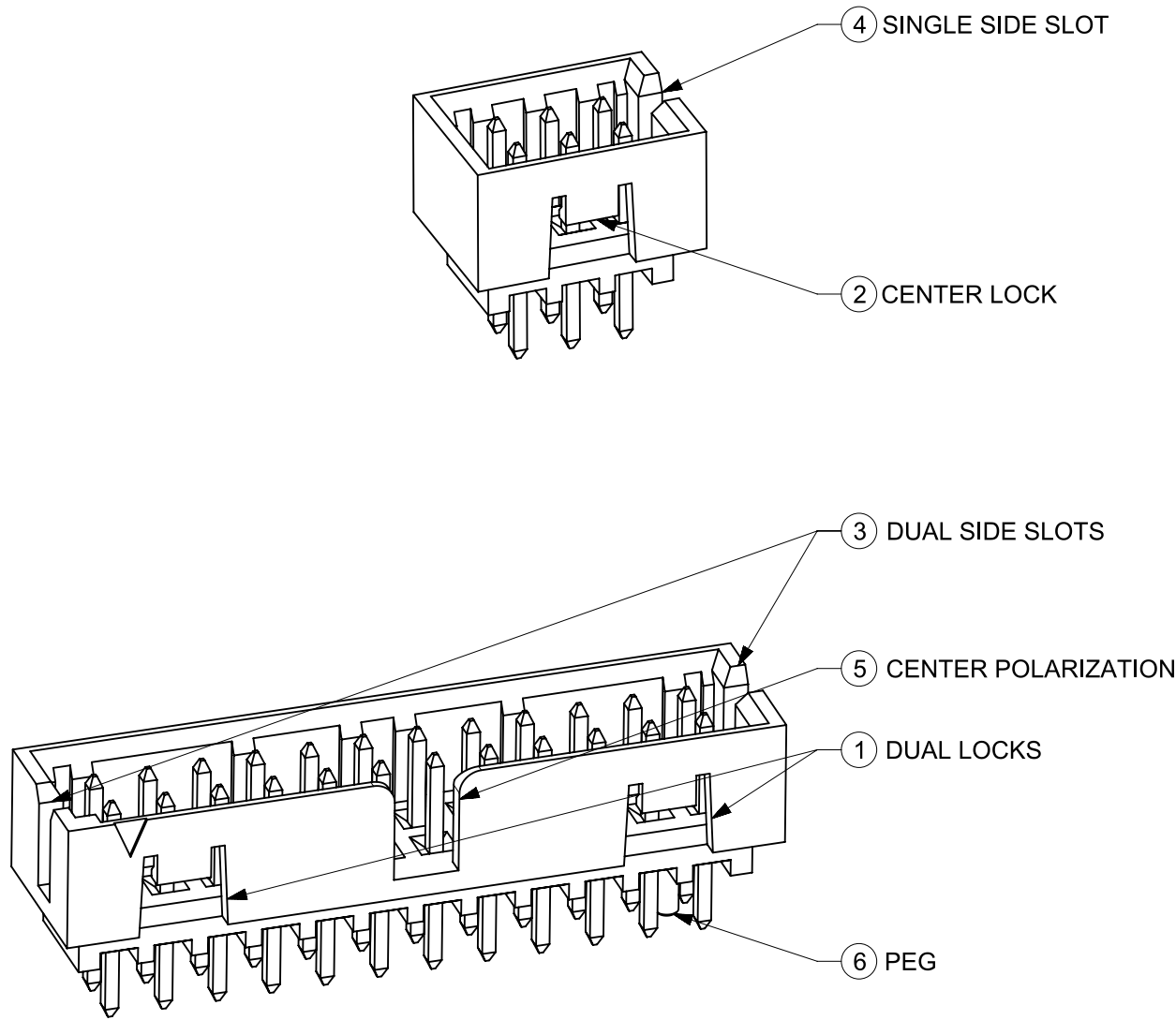


FEATURES SELECTION GUIDE



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	

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		

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

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

1 OF 14

A3-SIZE

87831

10

9

8

7

6

5

4

3

2

1

DOCUMENT STATUS

Production

RELEASE DATE

08-Jun-2026

04:36:51

10

9

8

7

6

5

4

3

2

1

FORMAT: Mef-kgp-master-ib-prod-A3

REVISION: E1

DATE: 2021/05/01

10

9

8

7

6

5

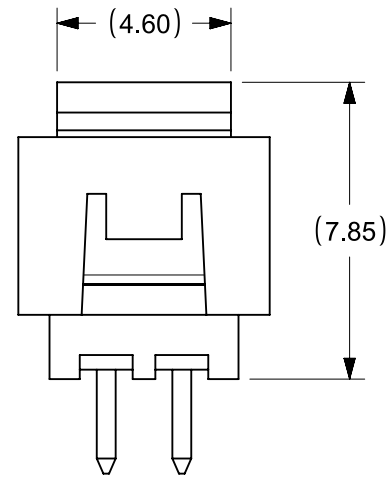
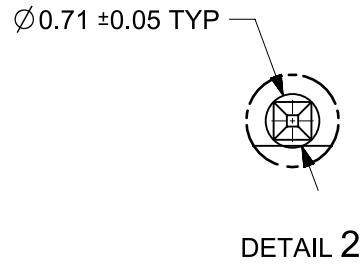
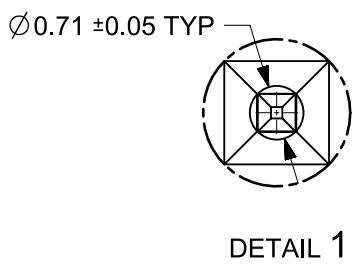
