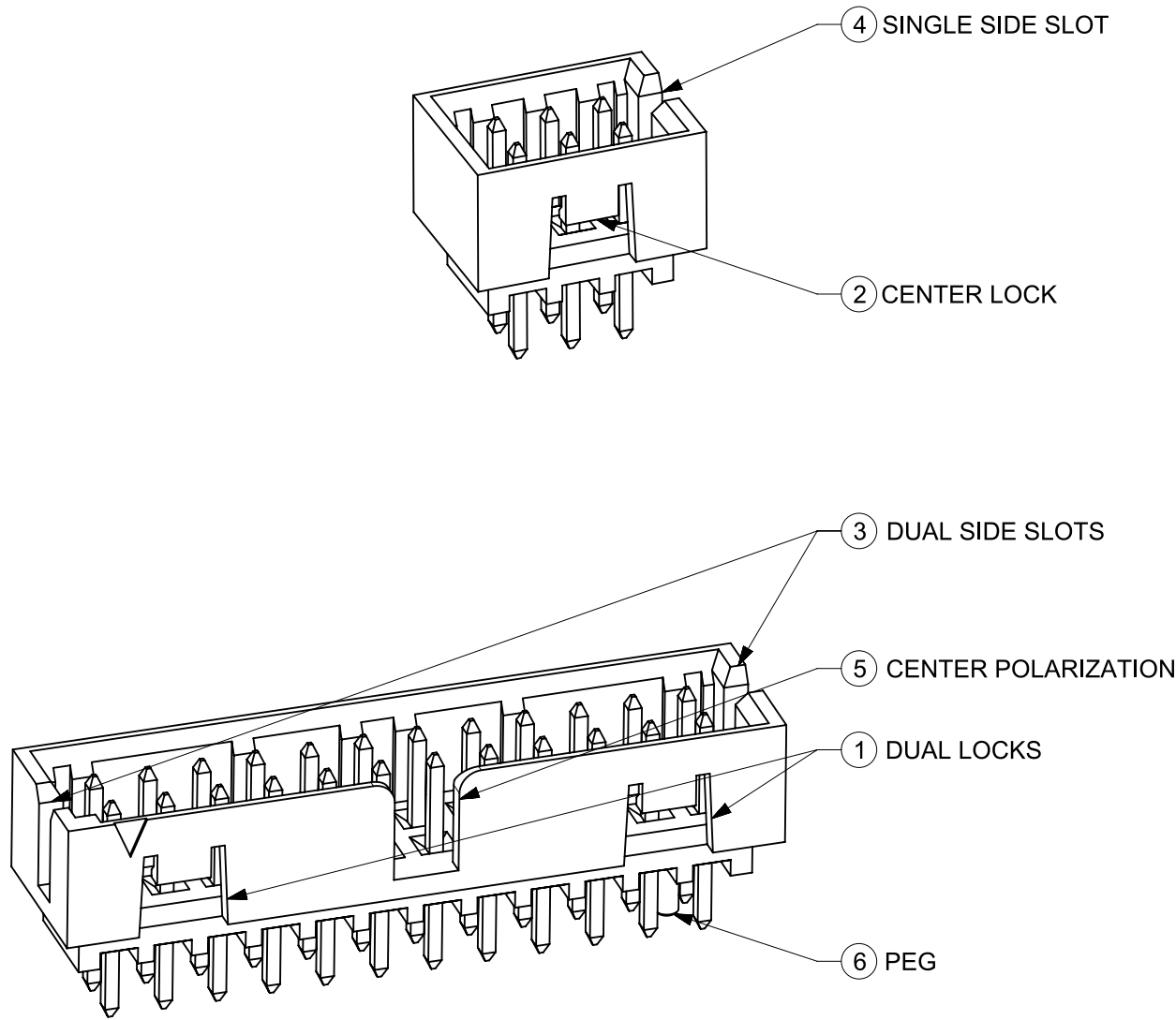


FEATURES SELECTION GUIDE



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		

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DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

