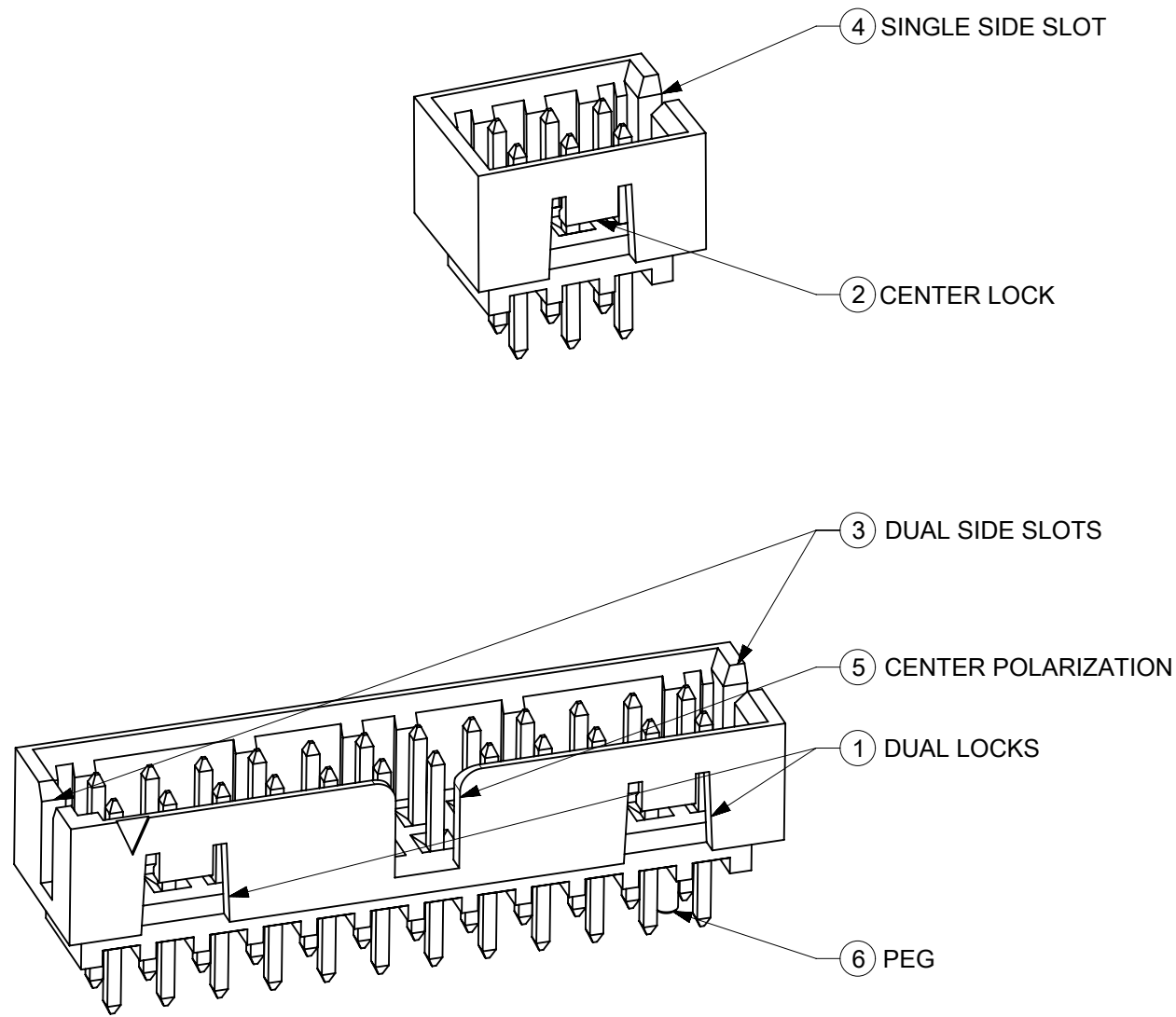


FEATURES SELECTION GUIDE



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		


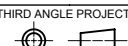
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADDED BTB DIST.		
	DIMENSION UNITS SCALE GENERAL TOLERANCES (UNLESS SPECIFIED)	mm NTS			
4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2 ± 1 PLACE ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0°	MM INCH	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 A3-SIZE	SERIES 87831	MATERIAL NUMBER SEE TABLE	CUSTOMER GENERAL MARKET
				DOCUMENT NUMBER SD-87831-0001	DOC TYPE PSD
				DOC PART 001	REVISION A16
				SHEET NUMBER 1 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 ^{+0.15} -0.10
	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	2.50	3.60 ^{+0.15} -0.10	
	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	2.50	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. 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													
SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.							
▽ = 0	mm	NTS		 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER PRODUCT CUSTOMER DRAWING									
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)												
▽ = 0		MM	INCH										
▽ = 0	4 PLACES ±												
▽ = 0	3 PLACES ±			EC NO: 619055		DRWN: NMANE02		2019/03/25		DOCUMENT NUMBER SD-87831-0001			
▽ = 0	2 PLACES ±	0.2		CHK'D: NMANE02		2019/07/09		DOC TYPE				DOC PART	
▽ = 0	1 PLACE ±			APPR: MRAMAKRISHNA		2019/07/09		REVISION				A16	
▽ = 0	0 PLACES ±			INITIAL REVISION:		DRWN: GMENARLY		2015/04/15		SHEET NUMBER			
▽ = 0	ANGULAR TOL ±	3.0°		APPR: KHLIM		2015/06/29		MATERIAL NUMBER		CUSTOMER			
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING		SERIES		SHEET NUMBER			
▽ = 0						A3-SIZE		87831		3 OF 14			

