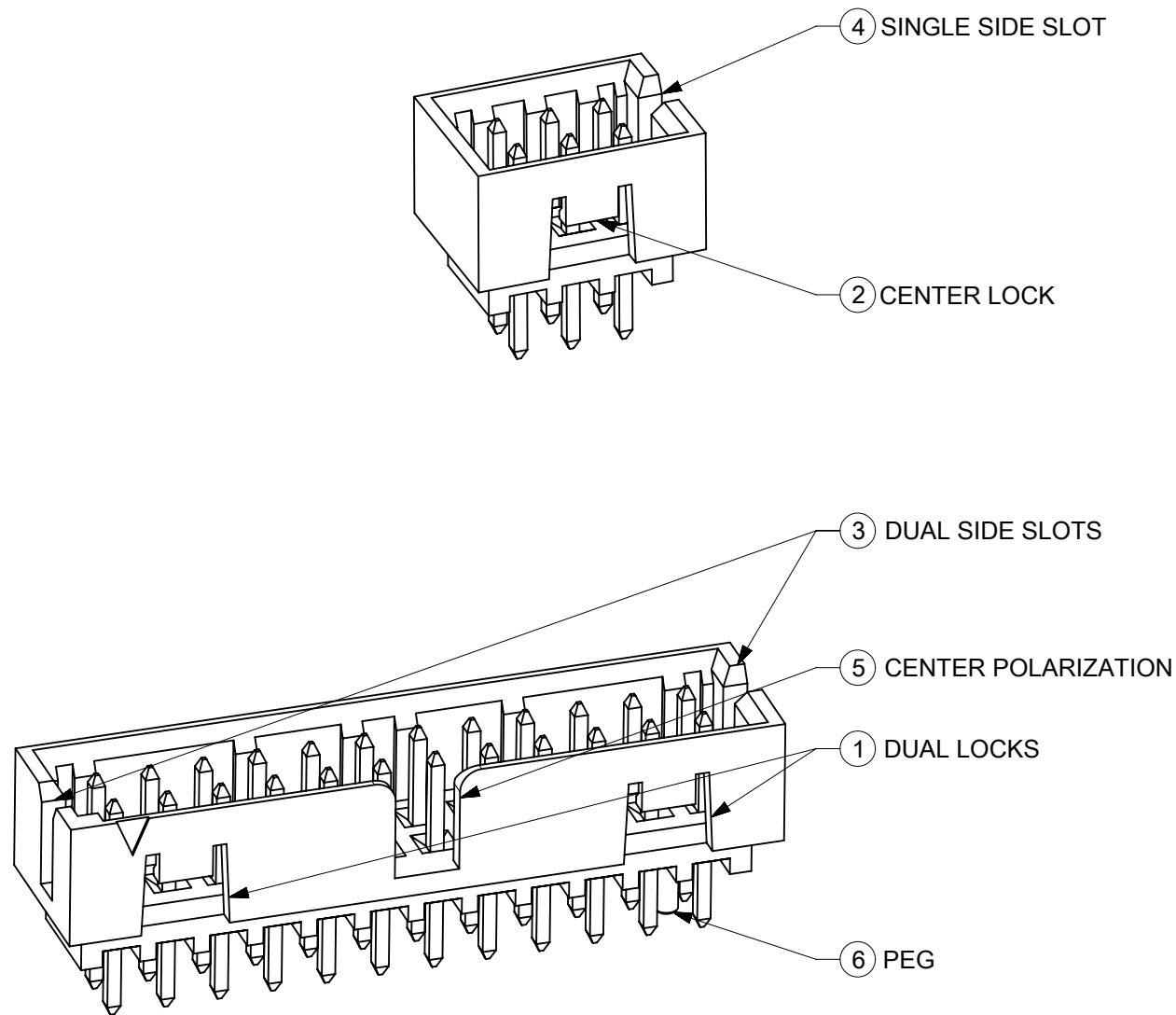


FEATURES SELECTION GUIDE



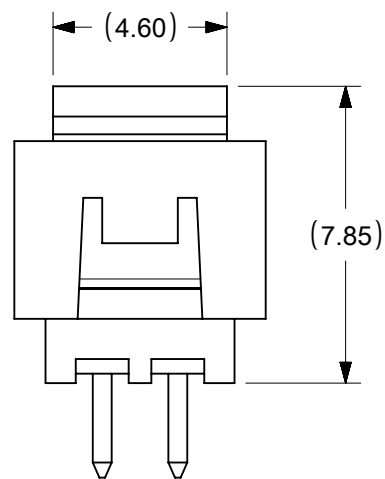
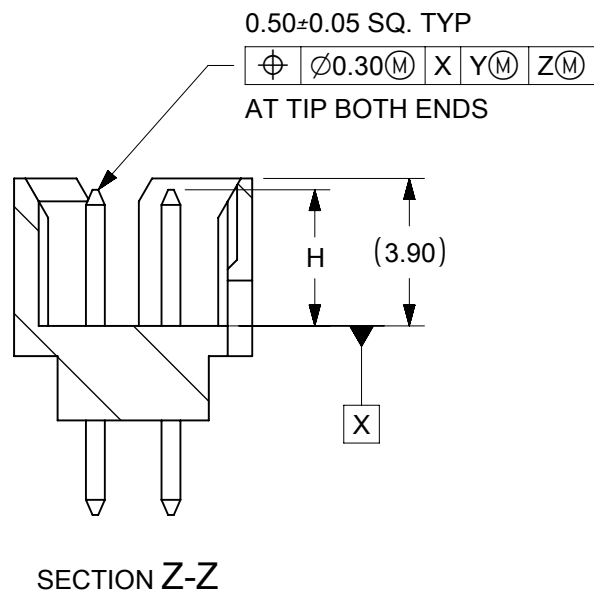
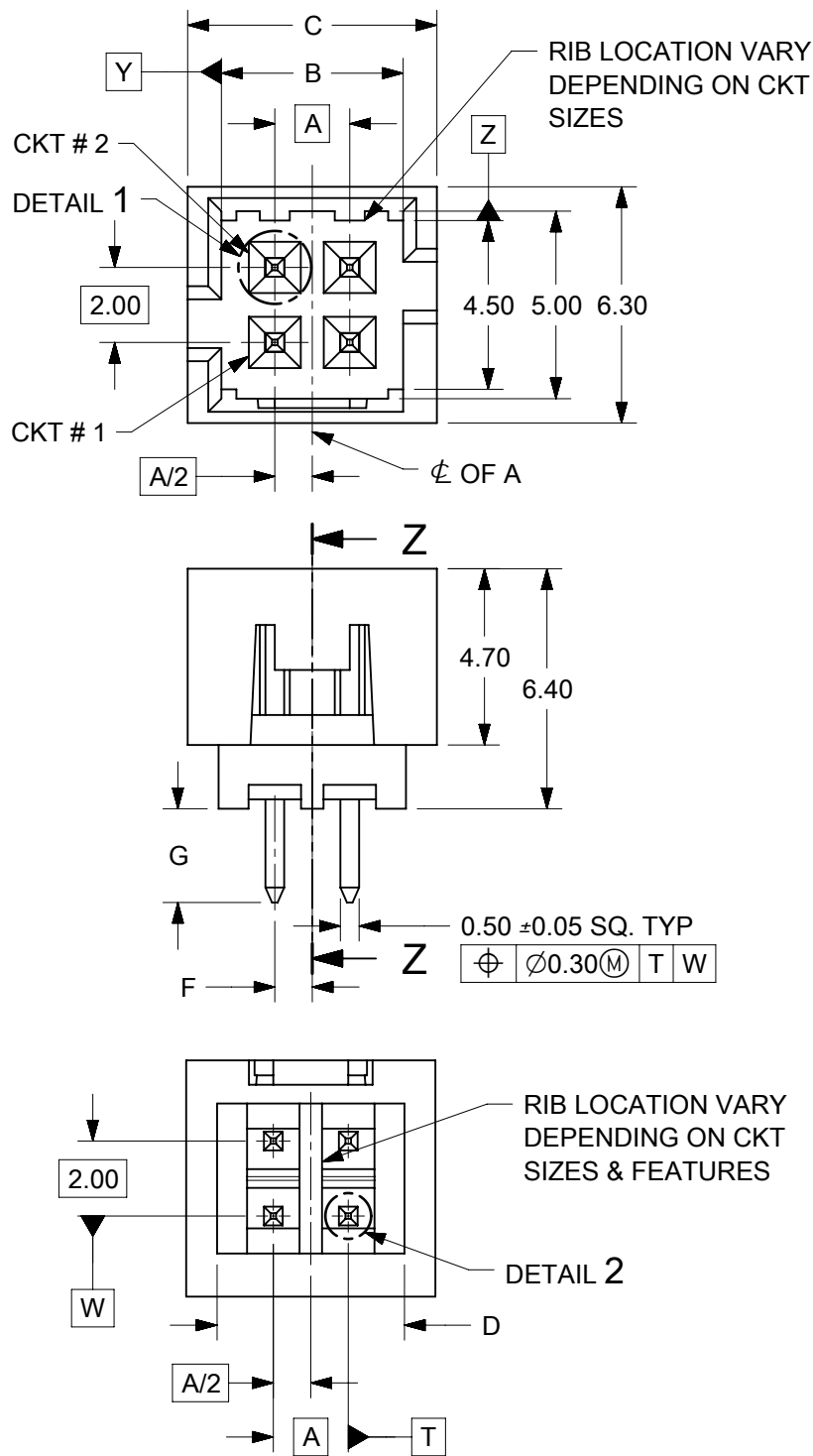
PACKAGING SPECIFICATION TABLE

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

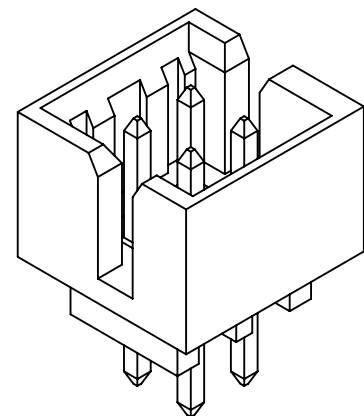
		FEATURES					
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A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

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
F = 0 E = 0 E = 0 S = 0 = 0 C = 0 = 0 = 0 = 0		DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.				molex			
		mm		NTS									
		GENERAL TOLERANCES (UNLESS SPECIFIED)						EC NO: 619055		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
			MM		INCH	DRWN: NMANE022019/03/25							