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

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

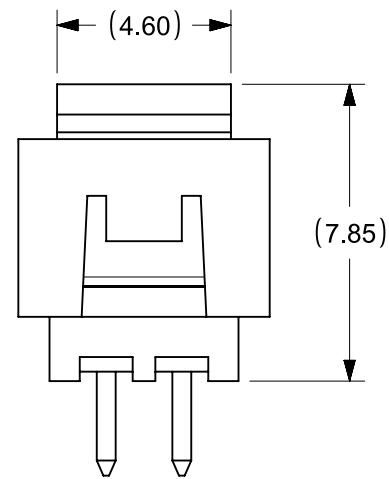
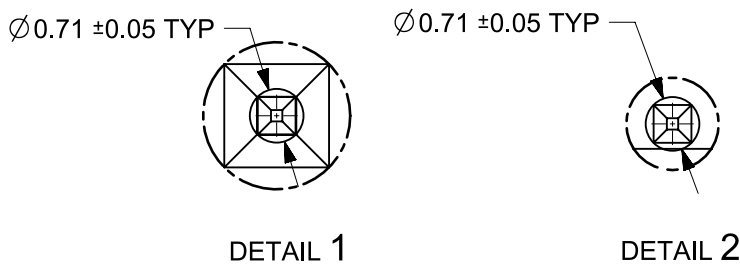
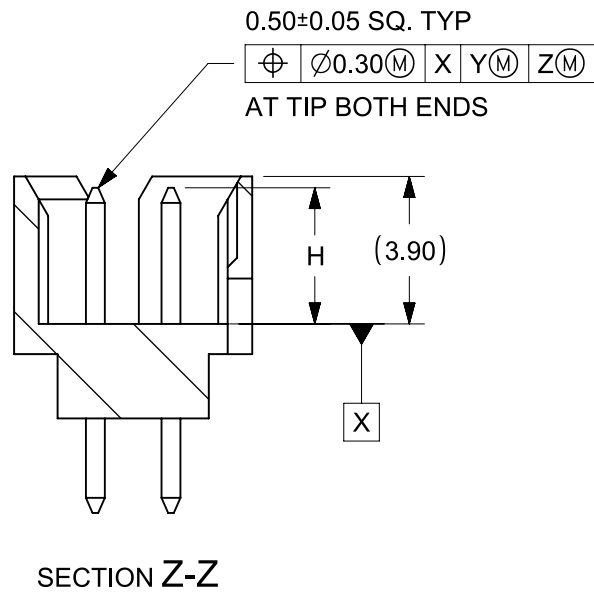
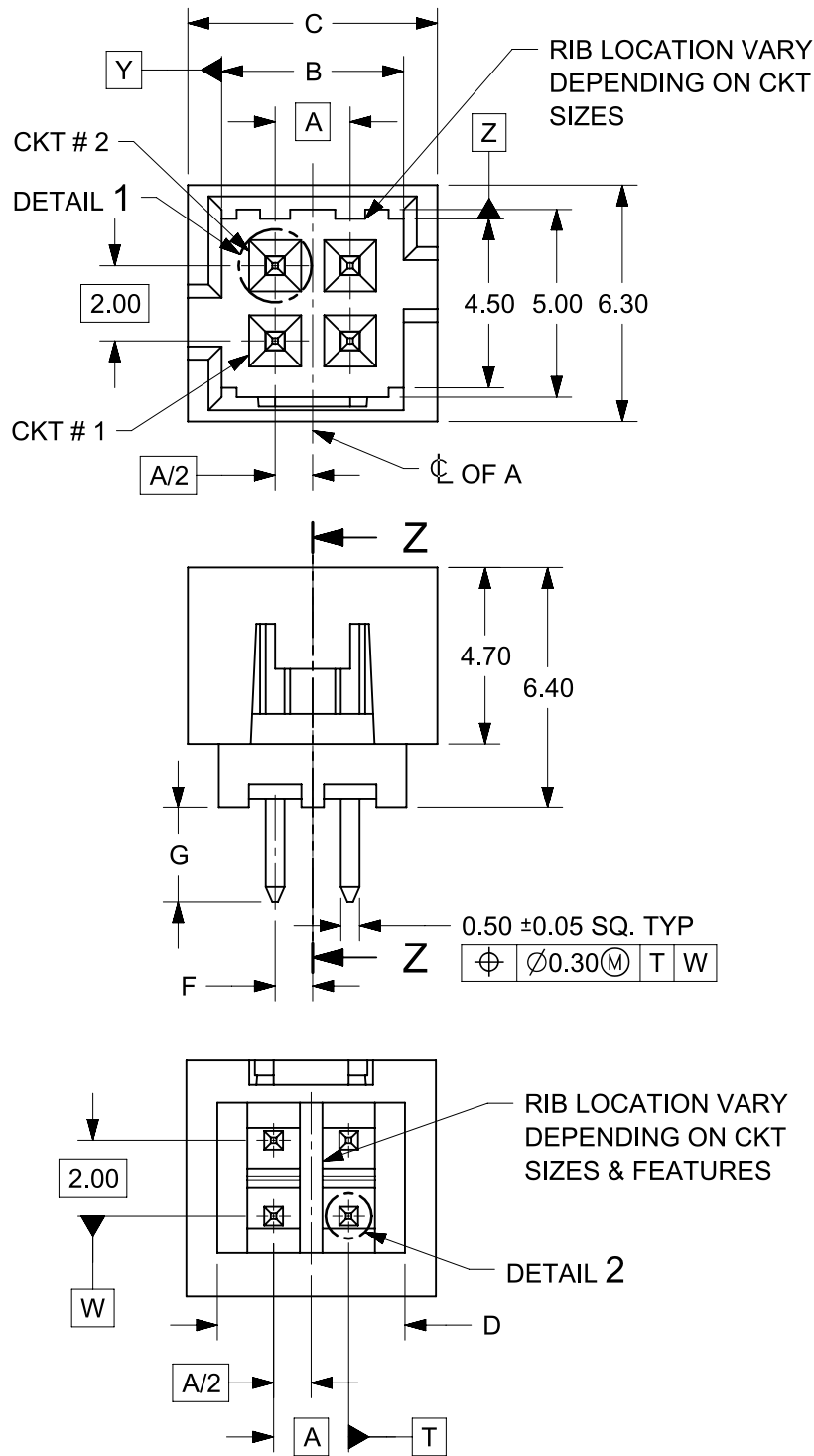
SHEET NUMBER