6 CIRCUITS

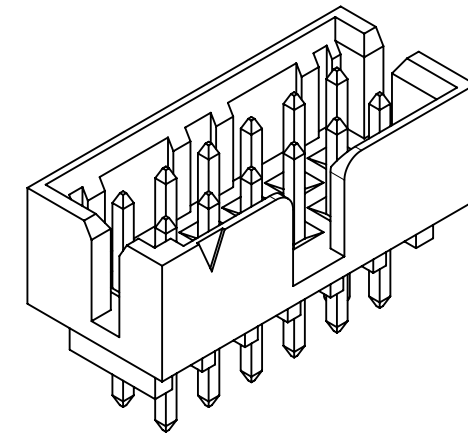
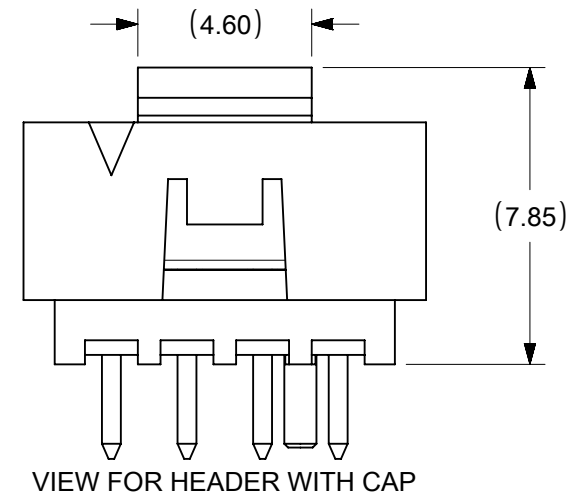
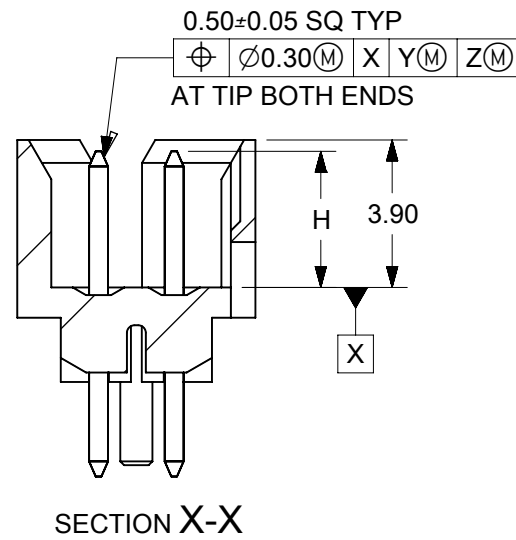
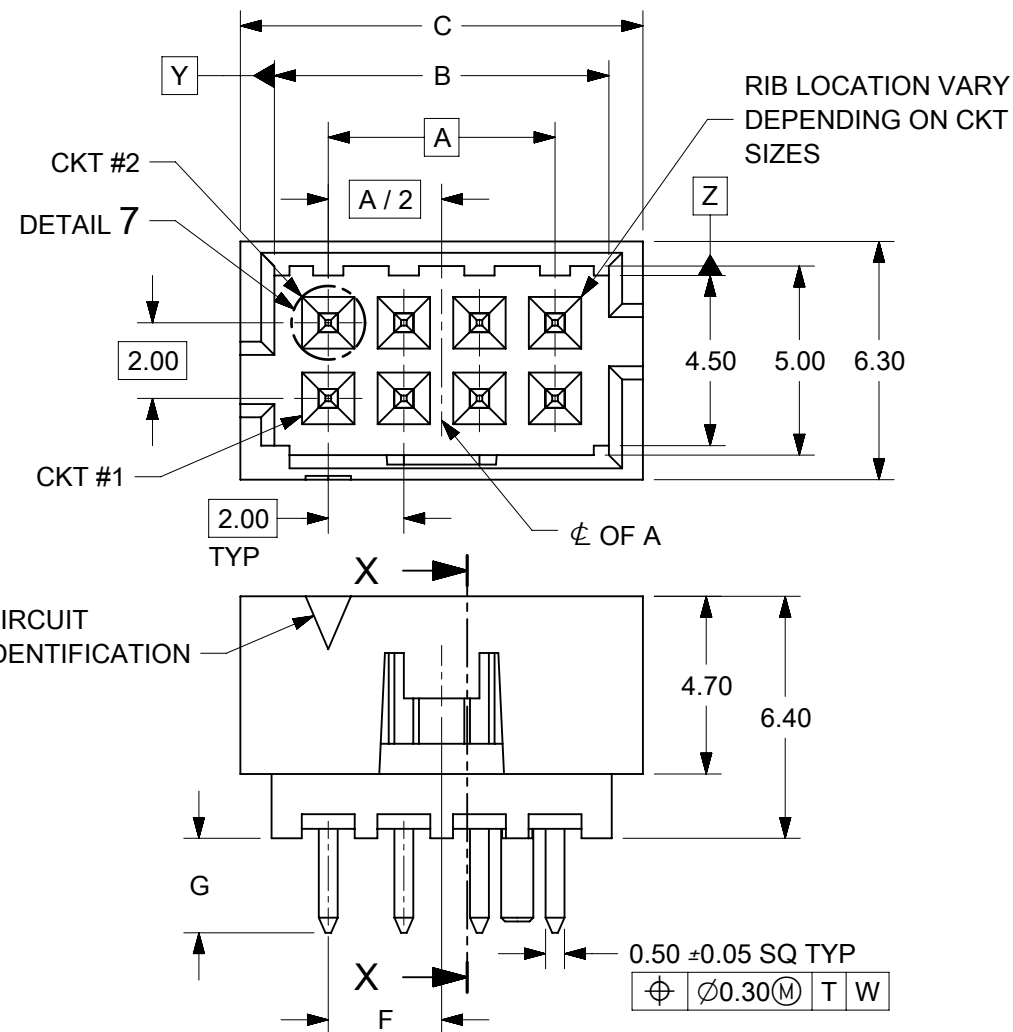
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	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	N.A	N.A	YES	N.A	N.A	YES						N.A	N.A		N.A	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0628	N.A	N.A	2																				
	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	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0642	N.A	87831-5552	3																				
	87831-5241	N.A	N.A	2																				
	87831-5242	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	2.80	3.60±0.20
	87831-6241	N.A	N.A	2																				
	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	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0644	N.A	N.A	3																				
	87831-0645	N.A	N.A	2																				
	87831-0646	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A						YES	N.A		N.A	N.A	N.A	N.A	2.50	3.60±0.20
	87831-0632	N.A	N.A	2																				
	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	N.A	N.A	2.50	3.60±0.20							
87831-5136	N.A	N.A	4																					

PLATING OPTIONS:

