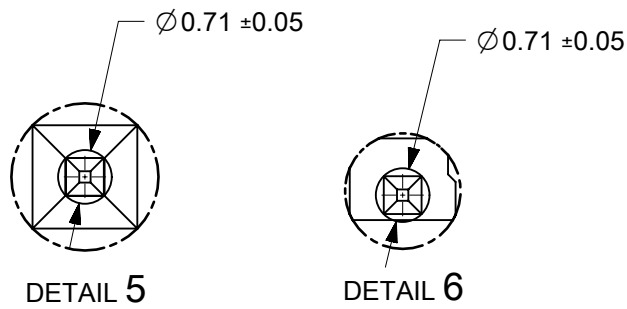
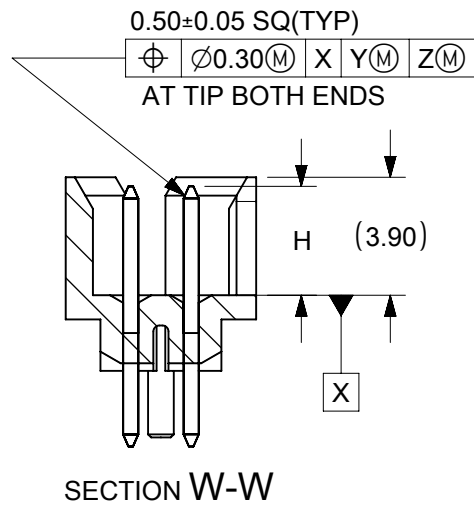
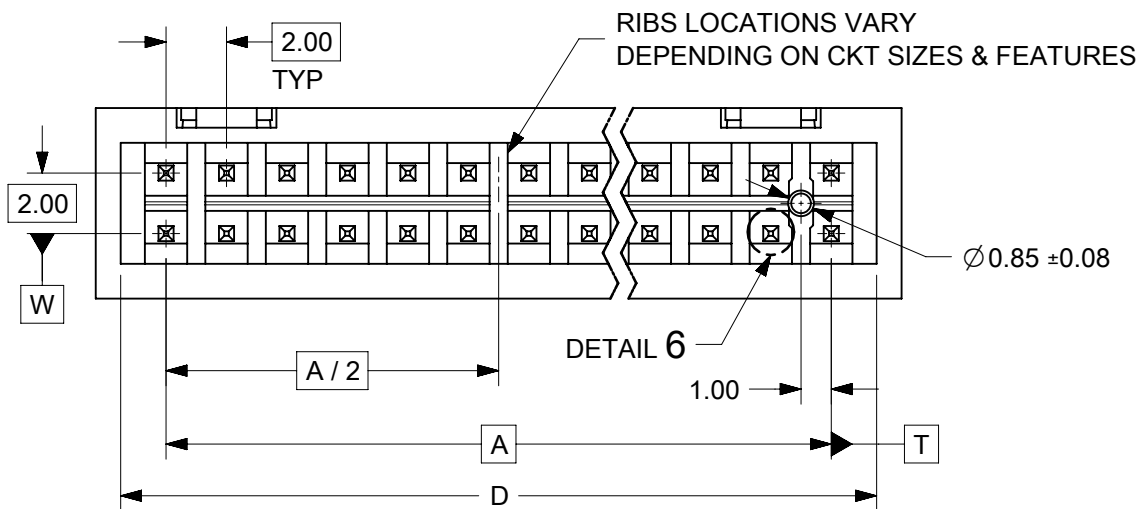
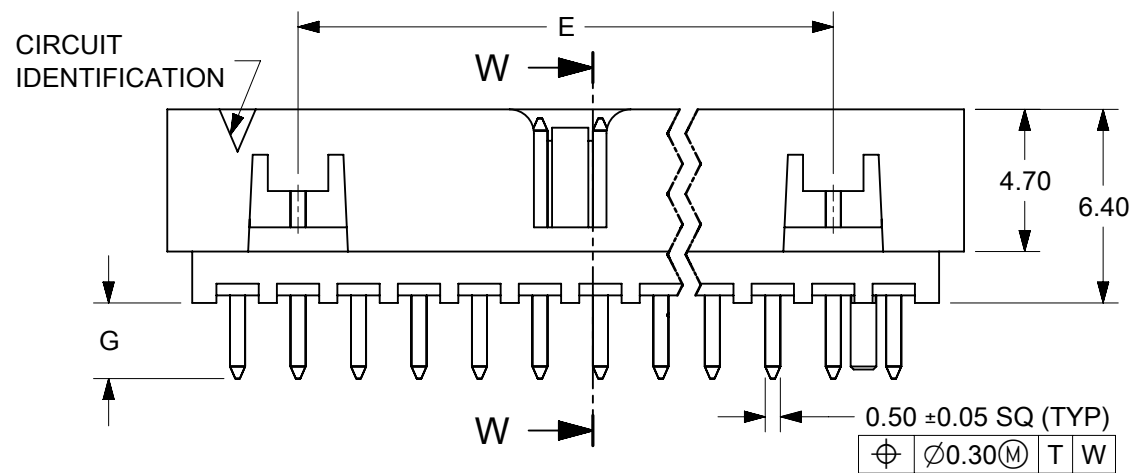
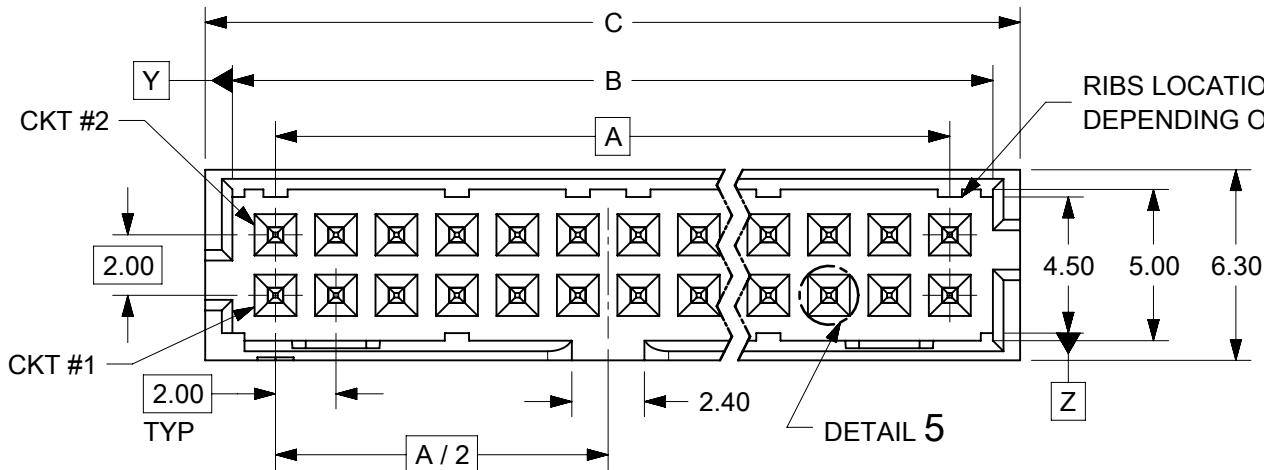
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED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

