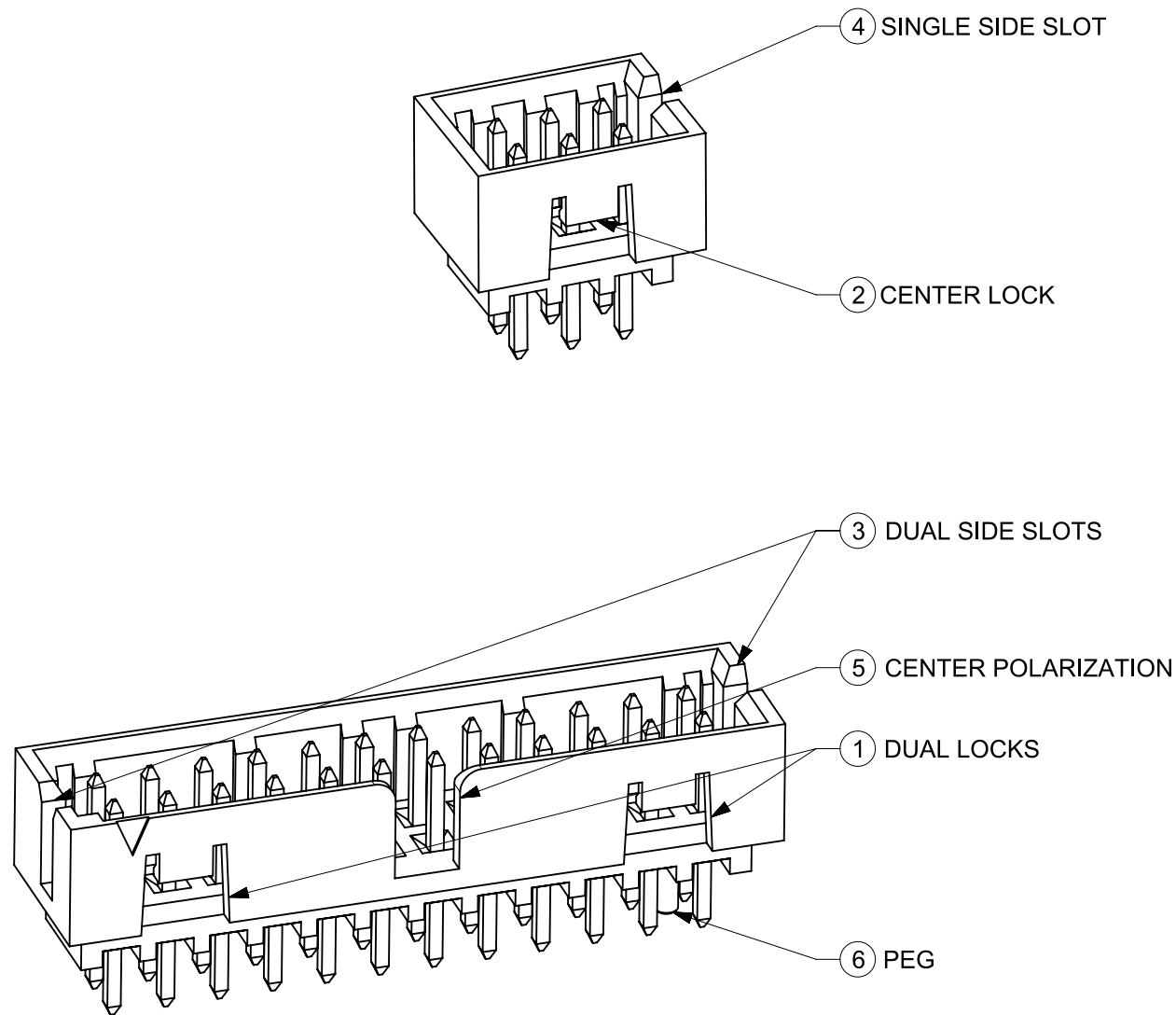


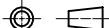
FEATURES SELECTION GUIDE



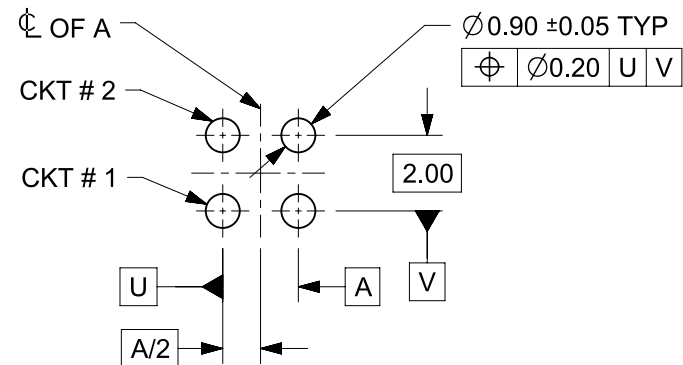
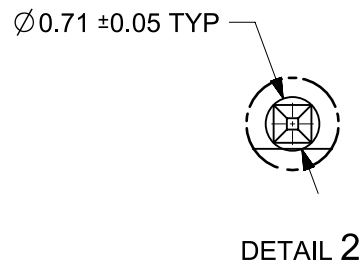
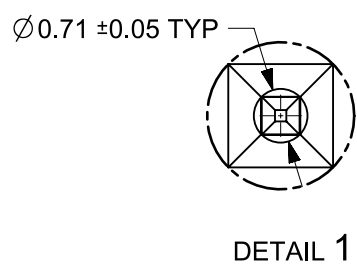
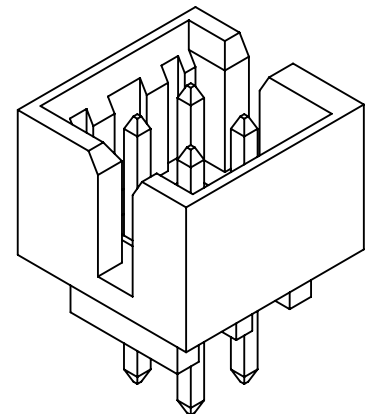
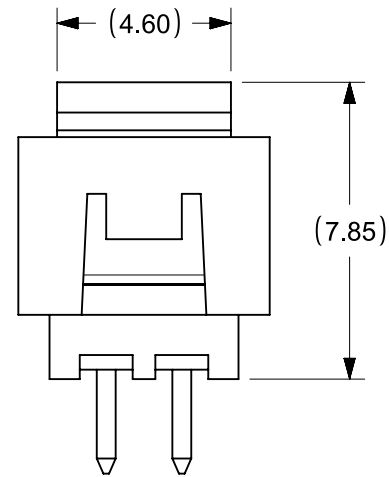
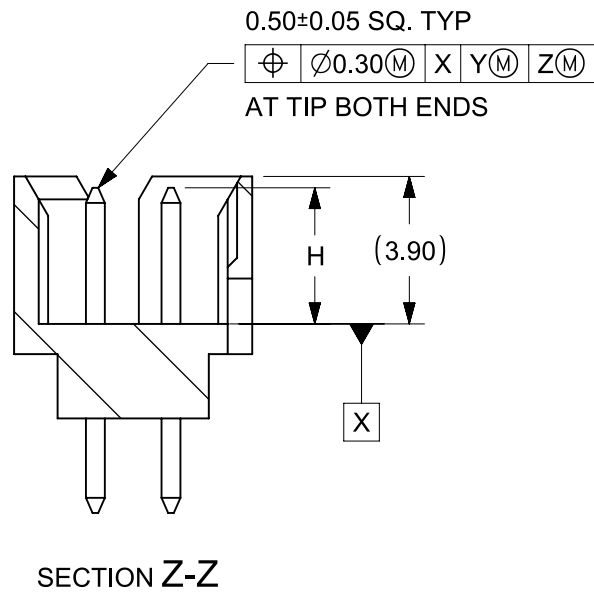
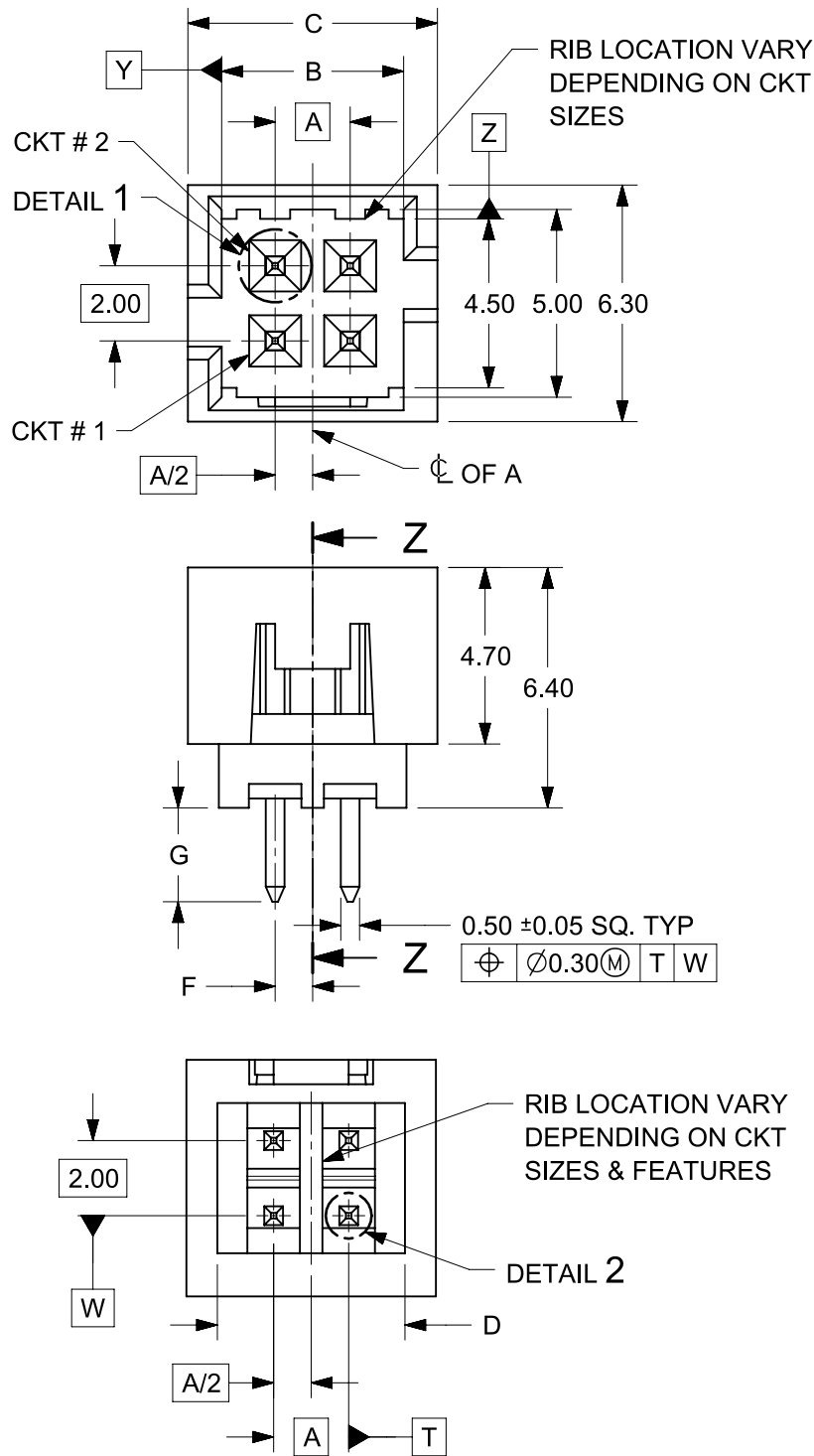
PACKAGING SPECIFICATION TABLE

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

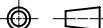
CIRCUIT SIZE		FEATURES						
		FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
		① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3	
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	N.A	YES	N.A	N.A		
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5	
	N.A	N.A	YES	N.A	N.A	YES		
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	YES	N.A	N.A	YES		
	N.A	YES	N.A	YES	N.A	N.A		
	N.A	YES	N.A	YES	N.A	YES		
	N.A	N.A	YES	N.A	YES	N.A		
8 TO 12	N.A	N.A	YES	N.A	YES	N.A	6 - 8	
	N.A	N.A	YES	N.A	YES	YES		
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	YES	N.A	N.A	YES		
	N.A	YES	N.A	YES	N.A	N.A		
	N.A	YES	N.A	YES	N.A	YES		
14 TO 50	YES	N.A	YES	N.A	YES	N.A	9 - 13	
	YES	N.A	YES	N.A	YES	YES		