1 OF 14

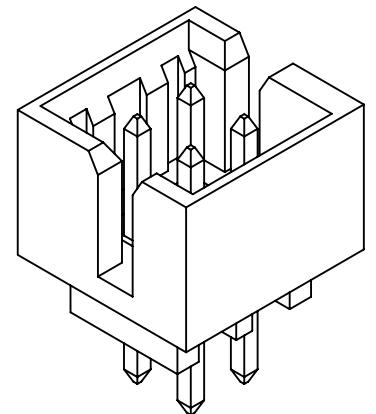
A3-SIZE

87831

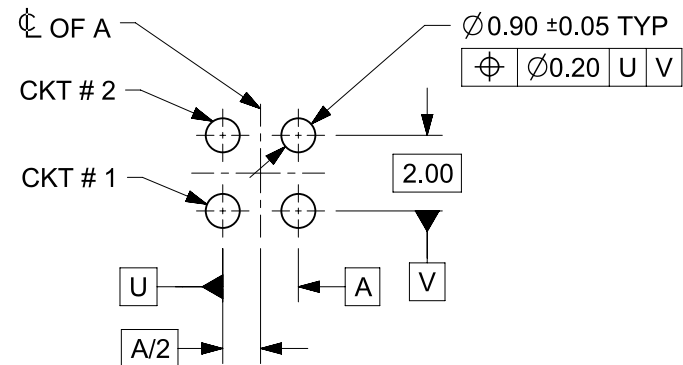
4 CIRCUITS



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		EC NO: CO-000042098	22-Apr-2026	DOC TYPE	DOC PART
3 PLACES	± 0	± 0		DRWN: Meghraj Boodagatti	08-Jun-2026	PSD	001
2 PLACES	± 0.2	± 0		CHK'D: Meghraj Boodagatti	08-Jun-2026		A25
1 PLACE	± 0	± 0		APPR: Saravanakumar Murugesan	08-Jun-2026		
0 PLACES	± 0	± 0		INITIAL REVISION:			
ANGULAR TOL	± 3°			DRWN: GMENARLY	2015/04/15		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
				A3-SIZE	87831	SEE TABLE	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								
	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.

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DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

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

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

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

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

3 OF 14

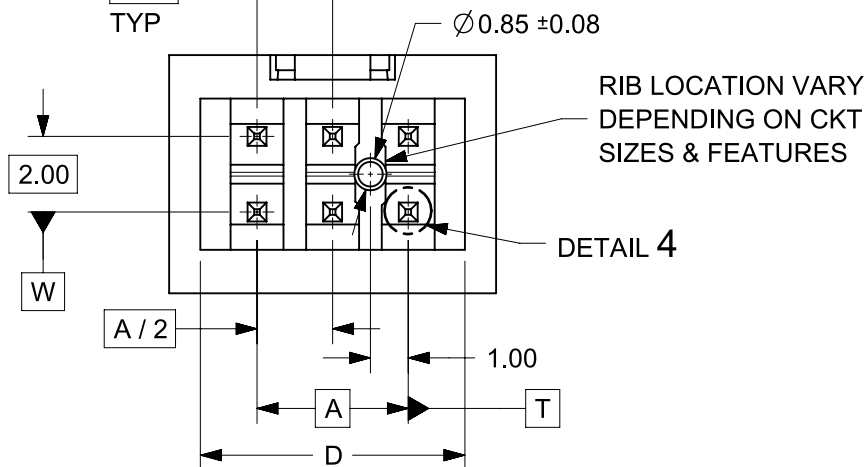
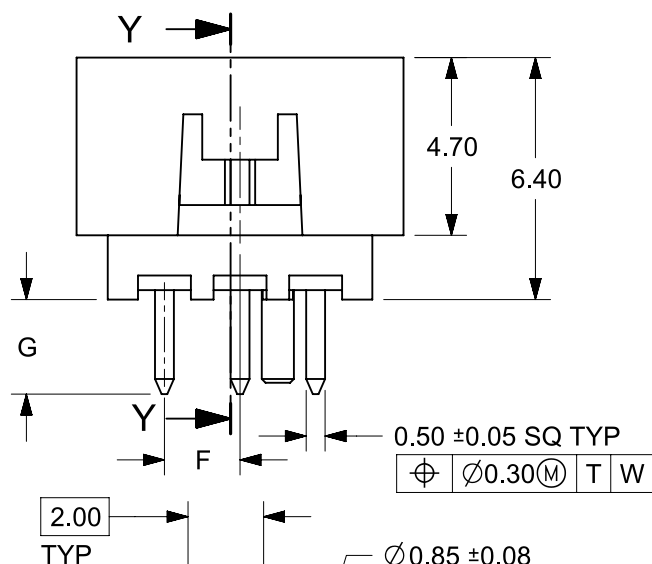
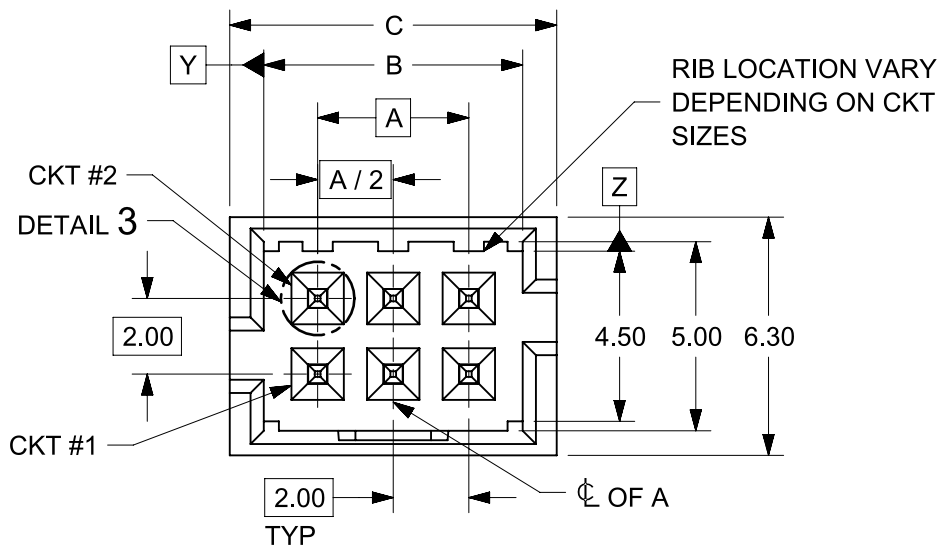
DOCUMENT STATUS

