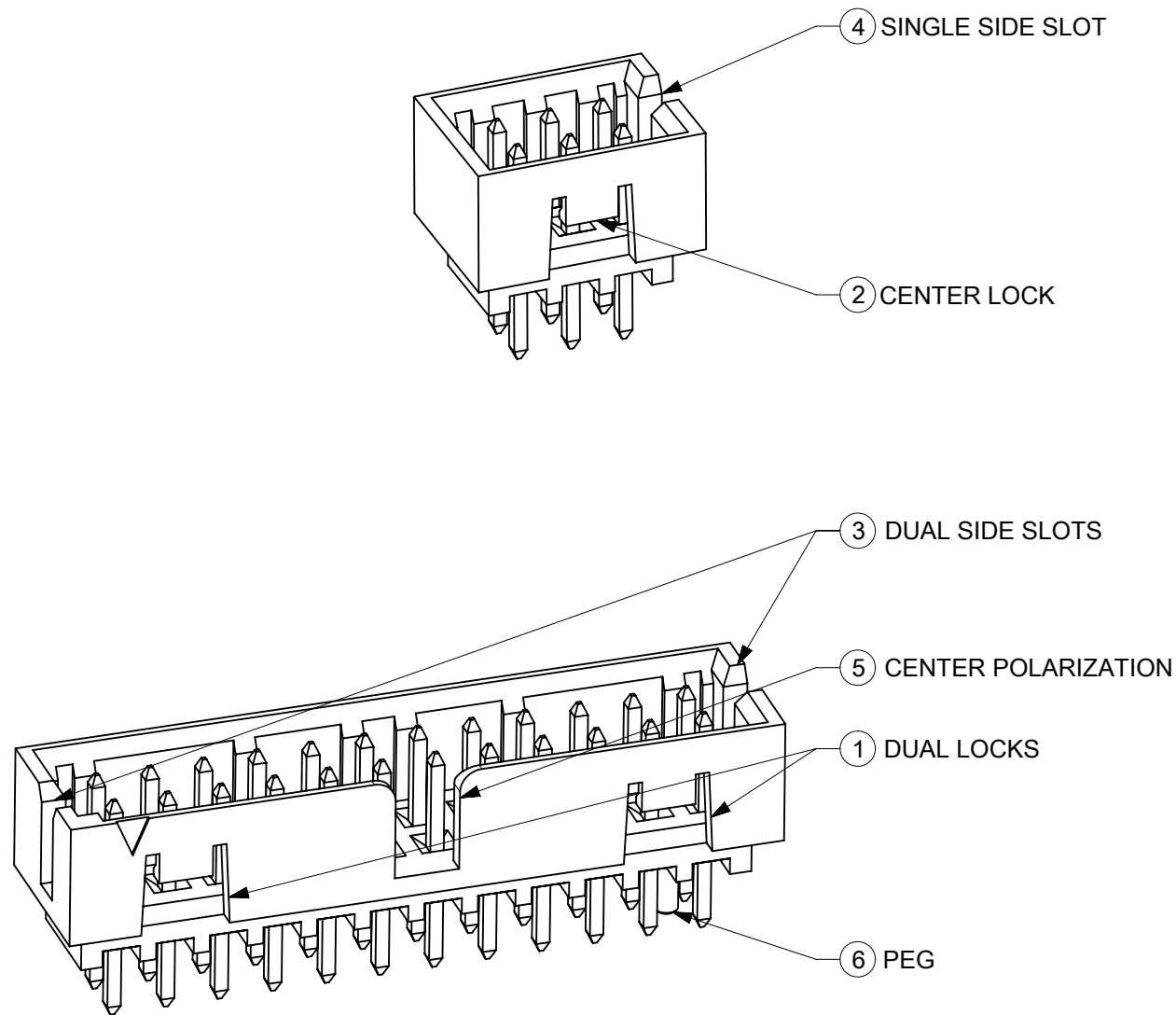











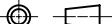

FEATURES SELECTION GUIDE



