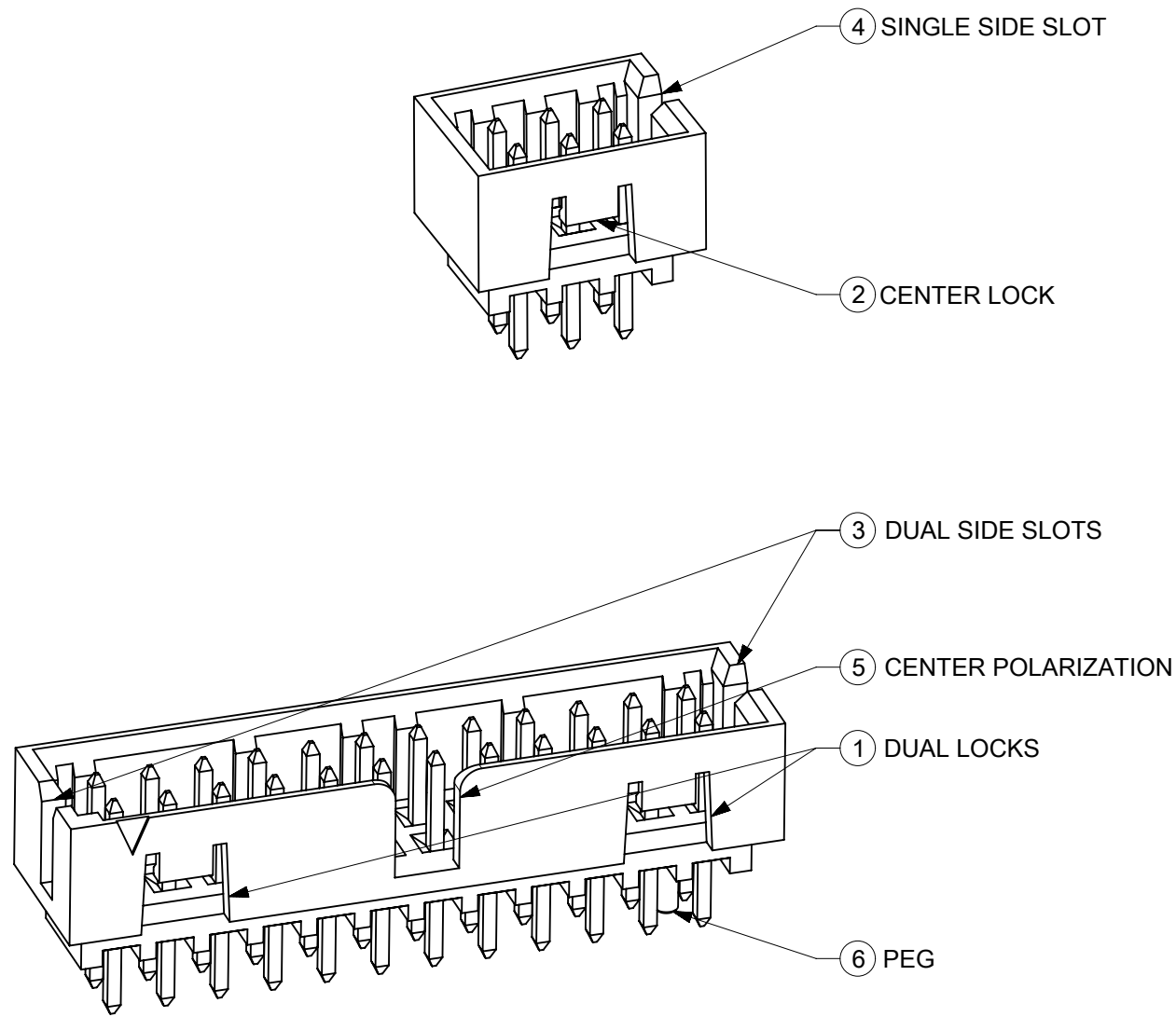


# FEATURES SELECTION GUIDE



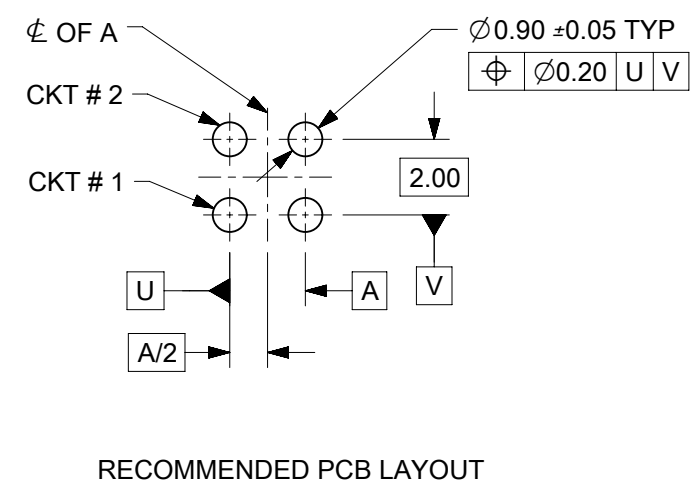
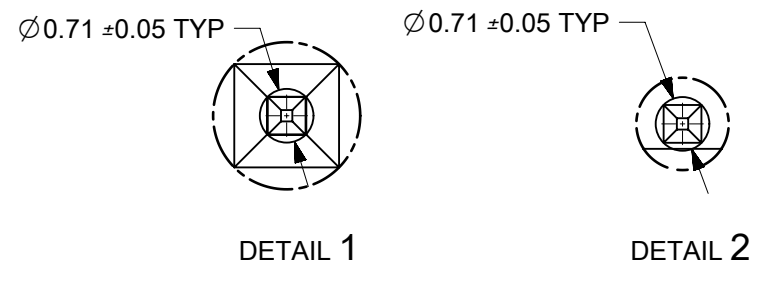
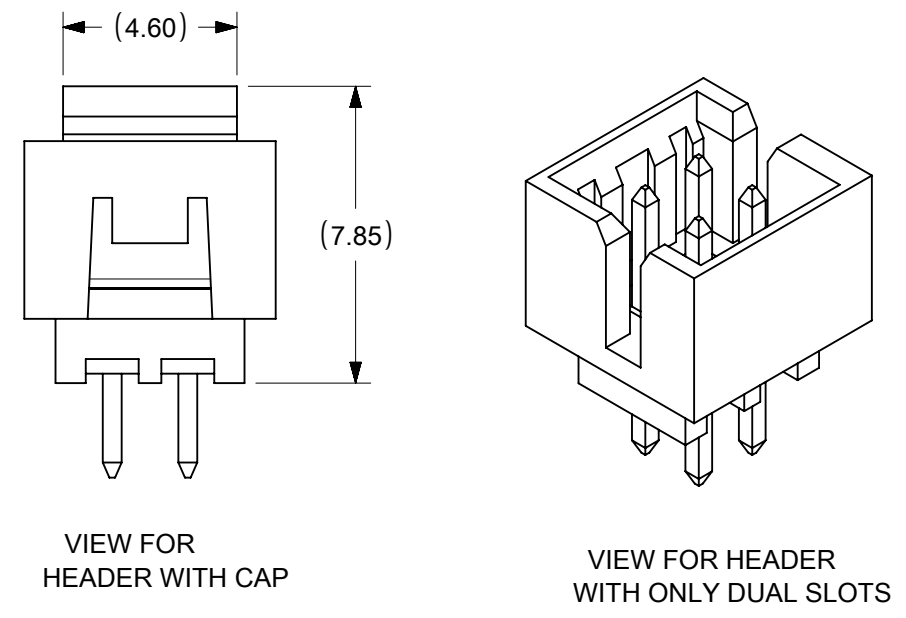
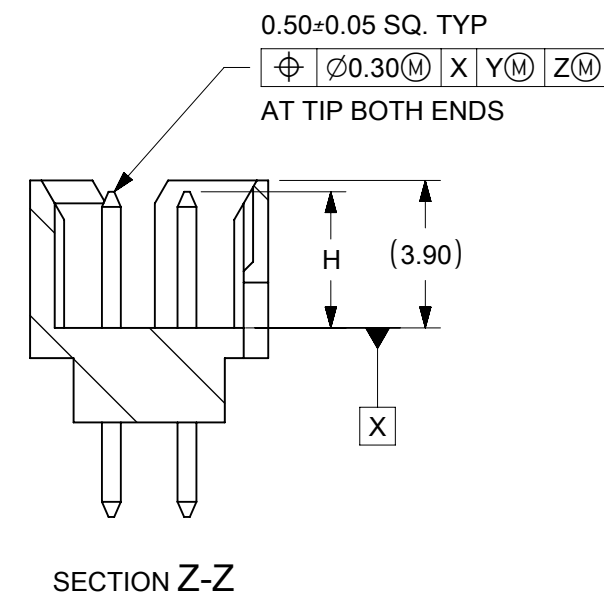
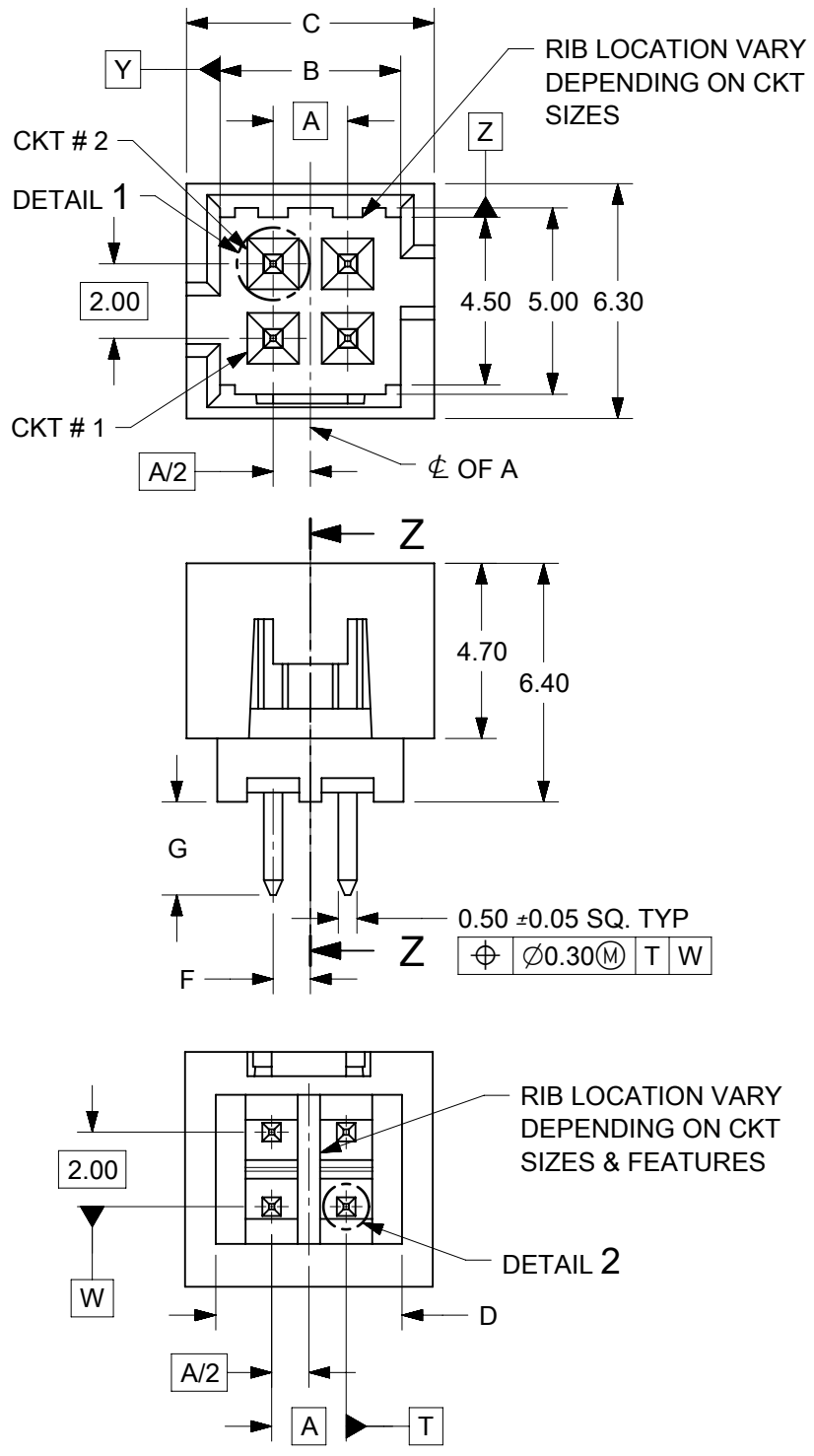
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	N.A	
	N.A	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		

SYMBOLS	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.					
	DIMENSION UNITS		SCALE			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
	mm NTS		GENERAL TOLERANCES (UNLESS SPECIFIED)					
	4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2 ± 1 PLACE ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0°		EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09			PRODUCT CUSTOMER DRAWING		
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	A16
			SEE TABLE	GENERAL MARKET	SHEET NUMBER 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)


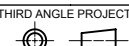
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADDED BTB DIST.		<b>molex</b>	
	mm	NTS				
	GENERAL TOLERANCES (UNLESS SPECIFIED)				MILLIGRID	
					2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0	4 PLACES ±	MM	INCH	EC NO: 619055		PRODUCT CUSTOMER DRAWING
▽ = 0	3 PLACES ±			DRWN: NMANE02	2019/03/25	
▽ = 0	2 PLACES ±	0.2		CHK'D: NMANE02	2019/07/09	DOCUMENT NUMBER
▽ = 0	1 PLACE ±			APPR: MRAMAKRISHNA	2019/07/09	
□ = 0	0 PLACES ±			INITIAL REVISION:		SD-87831-0001
■ = 0	ANGULAR TOL ±	3.0°		DRWN: GMENARLY	2015/04/15	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER
				A3-SIZE	87831	CUSTOMER
						SEE TABLE
						GENERAL MARKET
						SHEET NUMBER
						2 OF 14