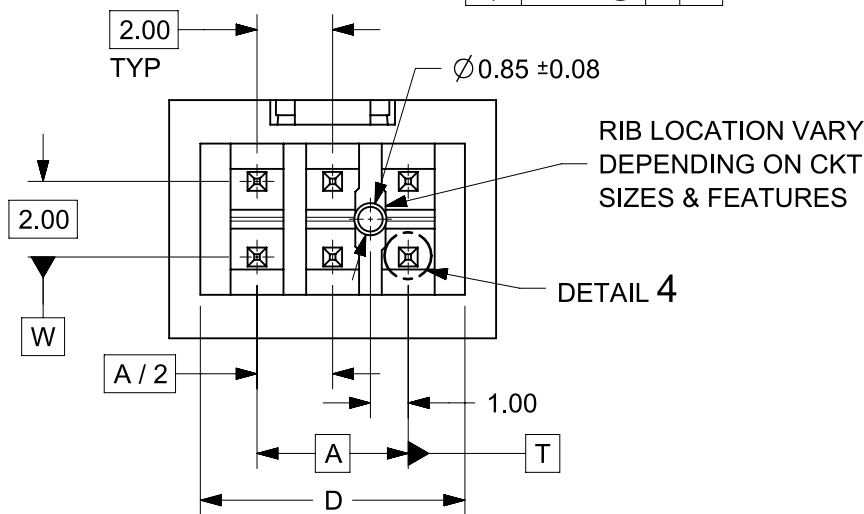
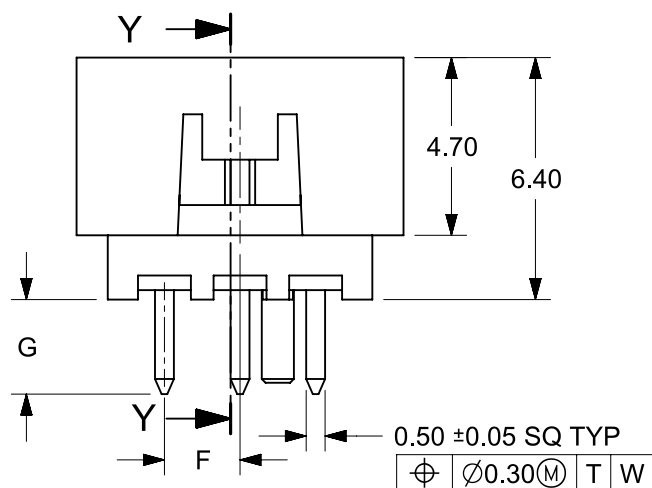
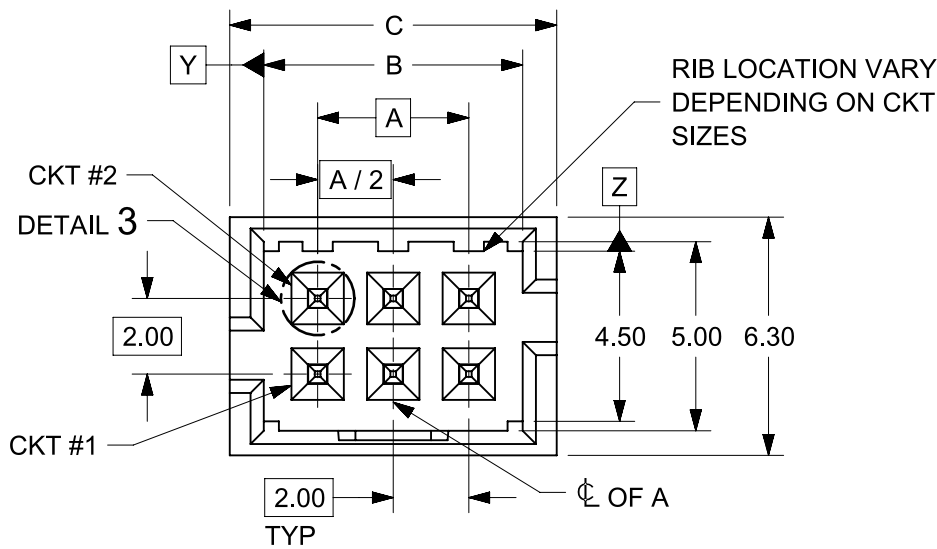
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers			molex				
mm		NTS									
GENERAL TOLERANCES (UNLESS SPECIFIED)				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
	MM	INCH									
4 PLACES	± 0	± 0									
3 PLACES	± 0	± 0									
2 PLACES	± 0.2	± 0									
1 PLACE	± 0	± 0		PRODUCT CUSTOMER DRAWING							
0 PLACES	± 0	± 0									
ANGULAR TOL ± 3°				DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SD-87831-0001		PSD		001	A25		
THIRD ANGLE PROJECTION				DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
				A3-SIZE		87831		SEE TABLE		GENERAL MARKET	1 OF 14

4 CIRCUITS

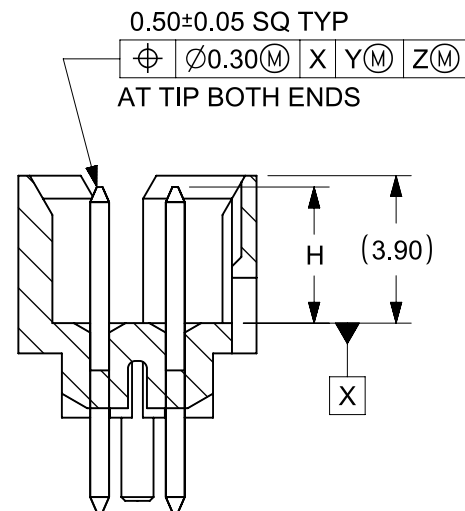


- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES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

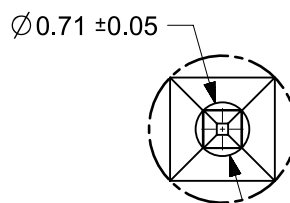
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex	
mm		NTS							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
	MM	INCH							
4 PLACES	±	0	±					0	
3 PLACES	±	0	±	0					
2 PLACES	±	0.2	±	0					
1 PLACE	±	0	±	0					
0 PLACES	±	0	±	0					
ANGULAR TOL				±		3 °		PRODUCT CUSTOMER DRAWING	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES			
				A3-SIZE		87831			
				MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
				SEE TABLE		GENERAL MARKET		2 OF 14	