Production

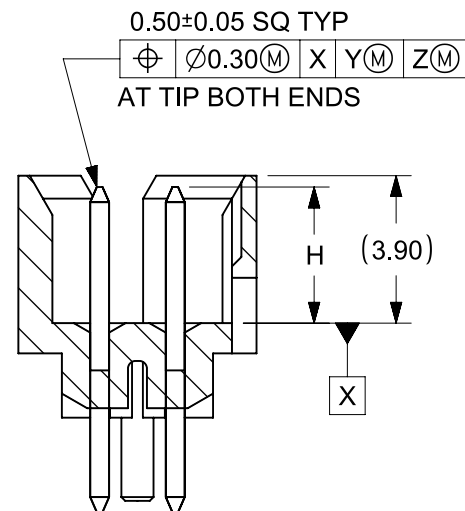
RELEASE DATE

08-Jun-2026 04:36:51

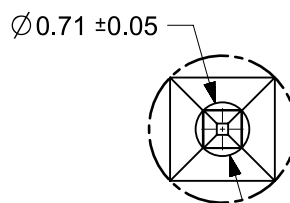
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |



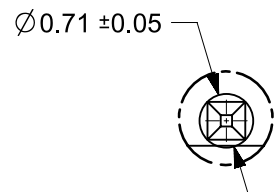
6 CIRCUITS



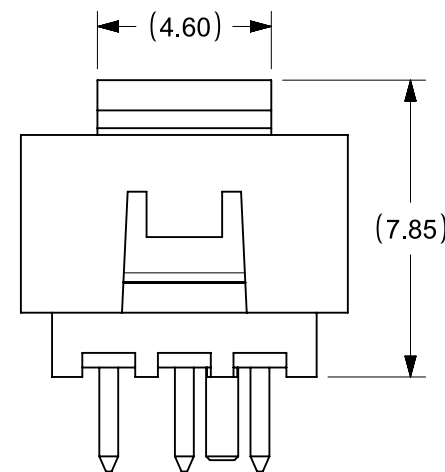
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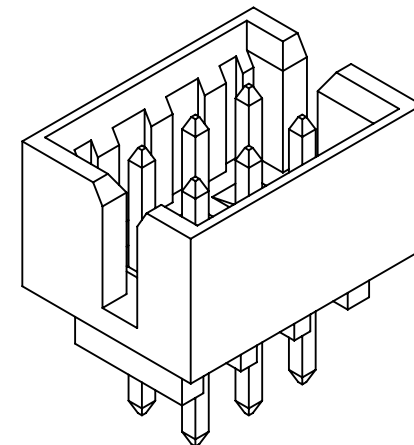
DETAIL 3