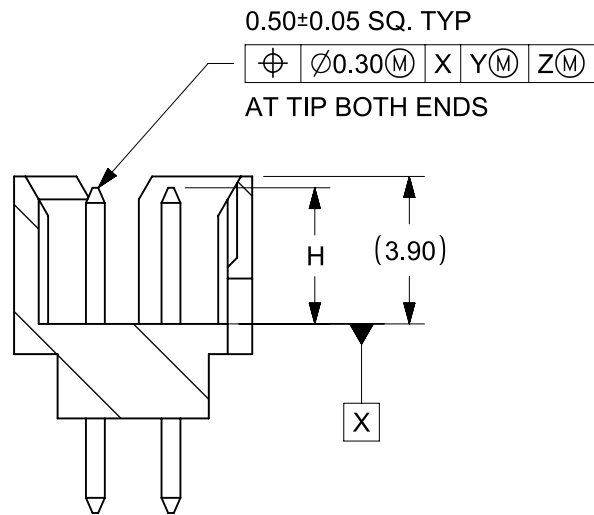
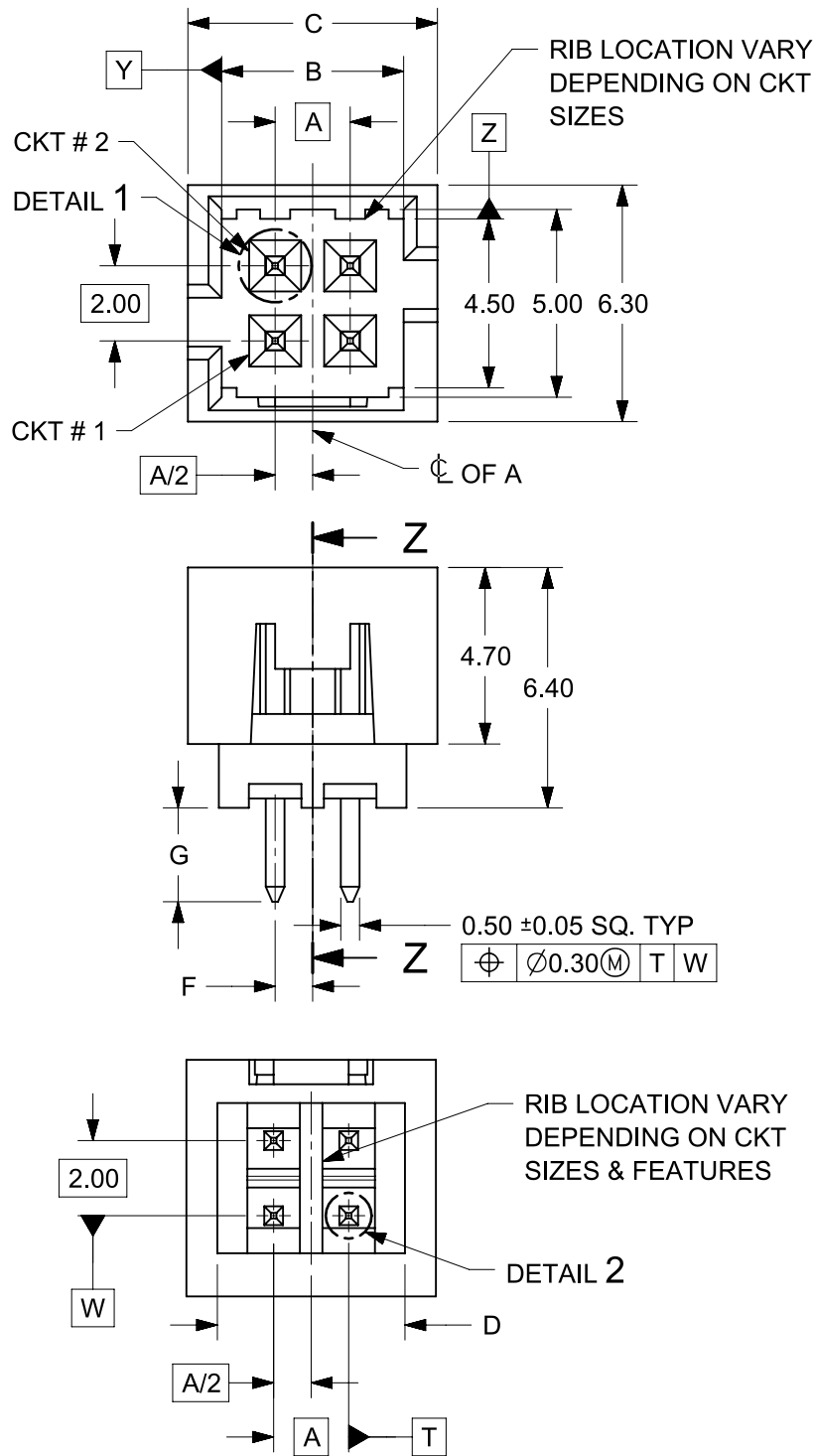
4

3

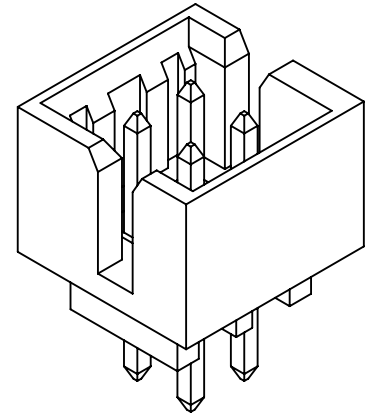
2

1

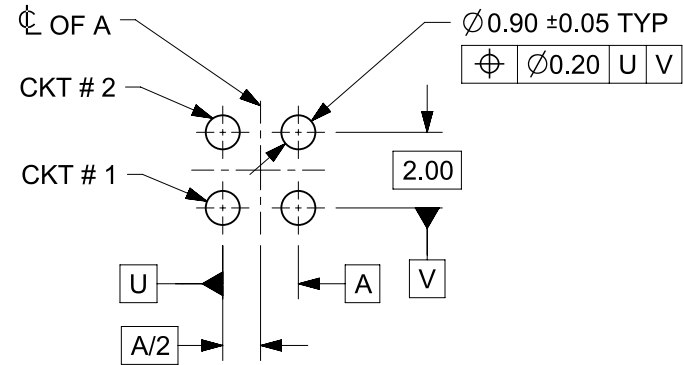
4 CIRCUITS



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		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	± 0	DOC TYPE			
3 PLACES	± 0	± 0	± 0	DOC PART			
2 PLACES	± 0.2	± 0	± 0	REVISION			
1 PLACE	± 0	± 0	± 0	A25			
0 PLACES	± 0	± 0	± 0				
ANGULAR TOL		± 3 °					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION					
		DRAWING					
		SERIES					
		A3-SIZE					
		87831					
		MATERIAL NUMBER					
		CUSTOMER					
		GENERAL MARKET					
		SHEET NUMBER					
		2 OF 14					