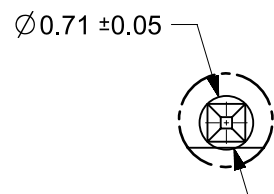
6 CIRCUITS



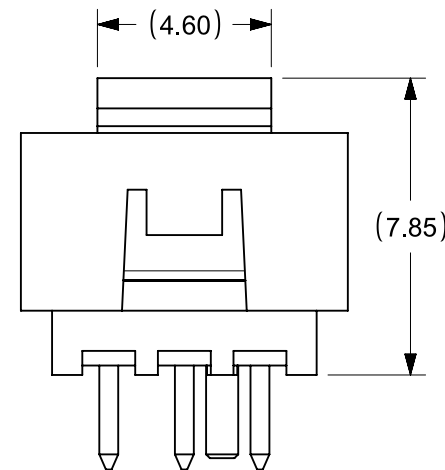
SECTION Y-Y



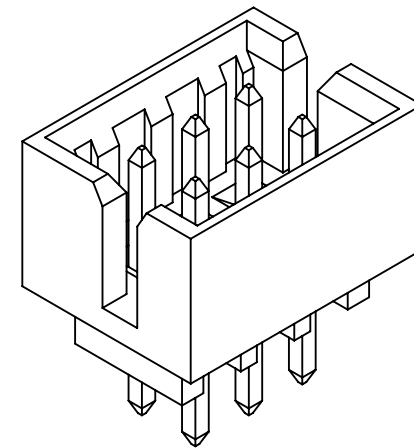
DETAIL 3



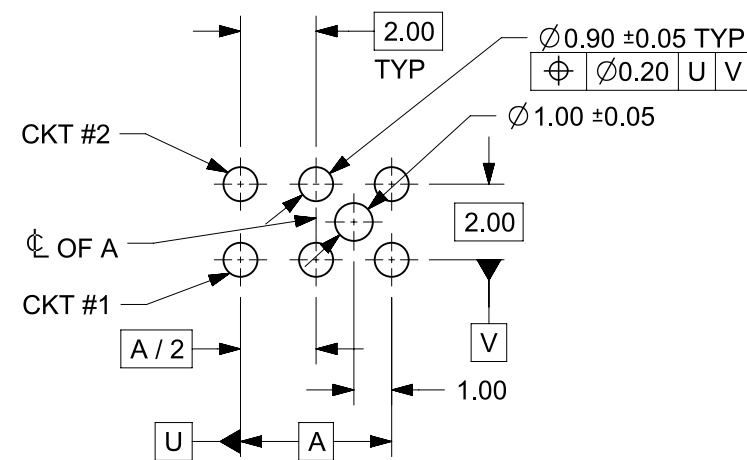
DETAIL 4



VIEW FOR
HEADER WITH CAP



VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