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

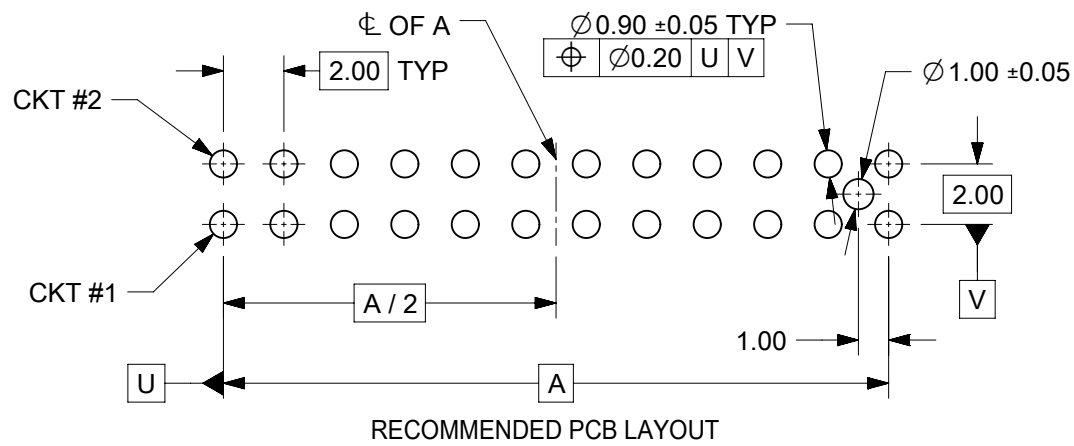
10		9		8		7		6		5		4		3		2		1										
10 TO 12 CIRCUITS																												
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTE R POLARI ZATION	PEG	DIMENSION							F								
							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								
		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							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																						
		87831-1035	N.A	N.A		3	N.A	N.A	YES	N.A	YES	YES						N.A	3.50									
		87831-1041	N.A	N.A		2																						
		87831-1042	N.A	87831-5553		3															N.A	YES	YES	N.A	N.A	YES	N.A	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																								
C	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							N.A		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
		87831-1242	N.A	N.A		3																						
		87831-1255	87831-1256	N.A		2	N.A	YES	YES	N.A	N.A	YES						N.A	2.50									
		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.																												
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		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														
4 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA				2023/08/14 2023/09/11 2023/09/11				PRODUCT CUSTOMER DRAWING				
3 PLACES	±		±													
2 PLACES	±	0.2	±													
1 PLACE	±		±													
0 PLACES	±		±	INITIAL REVISION:				DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION		
ANGULAR TOL ± 3.0 °				DRWN: GMENARLY APPR: KHLIM				2015/04/15 2015/06/29				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		8 OF 14		

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)				EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11						
	MM	INCH	INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29							
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	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
						A3-SIZE	87831	SEE TABLE	GENERAL MARKET	9 OF 14

DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION
SD-87831-0001				PSD	001	A24