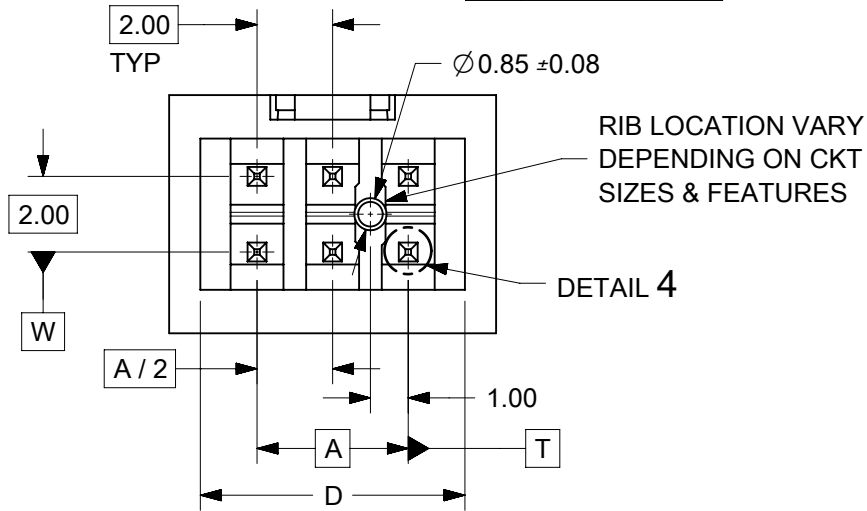
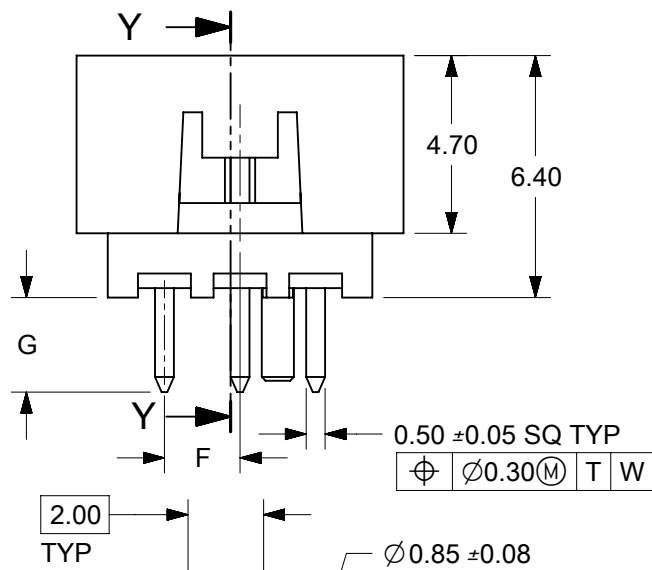
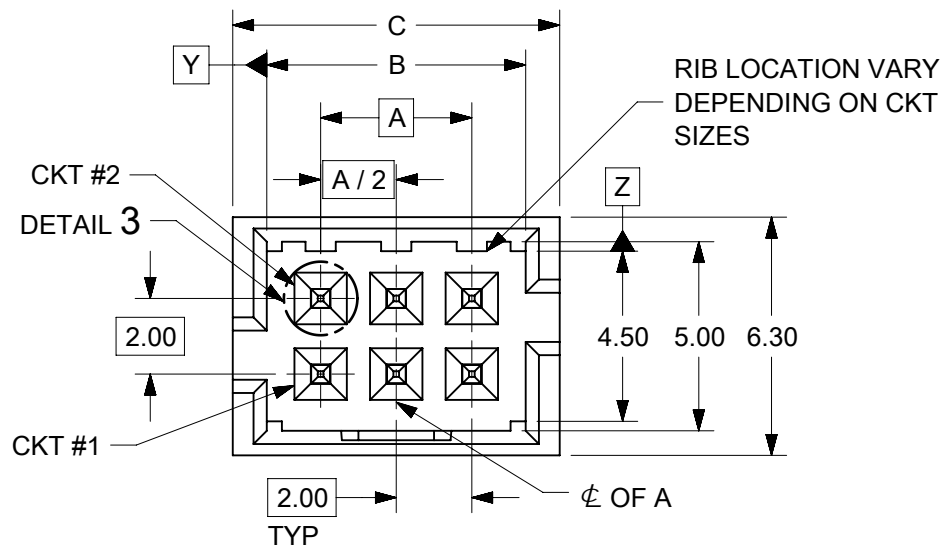
4 CIRCUITS

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						N.A	N.A		N.A	1.00	2.50	3.50
	87831-0442	N.A	87831-5565	3																		
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.80	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>
	87831-5142	N.A	N.A	3																		
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.80	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>
	87831-6142	N.A	N.A	3																		
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	N.A		N.A	2.80	2.50	3.60 <sup>+0.15</sup> <sub>-0.10</sub>
	87831-0444	N.A	N.A	3																		

PLATING OPTIONS:

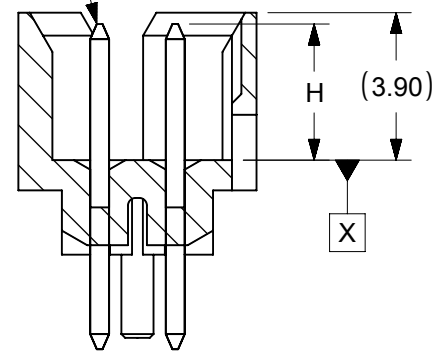
- 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. 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.

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.										
▽ = 0	mm	NTS								MILLIGRID					
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)									2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
▽ = 0				MM		INCH									
▽ = 0	4 PLACES	±								EC NO: 619055					
▽ = 0	3 PLACES	±								DRWN: NMANE02 2019/03/25					
▽ = 0	2 PLACES	±	0.2							CHK'D: NMANE02 2019/07/09					
▽ = 0	1 PLACE	±								APPR: MRAMAKRISHNA 2019/07/09					
▽ = 0	0 PLACES	±								INITIAL REVISION:					
▽ = 0	ANGULAR TOL ± 3.0°									DRWN: GMENARLY 2015/04/15					
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
▽ = 0						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		3 OF 14	

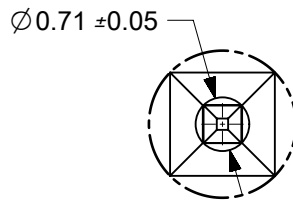


**6 CIRCUITS**

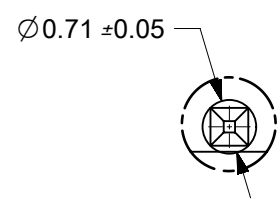
0.50±0.05 SQ TYP  
 $\varnothing \varnothing 0.30(M) X Y(M) Z(M)$   
 AT TIP BOTH ENDS