10	9	8	7	6	5	4	3	2	1																																							
4 CIRCUITS																																																
4	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																														
	87831-0419	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	N.A	2.50																														
	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																																						
	87831-0442	N.A	87831-5565	3																																												
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A																																						
	87831-5142	N.A	N.A	3																																												
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A																																						
	87831-6142	N.A	N.A	3																																												
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A																																						
	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

± 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 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

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

3 OF 14

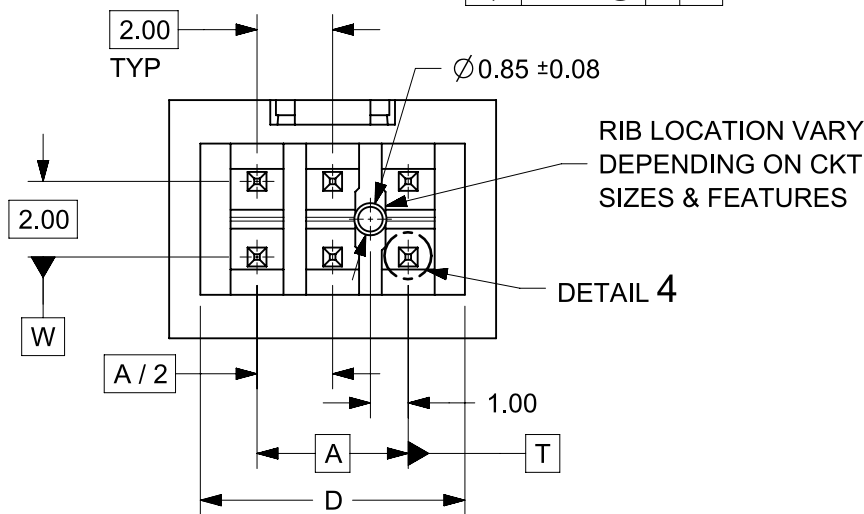
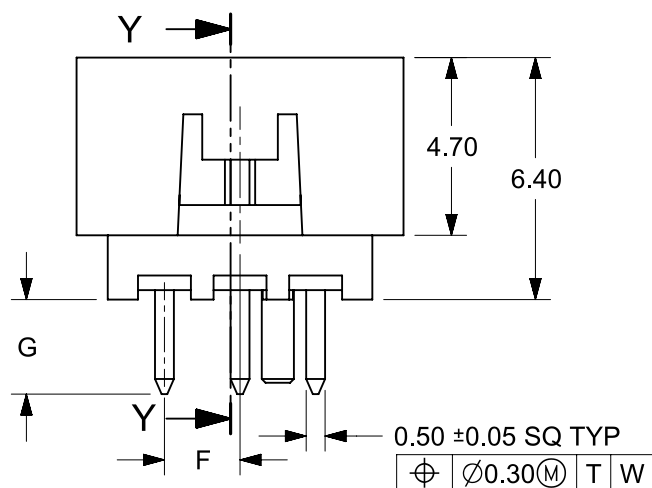
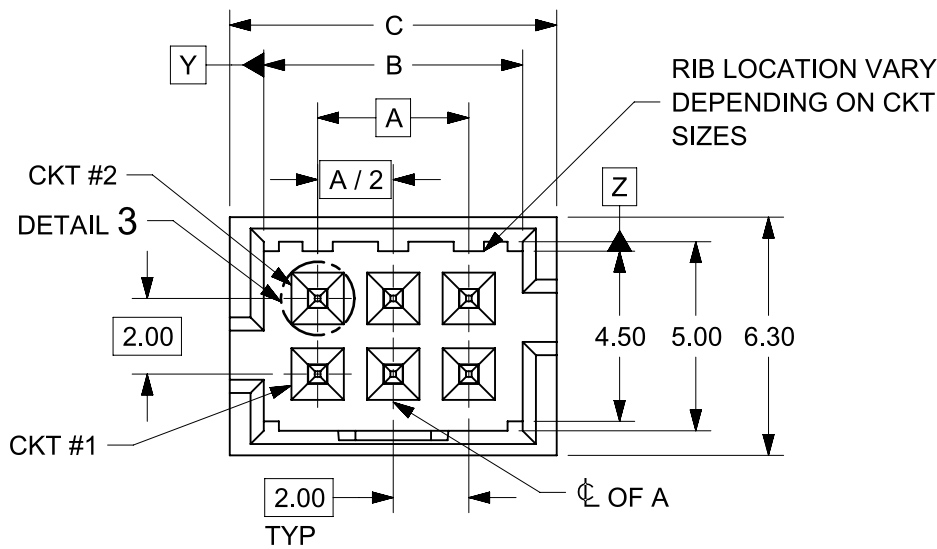
DOCUMENT STATUS