			4 PLACES	±	±	CHK'D: NMANE022019/07/09							
			3 PLACES	±	±	APPR: MRAMAKRISHNA2019/07/09							
			2 PLACES	±	0.2	±	INITIAL REVISION: DRWN: GMENARLY2015/04/15 APPR: KHLIM2015/06/29						
			1 PLACE	±	±								
			0 PLACES	±	±								
			ANGULAR TOL		± 3.0 °		THIRD ANGLE PROJECTION				DOCUMENT NUMBER SD-87831-0001		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DOC TYPE PSD								
					DRAWING A3-SIZE		SERIES 87831		DOC PART 001		REVISION A16		
									SHEET NUMBER 1 OF 14				

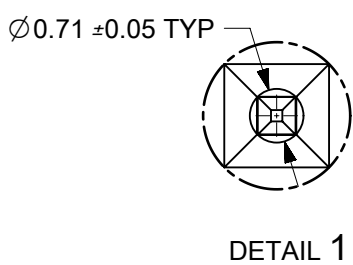
4 CIRCUITS



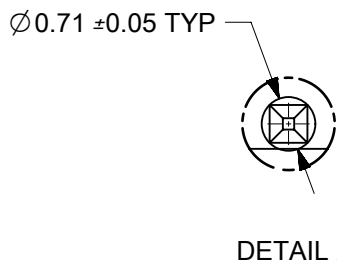
VIEW FOR
HEADER WITH CAP



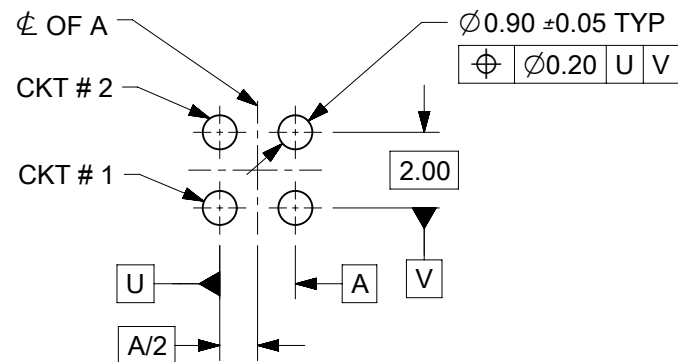
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



DETAIL 1



DETAIL 2



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)