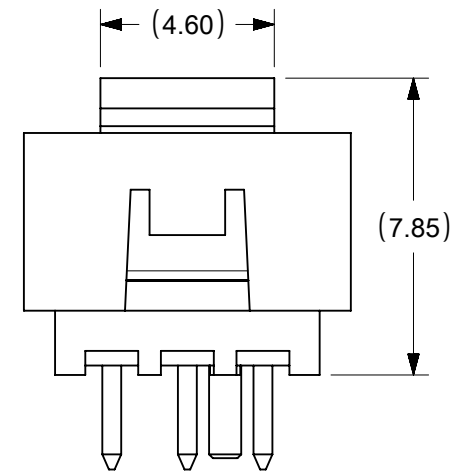
SECTION Y-Y



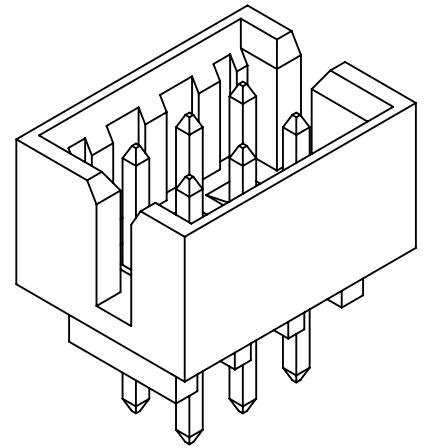
DETAIL 3



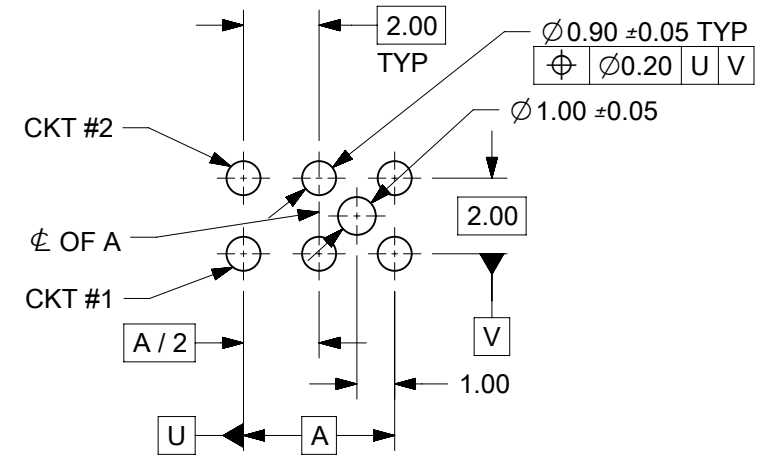
DETAIL 4



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		CURRENT REV DESC: ADDED BTB DIST.					
	DIMENSION UNITS	SCALE						
$\nabla = 0$	mm	NTS			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)							
$\nabla = 0$		MM	INCH			PRODUCT CUSTOMER DRAWING		
$\nabla = 0$	4 PLACES	±	±					
$\nabla = 0$	3 PLACES	±	±			DOCUMENT NUMBER <b>SD-87831-0001</b>		
$\nabla = 0$	2 PLACES	±	0.2					
$\nabla = 0$	1 PLACE	±	±			PSD	001	A16
$\nabla = 0$	0 PLACES	±	±			MATERIAL NUMBER SEE TABLE		
$\nabla = 0$	ANGULAR TOL		±	3.0°				
$\nabla = 0$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	SHEET NUMBER	
$\nabla = 0$					A3-SIZE	87831	4 OF 14	