Production

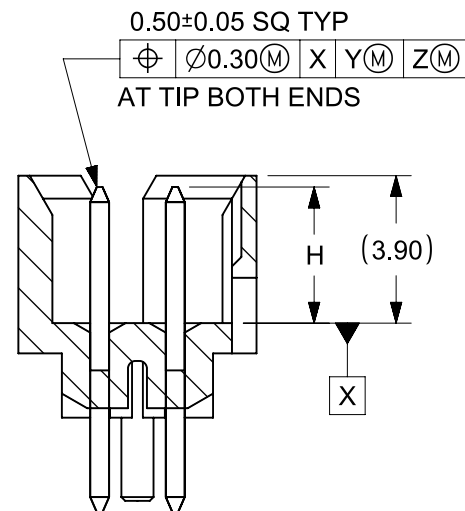
RELEASE DATE

08-Jun-2026 04:36:51

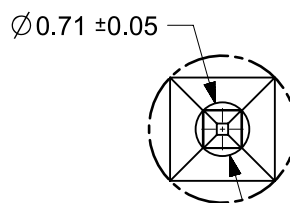
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |



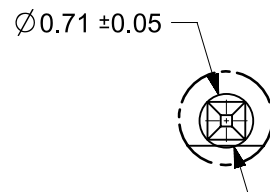
6 CIRCUITS



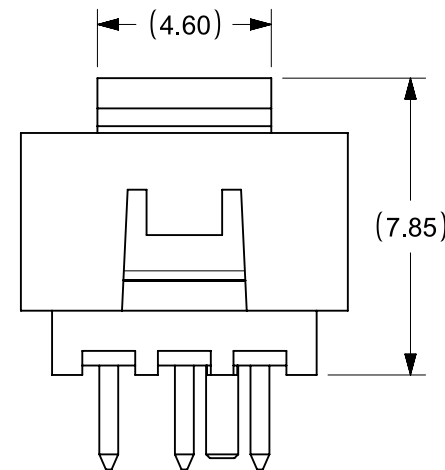
SECTION Y-Y



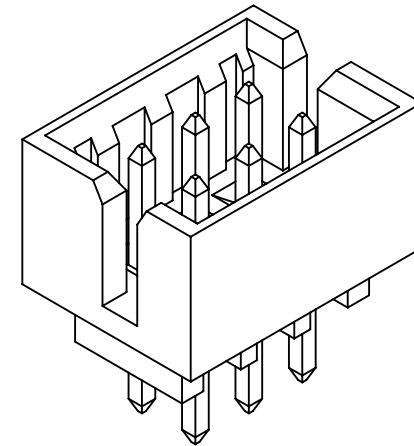
DETAIL 3



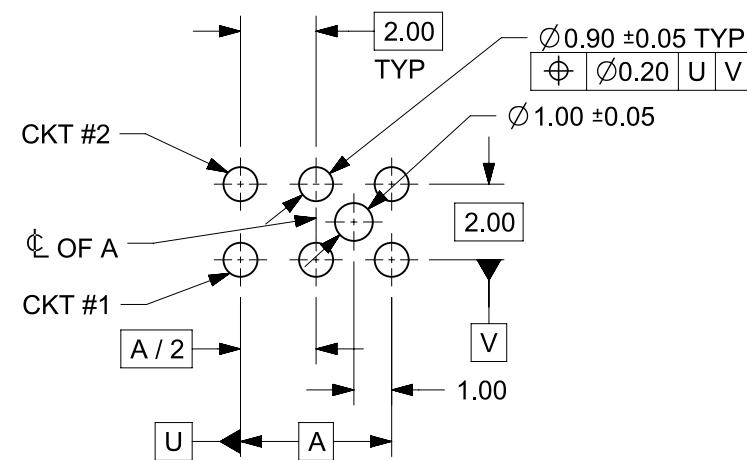
DETAIL 4



VIEW FOR
HEADER WITH CAP



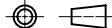
VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