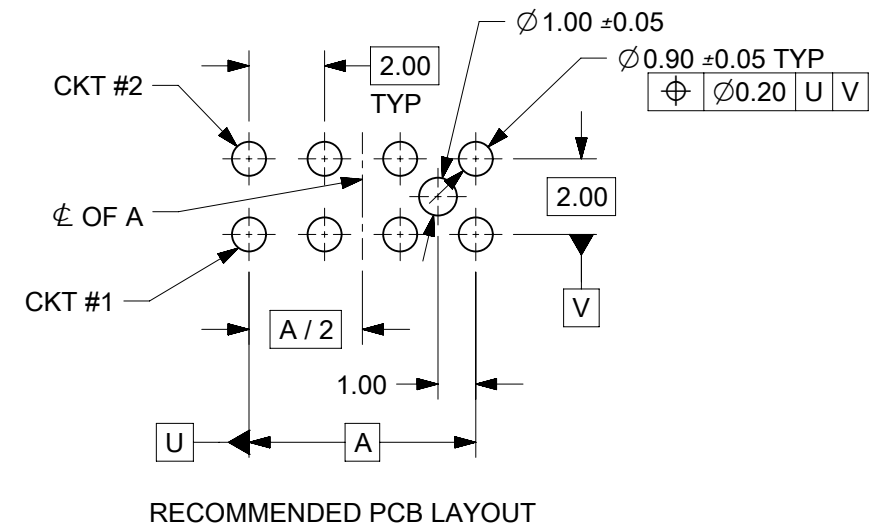
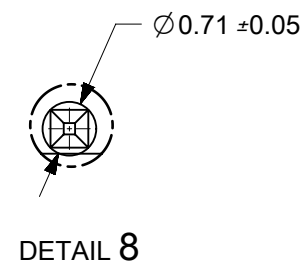
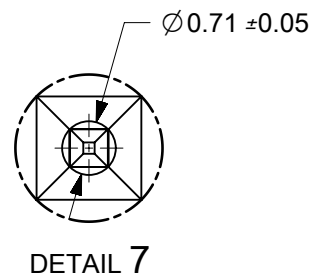
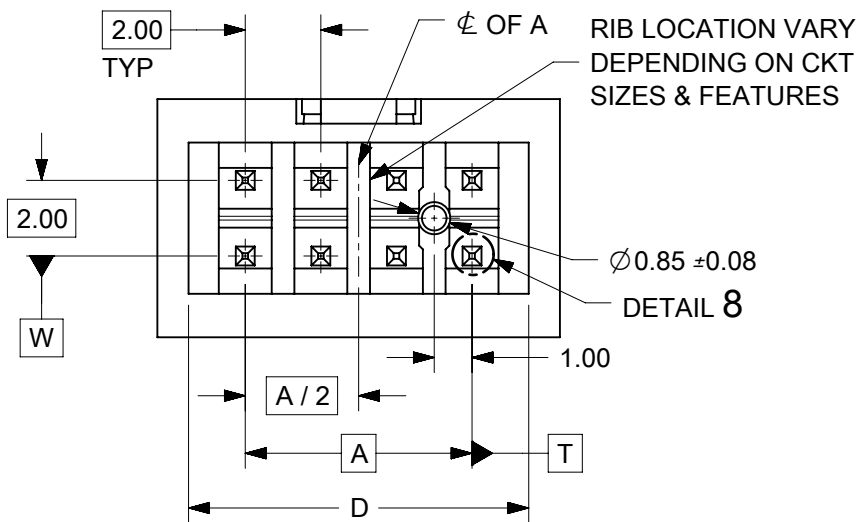
- 1 - 0.05-0.13µm/2-5µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µm GOLD IN CONTACT AREA AND 1.88µm/75µm MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µm MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µm GOLD IN CONTACT AREA 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.		molex	
	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			MATERIAL NUMBER		CUSTOMER	
▽ = 0			A3-SIZE 87831		SEE TABLE GENERAL MARKET	

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		CURRENT REV DESC: ADDED BTB DIST.			
	DIMENSION UNITS SCALE GENERAL TOLERANCES (UNLESS SPECIFIED)	mm NTS	EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09	EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09		
4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2 1 PLACE ± 0 PLACES ± ANGULAR TOL ± 3.0°	MM INCH	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING A3-SIZE	SERIES 87831	PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER SD-87831-0001
INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29	MATERIAL NUMBER SEE TABLE	CUSTOMER GENERAL MARKET	DOC TYPE PSD	DOC PART 001	REVISION A16	SHEET NUMBER 6 OF 14

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						YES	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	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.
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- 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	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
CURRENT REV DESC: ADDED BTB DIST.		SERIES
EC NO: 619055		MATERIAL NUMBER
DRWN: NMANE02 2019/03/25		CUSTOMER
CHK'D: NMANE02 2019/07/09		GENERAL MARKET
APPR: MRAMAKRISHNA 2019/07/09		SHEET NUMBER
INITIAL REVISION:		7 OF 14
DRWN: GMENARLY 2015/04/15		
APPR: KHLIM 2015/06/29		
DOCUMENT NUMBER		
SD-87831-0001		
DOC TYPE		
PSD		
DOC PART		
001		
REVISION		
A16		

10 TO 12 CIRCUITS

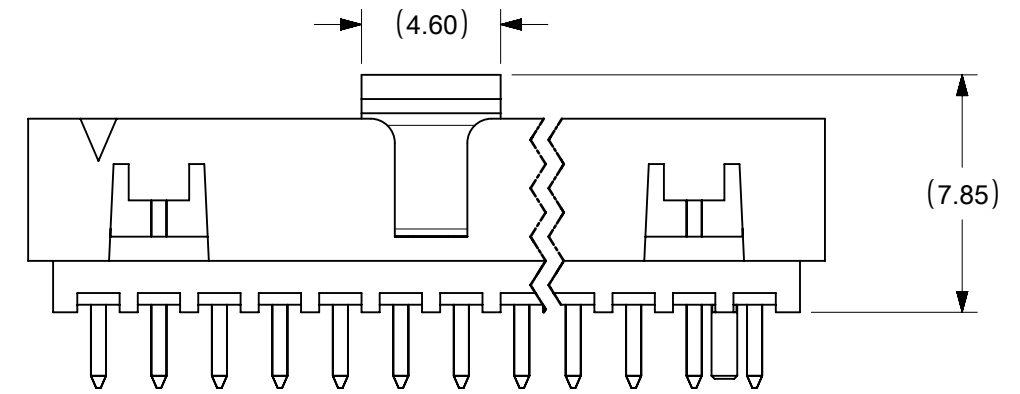
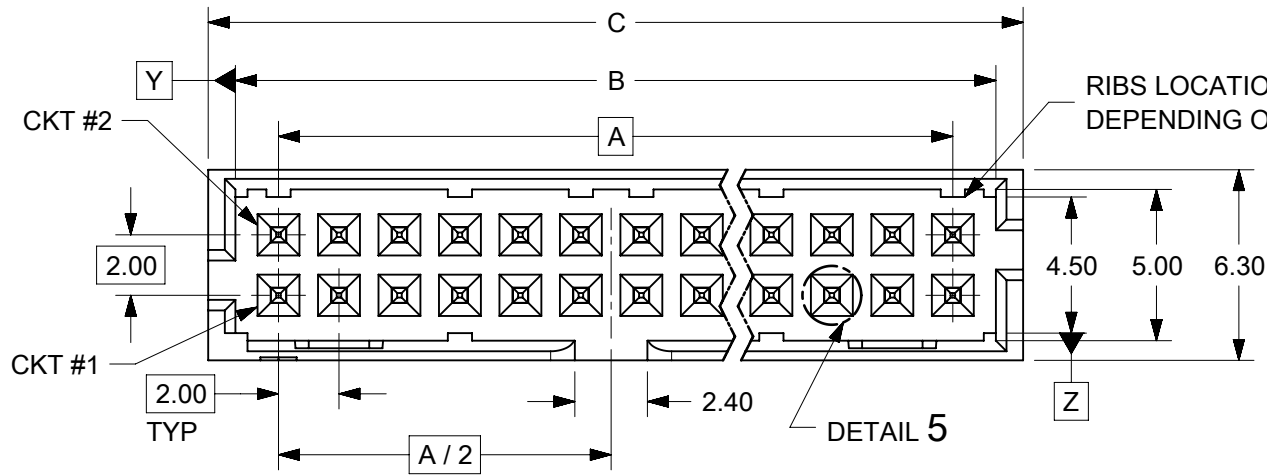
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION									
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H		
10	87831-1019	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	N.A	N.A	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	3.60 ^{+0.15} _{-0.10}
	87831-1029	N.A	87831-5557	3																
	87831-1035	N.A	N.A	3																
	87831-1041	N.A	N.A	2																
	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	
	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								
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		
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		
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		
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		