6 CIRCUITS

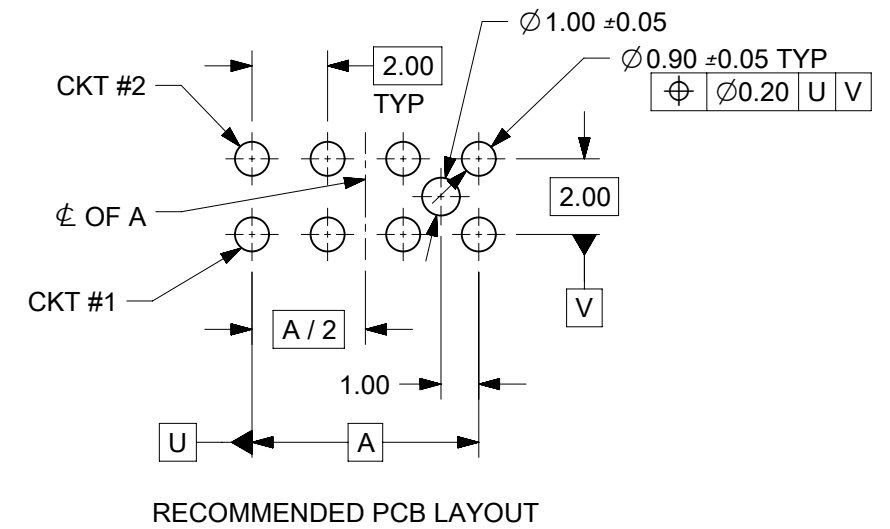
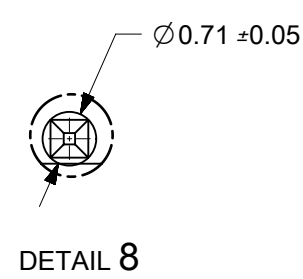
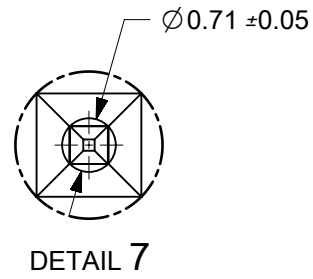
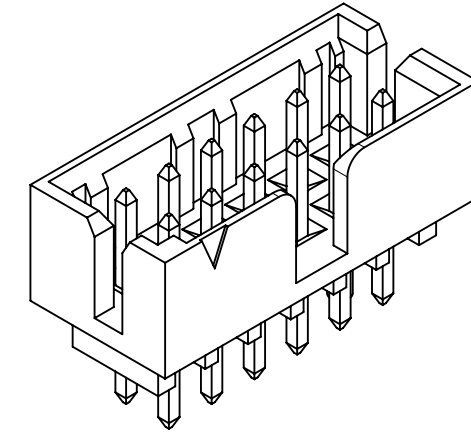
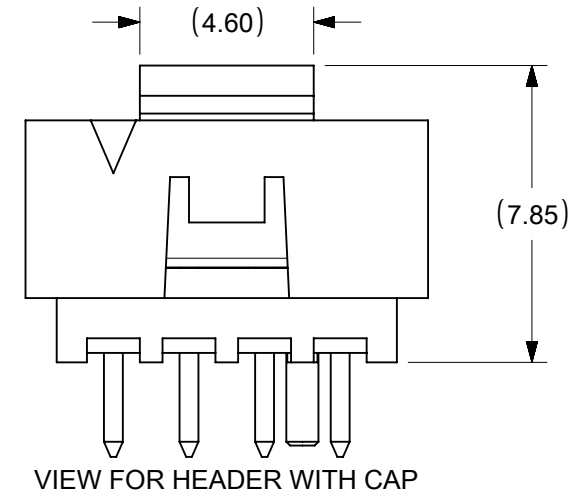
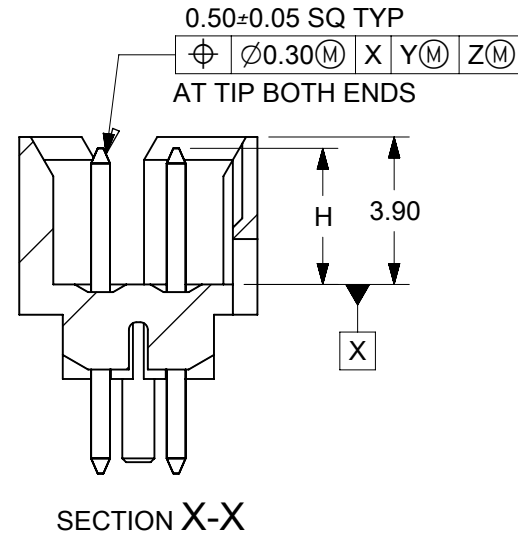
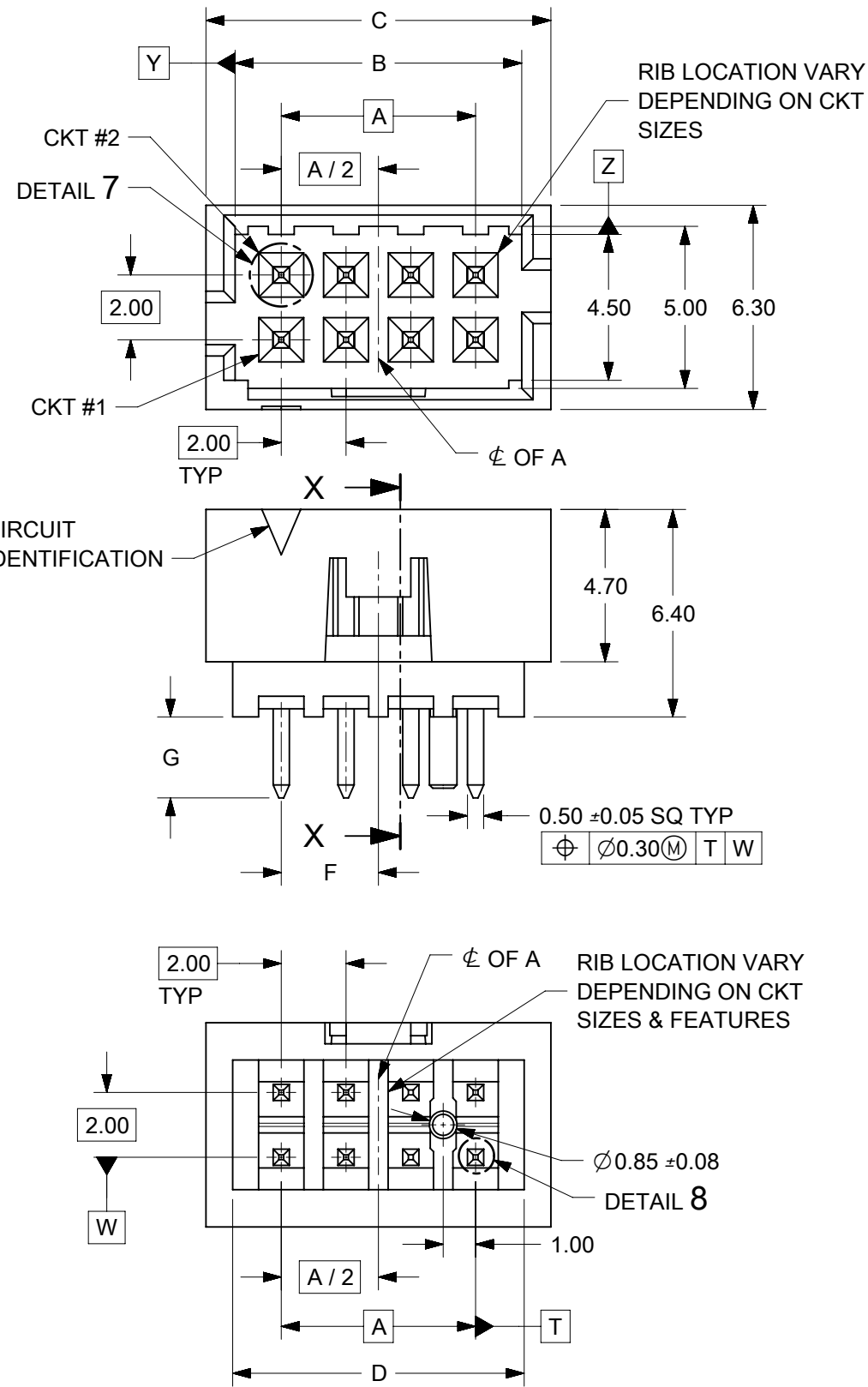
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	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	N.A		N.A	2.50	N.A	2.50	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						N.A	N.A		N.A	2.50	N.A	2.80	N.A	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						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-5242	N.A	N.A	3																				
	87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.50	N.A	2.50	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						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-0644	N.A	N.A	3																				
	87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						YES	N.A		N.A	2.50	N.A	2.50	N.A	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						N.A	N.A		N.A	2.50	N.A	2.50	N.A	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	N.A	N.A	N.A	2.50	N.A	2.50	N.A	3.60±0.20						
87831-5136	N.A	N.A	4																					

PLATING OPTIONS:

- 1 - 0.05-0.13µm/2-5µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 4 - 2.50µm/100µm MIN. MATTE TIN OVER 1.25µm/50µm MIN. NICKEL OVERALL.

SYMBOLS	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.		<b>molex</b>	
	DIMENSION UNITS	SCALE	GENERAL TOLERANCES (UNLESS SPECIFIED)			
▽ = 0	mm	NTS	EC NO: 619055		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: NMANE02 2019/03/25			
▽ = 0	MM INCH		CHK'D: NMANE02 2019/07/09		PRODUCT CUSTOMER DRAWING	
▽ = 0	4 PLACES ±		APPR: MRAMAKRISHNA 2019/07/09			
▽ = 0	3 PLACES ±		INITIAL REVISION:		DOCUMENT NUMBER	
▽ = 0	2 PLACES ± 0.2		DRWN: GMENARLY 2015/04/15		SD-87831-0001	
▽ = 0	1 PLACE ±		APPR: KHLIM 2015/06/29		DOC TYPE DOC PART REVISION	
▽ = 0	0 PLACES ±		THIRD ANGLE PROJECTION		PSD 001 A16	
▽ = 0	ANGULAR TOL ± 3.0°		DRAWING		SHEET NUMBER	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SERIES		5 OF 14	
▽ = 0			A3-SIZE		SEE TABLE	

# 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)


SYMBOLS	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.			
	DIMENSION UNITS	SCALE				
▽ = 0	mm	NTS			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)					
▽ = 0		MM	INCH			PRODUCT CUSTOMER DRAWING
▽ = 0	4 PLACES ±	±	±			
▽ = 0	3 PLACES ±	±	±			DOCUMENT NUMBER SD-87831-0001
▽ = 0	2 PLACES ±	0.2	±			
▽ = 0	1 PLACE ±	±	±			DOC TYPE DOC PART REVISION PSD 001 A16
▽ = 0	0 PLACES ±	±	±			
▽ = 0	ANGULAR TOL	± 3.0°			MATERIAL NUMBER CUSTOMER SEE TABLE GENERAL MARKET	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
▽ = 0	THIRD ANGLE PROJECTION		DRAWING	SERIES	SHEET NUMBER 6 OF 14	
▽ = 0			A3-SIZE	87831		

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		
	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	N.A	2.50	
	87831-0829	N.A	N.A	3															
	87831-0841	N.A	87831-5551	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A	3.00	2.50
	87831-0842	N.A	N.A	3															
	87831-5841	N.A	N.A	2															
	87831-5441	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A	3.50	
	87831-5442	N.A	N.A	3															
	87831-5541	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A	2.80	
	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	4.70	
	87831-5742	N.A	N.A	3															
	87831-0832	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A	N.A	2.50
	87831-0843	N.A	N.A	2															
	87831-0844	N.A	N.A	3															
87831-0845	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	N.A	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.