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
= 0	mm	NTS
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
= 0		
= 0	MM	INCH
= 0	4 PLACES	±
= 0	3 PLACES	±
= 0	2 PLACES	± 0.2 ±
= 0	1 PLACE	±
= 0	0 PLACES	±
= 0	ANGULAR TOL	± 3.0 °
= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION
= 0		DRAWING
		SERIES
		MATERIAL NUMBER
		CUSTOMER
		SHEET NUMBER

CURRENT REV DESC: ADDED BTB DIST.		molex	
EC NO: 619055		MILLIGRID	
DRWN: NMANE02 2019/03/25		2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
CHK'D: NMANE02 2019/07/09			
APPR: MRAMAKRISHNA 2019/07/09		PRODUCT CUSTOMER DRAWING	
INITIAL REVISION:		DOCUMENT NUMBER	DOC TYPE
DRWN: GMENARLY 2015/04/15		SD-87831-0001	PSD
APPR: KHLIM 2015/06/29		DOC PART	REVISION
		001	A16
		SHEET NUMBER	
		2 OF 14	

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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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	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	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	N.A								2.80			
	87831-6142	N.A	N.A	3																	
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A										2.50	3.60 ^{+0.15} -0.10
	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.

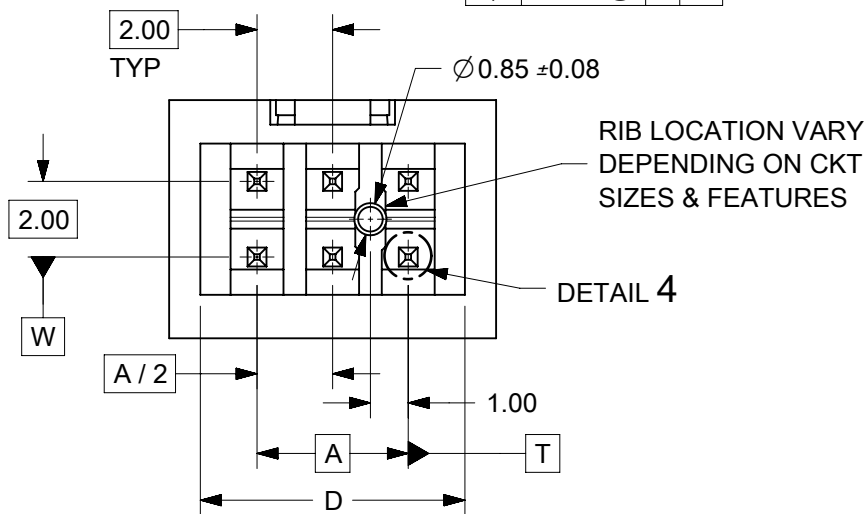
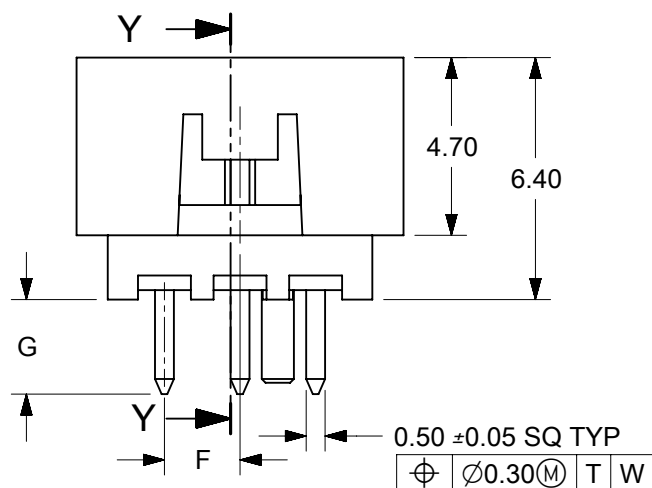
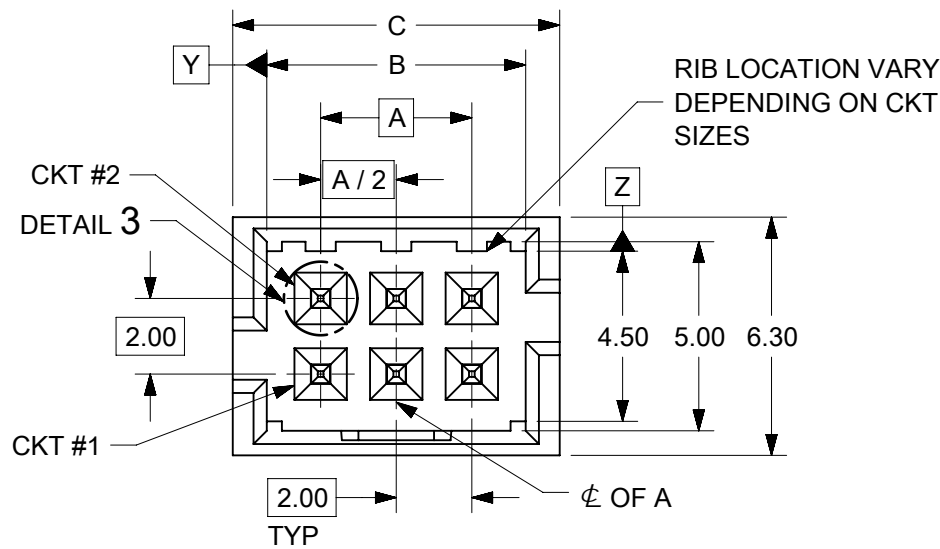
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

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.

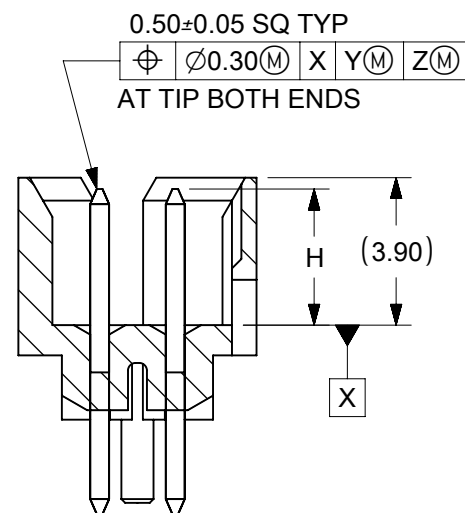
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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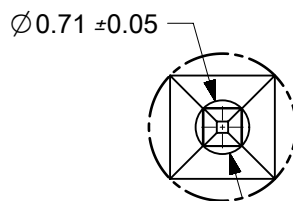
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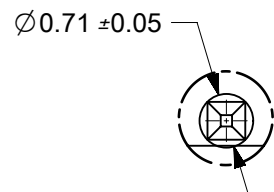
6 CIRCUITS