PLATING OPTIONS:

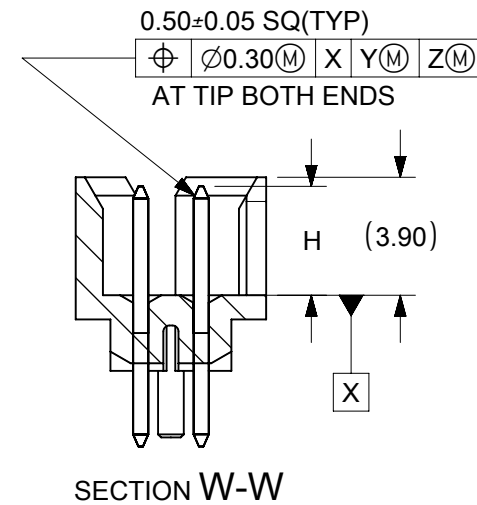
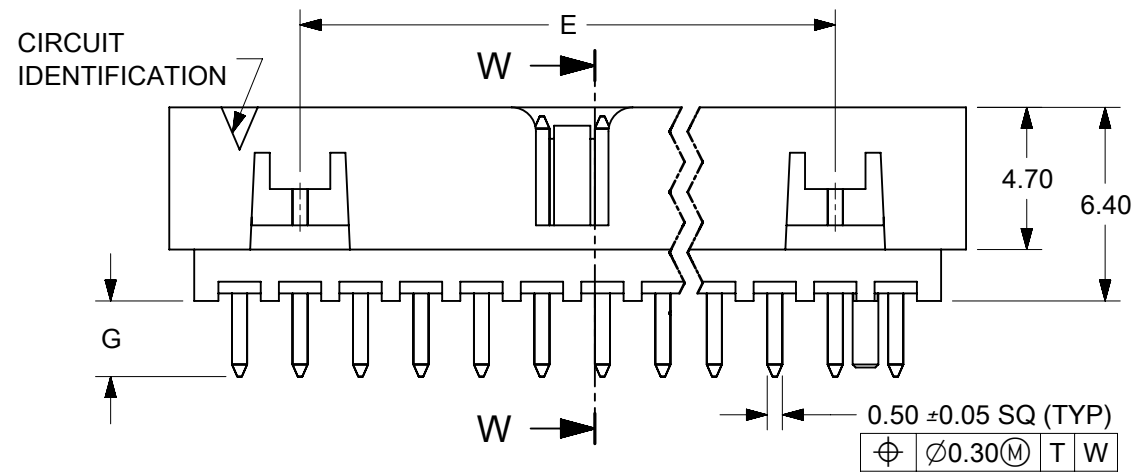
- 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µin GOLD IN CONTACT 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	SERIES	MATERIAL NUMBER
▽ = 0	A3-SIZE	87831
▽ = 0	EC NO: 619055	DRWN: NMANE02 2019/03/25
▽ = 0	CHK'D: NMANE02 2019/07/09	APPR: MRAMAKRISHNA 2019/07/09
▽ = 0	INITIAL REVISION:	DRWN: GMENARLY 2015/04/15
▽ = 0	APPR: KHLIM 2015/06/29	SD-87831-0001
▽ = 0	DOCUMENT NUMBER	DOC TYPE DOC PART REVISION
▽ = 0	PSD	001 A16
▽ = 0	CUSTOMER	SHEET NUMBER
▽ = 0	GENERAL MARKET	8 OF 14