SYMBOLS	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.			
	DIMENSION UNITS		SCALE			
▽ = 0	mm	NTS		EC NO: 619055		
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: NMANE02 2019/03/25		2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0			CHK'D: NMANE02 2019/07/09		PRODUCT CUSTOMER DRAWING	
▽ = 0			APPR: MRAMAKRISHNA 2019/07/09		DOCUMENT NUMBER	
▽ = 0			INITIAL REVISION:		SD-87831-0001	
▽ = 0			DRWN: GMENARLY 2015/04/15		DOC TYPE	
▽ = 0			APPR: KHLIM 2015/06/29		PSD	
▽ = 0			ANGULAR TOL ± 3.0°		DOC PART	
▽ = 0			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		001	
▽ = 0			THIRD ANGLE PROJECTION		REVISION	
▽ = 0			DRAWING		A16	
▽ = 0			SERIES		SHEET NUMBER	
▽ = 0			A3-SIZE		7 OF 14	
▽ = 0			87831		MATERIAL NUMBER	
▽ = 0			SEE TABLE		CUSTOMER	
▽ = 0			GENERAL MARKET			

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	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	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	N.A	2																
	87831-1021	N.A	87831-5562	3																
	87831-1036	N.A	N.A	4																
	87831-1010	N.A	87831-5561	2																
	87831-1011	N.A	N.A	3																
	87831-1028	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES						N.A	4.00		2.50	2.50
	87831-1029	N.A	87831-5557	3																
	87831-1035	N.A	N.A	3																
	87831-1041	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	5.00		2.50	2.50
	87831-1042	N.A	87831-5553	3																
	87831-1032	N.A	N.A	2																
	87831-1043	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	5.00		2.50	2.50
	87831-1044	N.A	N.A	3																
	87831-1045	N.A	N.A	2																
87831-1046	N.A	N.A	3	N.A	YES	N.A	YES	N.A	YES	N.A	5.00	2.50	2.50							
87831-1219	N.A	N.A	1																	
87831-1220	N.A	87831-5556	2																	
87831-1221	N.A	N.A	3	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			
87831-1236	N.A	N.A	4																	
87831-1228	N.A	N.A	2																	
87831-1229	N.A	87831-5558	3	N.A	N.A	YES	N.A	YES	YES	N.A	5.00	2.50	2.50							
87831-1258	N.A	(A13) 87831-5567	2																	
87831-1241	N.A	N.A	2																	
87831-1242	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A	N.A	5.00	2.50	2.50							
87831-1255	87831-1256	N.A	2																	
87831-1232	N.A	N.A	2																	
87831-1243	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A	N.A	5.00	2.50	2.50							
87831-1244	N.A	N.A	3																	
87831-1245	N.A	N.A	2																	
87831-1246	N.A	N.A	3	N.A	YES	N.A	YES	N.A	YES	N.A	5.00	2.50	2.50							