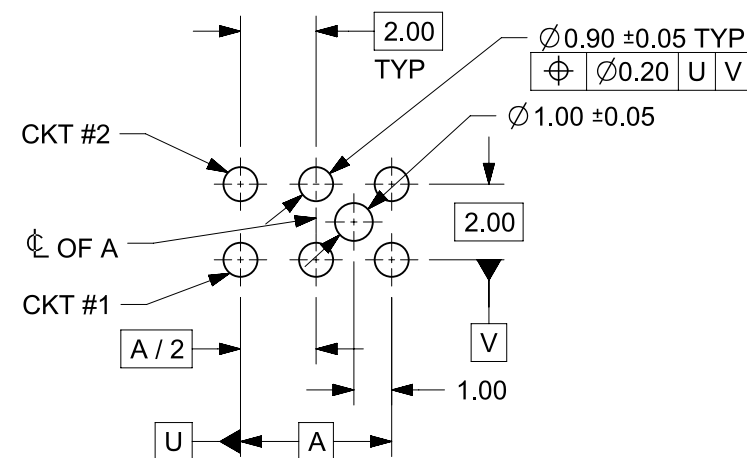
DETAIL 4



VIEW FOR
HEADER WITH CAP

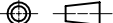


VIEW FOR HEADER WITH
ONLY DUAL SLOTS



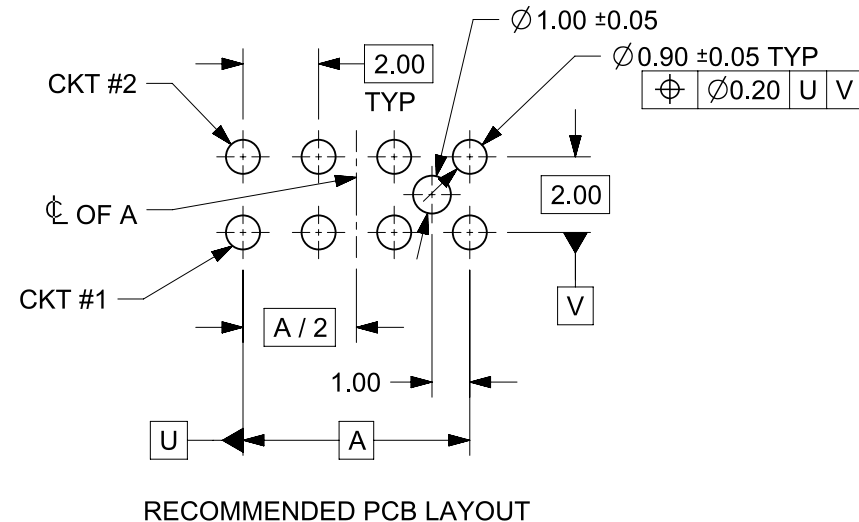
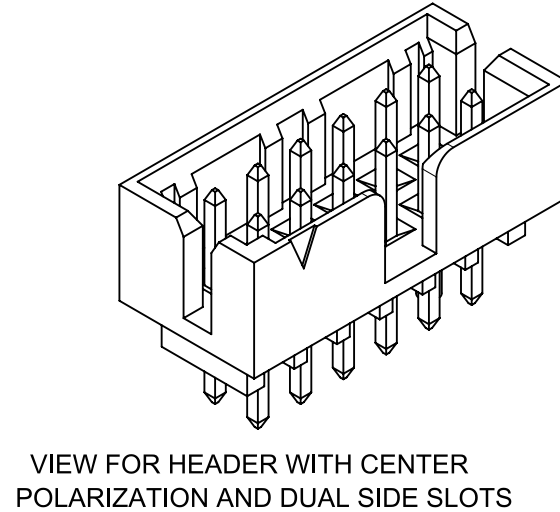
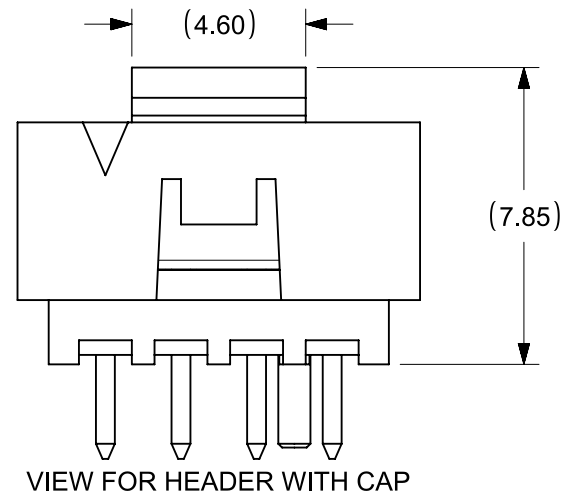
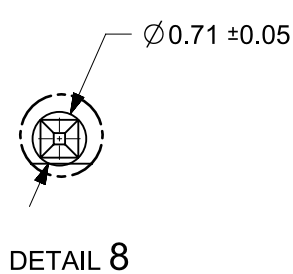
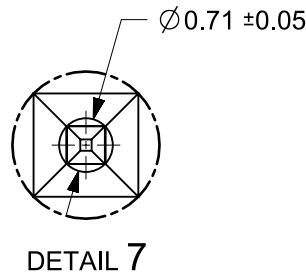
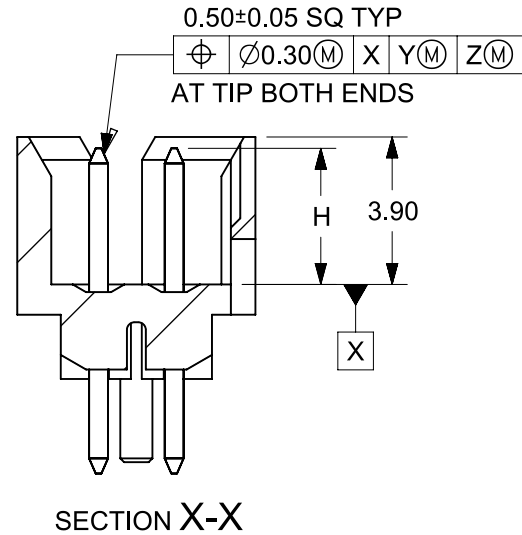
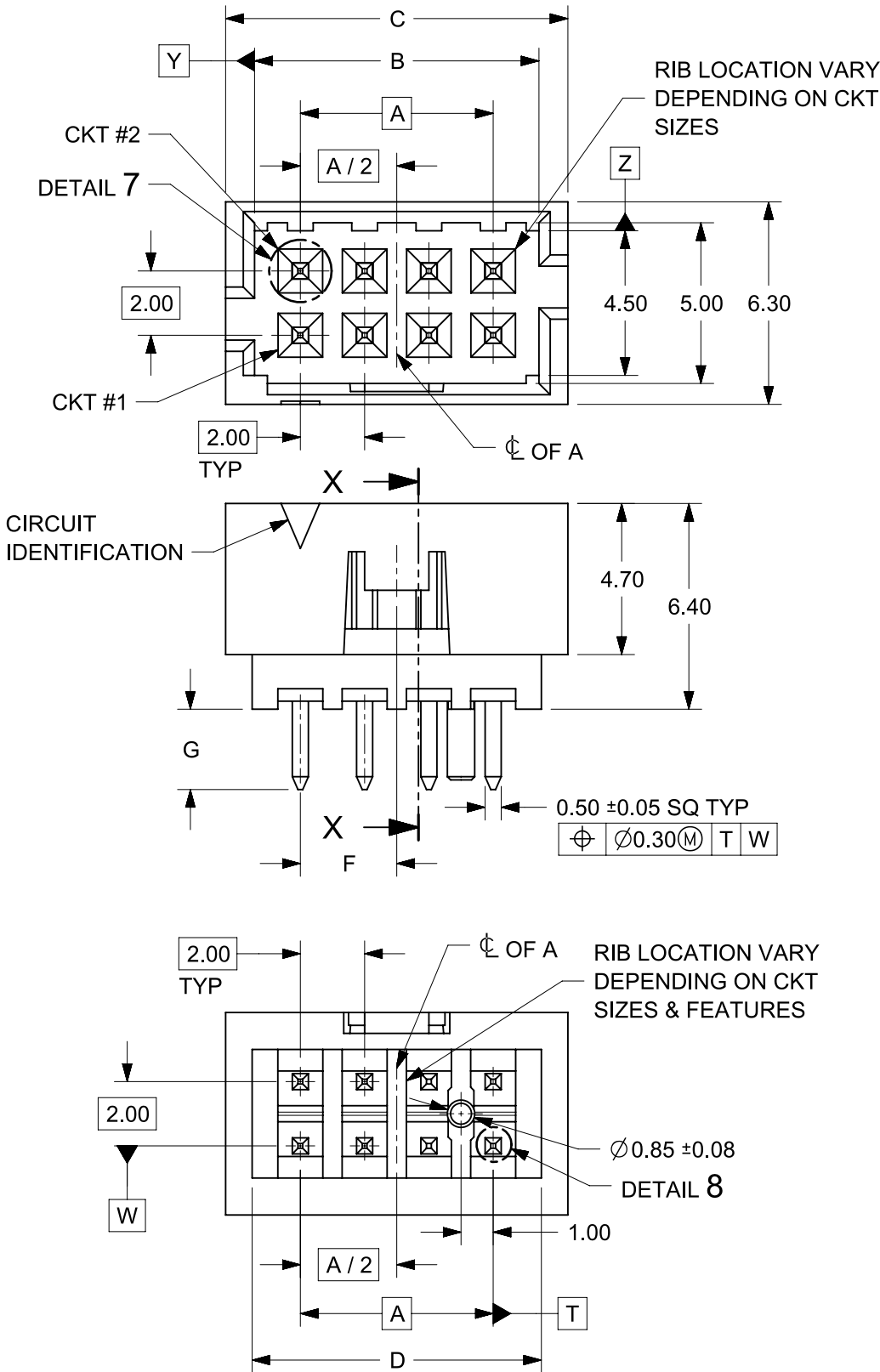
RECOMMENDED PCB LAYOUT