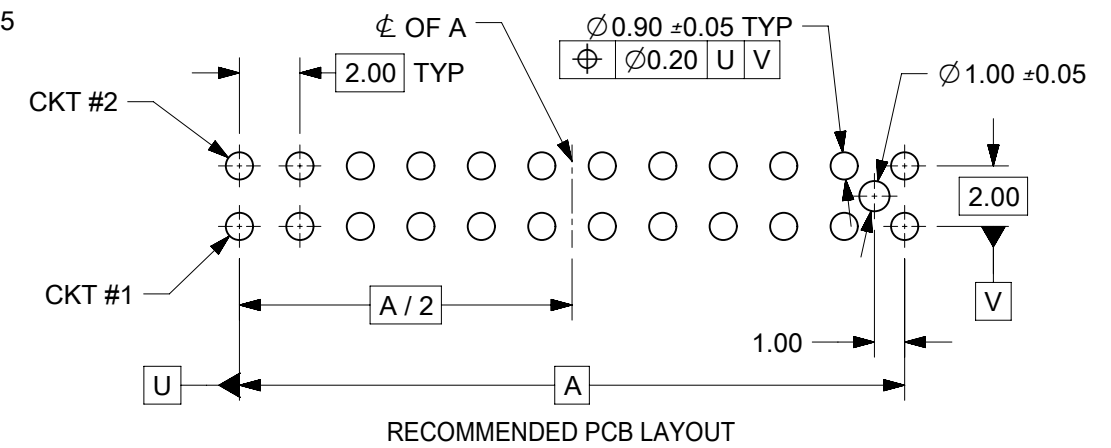
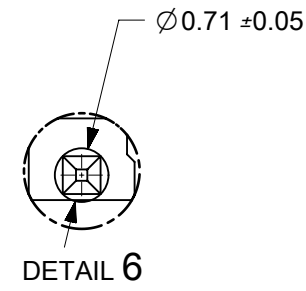
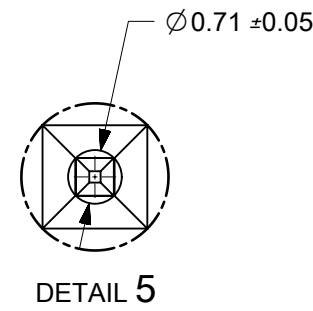
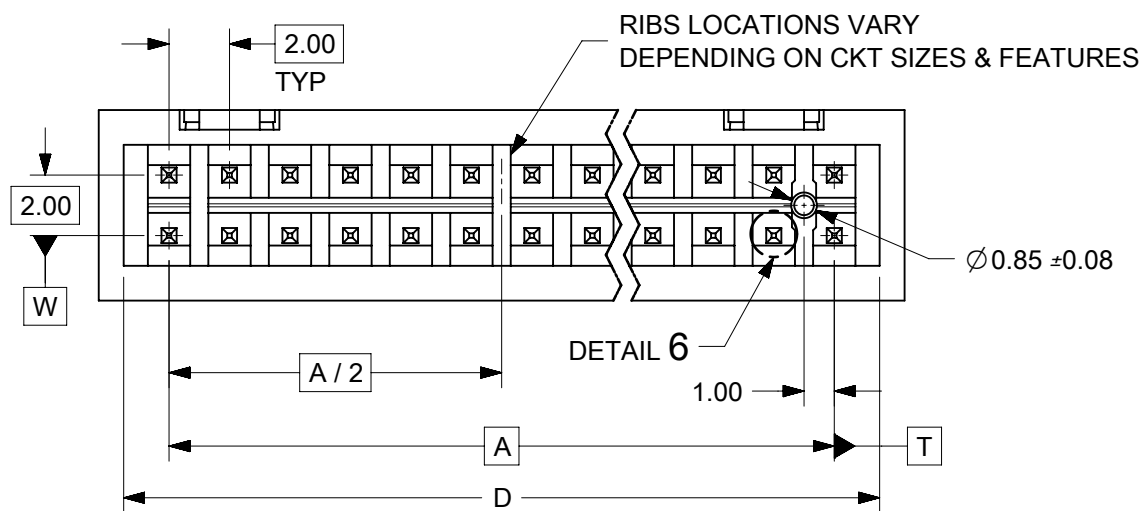
14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



SECTION W-W



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			
▽ = 0	mm	NTS			2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				PRODUCT CUSTOMER DRAWING
▽ = 0		MM	INCH	EC NO: 619055	DOCUMENT NUMBER
▽ = 0	4 PLACES ±	±		DRWN: NMANE02 2019/03/25	DOC TYPE
▽ = 0	3 PLACES ±	±		CHK'D: NMANE02 2019/07/09	DOC PART
▽ = 0	2 PLACES ±	0.2	±	APPR: MRAMAKRISHNA 2019/07/09	REVISION
▽ = 0	1 PLACE ±	±		INITIAL REVISION:	
▽ = 0	0 PLACES ±	±		DRWN: GMENARLY 2015/04/15	SD-87831-0001
▽ = 0	ANGULAR TOL ±	3.0°		APPR: KHLIM 2015/06/29	PSD
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	001
▽ = 0				SERIES	A16
				MATERIAL NUMBER	SEE TABLE
				CUSTOMER	GENERAL MARKET
				SHEET NUMBER	9 OF 14

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	YES	N.A	YES	N.A	YES	YES							3.50	
	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.


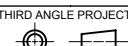
SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: mm SCALE: NTS CURRENT REV DESC: ADDED BTB DIST.		MILLIGRID 2MM PITCH, THROUGH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


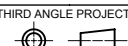
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
	DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.										
▽ = 0	mm	NTS		 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.					
▽ = 0	mm	NTS		 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)										
▽ = 0	4 PLACES ±		MM	INCH	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				APPR: KHLIM 2015/06/29						
THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
		A3-SIZE		87831		SEE TABLE		GENERAL MARKET		12 OF 14	

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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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														
	87831-4429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	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														
	87831-4629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
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														
	87831-4829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
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														
	87831-5029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-5035	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50	

PLATING OPTIONS:

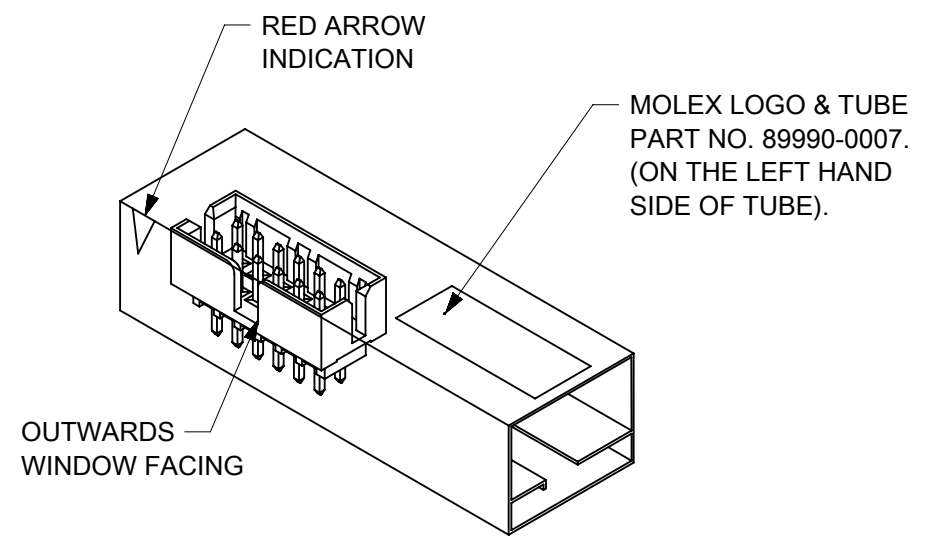
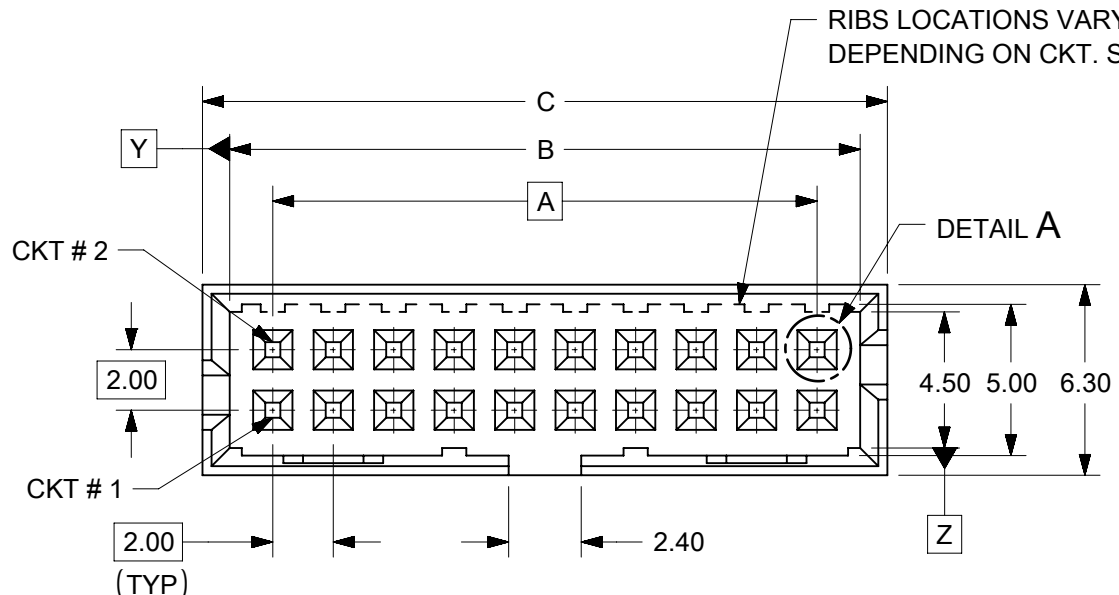
- 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µin GOLD IN CONTACT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