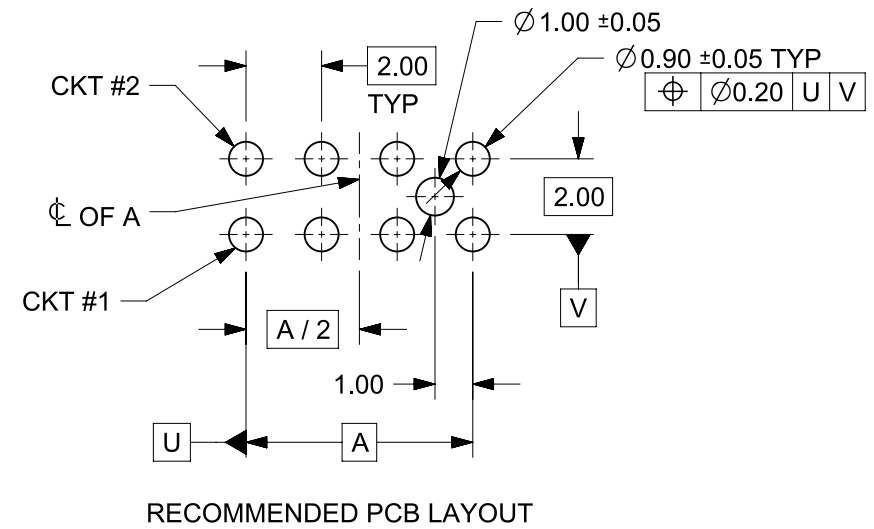
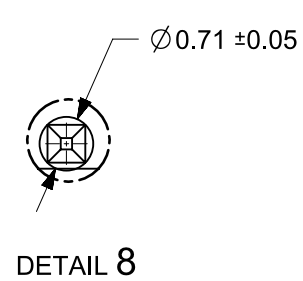
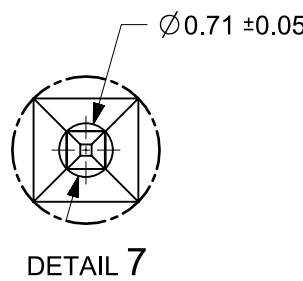
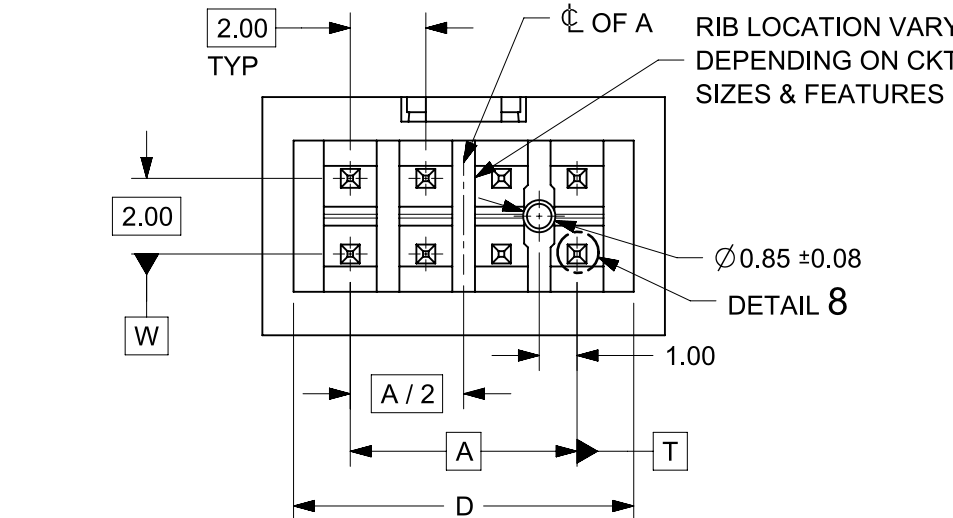
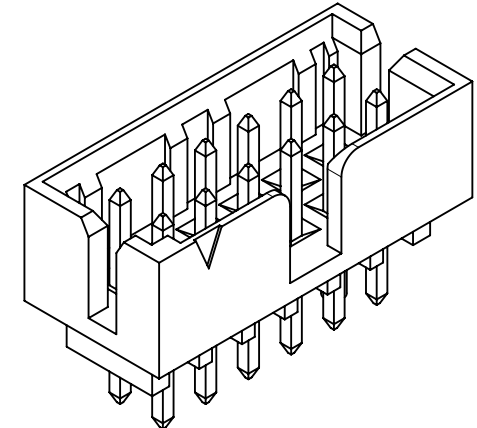
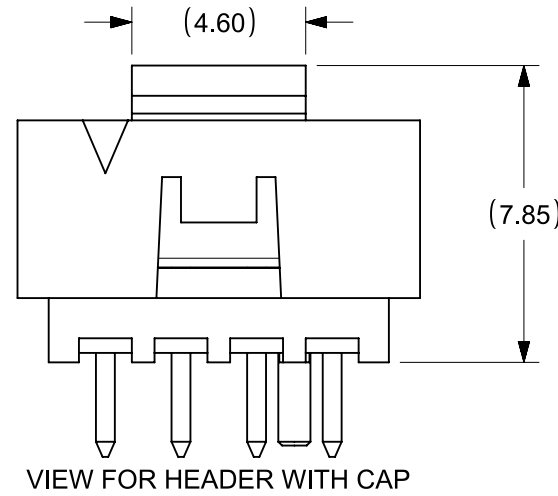
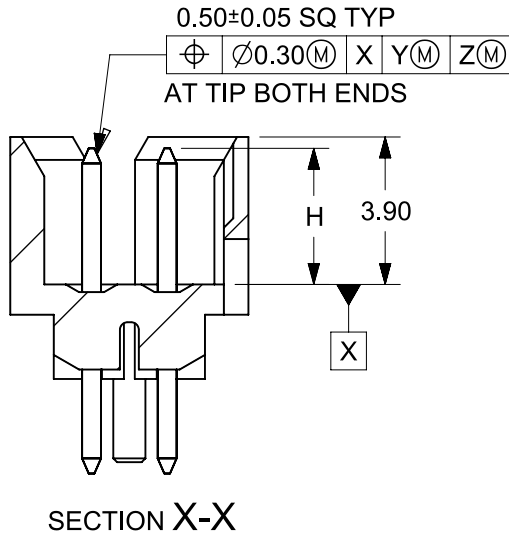
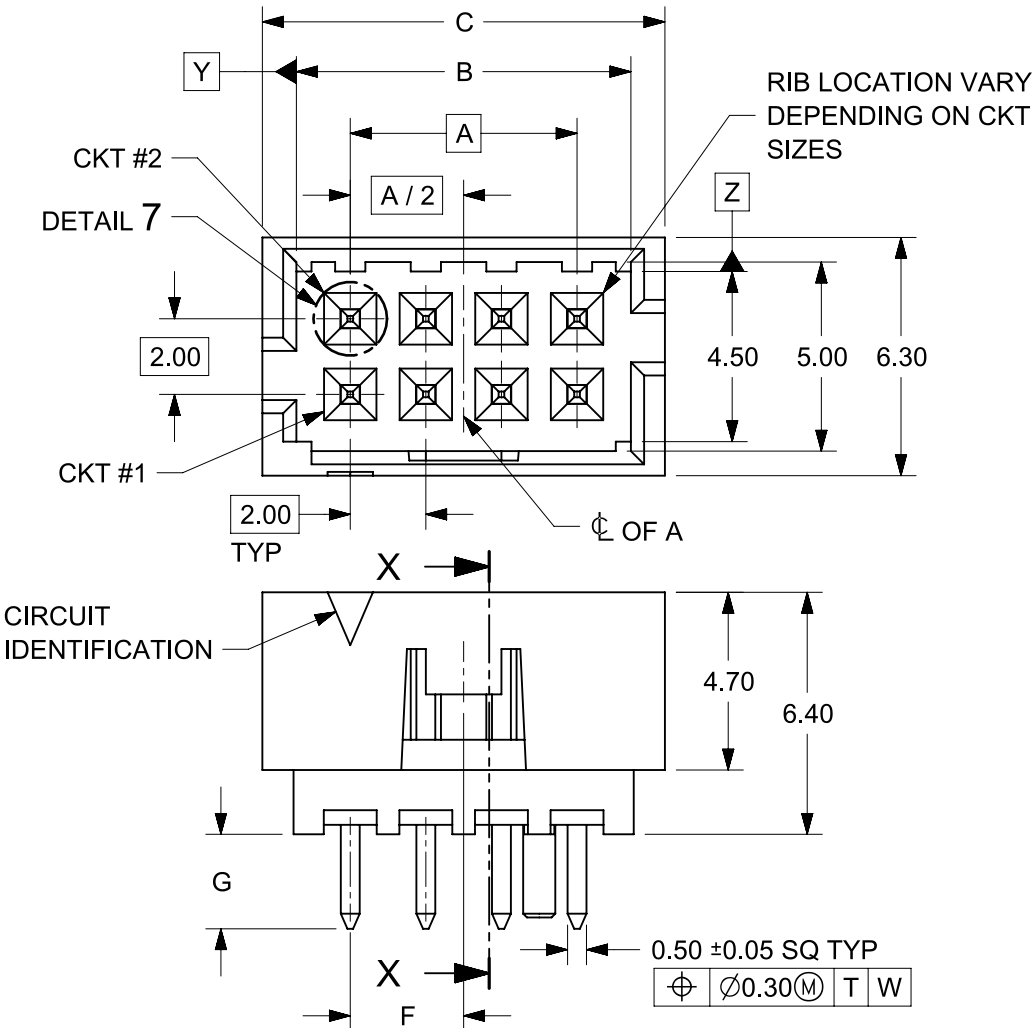
NOTES:

- 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: 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													
	MM		INCH														
4 PLACES	± 0	± 0															
3 PLACES	± 0	± 0															
2 PLACES	± 0.2	± 0															
1 PLACE	± 0	± 0															
0 PLACES	± 0	± 0		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29													
ANGULAR TOL ± 3 °																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
						A3-SIZE		87831		SD-87831-0001		PSD		001		A25	
										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
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			

8 TO 12 CIRCUITS



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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
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								
0 PLACES	±	0	±	0								
ANGULAR TOL ± 3°				INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								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	YES						N.A	N.A		YES	N.A	3.00			2.50	
	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		YES	N.A		3.50
	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	N.A		N.A	N.A	N.A	N.A	N.A	N.A	3.60 ^{+0.15} _{-0.10}
	87831-0832	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	N.A	2.50	
	87831-0843	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	2.50		
	87831-0844	N.A	N.A	3																					
	87831-0845	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						YES	N.A		YES	N.A	YES	N.A	N.A	2.50	
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.

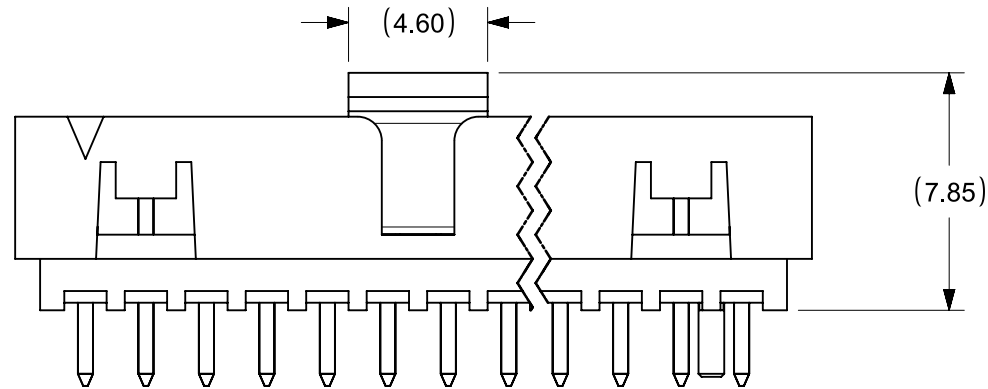
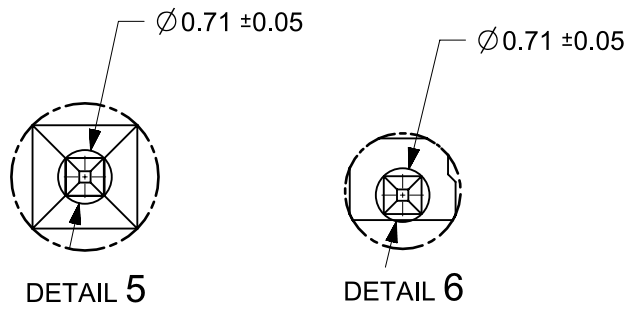
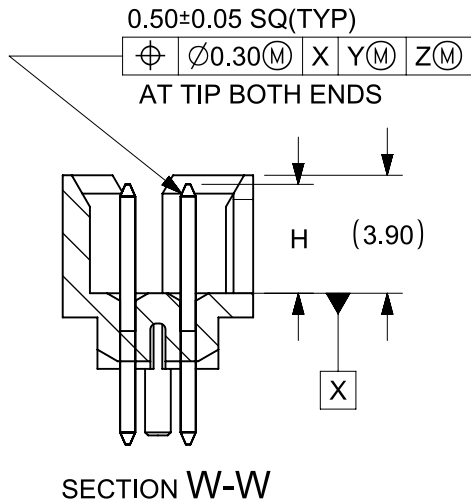
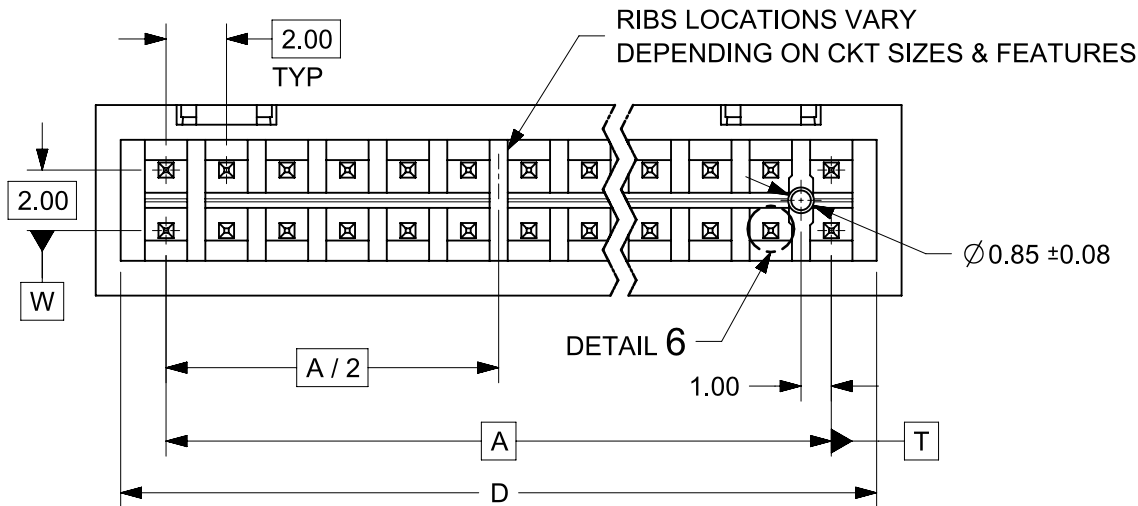
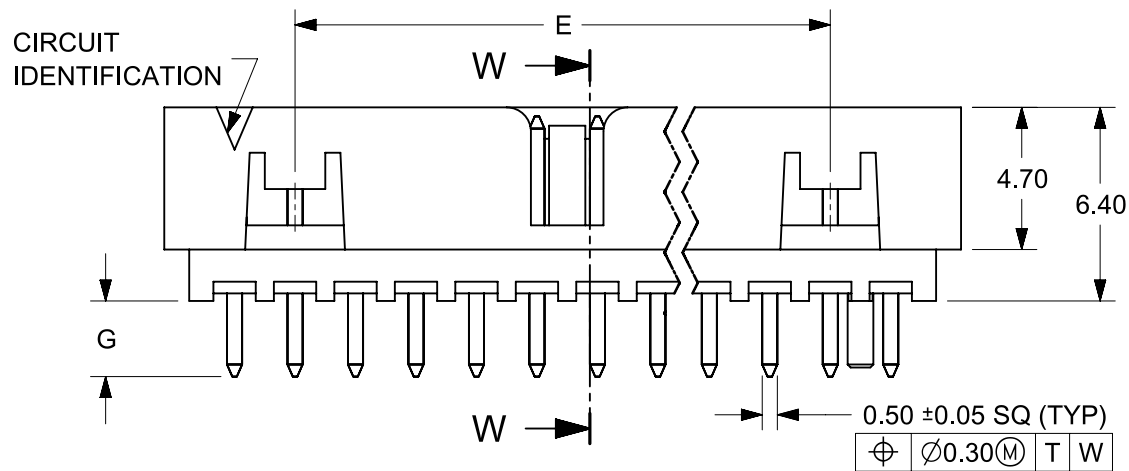
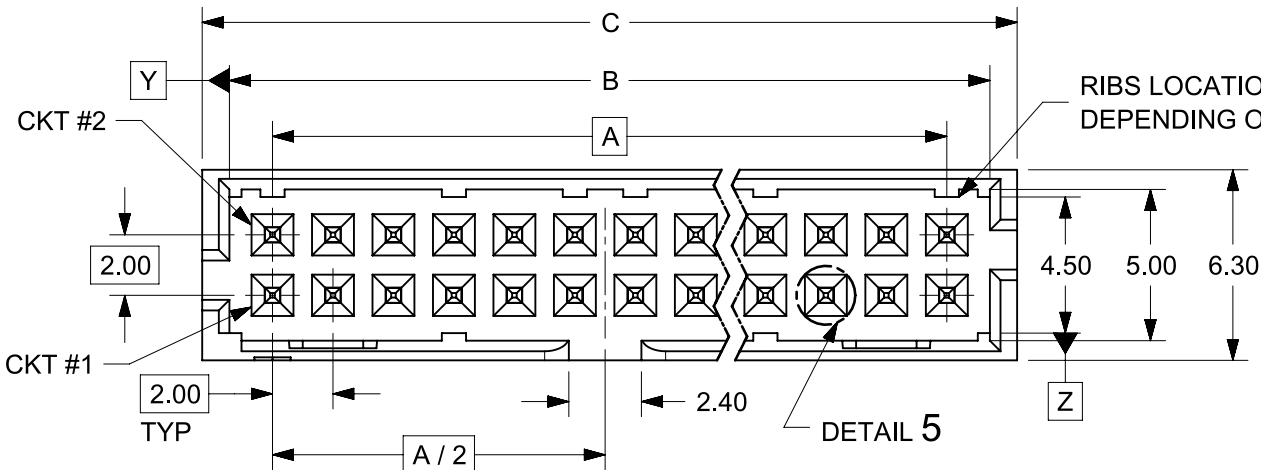
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

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				mo 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		