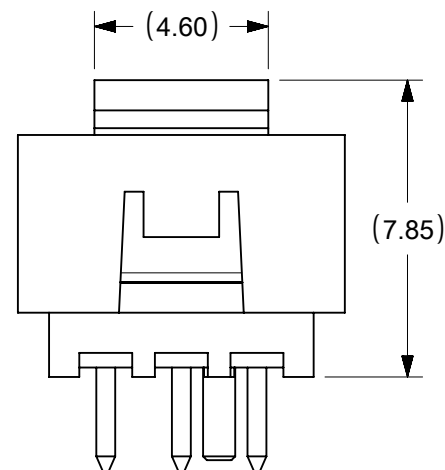
SECTION Y-Y



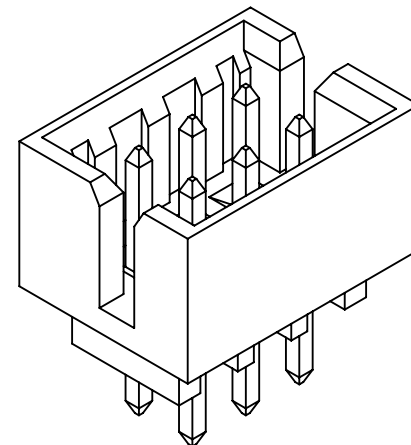
DETAIL 3



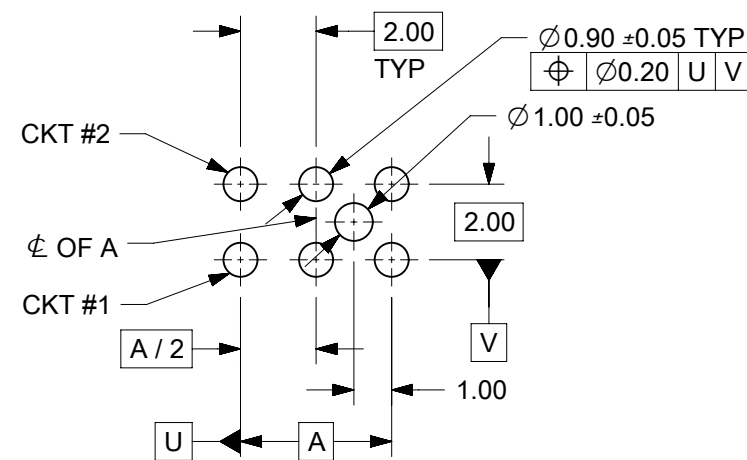
DETAIL 4



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)

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
= 0	mm	NTS
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
= 0		
= 0	MM	INCH
= 0	4 PLACES	±
= 0	3 PLACES	±
= 0	2 PLACES	± 0.2 ±
= 0	1 PLACE	±
= 0	0 PLACES	±
= 0	ANGULAR TOL	± 3.0 °
= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
= 0	THIRD ANGLE PROJECTION	DRAWING
= 0	SERIES	87831
= 0	MATERIAL NUMBER	SEE TABLE
= 0	CUSTOMER	GENERAL MARKET
= 0	SHEET NUMBER	4 OF 14

EC NO: 619055	2019/03/25
DRWN: NMANE02	2019/07/09
CHK'D: NMANE02	2019/07/09
APPR: MRAMAKRISHNA	2019/07/09
INITIAL REVISION:	
DRWN: GMENARLY	2015/04/15
APPR: KHLIM	2015/06/29

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-87831-0001	PSD	001	A16

PRODUCT CUSTOMER DRAWING	
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10	9	8	7	6	5	4	3	2	1											
6 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		
6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	N.A	2.50	3.60±0.20		
	87831-0620	N.A	N.A	2																
	87831-0621	N.A	N.A	3																
	87831-0636	N.A	N.A	4																
	87831-0628	N.A	N.A	2	N.A	N.A	YES	N.A	N.A	YES						N.A	2.50			
	87831-0629	N.A	N.A	3																
	87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A									2.00	2.50
	87831-0642	N.A	87831-5552	3																
	87831-5241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						2.80				
	87831-5242	N.A	N.A	3																
	87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A							2.50			
	87831-6242	N.A	N.A	3																
	87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						3.60 ^{+0.15} -0.10				
	87831-0644	N.A	N.A	3																
	87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES							2.50			
	87831-0646	N.A	N.A	3																
	87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES						2.50				
	87831-5119	N.A	N.A	1																
	87831-5121	N.A	N.A	3	N.A	N.A	YES	N.A	YES	N.A							N.A		2.50	3.60±0.20
	87831-5136	N.A	N.A	4																

PLATING OPTIONS:

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

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

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

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

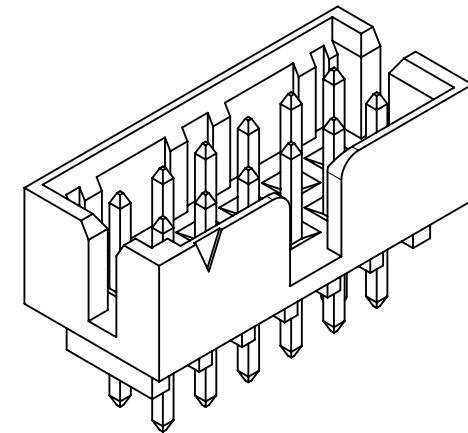
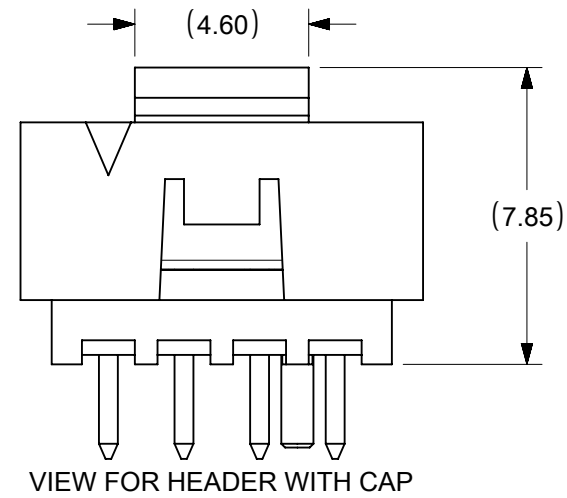
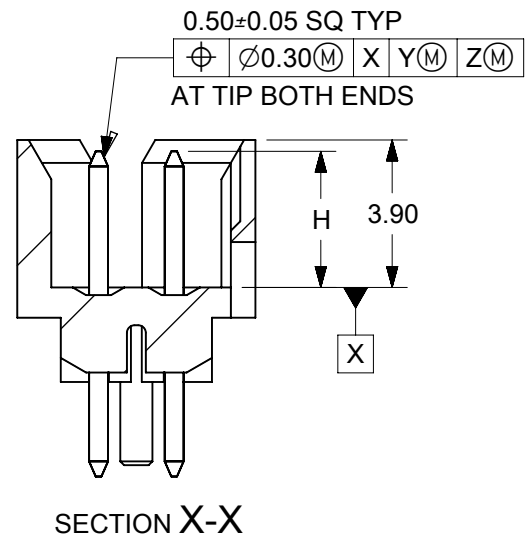
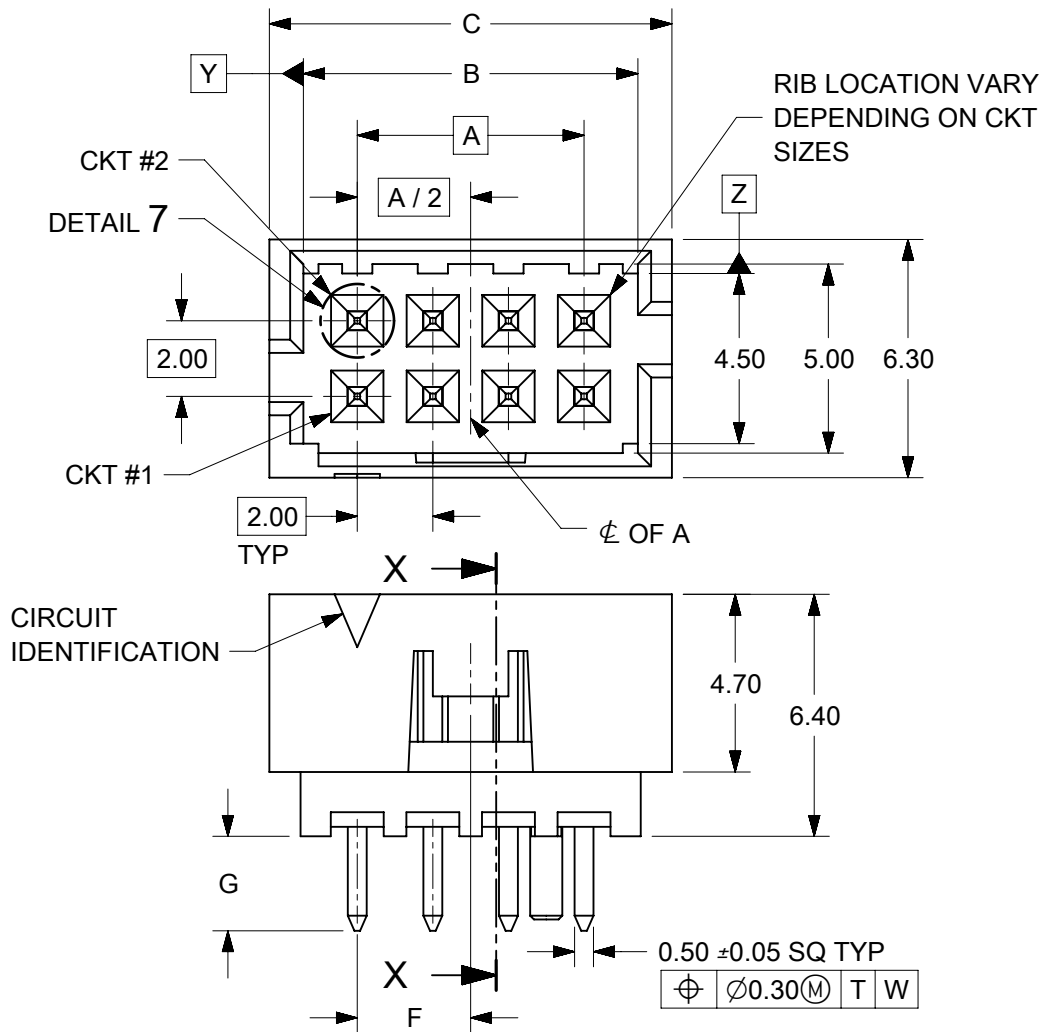
DOCUMENT STATUS		P1	RELEASE DATE	2019/07/09	06:47:12
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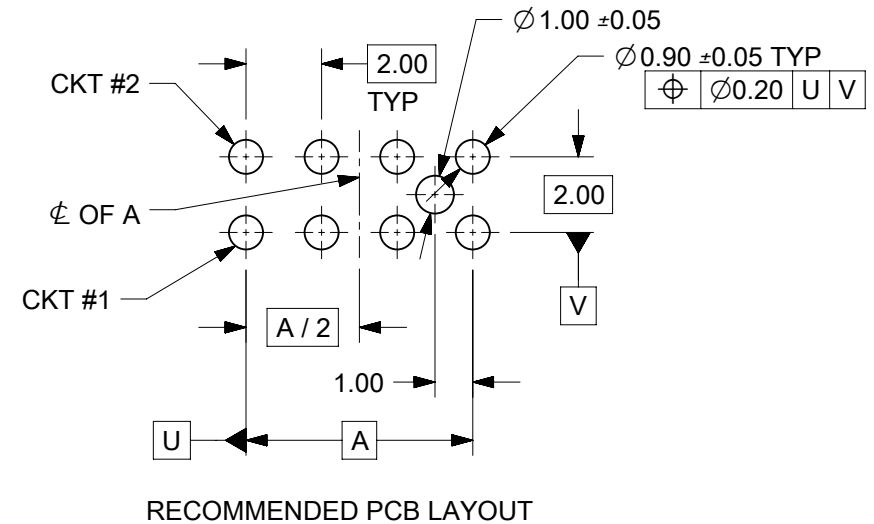
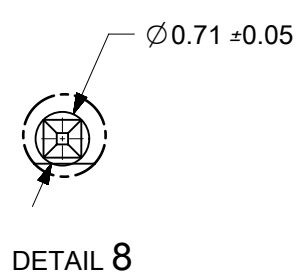
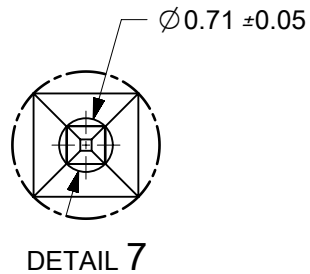
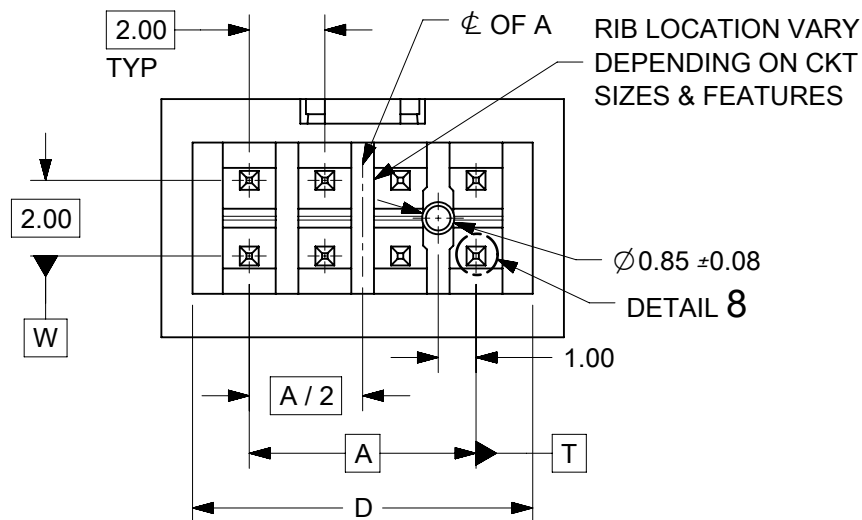
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
	DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.					molex			
	mm		NTS										
	GENERAL TOLERANCES (UNLESS SPECIFIED)												
			MM	INCH	EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09					2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
	4 PLACES		±	±									
	3 PLACES		±	±									
	2 PLACES		± 0.2	±									
	1 PLACE		±	±									
	0 PLACES		±	±	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29					DOCUMENT NUMBER		DOC TYPE	DOC PART
ANGULAR TOL		± 3.0 °	SD-87831-0001							PSD	001	A16	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
				A3-SIZE	87831	SEE TABLE		GENERAL MARKET		5 OF 14			