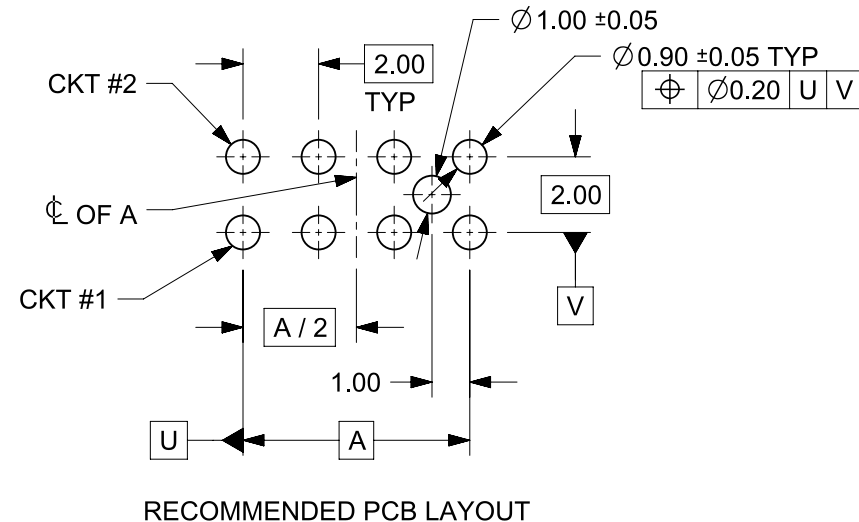
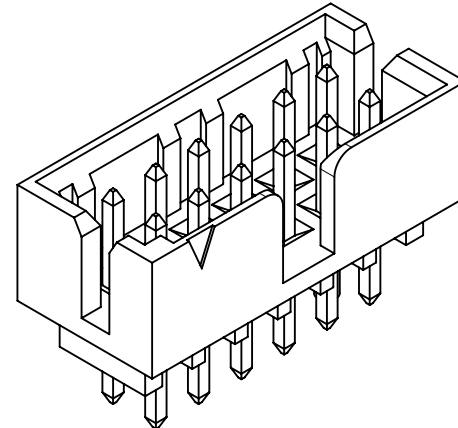
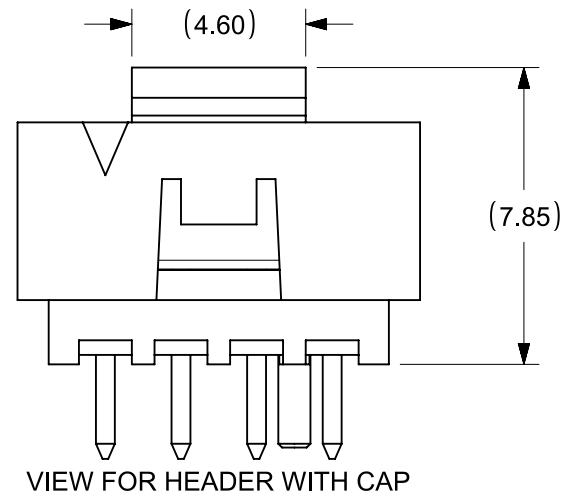
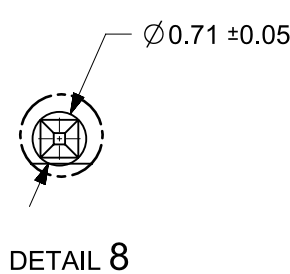
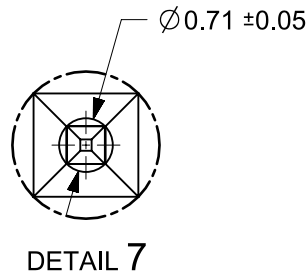
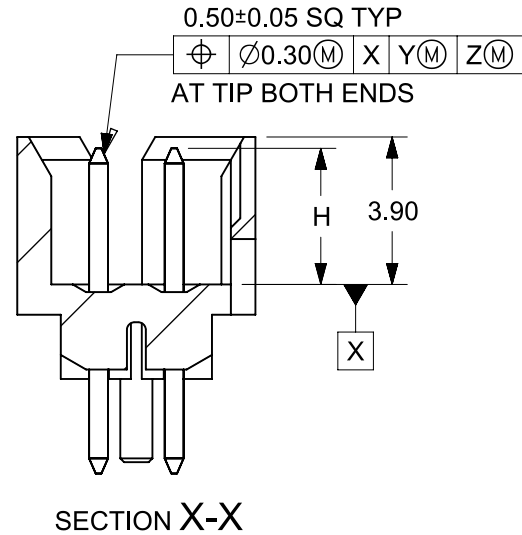
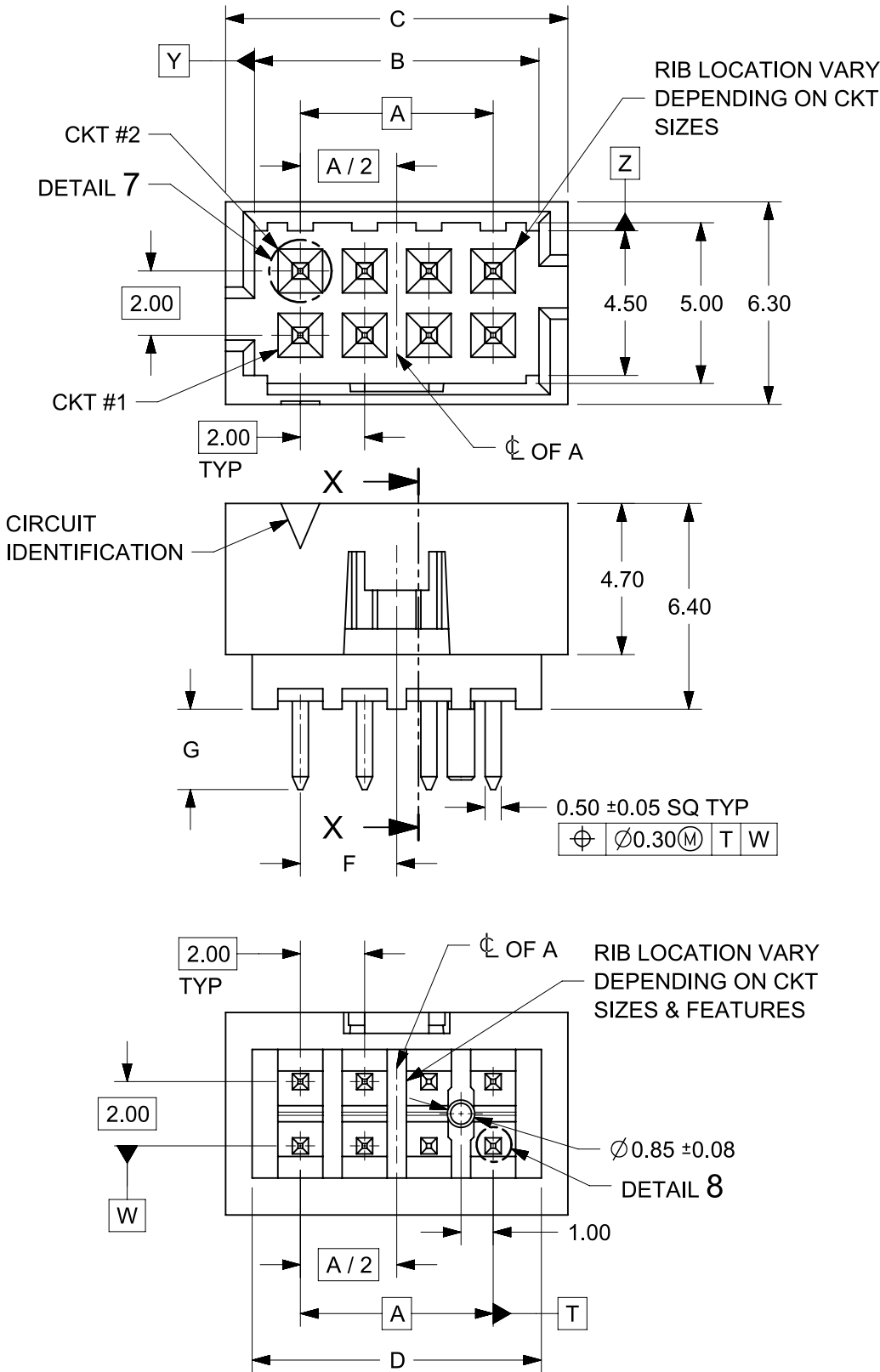
NOTES:

- 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)

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				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		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				PRODUCT CUSTOMER DRAWING		
0 PLACES	± 0	± 0						DOCUMENT NUMBER		DOC TYPE
ANGULAR TOL ± 3 °				SD-87831-0001				PSD	001	A25
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER
				A3-SIZE		87831		SEE TABLE		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	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
F									

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				
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				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		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				PRODUCT CUSTOMER DRAWING				
0 PLACES	± 0	± 0										
ANGULAR TOL ± 3 °				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
								SD-87831-0001		PSD	001	A25
THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
		A3-SIZE		87831		SEE TABLE		GENERAL MARKET		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			
	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						N.A	YES		N.A	N.A	N.A	3.00	2.50	3.60 ^{+0.15} -0.10		
	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						N.A	YES		N.A	N.A	N.A	N.A	3.00		2.80	
	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	N.A	N.A	N.A	N.A		3.00	4.70
	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	N.A	N.A	N.A	N.A		3.00	2.50
	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.

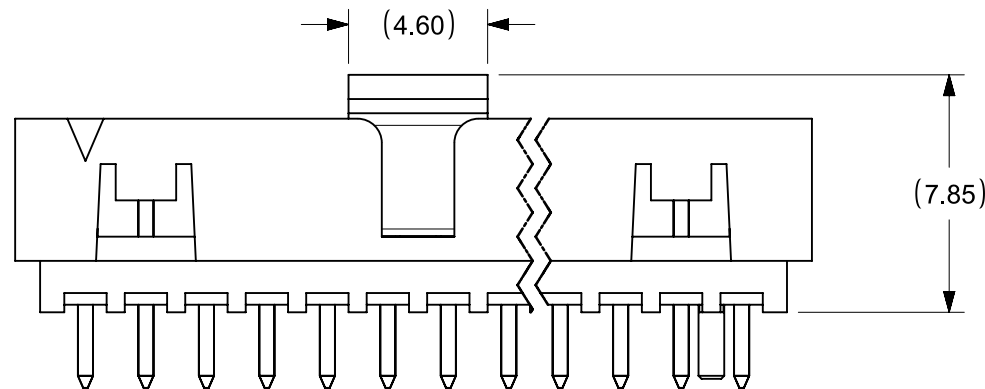
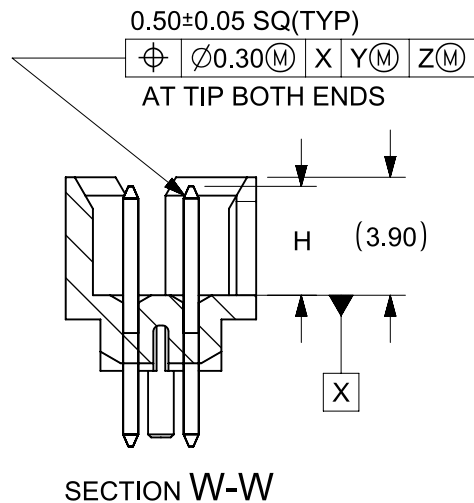
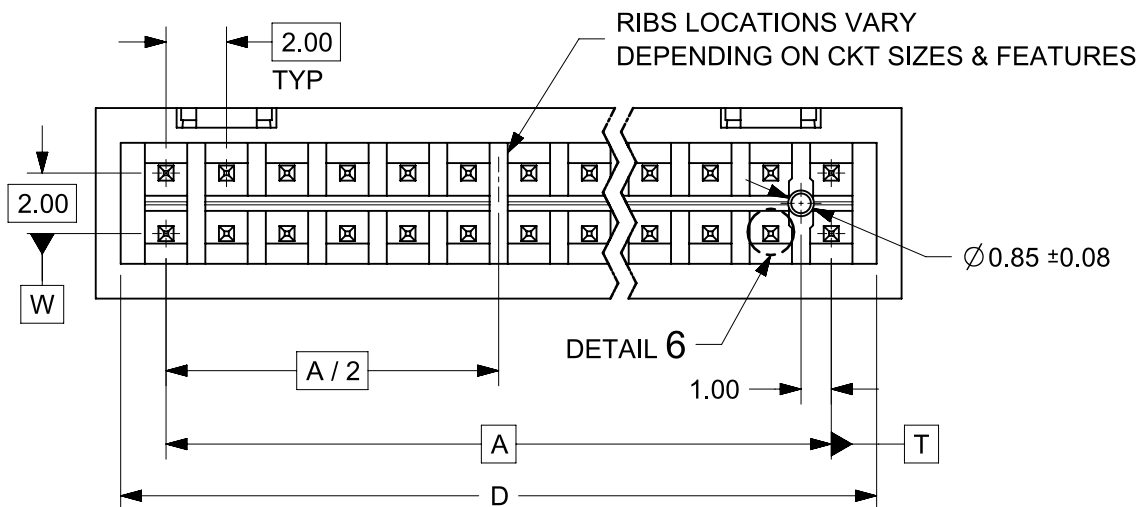
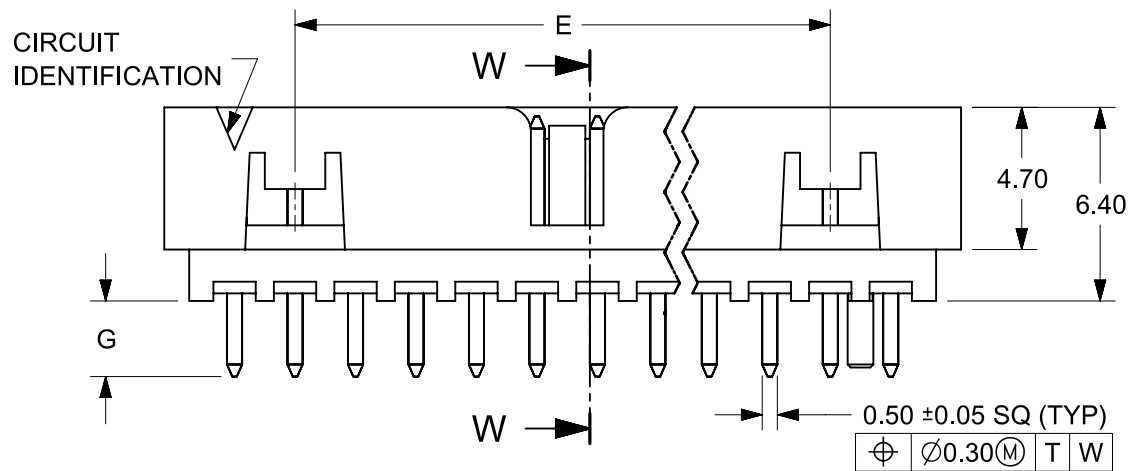
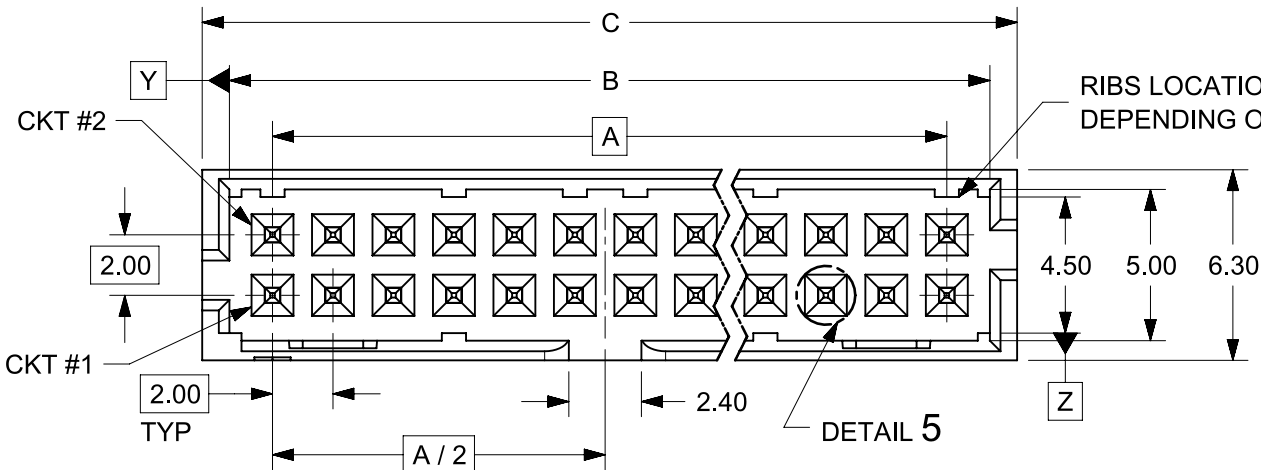
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