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

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	N.A	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							3.50	
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		P1	RELEASE DATE	2023/09/11	04:36:51														
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

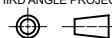
DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	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	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER

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

<

10		9		8		7		6		5		4		3		2		1																																																																						
22 TO 30 CIRCUITS																																																																																								
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT 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																																																																			
	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																																																																																				
E	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	N.A	YES	N.A	YES	N.A	3.50																																																																												
D	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	YES	N.A	YES	N.A	YES	N.A							3.50																																																																					
C	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																																																																																		
B	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	YES	N.A	YES	N.A	YES	YES							3.50																																																																					
		87831-3037	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							1.60																																																																					
		87831-3010	87831-3030	87831-3050	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																																																																																			
FORMAT: Met-lega-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		9		8		7		6		5		4		3		2		1																																																																						
<table><tr><td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr><tr><td>DIMENSION UNITS</td><td>SCALE</td><td colspan="2" rowspan="4">CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.</td><td colspan="2" rowspan="4"> molex </td></tr><tr><td rowspan="3">mm</td><td rowspan="3">NTS</td></tr><tr><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td></tr><tr><td>MM</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>±</td><td>±</td><td rowspan="4">EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11</td><td colspan="2" rowspan="4">MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER</td></tr><tr><td>3 PLACES</td><td>±</td><td>±</td></tr><tr><td>2 PLACES</td><td>±</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><td colspan="2">INITIAL REVISION:</td><td colspan="2">DOCUMENT NUMBER</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td></tr><tr><td colspan="2">ANGULAR TOL ± 3.0 °</td><td colspan="2">DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29</td><td colspan="2">SD-87831-0001</td><td>PSD</td><td>001</td><td>A24</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">THIRD ANGLE PROJECTION</td><td>DRAWING</td><td>SERIES</td><td>MATERIAL NUMBER</td><td colspan="2">CUSTOMER</td><td>SHEET NUMBER</td></tr><tr><td colspan="2"></td><td colspan="2"></td><td>A3-SIZE</td><td>87831</td><td>SEE TABLE</td><td colspan="2">GENERAL MARKET</td><td>11 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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.		molex		mm	NTS	GENERAL TOLERANCES (UNLESS SPECIFIED)		MM	INCH	4 PLACES	±	±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		3 PLACES	±	±	2 PLACES	±	0.2	±	1 PLACE	±	±	0 PLACES	±	±	INITIAL REVISION:		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	ANGULAR TOL ± 3.0 °		DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29		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		11 OF 14
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																																																																																	
4 PLACES	±	±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																																																																																				
3 PLACES	±	±																																																																																						
2 PLACES	±	0.2				±																																																																																		
1 PLACE	±	±																																																																																						
0 PLACES	±	±	INITIAL REVISION:		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION																																																																															
ANGULAR TOL ± 3.0 °		DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29		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		11 OF 14																																																																															

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														
87831-3229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50									
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														
		87831-3429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
		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														
		87831-3629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
		C	38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A							YES	
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														
87831-3829	N.A			N.A	3	YES	N.A	YES	N.A	YES	YES	2.50							
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
		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														
		87831-4029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	2.50							
		87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A	3.50							
<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. 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		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				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				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		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	YES	N.A	YES	N.A	YES	YES							3.50							
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	YES	N.A	YES	N.A	YES	YES							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											
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		

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

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A24

MATERIAL NUMBER

SEE TABLE

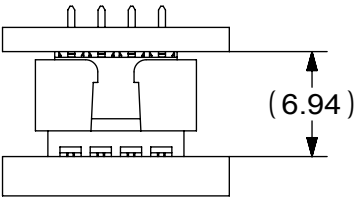
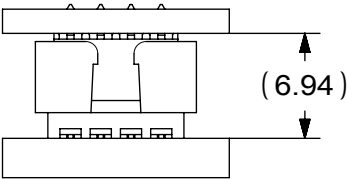
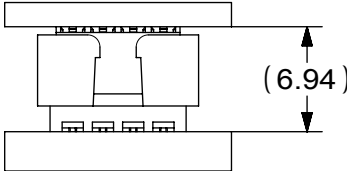
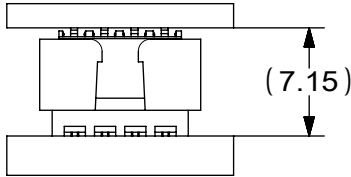
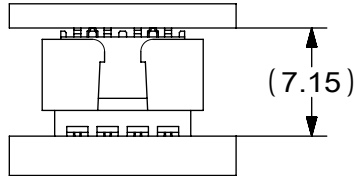
CUSTOMER

GENERAL MARKET

SHEET NUMBER

13 OF 14

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

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		

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: DRWN BY

APPR: APPR BY

XXXX/XX/XX

XXXX/XX/XX

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

A3-SIZE

87831

GENERAL MARKET

14 OF 14

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A24

PRODUCT CUSTOMER DRAWING

molex

MILLIGRID
2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

FORMAT: Mtl-lega-master-ib-prod-A3
REVISION: E1
DATE: 2021/05/01