FORMAT: Mch 2019/07/09 10:00:00
REVISION: D
DATE: 2018/01/15

8 TO 12 CIRCUITS



VIEW FOR HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



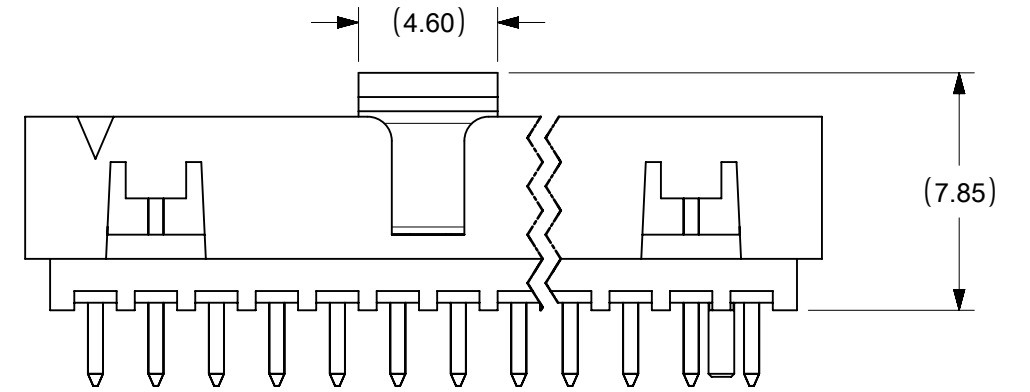
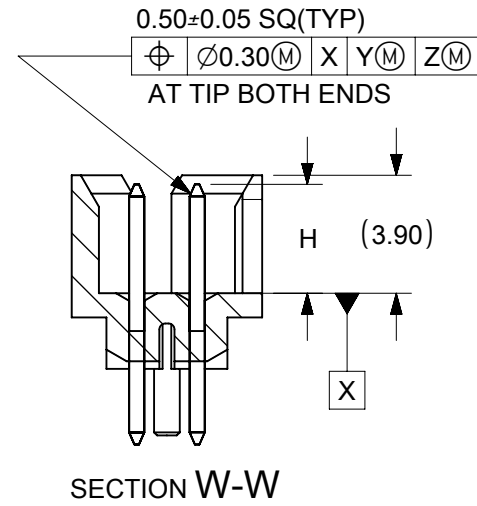
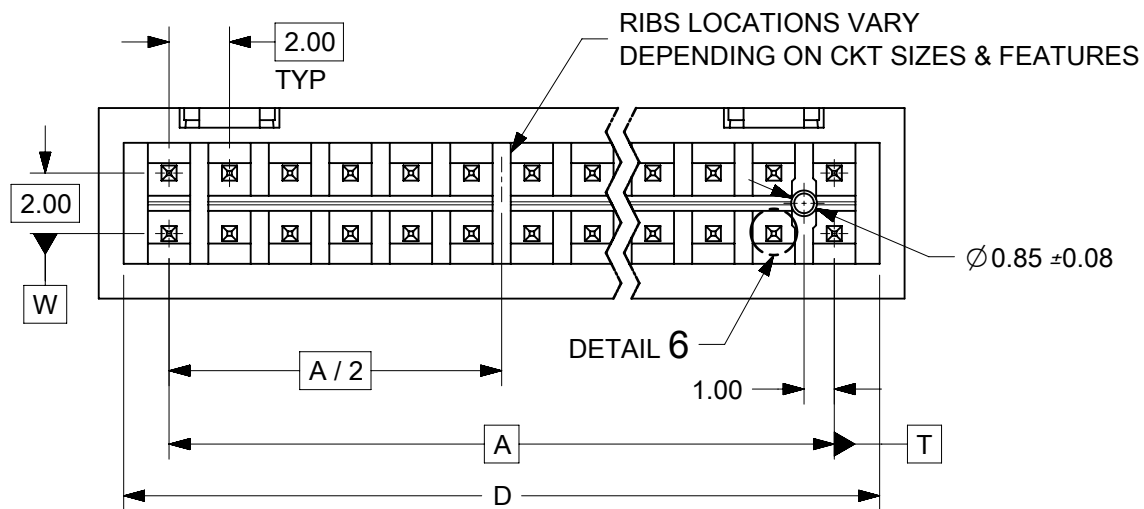
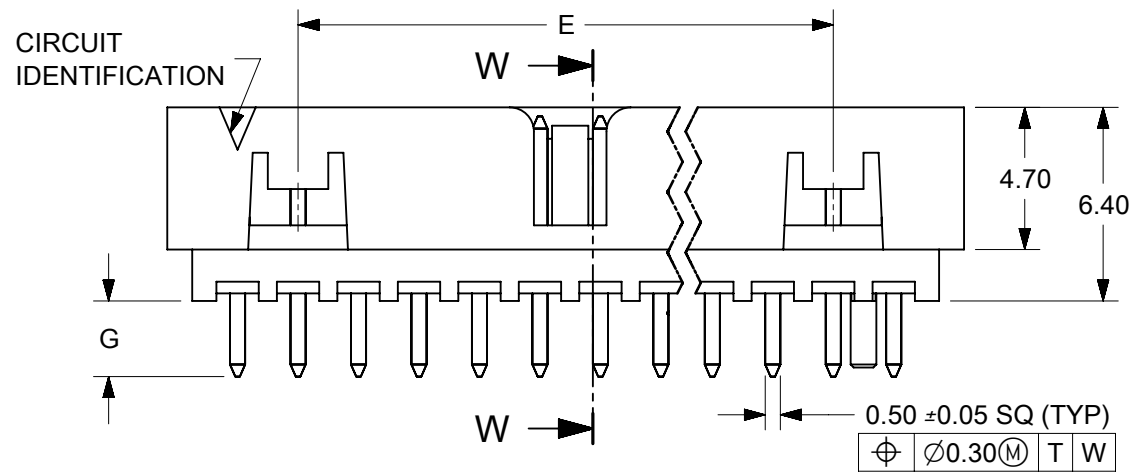
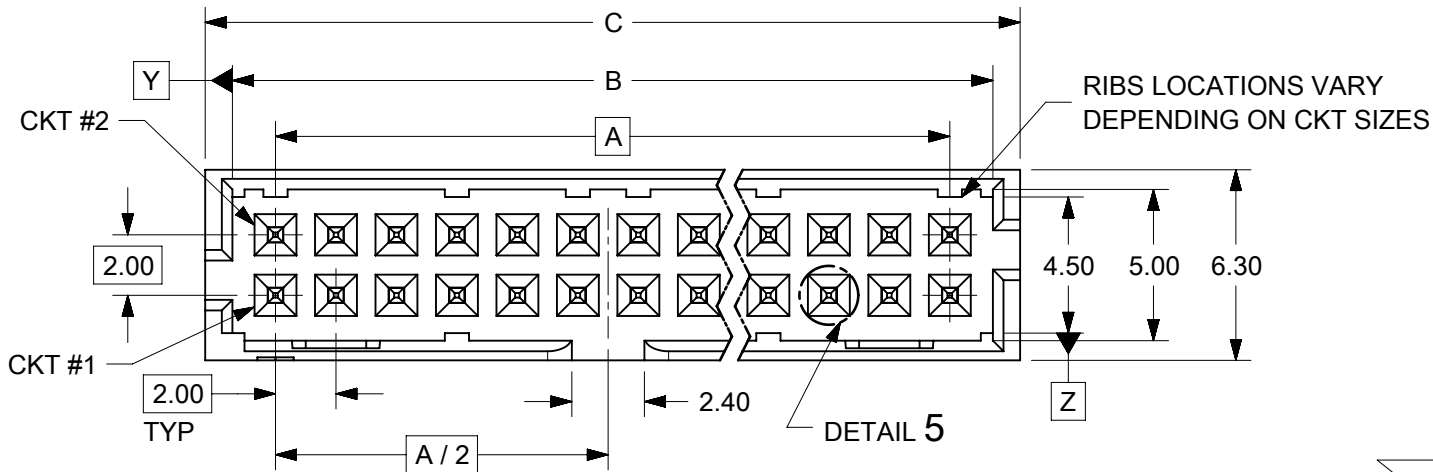
- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES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