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 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
mm		NTS									
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098							
4 PLACES		± 0	± 0	3 PLACES		± 0	± 0	DRWN: Meghraj Boodagatti		08-Jun-2026	
2 PLACES		± 0.2	± 0	1 PLACE		± 0	± 0	CHK'D: Meghraj Boodagatti		08-Jun-2026	
0 PLACES		± 0	± 0	ANGULAR TOL		± 3 °	APPR: Saravanakumar Murugesan		08-Jun-2026		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
						A3-SIZE		87831		SEE TABLE	
										CUSTOMER	
										GENERAL MARKET	
										SHEET NUMBER	
										7 OF 14	

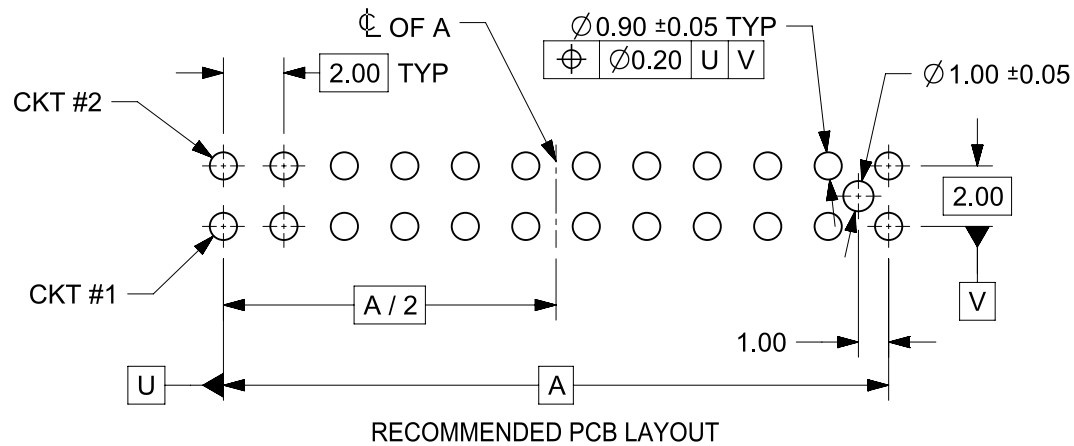
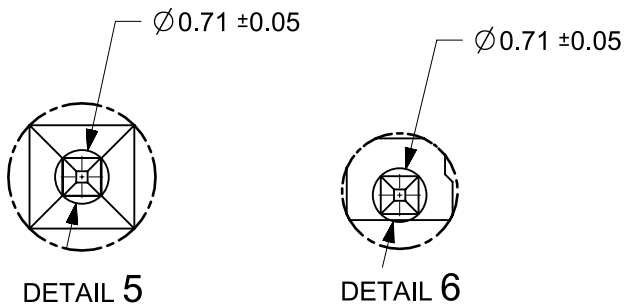
DOCUMENT STATUS	Production	RELEASE DATE	08-Jun-2026	04:36:51
9	8	7	6	5
4	3	2	1	