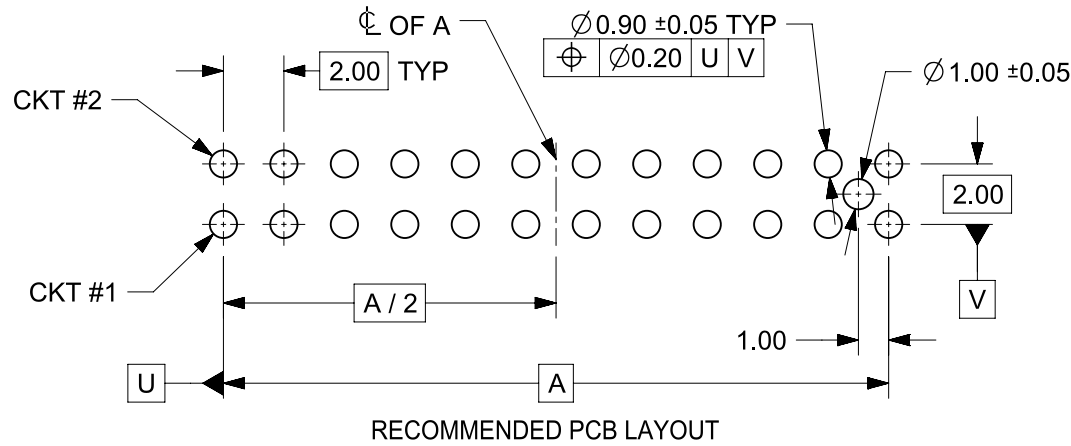
DOCUMENT STATUS	Production	RELEASE DATE	08-Jun-2026	04:36:51				
9	8	7	6	5	4	3	2	1

10	9	8	7	6	5	4	3	2	1																																																																																																																																
10 TO 12 CIRCUITS																																																																																																																																									
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		#####	PEG	DIMENSION																																																																																																																													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																																																																																																																						
10	87831-1019	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	N.A	N.A	2.50	3.60±0.20																																																																																																																						
	87831-1020	N.A	87831-1070	2																																																																																																																																					
	87831-1021	N.A	87831-5562	3																																																																																																																																					
	87831-1036	N.A	N.A	4																																																																																																																																					
	87831-1010	87831-1030	87831-5561	2	N.A	N.A	YES	N.A	YES	N.A	3.50																																																																																																																														
	87831-1011	N.A	N.A	3																																																																																																																																					
	87831-1028	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES								2.50																																																																																																																							
	87831-1029	N.A	87831-5557	3																																																																																																																																					
	87831-1035	N.A	N.A	3	N.A	N.A	YES	N.A	YES	YES	3.50																																																																																																																														
	87831-1041	N.A	N.A	2																																																																																																																																					
	87831-1042	N.A	87831-5553	3	N.A	YES	YES	N.A	N.A	N.A							4.00	2.50																																																																																																																							
	87831-1032	N.A	N.A	2																																																																																																																																					
	87831-1043	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	2.50																																																																																																																														
	87831-1044	N.A	N.A	3																																																																																																																																					
	87831-1045	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES								2.50																																																																																																																							
	87831-1046	N.A	N.A	3																																																																																																																																					
12	87831-1219	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	10.00	12.85	14.65	13.00	N.A			N.A	2.50	3.60±0.20																																																																																																																				
	87831-1220	N.A	87831-5556	2																																																																																																																																					
	87831-1221	N.A	N.A	3																																																																																																																																					
	87831-1236	N.A	N.A	4																																																																																																																																					
	87831-1228	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES	3.50																																																																																																																														
	87831-1229	N.A	87831-5558	3																																																																																																																																					
	87831-1258	N.A	87831-5567	2																																																																																																																																					
	87831-1241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A							5.00	2.50																																																																																																																							
	87831-1242	N.A	N.A	3																																																																																																																																					
	87831-1255	87831-1256	N.A	2	N.A	YES	YES	N.A	N.A	N.A	3.50																																																																																																																														
	87831-1232	N.A	N.A	2																																																																																																																																					
	87831-1243	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A								2.50																																																																																																																							
	87831-1244	N.A	N.A	3																																																																																																																																					
	87831-1245	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES	2.50																																																																																																																														
	87831-1246	N.A	N.A	3																																																																																																																																					
	PLATING OPTIONS: 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																																																																																																																																								
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION <table><tr><td colspan="2">DIMENSION UNITS</td><td colspan="2">SCALE</td><td colspan="4" rowspan="2">CURRENT REV DESC: Adding New Part Numbers</td><td colspan="4" rowspan="2"> molex </td></tr><tr><td colspan="2">mm</td><td colspan="2">NTS</td></tr><tr><td colspan="4">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="4" rowspan="2">EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29</td><td colspan="4">MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER</td></tr><tr><td colspan="2"></td><td>MM</td><td>INCH</td><td colspan="4">PRODUCT CUSTOMER DRAWING</td></tr><tr><td>4 PLACES</td><td>±</td><td>0</td><td>±</td><td>0</td><td colspan="4">DOCUMENT NUMBER</td></tr><tr><td>3 PLACES</td><td>±</td><td>0</td><td>±</td><td>0</td><td colspan="4">SD-87831-0001</td></tr><tr><td>2 PLACES</td><td>±</td><td>0.2</td><td>±</td><td>0</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td><td colspan="2"></td></tr><tr><td>1 PLACE</td><td>±</td><td>0</td><td>±</td><td>0</td><td>PSD</td><td>001</td><td>A25</td><td colspan="2"></td></tr><tr><td>0 PLACES</td><td>±</td><td>0</td><td>±</td><td>0</td><td colspan="4">SHEET NUMBER</td></tr><tr><td colspan="4">ANGULAR TOL</td><td>±</td><td>3 °</td><td colspan="4">8 OF 14</td></tr><tr><td colspan="4">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>CUSTOMER</td><td colspan="2"></td></tr><tr><td colspan="4"></td><td colspan="2"></td><td>A3-SIZE</td><td>87831</td><td>SEE TABLE</td><td>GENERAL MARKET</td><td colspan="2"></td></tr></table>																					DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex				mm		NTS		GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						MM	INCH	PRODUCT CUSTOMER DRAWING				4 PLACES	±	0	±	0	DOCUMENT NUMBER				3 PLACES	±	0	±	0	SD-87831-0001				2 PLACES	±	0.2	±	0	DOC TYPE	DOC PART	REVISION			1 PLACE	±	0	±	0	PSD	001	A25			0 PLACES	±	0	±	0	SHEET NUMBER				ANGULAR TOL				±	3 °	8 OF 14				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER									A3-SIZE	87831	SEE TABLE	GENERAL MARKET		
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex																																																																																																																																	
mm		NTS																																																																																																																																							
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																																																																																																																																	
		MM	INCH					PRODUCT CUSTOMER DRAWING																																																																																																																																	
4 PLACES	±	0	±	0	DOCUMENT NUMBER																																																																																																																																				
3 PLACES	±	0	±	0	SD-87831-0001																																																																																																																																				
2 PLACES	±	0.2	±	0	DOC TYPE	DOC PART	REVISION																																																																																																																																		
1 PLACE	±	0	±	0	PSD	001	A25																																																																																																																																		
0 PLACES	±	0	±	0	SHEET NUMBER																																																																																																																																				
ANGULAR TOL				±	3 °	8 OF 14																																																																																																																																			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER																																																																																																																																
						A3-SIZE	87831	SEE TABLE	GENERAL MARKET																																																																																																																																
DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51																																																																																																																																				
FORMAT: Molex-aga-master-its-prod-A3 REVISION: E1 DATE: 2021/05/01		9	8	7	6	5	4	3	2	1																																																																																																																															