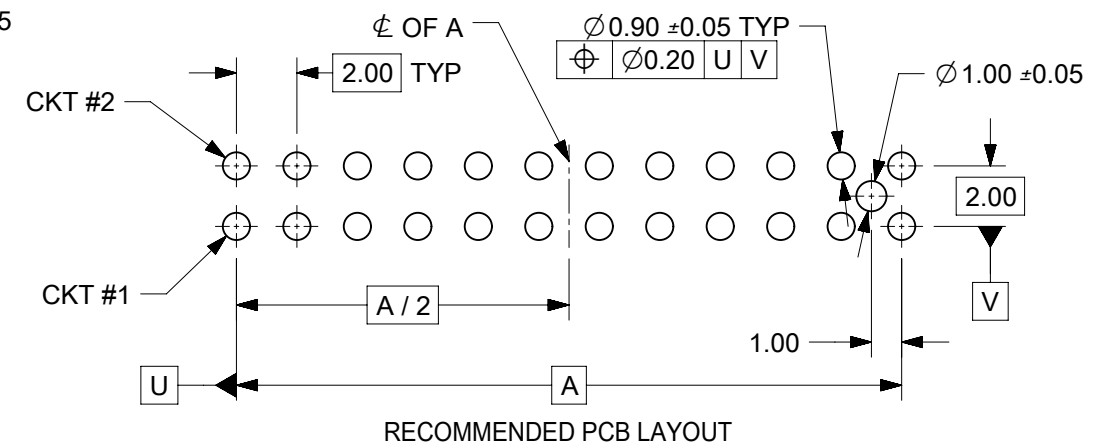
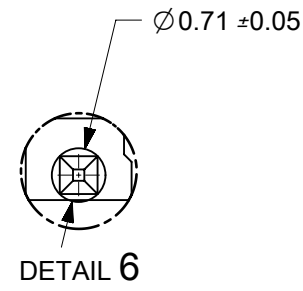
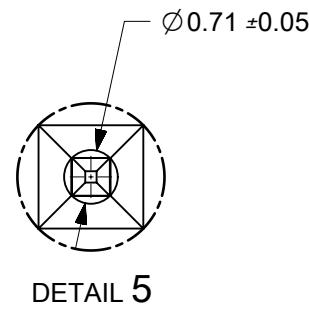
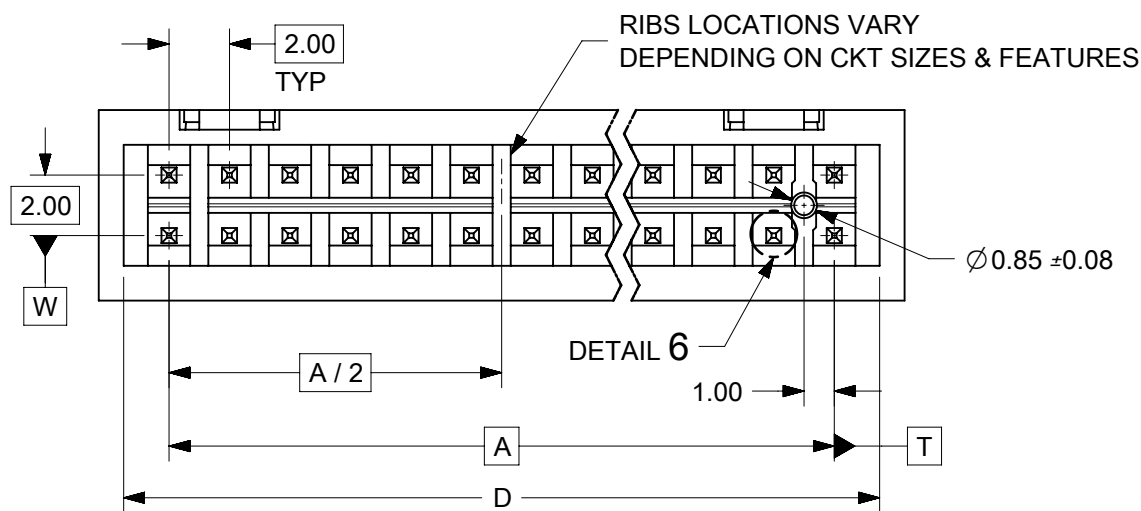
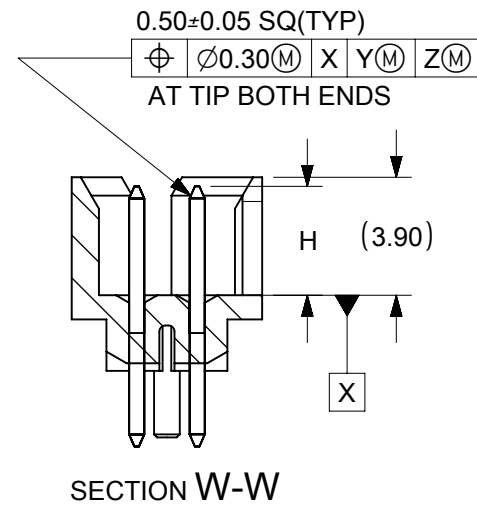
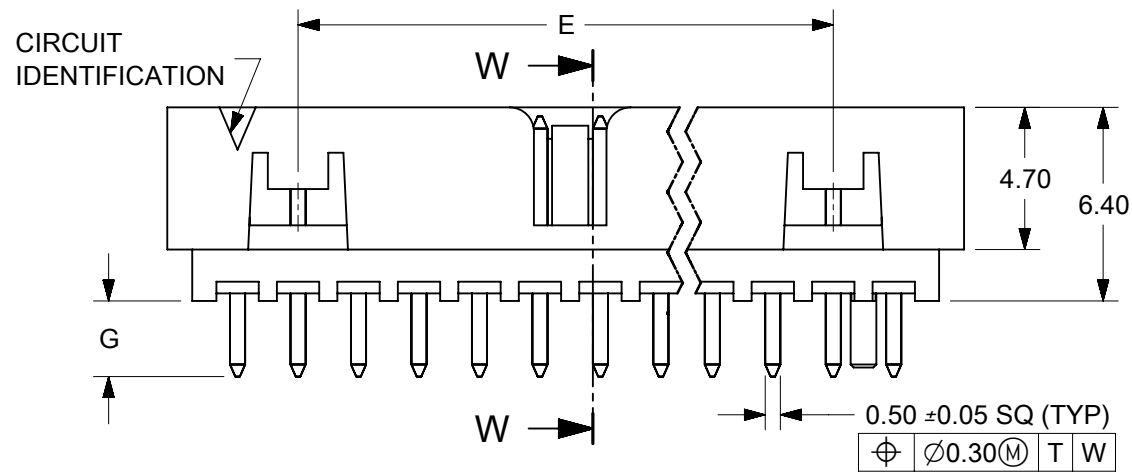
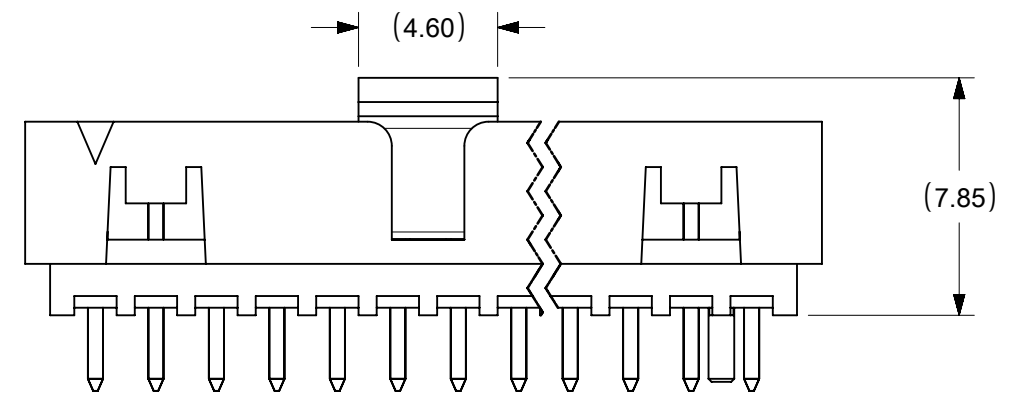
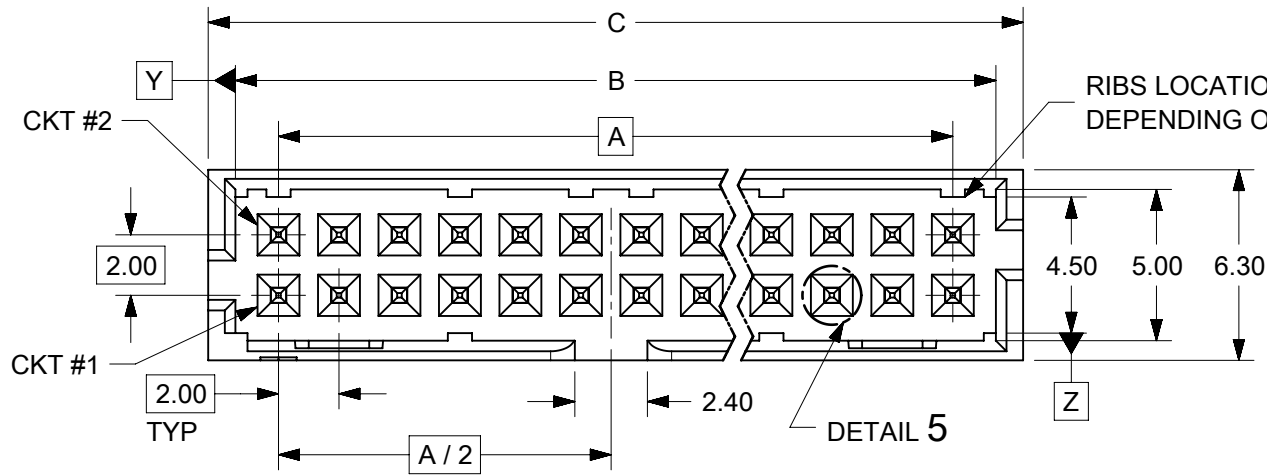
PLATING OPTIONS:

- 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.

SYMBOLS	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.		<b>molex</b>		
	DIMENSION UNITS		SCALE				
	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		MM INCH				
= 0		4 PLACES ± ±		DOCUMENT NUMBER SD-87831-0001			
= 0		3 PLACES ± ±					DOC TYPE DOC PART REVISION PSD 001 A16
= 0		2 PLACES ± 0.2 ±		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29			
= 0		1 PLACE ± ±					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS
= 0		0 PLACES ± ±		THIRD ANGLE PROJECTION			
= 0		ANGULAR TOL ± 3.0°					DRAWING SERIES MATERIAL NUMBER CUSTOMER SHEET NUMBER A3-SIZE 87831 SEE TABLE GENERAL MARKET 8 OF 14
= 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SERIES MATERIAL NUMBER CUSTOMER SHEET NUMBER A3-SIZE 87831 SEE TABLE GENERAL MARKET 8 OF 14			
= 0		THIRD ANGLE PROJECTION					DRAWING SERIES MATERIAL NUMBER CUSTOMER SHEET NUMBER A3-SIZE 87831 SEE TABLE GENERAL MARKET 8 OF 14