FORMAT: Mch-Rega-master-4b-prod-A3
REVISION: E1
DATE: 20210501

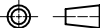
14 TO 50 CIRCUITS



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: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
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								PRODUCT CUSTOMER DRAWING			
	MM	INCH													
4 PLACES	± 0	± 0													
3 PLACES	± 0	± 0													
2 PLACES	± 0.2	± 0													
1 PLACE	± 0	± 0	INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION				
0 PLACES	± 0	± 0	DRWN: GMENARLY 2015/04/15		2015/06/15		SD-87831-0001		PSD	001	A25				
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		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	N.A	YES	N.A	YES	N.A	3.50																																																																																																																																						
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																																																																																																																																														
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	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.										THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION <table><tr><td>DIMENSION UNITS</td><td>SCALE</td><td colspan="4" rowspan="3">CURRENT REV DESC: Adding New Part Numbers</td><td colspan="4" rowspan="5"> mo lex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER </td></tr><tr><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="2"></td></tr><tr><td></td><td>MM</td><td>INCH</td><td></td></tr><tr><td>4 PLACES</td><td>± 0</td><td>± 0</td><td></td><td></td><td colspan="4">EC NO: CO-000042098</td><td colspan="4">22-Apr-2026</td></tr><tr><td>3 PLACES</td><td>± 0</td><td>± 0</td><td></td><td></td><td colspan="4">DRWN: Meghraj Boodagatti</td><td colspan="4">08-Jun-2026</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± 0</td><td></td><td></td><td colspan="4">CHK'D: Meghraj Boodagatti</td><td colspan="4">08-Jun-2026</td></tr><tr><td>1 PLACE</td><td>± 0</td><td>± 0</td><td></td><td></td><td colspan="4">APPR: Saravanakumar Murugesan</td><td colspan="4">08-Jun-2026</td></tr><tr><td>0 PLACES</td><td>± 0</td><td>± 0</td><td></td><td></td><td colspan="4">INITIAL REVISION:</td><td colspan="4">DOCUMENT NUMBER</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td></tr><tr><td colspan="4">ANGULAR TOL ± 3°</td><td colspan="4">DRWN: GMENARLY</td><td colspan="4">2015/04/15</td><td colspan="4">SD-87831-0001</td><td>PSD</td><td>001</td><td>A25</td></tr><tr><td colspan="4">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="4">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="4"></td><td colspan="4"></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">11 OF 14</td></tr></table>										DIMENSION UNITS	SCALE	CURRENT REV DESC: Adding New Part Numbers				mo lex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				GENERAL TOLERANCES (UNLESS SPECIFIED)					MM	INCH		4 PLACES	± 0	± 0			EC NO: CO-000042098				22-Apr-2026				3 PLACES	± 0	± 0			DRWN: Meghraj Boodagatti				08-Jun-2026				2 PLACES	± 0.2	± 0			CHK'D: Meghraj Boodagatti				08-Jun-2026				1 PLACE	± 0	± 0			APPR: Saravanakumar Murugesan				08-Jun-2026				0 PLACES	± 0	± 0			INITIAL REVISION:				DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION	ANGULAR TOL ± 3°				DRWN: GMENARLY				2015/04/15				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		11 OF 14	
DIMENSION UNITS	SCALE	CURRENT REV DESC: Adding New Part Numbers				mo lex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																																																																																																																																																										
GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																																																																																																																
	MM																			INCH																																																																																																																																												
4 PLACES	± 0	± 0			EC NO: CO-000042098					22-Apr-2026																																																																																																																																																						
3 PLACES	± 0	± 0			DRWN: Meghraj Boodagatti					08-Jun-2026																																																																																																																																																						
2 PLACES	± 0.2	± 0			CHK'D: Meghraj Boodagatti				08-Jun-2026																																																																																																																																																							
1 PLACE	± 0	± 0			APPR: Saravanakumar Murugesan				08-Jun-2026																																																																																																																																																							
0 PLACES	± 0	± 0			INITIAL REVISION:				DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION																																																																																																																																																	
ANGULAR TOL ± 3°				DRWN: GMENARLY				2015/04/15				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		11 OF 14																																																																																																																																																
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

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: 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

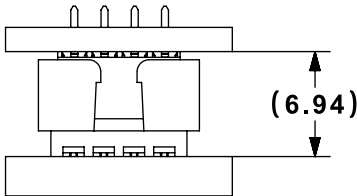
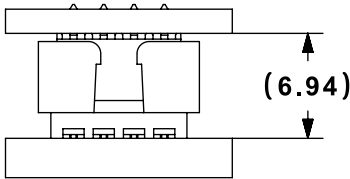
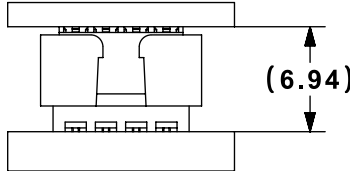
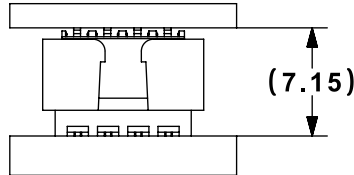
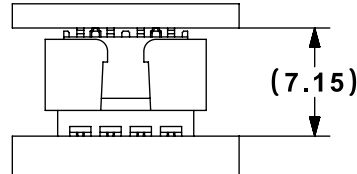
11 OF 14

A3-SIZE

87831

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								
FORMAT: Molex-aga-master-ib-prod-A3		9	8	7	6	5	4	3	2	1								
REVISION: E1		9	8	7	6	5	4	3	2	1								
DATE: 2021/05/01		9	8	7	6	5	4	3	2	1								

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: Adding New Part Numbers				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER											
		MM		INCH		PRODUCT CUSTOMER DRAWING									
4 PLACES		± 0 ± 0													
3 PLACES		± 0 ± 0				DOCUMENT NUMBER SD-87831-0001									
2 PLACES		± 0.2 ± 0													
1 PLACE		± 0 ± 0				DOC TYPE		DOC PART		REVISION					
0 PLACES		± 0 ± 0						PSD		001 A25					
ANGULAR TOL		± 3°													
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	