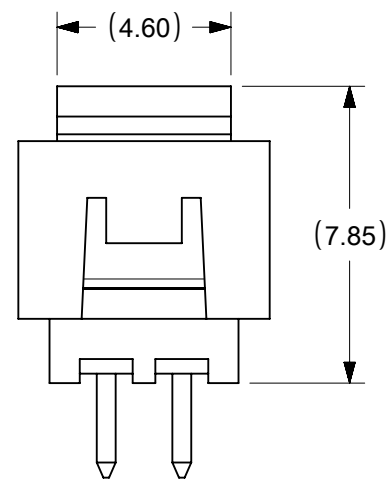
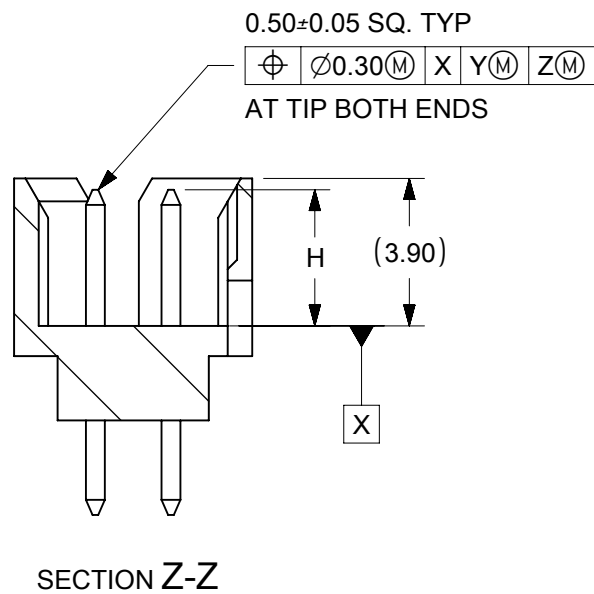
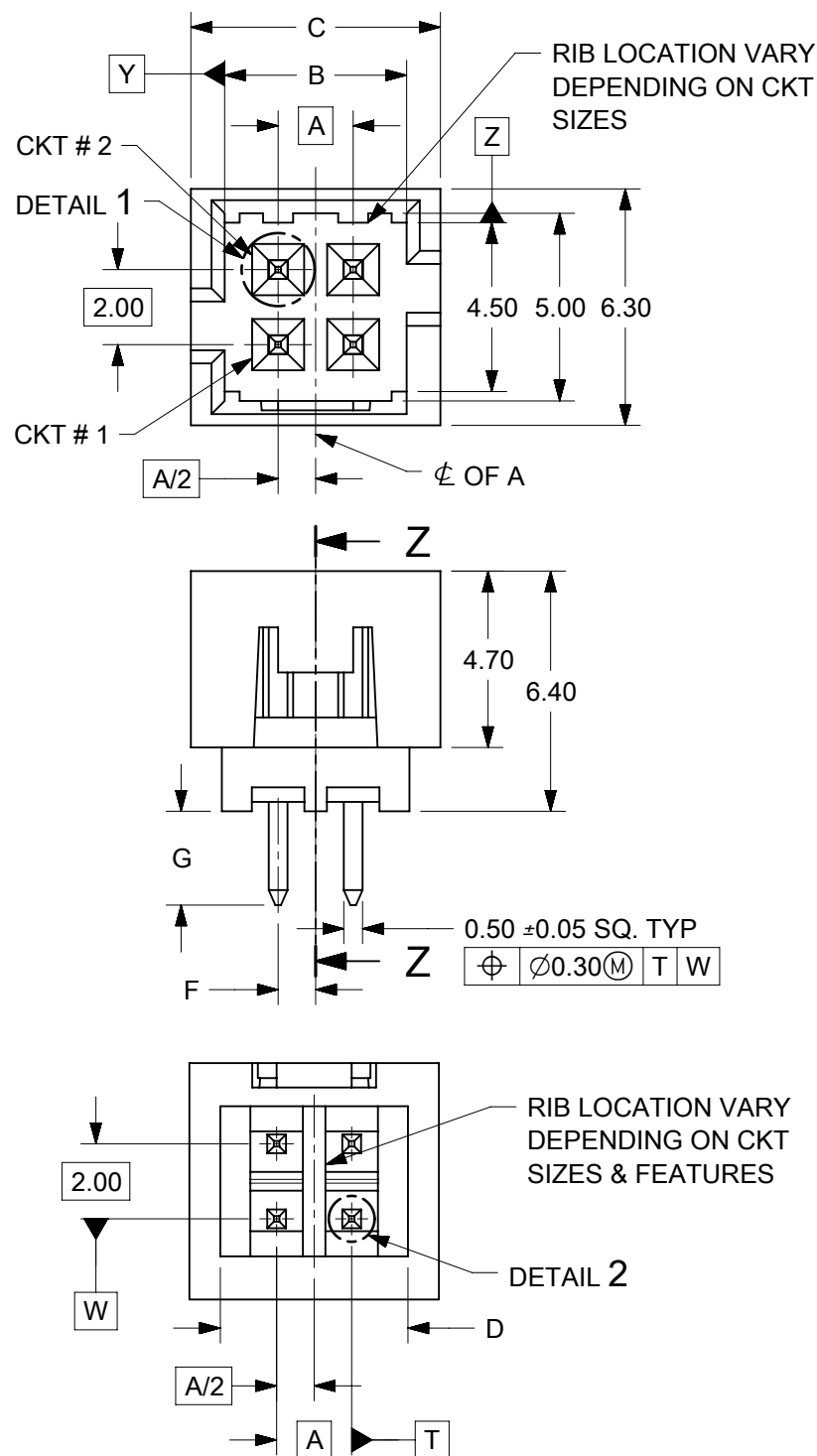
PACKAGING SPECIFICATION TABLE