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
▽ = 0	DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.					molex			
▽ = 0	mm	NTS											
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)										MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
▽ = 0			MM	INCH									
▽ = 0	4 PLACES ±				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: SD-87831-0001 DOC TYPE: PSD DOC PART: 001 REVISION: A16			
▽ = 0	1 PLACE ±				APPR: MRAMAKRISHNA 2019/07/09								
▽ = 0	0 PLACES ±				INITIAL REVISION:					MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 13 OF 14			
▽ = 0	ANGULAR TOL ± 3.0°				DRWN: GMENARLY 2015/04/15								
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPR: KHLIM 2015/06/29					THIRD ANGLE PROJECTION			
▽ = 0					DRAWING: A3-SIZE SERIES: 87831								

BOARD TO BOARD (BTB) DISTANCE

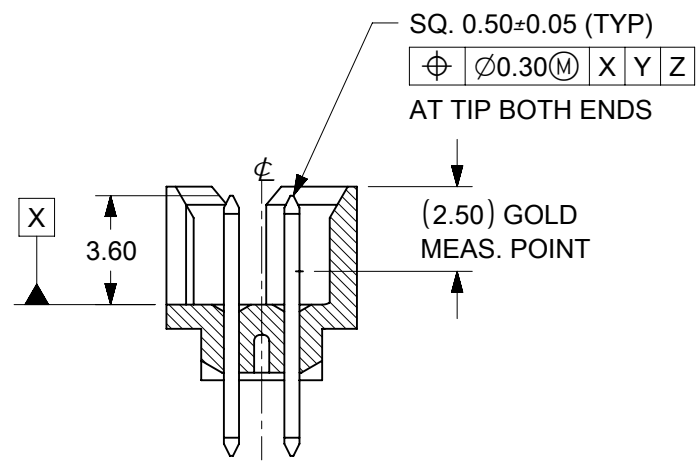
HEADER	MATES WITH (RECEPTACLE)	BTB DIST.	PICTORIAL VIEW
87831	79107	6.94	
	78787	6.94	
	79108	6.94	
	79109	7.15	
	78788	7.15	

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			2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				PRODUCT CUSTOMER DRAWING
▽ = 0					
▽ = 0	4 PLACES ±	±	EC NO: 619055	2019/03/25	DOCUMENT NUMBER
▽ = 0	3 PLACES ±	±	DRWN: NMANE02	2019/07/09	
▽ = 0	2 PLACES ±	0.2 ±	CHK'D: NMANE02	2019/07/09	DOC TYPE
▽ = 0	1 PLACE ±	±	APPR: MRAMAKRISHNA	2019/07/09	DOC PART
☒ = 0	0 PLACES ±	±	INITIAL REVISION:		REVISION
■ = 0	ANGULAR TOL ± 3.0°		DRWN: DRWN BY	XXXX/XX/XX	A16
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: APPR BY	XXXX/XX/XX	
	THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER
			A3-SIZE	87831	CUSTOMER
					GENERAL MARKET
					SHEET NUMBER
					14 OF 14