- 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 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER PRODUCT CUSTOMER DRAWING									
mm		NTS															
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29		DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD		DOC PART 001		REVISION A25			
																MM	
								4 PLACES								± 0 ± 0	
								3 PLACES								± 0 ± 0	
								2 PLACES								± 0.2 ± 0	
1 PLACE		± 0 ± 0															
0 PLACES		± 0 ± 0															
ANGULAR TOL				± 3 °													
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		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
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F	E	D	C	B	A	F	E	D	C
F	E	D	C	B	A	F	E	D	C
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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	

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

10	9	8	7	6	5	4	3	2	1																
8 CIRCUITS																									
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION														
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H							
8	87831-0819	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	6.00	8.85	10.65	9.00	N.A	N.A	2.50	3.60±0.20							
	87831-0820	N.A	N.A	2																					
	87831-0821	N.A	N.A	3																					
	87831-0836	N.A	N.A	4																					
	87831-0828	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES						N.A	YES		N.A	YES	N.A	N.A	2.50	3.60±0.20	
	87831-0829	N.A	N.A	3																					
	87831-0841	N.A	87831-5551	2																					
	87831-0842	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						N.A	YES		N.A	YES	N.A	N.A	2.50	3.60±0.20	
	87831-5841	N.A	N.A	2																					
	87831-5441	N.A	N.A	2																					
	87831-5442	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						N.A	YES		N.A	YES	N.A	N.A	2.80	3.60±0.20	
	87831-5541	N.A	N.A	2																					
	87831-5542	N.A	N.A	3																					
	87831-5741	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	YES		N.A	YES	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0832	N.A	N.A	2																					
	87831-0843	N.A	N.A	2																					
	87831-0844	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A						N.A	YES		N.A	YES	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0845	N.A	N.A	2																					
87831-0846	N.A	N.A	3																						

PLATING OPTIONS:

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

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

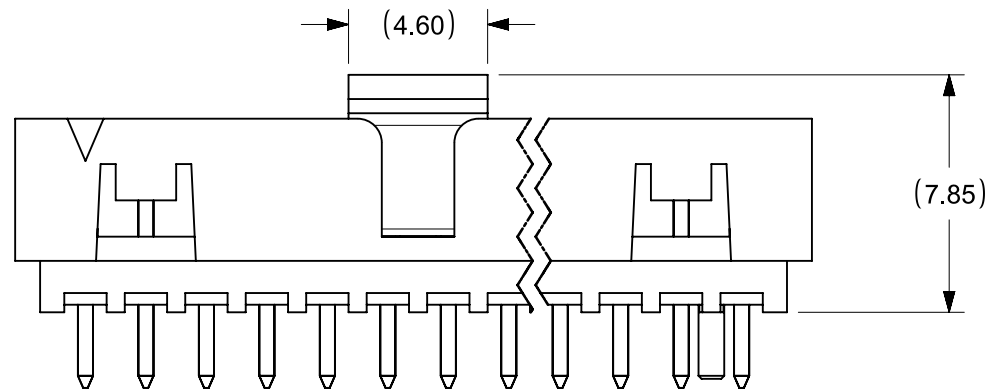
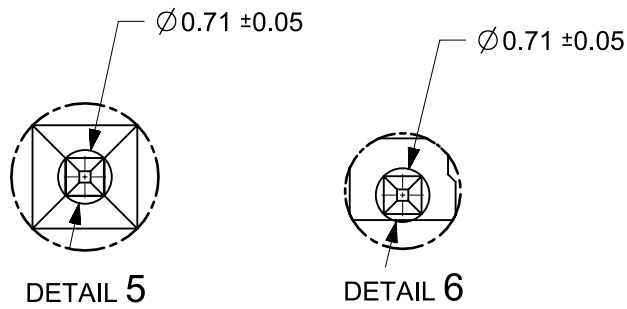
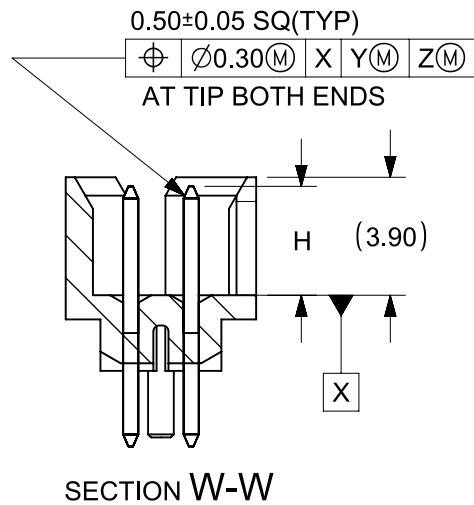
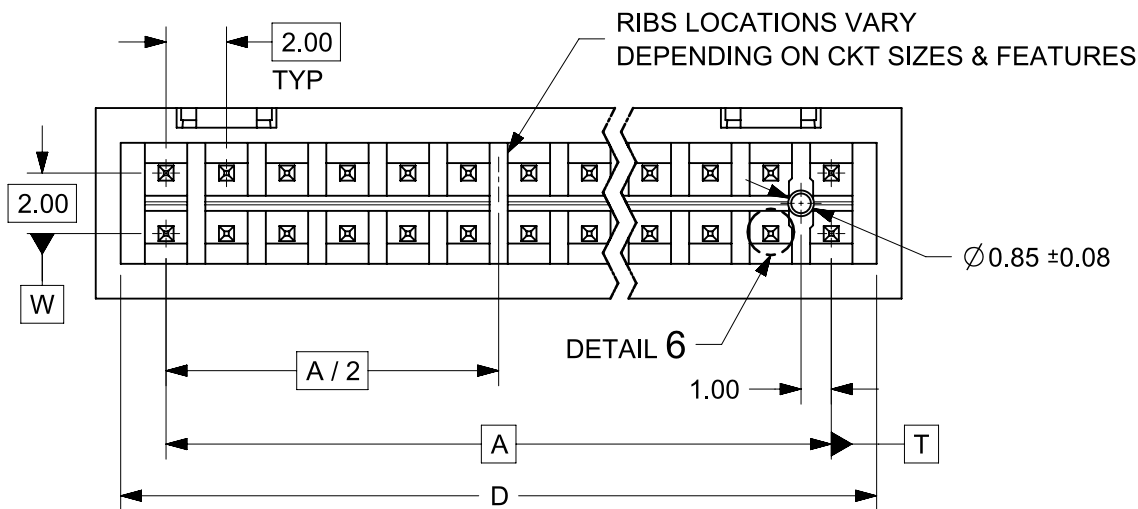
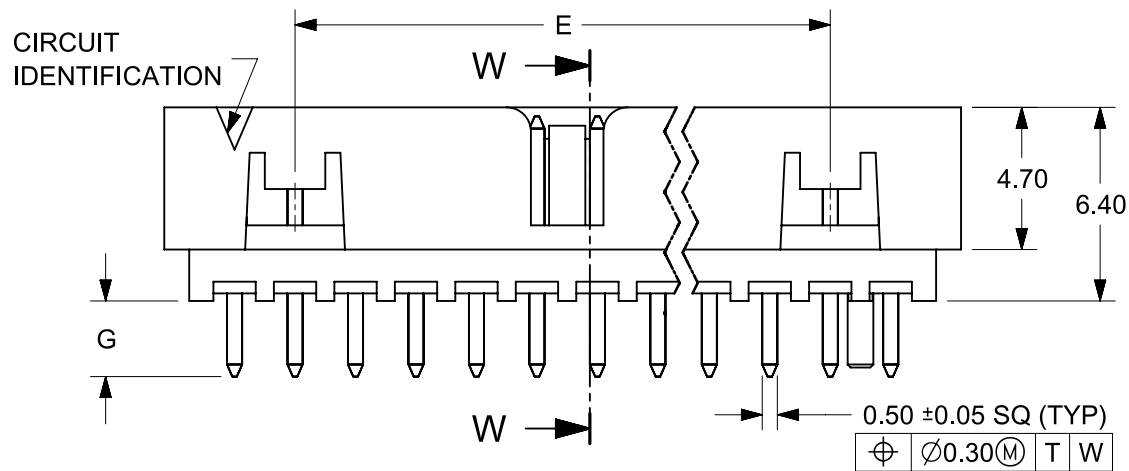
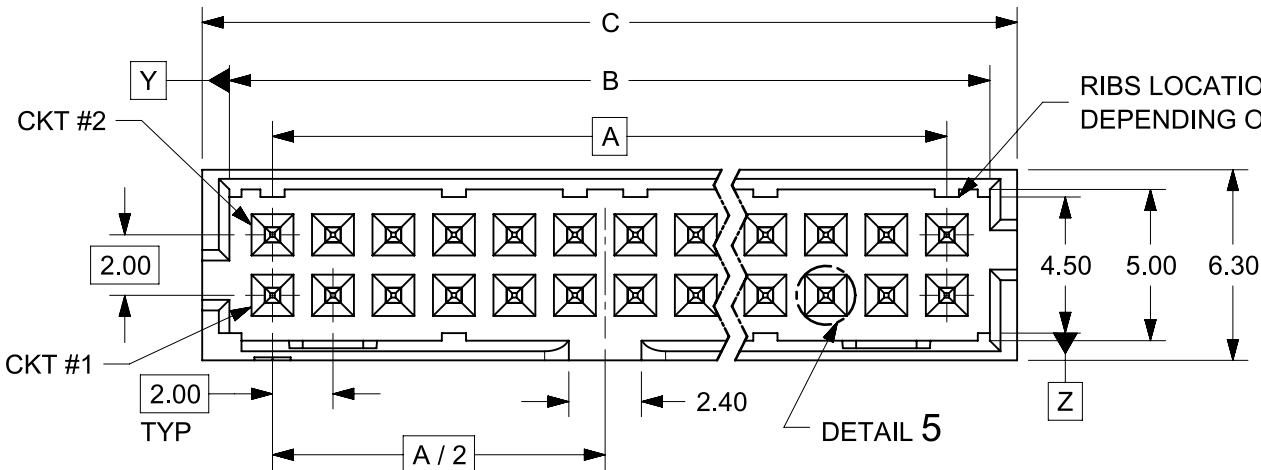
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