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

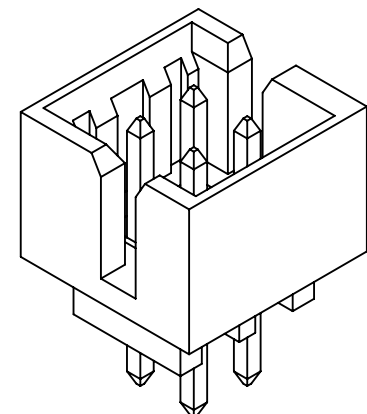
FEATURES							
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	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			
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.	
mm		NTS			
GENERAL TOLERANCES (UNLESS SPECIFIED)					
	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		APPR: KHLIM 2015/06/29		
 = 0	THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER
 = 0			A3-SIZE	87831	CUSTOMER
 = 0					SHEET NUMBER
			SEE TABLE	GENERAL MARKET	1 OF 14

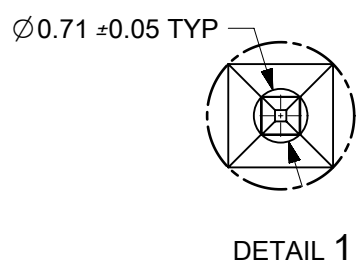
4 CIRCUITS



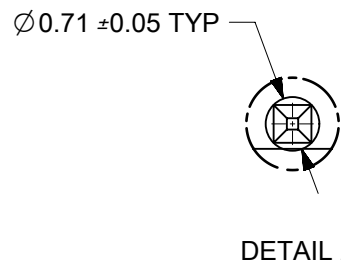
VIEW FOR
HEADER WITH CAP



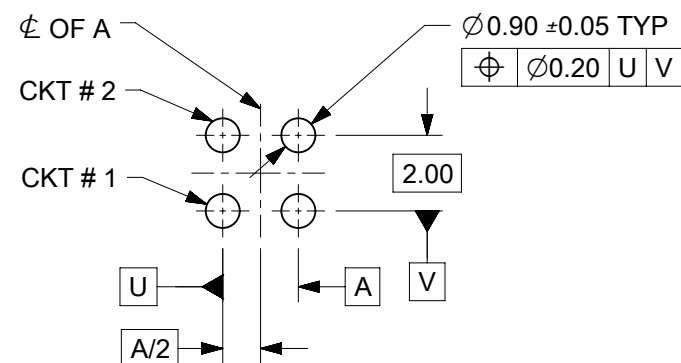
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



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	
= 0	THIRD ANGLE PROJECTION	DRAWING
= 0	SERIES	87831
= 0	MATERIAL NUMBER	SEE TABLE
= 0	CUSTOMER	GENERAL MARKET
= 0	SHEET NUMBER	2 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	
--------------------------	--

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

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	2 OF 14

10	9	8	7	6	5	4	3	2	1																																				
4 CIRCUITS																																													
4	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																											
	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																											
	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							2.00		4.85	6.65	5.00	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															2.00	4.85	6.65	5.00	N.A	N.A	1.00	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																						2.00	4.85	6.65	5.00	N.A	N.A	1.00	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								2.00																					4.85	6.65	5.00	N.A	N.A	1.00	2.50
	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.










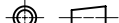




2 - 0.38µm/15µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

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.