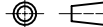
14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: 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		PRODUCT CUSTOMER DRAWING				DOCUMENT NUMBER SD-87831-0001		DOC TYPE PSD		DOC PART 001		REVISION A25	
0 PLACES	± 0	± 0													
ANGULAR TOL ± 3 °				INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29											
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION 		DRAWING A3-SIZE		SERIES 87831		MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 9 OF 14	

10	9	8	7	6	5	4	3	2	1										
14 TO 20 CIRCUITS																			
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
14	87831-1419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	12.00	14.85	16.65	15.00	8.00	N.A	2.50	3.60±0.20
	87831-1420	87831-1430	87831-5554	N.A	2														
	87831-1421	87831-5530	87831-5560	N.A	3														
	87831-1436	N.A	N.A	N.A	4														
	87831-1428	N.A	87831-5564	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-1429	N.A	87831-5563	N.A	3														
	87831-1435	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50	
	87831-1410	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							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		Production	RELEASE DATE		08-Jun-2026	04:36:51													
		9	8		7		6		5		4		3		2		1		

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

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

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

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

10 OF 14

A3-SIZE

87831

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	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																																																																																		
	87831-3037	N.A	N.A	N.A	3																																																																																		
	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="3" rowspan="2">CURRENT REV DESC: Adding New Part Numbers</td><td colspan="3" rowspan="5"> molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER </td></tr><tr><td>mm</td><td>NTS</td></tr><tr><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="3" rowspan="4">EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026</td></tr><tr><td></td><td>MM</td><td>INCH</td></tr><tr><td>4 PLACES</td><td>± 0</td><td>± 0</td></tr><tr><td>3 PLACES</td><td>± 0</td><td>± 0</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± 0</td><td colspan="3" rowspan="2">INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29</td><td colspan="2">DOCUMENT NUMBER</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td></tr><tr><td>1 PLACE</td><td>± 0</td><td>± 0</td><td colspan="2">SD-87831-0001</td><td>PSD</td><td>001</td><td>A25</td></tr><tr><td>0 PLACES</td><td>± 0</td><td>± 0</td><td colspan="3">ANGULAR TOL ± 3 °</td><td colspan="2">THIRD ANGLE PROJECTION</td><td>DRAWING</td><td>SERIES</td><td>MATERIAL NUMBER</td><td>CUSTOMER</td><td>SHEET NUMBER</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2"></td><td>A3-SIZE</td><td>87831</td><td>SEE TABLE</td><td colspan="2">GENERAL MARKET</td><td colspan="3">11 OF 14</td></tr></table>										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				MM	INCH	4 PLACES	± 0	± 0	3 PLACES	± 0	± 0	2 PLACES	± 0.2	± 0	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	1 PLACE	± 0	± 0	SD-87831-0001		PSD	001	A25	0 PLACES	± 0	± 0	ANGULAR TOL ± 3 °			THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				A3-SIZE	87831	SEE TABLE	GENERAL MARKET		11 OF 14		
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																																																																																					
	MM							INCH																																																																															
4 PLACES	± 0							± 0																																																																															
3 PLACES	± 0				± 0																																																																																		
2 PLACES	± 0.2	± 0	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION																																																																													
1 PLACE	± 0	± 0				SD-87831-0001		PSD	001	A25																																																																													
0 PLACES	± 0	± 0	ANGULAR TOL ± 3 °			THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER																																																																											
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				A3-SIZE	87831	SEE TABLE	GENERAL MARKET		11 OF 14																																																																														
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: Mxl-Apgs-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	± 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

11 OF 14

A3-SIZE

87831

THIRD ANGLE PROJECTION

DRAWING

SERIES

SEE TABLE

GENERAL MARKET

11 OF 14

11 OF 14

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													YES	
	87831-3435	N.A	N.A	3														
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													YES	
	87831-4010	N.A	N.A	2														
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: Mtl-Apgs-master-4b-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: Adding New Part Numbers						molex								
mm		NTS																
GENERAL TOLERANCES (UNLESS SPECIFIED)										MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER								
		MM	INCH															
4 PLACES	±	0	±	0														
3 PLACES	±	0	±	0														
2 PLACES	±	0.2	±	0														
1 PLACE	±	0	±	0														
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		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		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

DRAWING

A3-SIZE

SERIES

87831

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

13 OF 14

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

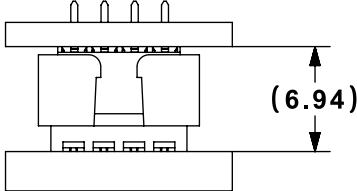
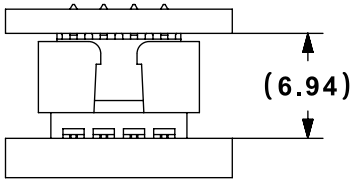
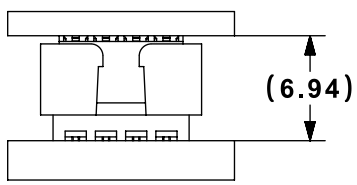
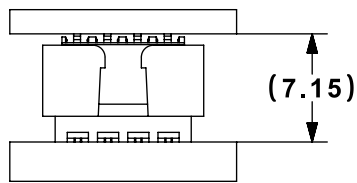
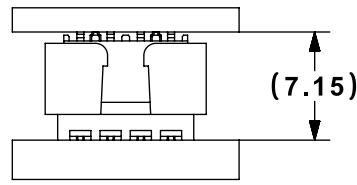
DOC PART

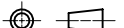
001

REVISION

A25

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	EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026											
4 PLACES	±	0	±									0			
3 PLACES	±	0	±									0			
2 PLACES	±	0.2	±									0			
1 PLACE	±	0	±									0			
0 PLACES	±	0	±	0	INITIAL REVISION: DRWN: DRWN BY XXXX/XX/XX APPR: APPR BY XXXX/XX/XX										
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	
				DOCUMENT NUMBER				DOC TYPE		DOC PART		REVISION			
				SD-87831-0001				PSD		001		A25			