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

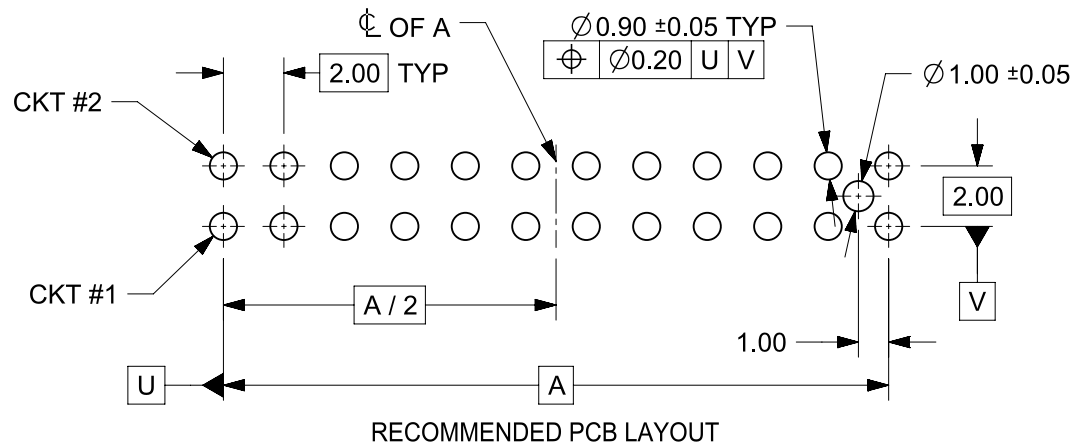
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				moLEX MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						
mm		NTS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

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

14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



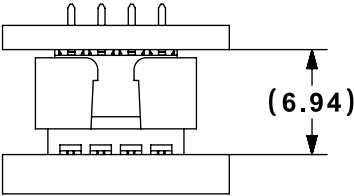
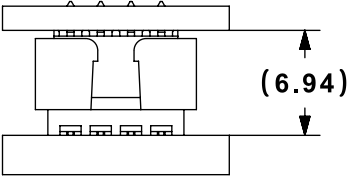
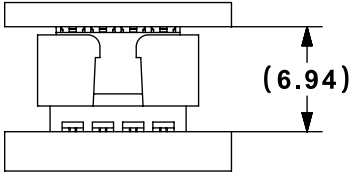
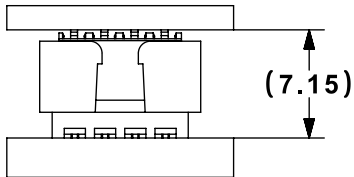
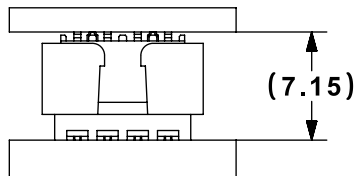
- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES 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		CURRENT REV DESC: Adding New Part Numbers		molex			
DIMENSION UNITS		SCALE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
mm		NTS		PRODUCT CUSTOMER DRAWING			
GENERAL TOLERANCES (UNLESS SPECIFIED)		MM		DOCUMENT NUMBER			
		INCH		SD-87831-0001			
4 PLACES	± 0	± 0		EC NO: CO-000042098	22-Apr-2026	DOC TYPE	DOC PART
3 PLACES	± 0	± 0		DRWN: Meghraj Boodagatti	08-Jun-2026	PSD	001
2 PLACES	± 0.2	± 0		CHK'D: Meghraj Boodagatti	08-Jun-2026		A25
1 PLACE	± 0	± 0		APPR: Saravanakumar Murugesan	08-Jun-2026		
0 PLACES	± 0	± 0		INITIAL REVISION:			
ANGULAR TOL		± 3 °		DRWN: GMENARLY	2015/04/15	SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	9 OF 14	
				A3-SIZE	87831		
				MATERIAL NUMBER		CUSTOMER	
				SEE TABLE		GENERAL MARKET	

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
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
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		N.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.																				
DOCUMENT STATUS		Production	RELEASE DATE		08-Jun-2026		04:36:51													
		9		8		7		6		5		4		3		2		1		
FORMAT: Mol-jpgs-master-db-prod-A3 REVISION: E1 DATE: 2021/05/01																				

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										Production	RELEASE DATE		08-Jun-2026	04:36:51													
FORMAT: Molex-figs-master-db-prod-A3 REVISION: E1 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	

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

CURRENT REV DESC: Adding New Part Numbers

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

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

INITIAL REVISION:
DRWN: DRWN BY
APPR: APPR BY

XXXX/XX/XX
XXXX/XX/XX

DOCUMENT NUMBER
SD-87831-0001

DOC TYPE
PSD

DOC PART
001

REVISION
A25

SHEET NUMBER
14 OF 14

A3-SIZE

87831

MATERIAL NUMBER

CUSTOMER

GENERAL MARKET