# 14 TO 50 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)

SYMBOLS	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.			
	DIMENSION UNITS	SCALE				
▽ = 0	mm	NTS			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)					
▽ = 0		MM	INCH			PRODUCT CUSTOMER DRAWING
▽ = 0	4 PLACES ±	±	±			
▽ = 0	3 PLACES ±	±	±			DOCUMENT NUMBER <b>SD-87831-0001</b> DOC TYPE PSD DOC PART 001 REVISION A16
▽ = 0	2 PLACES ±	0.2	±			
▽ = 0	1 PLACE ±	±	±			MATERIAL NUMBER SEE TABLE CUSTOMER GENERAL MARKET SHEET NUMBER 9 OF 14
▽ = 0	0 PLACES ±	±	±			
▽ = 0	ANGULAR TOL	± 3.0°				
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	
▽ = 0				A3-SIZE	87831	

# 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	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	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	2														
	87831-1421	N.A	87831-5560	3														
	87831-1436	N.A	N.A	4														
	87831-1428	N.A	(A14) 87831-5564	2	YES	N.A	YES	N.A	YES	YES								
	87831-1429	N.A	87831-5563	3														
	87831-1435	N.A	N.A	3														
	87831-1410	N.A	N.A	2														
87831-1411	N.A	N.A	3	YES	N.A	YES	N.A	YES	N.A	3.50								
16	87831-1619	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	2														
	87831-1621	N.A	N.A	3														
	87831-1636	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-1628	N.A	N.A	2														
	87831-1629	N.A	87831-5559	3														
	87831-1635	N.A	N.A	3														
18	87831-1819	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	2														
	87831-1821	N.A	N.A	3														
	87831-1836	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-1828	N.A	N.A	2														
	87831-1829	N.A	N.A	3														
20	87831-2019	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	2														
	87831-2021	N.A	N.A	3														
	87831-2036	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-2028	N.A	N.A	2														
	87831-2029	N.A	N.A	3														
	87831-2035	N.A	N.A	3														
	87831-2010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A								
87831-2011	N.A	(A13) 87831-2041	3															

**PLATING OPTIONS:**

- 1 - 0.05-0.13µm/2-5µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 4 - 2.50µm/100µm MIN. MATTE TIN OVER 1.25µm/50µm MIN. NICKEL OVERALL.


<b>SYMBOLS</b> ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE mm NTS	CURRENT REV DESC: ADDED BTB DIST.	molex		
	GENERAL TOLERANCES (UNLESS SPECIFIED)	EC NO: 619055	MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
	4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2 ± 1 PLACE ±	DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09	PRODUCT CUSTOMER DRAWING			
	0 PLACES ± ANGULAR TOL ± 3.0°	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29	DOCUMENT NUMBER <b>SD-87831-0001</b>	DOC TYPE PSD	DOC PART 001	REVISION <b>A16</b>
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING <b>A3-SIZE</b>	SERIES <b>87831</b>	MATERIAL NUMBER SEE TABLE	CUSTOMER GENERAL MARKET	SHEET NUMBER 10 OF 14

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														
	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														
	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															
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														
	87831-2629	N.A	N.A	N.A	3														
	87831-2610	N.A	N.A	N.A	2														
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														
	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														
	87831-3029	N.A	N.A	N.A	3														
	87831-3035	N.A	N.A	N.A	3														
	87831-3010	87831-3030	87831-3050	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.

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.					
	mm		NTS		 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER PRODUCT CUSTOMER DRAWING					
	GENERAL TOLERANCES (UNLESS SPECIFIED)									
▽ = 0	4 PLACES ±	MM	INCH	EC NO: 619055		DRWN: NMANE02 2019/03/25				
▽ = 0	3 PLACES ±			DRWN: NMANE02 2019/07/09		CHK'D: NMANE02 2019/07/09				
▽ = 0	2 PLACES ± 0.2			APPR: MRAMAKRISHNA 2019/07/09		INITIAL REVISION:				
▽ = 0	1 PLACE ±			DRWN: GMENARLY 2015/04/15		DOCUMENT NUMBER				
☒ = 0	ANGULAR TOL ± 3.0°			APPR: KHLIM 2015/06/29		SD-87831-0001		PSD	001	A16
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
▽ = 0		A3-SIZE		87831	SEE TABLE	GENERAL MARKET		11 OF 14		


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														
	87831-3229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20
	87831-3420	N.A	N.A	2														
	87831-3421	N.A	N.A	3														
	87831-3436	N.A	N.A	4														
	87831-3428	N.A	N.A	2														
	87831-3429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50	
36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20
	87831-3620	N.A	87831-5564	2														
	87831-3621	N.A	N.A	3														
	87831-3636	N.A	N.A	4														
	87831-3628	N.A	N.A	2														
	87831-3629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
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														
	87831-3829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
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														
	87831-4029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50	

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.

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	CURRENT REV DESC: ADDED BTB DIST.	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 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	DRWN: NMANE02	2019/03/25
▽ = 0	CHK'D: NMANE02	2019/07/09
▽ = 0	APPR: MRAMAKRISHNA	2019/07/09
▽ = 0	EC NO: 619055	
▽ = 0	DRWN: GMENARLY	2015/04/15
▽ = 0	APPR: KHLIM	2015/06/29
▽ = 0	INITIAL REVISION:	
▽ = 0	MATERIAL NUMBER	
▽ = 0	CUSTOMER	
▽ = 0	SHEET NUMBER	



MILLIGRID  
2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

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

SEE TABLE    GENERAL MARKET    12 OF 14

# 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														
	87831-4229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
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	YES	N.A	YES	N.A	YES	YES							3.50	
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	YES	N.A	YES	N.A	YES	YES							3.50	

**PLATING OPTIONS:**

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

<b>SYMBOLS</b> ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	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.		molex	
	DIMENSION UNITS	SCALE	GENERAL TOLERANCES (UNLESS SPECIFIED)			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER
	mm	NTS				
	EC NO: 619055		DRWN: NMANE02 2019/03/25			DOCUMENT NUMBER <b>SD-87831-0001</b>
CHK'D: NMANE02 2019/07/09		APPR: MRAMAKRISHNA 2019/07/09		DOC TYPE PSD		
INITIAL REVISION: DRWN: GMENARLY 2015/04/15		APPR: KHLIM 2015/06/29		DOC PART 001	REVISION A16	
ANGULAR TOL ± 3.0°		THIRD ANGLE PROJECTION	DRAWING	SERIES	SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3-SIZE	87831	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	

<b>SYMBOLS</b> ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SCALE <b>mm NTS</b>		CURRENT REV DESC: ADDED BTB DIST.				
	DIMENSION UNITS		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
	4 PLACES ±     ± 3 PLACES ±     ± 2 PLACES ± 0.2 ± 1 PLACE ±     ± 0 PLACES ±     ±		MM     INCH		INITIAL REVISION: DRWN: DRWN BY     XXXX/XX/XX APPR: APPR BY     XXXX/XX/XX		PRODUCT CUSTOMER DRAWING		
	ANGULAR TOL ± 3.0°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DOCUMENT NUMBER <b>SD-87831-0001</b>		DOC TYPE DOC PART REVISION PSD 001 A16
MATERIAL NUMBER		CUSTOMER		SERIES <b>A3-SIZE 87831</b>		SHEET NUMBER 14 OF 14			

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