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
= 0	mm	NTS
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
= 0		
= 0	4 PLACES	±
= 0	3 PLACES	±
= 0	2 PLACES	± 0.2 ±
= 0	1 PLACE	±
= 0	0 PLACES	±
= 0	ANGULAR TOL	± 3.0 °
= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
= 0	THIRD ANGLE PROJECTION	
= 0	DRAWING	SERIES
= 0	A3-SIZE	87831

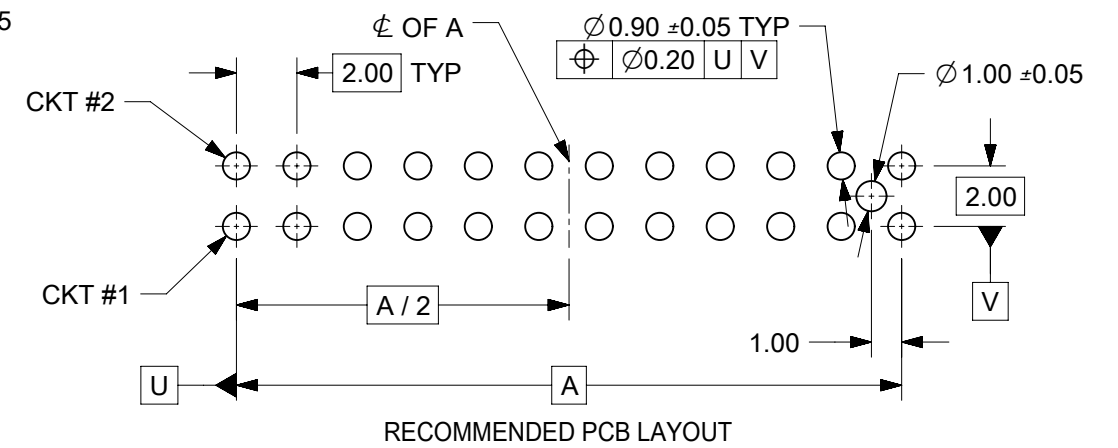
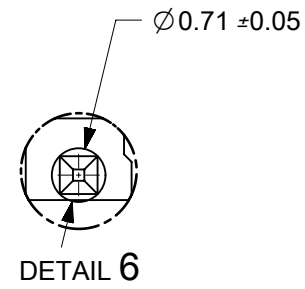
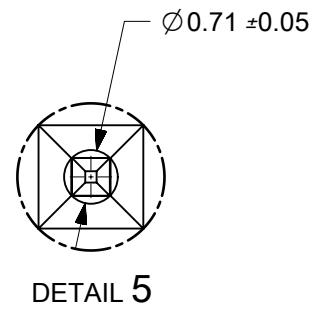
CURRENT REV DESC: ADDED BTB DIST.	
EC NO: 619055	2019/03/25
DRWN: NMANE02	2019/07/09
CHK'D: NMANE02	2019/07/09
APPR: MRAMAKRISHNA	2019/07/09
INITIAL REVISION:	
DRWN: GMENARLY	2015/04/15
APPR: KHLIM	2015/06/29

DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
SD-87831-0001		PSD	001	A16
MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
SEE TABLE		GENERAL MARKET		6 OF 14

14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



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

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)

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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SYMBOLS		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: ADDED BTB DIST.				molex									
mm		NTS															
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER									
	MM	INCH															
4 PLACES ± ±		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				PRODUCT CUSTOMER DRAWING											
3 PLACES ± ±																	
2 PLACES ± 0.2 ±		DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD		DOC PART 001		REVISION A16							
1 PLACE ± ±																	
0 PLACES ± ±		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	
ANGULAR TOL ± 3.0°																	

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
	87831-3010	87831-3030	87831-3050	N.A	2													YES		N.A	YES	N.A	YES	N.A	3.50
PLATING OPTIONS:																									
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																									
DOCUMENT STATUS		P1	RELEASE DATE	2019/07/09	06:47:12	7		6		5		4		3		2		1							
FORMAT: Met		9		8		7		6		5		4		3		2		1							

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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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3228	N.A	N.A	2														
	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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3428	N.A	N.A	2														
	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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3628	N.A	N.A	2														
	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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3828	N.A	N.A	2														
	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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4028	N.A	N.A	2														
	87831-4029	N.A	N.A	3														
	87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50	

PLATING OPTIONS:

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

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

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

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

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

MM

INCH

4 PLACES

±

±

3 PLACES

±

±

2 PLACES

±

0.2

±

1 PLACE

±

±

0 PLACES

±

±

ANGULAR TOL

±

3.0 °

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

CURRENT REV DESC: ADDED BTB DIST.

EC NO: 619055

DRWN: NMANE02

CHK'D: NMANE02

APPR: MRAMAKRISHNA

2019/03/25

2019/07/09

2019/07/09

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

DOCUMENT NUMBER

SD-87831-0001

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

12 OF 14

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED
HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

1

2

3

4

5

6

7

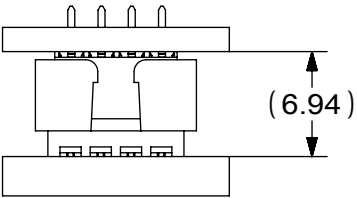
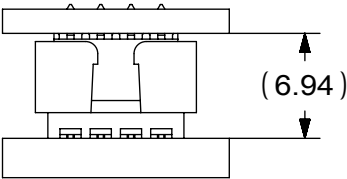
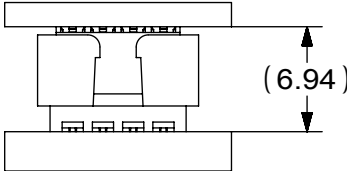
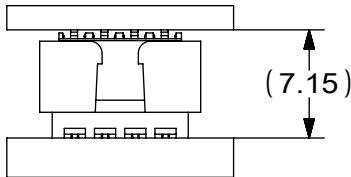
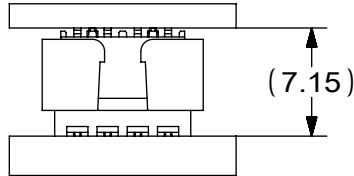
8

9

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	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION								
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H	
42	87831-4219	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	2															
	87831-4221	N.A	N.A	3															
	87831-4236	N.A	N.A	4															
	87831-4228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-4229	N.A	N.A	3															
44	87831-4419	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	2															
	87831-4421	N.A	N.A	3															
	87831-4436	N.A	N.A	4															
	87831-4428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-4429	N.A	N.A	3															
	87831-4435	N.A	N.A	3															
46	87831-4619	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	2															
	87831-4621	N.A	N.A	3															
	87831-4636	N.A	N.A	4															
	87831-4628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-4629	N.A	N.A	3															
48	87831-4819	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	2															
	87831-4821	N.A	N.A	3															
	87831-4836	N.A	N.A	4															
	87831-4828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-4829	N.A	N.A	3															
50	87831-5019	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	2															
	87831-5021	N.A	N.A	3															
	87831-5036	N.A	N.A	4															
	87831-5028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-5029	N.A	N.A	3															
	87831-5035	N.A	N.A	3															
PLATING OPTIONS:																			
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																			
DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12															
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FORMAT: Mfg REVISION: D DATE: 2018/01/17										PROD: B-prod-A3									

SYMBOLS	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: ADDED BTB DIST.					molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
	mm		NTS											
	GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09									
	▽ = 0	4 PLACES	±	±	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29					DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
	▽ = 0	3 PLACES	±	±						SD-87831-0001		PSD	001	A16
	▽ = 0	2 PLACES	±	0.2						SEE TABLE		GENERAL MARKET		13 OF 14
	▽ = 0	1 PLACE	±	±	THIRD ANGLE PROJECTION					MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
☒ = 0	0 PLACES	±	±	A3-SIZE						87831				
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWING		SERIES		CUSTOMER		SHEET NUMBER				
▽ = 0				A3-SIZE		87831		GENERAL MARKET		13 OF 14				

BOARD TO BOARD (BTB) DISTANCE

HEADER	MATES WITH (RECEPTACLE)	BTB DIST.	PICTORIAL VIEW
87831	79107	6.94	
	78787	6.94	
	79108	6.94	
	79109	7.15	
	78788	7.15	

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mm

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

MM

INCH

4 PLACES

±

±

3 PLACES

±

±

2 PLACES

±

0.2

±

1 PLACE

±

±

0 PLACES

±

±

ANGULAR TOL

±

3.0 °

DRAFT WHERE APPLICABLE

MUST REMAIN

WITHIN DIMENSIONS

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

CURRENT REV DESC: ADDED BTB DIST.

EC NO: 619055

DRWN: NMANE02

CHK'D: NMANE02

APPR: MRAMAKRISHNA

2019/03/25

2019/07/09

2019/07/09

INITIAL REVISION:

DRWN: DRWN BY

APPR: APPR BY

XXXX/XX/XX

XXXX/XX/XX

molex

MILLIGRID

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A16

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

GENERAL MARKET

14 OF 14

DOCUMENT STATUS

P1

RELEASE DATE

2019/07/09

06:47:12

FORMAT: Mfg-Prod-Header-IB-prod-A3
REVISION: D
DATE: 2018/01/15

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Molex:

87831-5142