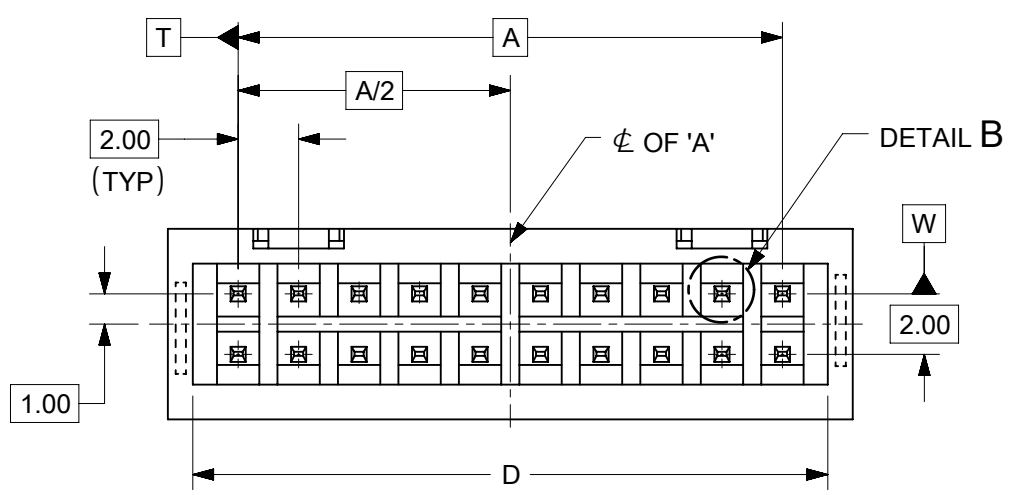
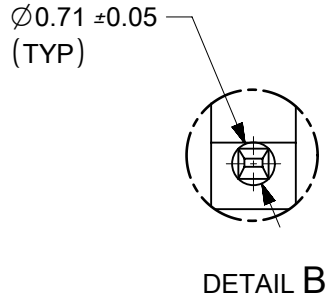
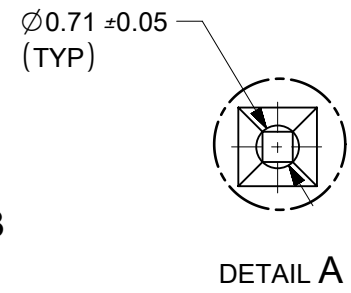
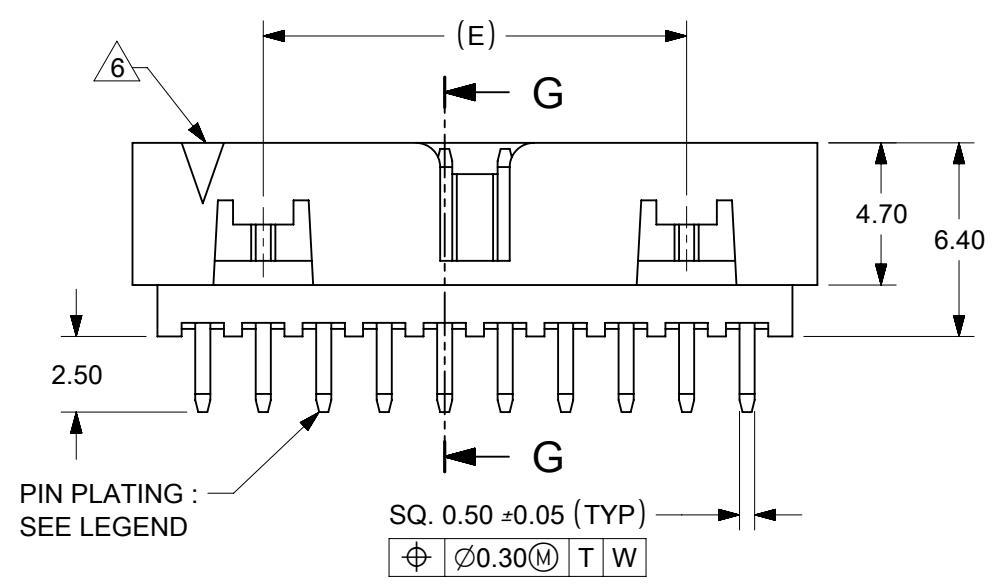


ORIENTATION OF PART IN TUBE
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)

- NOTES:
- FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
 - MATERIAL :
HOUSING : GLASS-FILLED NYLON, UL94V-0, COLOR BLACK.
PIN : 0.50mm SQ. PHOSPHOR BRONZE.
 - PRODUCT SPECIFICATION PS-87831-027 APPLIES.
 - WITH CENTRE POLARISATION SLOT FOR 87831-6120.
 - NO SIDE LOCKING SLOT FROM 6 TO 12 CKT SIZE.
 - CKT 6 HAS NO IDENTIFICATION TAG.
 - THIS HEADER MATES WITH MOLEX :
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
b) 2mm MILLIGRID DUAL ROW IDT, 87568 SERIES.
c) 2mm MILLIGRID DUAL ROW: 79107 (GOLD PLATED), 78787 (TIN PLATED)
 - PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.
 - PACKAGING SPECIFICATION : FOR TUBE : PK-87831-001
FOR T&R : PK-87831-300




SECTION G-G



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
ADDED BTB DIST. EC NO: 619055 DRWN: SCS02 CHK'D: NMANE02 REV APPR: MIRAMAKRISHNA	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE		molex		
			MM	INCH	MM	NTS			
	4 PLACES	±	±	DRWN BY	DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF		
	3 PLACES	±	±	ATSEE	2003/10/03				
	2 PLACES	±	0.2	±	CHK'D BY	DATE		PRODUCT CUSTOMER DRAWING	
1 PLACES	±	±	±	KCLING	2003/11/07				
0 PLACES	±	±	±	APPR BY	DATE		SERIES: 87831 MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET		
				SKTOH	2003/11/07				
	ANGULAR TOL = 3.0		DRAWING SIZE	THIRD ANGLE PROJECTION					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3						
C4	RELEASE STATUS	P1	RELEASE DATE	2019/07/09	06:47:14				

OTHER OPTIONS

ASSY. P/N IN T&R	ASSY. P/N IN TUBE	CKT SIZE	PLATING OPTIONS	VOID POSITION	DIMENSIONS					
					A	B	C	D	E	(G)
----	87831-5120	12	2	1	10.00	12.85	14.65	13.00	----	----
----	87831-5220	44	2	20	42.00	44.85	46.65	45.00	38.00	----
----	87831-5320	24	2	13	22.00	24.85	26.65	25.00	18.00	----
----	87831-5420	34	2	3	32.00	34.85	36.65	35.00	28.00	----
----	87831-5520	20	2	20	18.00	20.85	22.65	21.00	14.00	----
----	87831-5620	28	2	13	26.00	28.85	30.65	29.00	22.00	----
----	87831-5720	34	2	15	32.00	34.85	36.65	35.00	28.00	----
----	87831-5820	40	2	25	38.00	40.85	42.65	41.00	34.00	----
----	87831-5920	20	2	13	18.00	20.85	22.65	21.00	14.00	----
----	87831-6020	24	2	20	22.00	24.85	26.65	25.00	18.00	----
----	87831-6120 	6	2	1	4.00	6.85	8.65	7.00	----	----
----	87831-6320	20	2	19	18.00	20.85	22.65	21.00	14.00	----


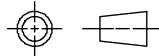
PART NUMBER LEGEND:

87831 - * * * *

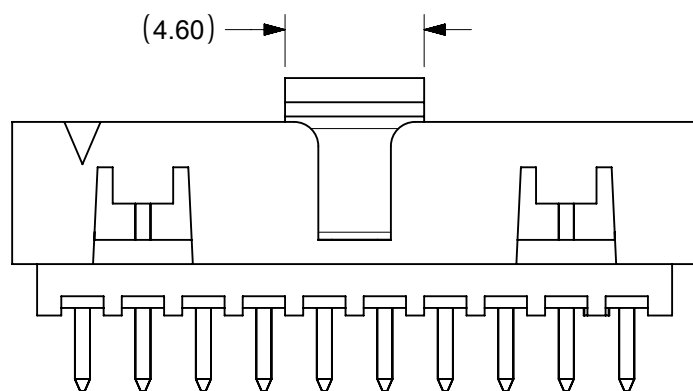
PLATING OPTION 

OPTION 1	**19 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 2	**20 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 3	**21 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 4	**36 - 2.50µm/100µin MIN. TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

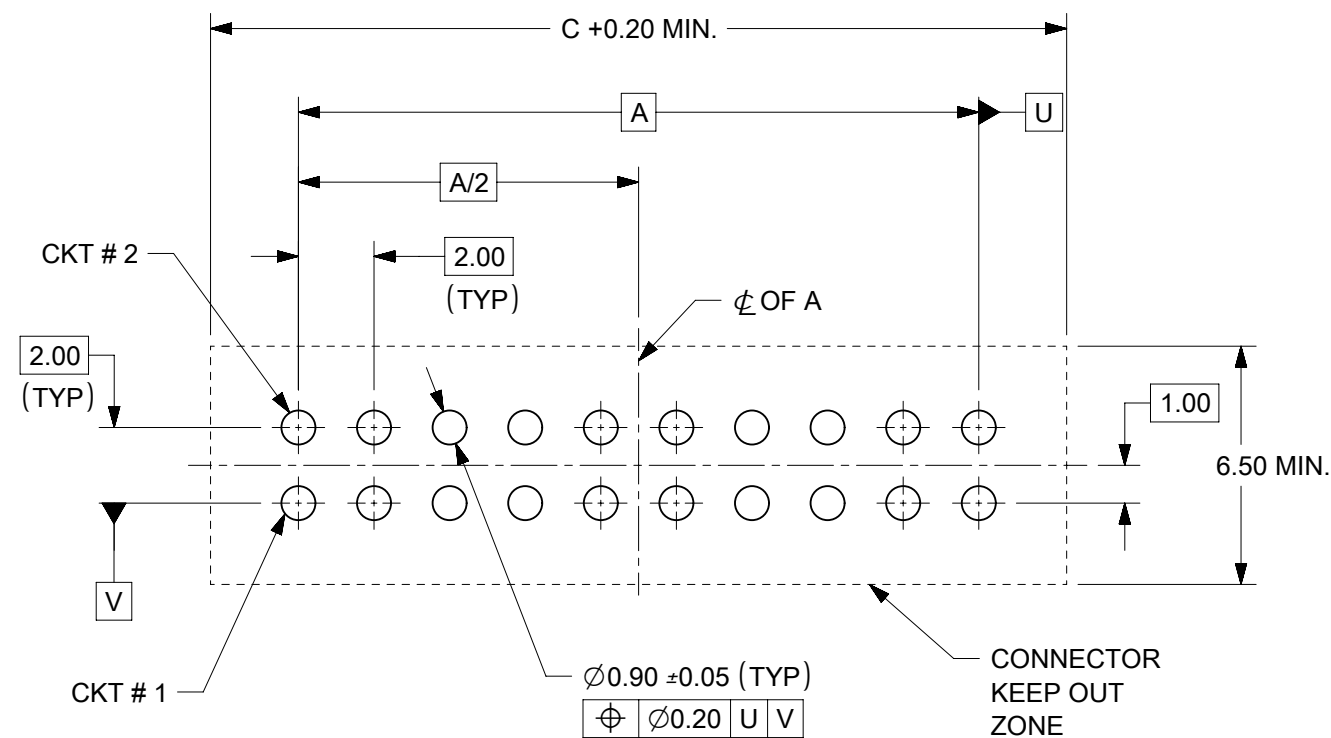
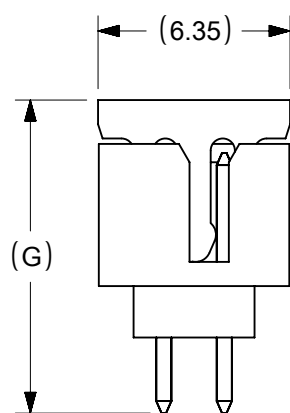
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

ADDED BTB DIST. EC NO: 619055 DRWN: SCS02 CHK'D: NMANE02 REV APPR: MRAMAKRISHNA	2018/06/19	2019/07/09	2019/07/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE					
				MM	INCH	MM	NTS						
	4 PLACES	±	±	DRWN BY	DATE	MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF							
	3 PLACES	±	±	ATSEE	2003/10/03								
	2 PLACES	± 0.2	±	CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING							
1 PLACES	±	±	KCLING	2003/11/07									
0 PLACES	±	±	APPR BY	DATE	SERIES: 87831 MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET								
			SKTOH	2003/11/07									
ANGULAR TOL = 3.0				DRAWING SIZE	THIRD ANGLE PROJECTION		DOCUMENT NUMBER: SD-87831-011 DOC TYPE: PSD DOC PART: 001 SHEET NUMBER: 2 OF 4						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				A3									

CAP INFORMATION



ILLUSTRATED VIEWS WITH CAP



RECOMMENDED PCB PATTERN

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

ADDED BTB DIST. EC NO: 619055 DRWN: SCS02 CHKD: NMANE02 REV APPR: MRAMAKRISHNA	2018/06/19 2019/07/09 2019/07/09		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS MM NTS		SCALE MM NTS					
	4 PLACES ± ±		DRWN BY ATSEE		DATE 2003/10/03		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF					
	3 PLACES ± ±		CHK'D BY KCLING		DATE 2003/11/07					PRODUCT CUSTOMER DRAWING		
	2 PLACES ± 0.2 ±		APPR BY SKTOH		DATE 2003/11/07		SERIES 87831	MATERIAL NUMBER SEE TABLE				
	1 PLACES ± ±		DRAWING SIZE A3		THIRD ANGLE PROJECTION		DOCUMENT NUMBER SD-87831-011			DOC TYPE PSD	DOC PART 001	SHEET NUMBER 3 OF 4
	0 PLACES ± ±		ANGULAR TOL = 3.0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							

BOARD TO BOARD (BTB) DISTANCE

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

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DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.		molex		
mm		NTS						
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 619055		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF		
		MM	INCH					
4 PLACES	±		±	DRWN: SCS02	2018/06/19	PRODUCT CUSTOMER DRAWING		
3 PLACES	±		±	CHK'D: NMANE02	2019/07/09			
2 PLACES	±	0.2	±	APPR: MRAMAKRISHNA	2019/07/09	DOCUMENT NUMBER: SD-87831-011 DOC TYPE: PSD DOC PART: 001 REVISION: C4		
1 PLACE	±		±	INITIAL REVISION:				
0 PLACES	±		±	DRWN: DRWN BY	XXXX/XX/XX	MATERIAL NUMBER: 87831 CUSTOMER: GENERAL MARKET SHEET NUMBER: 4 OF 4		
ANGULAR TOL		± 3.0°		APPR: APPR BY	XXXX/XX/XX			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES			
				A3-SIZE	87831			