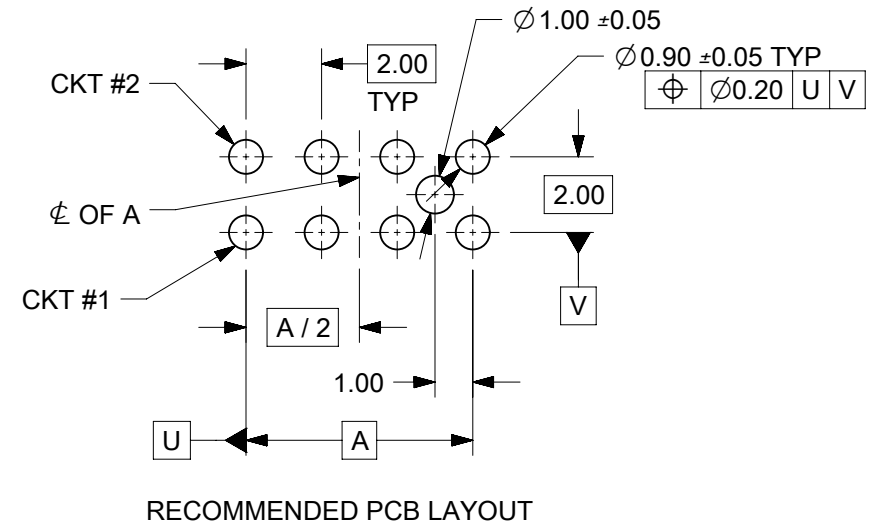
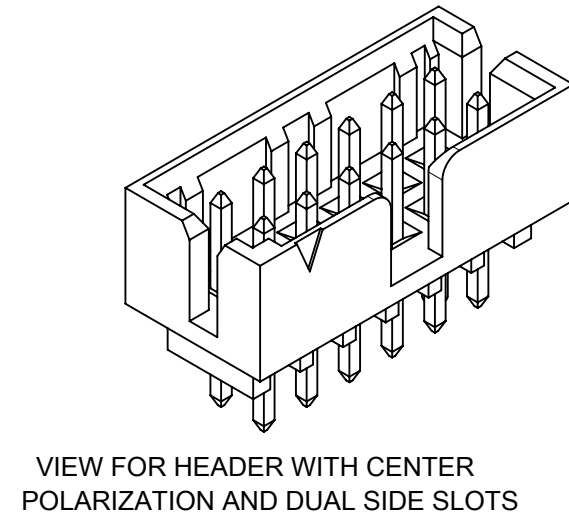
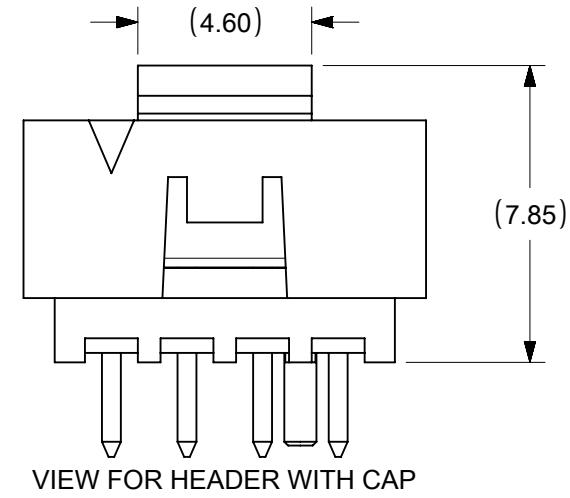
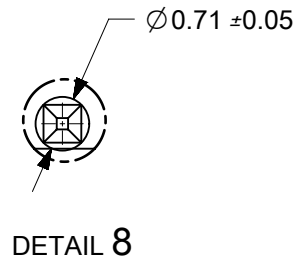
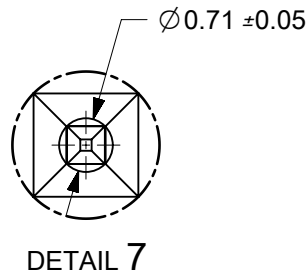
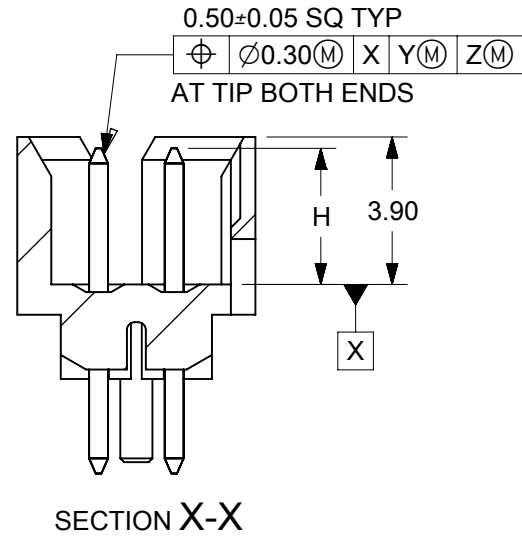
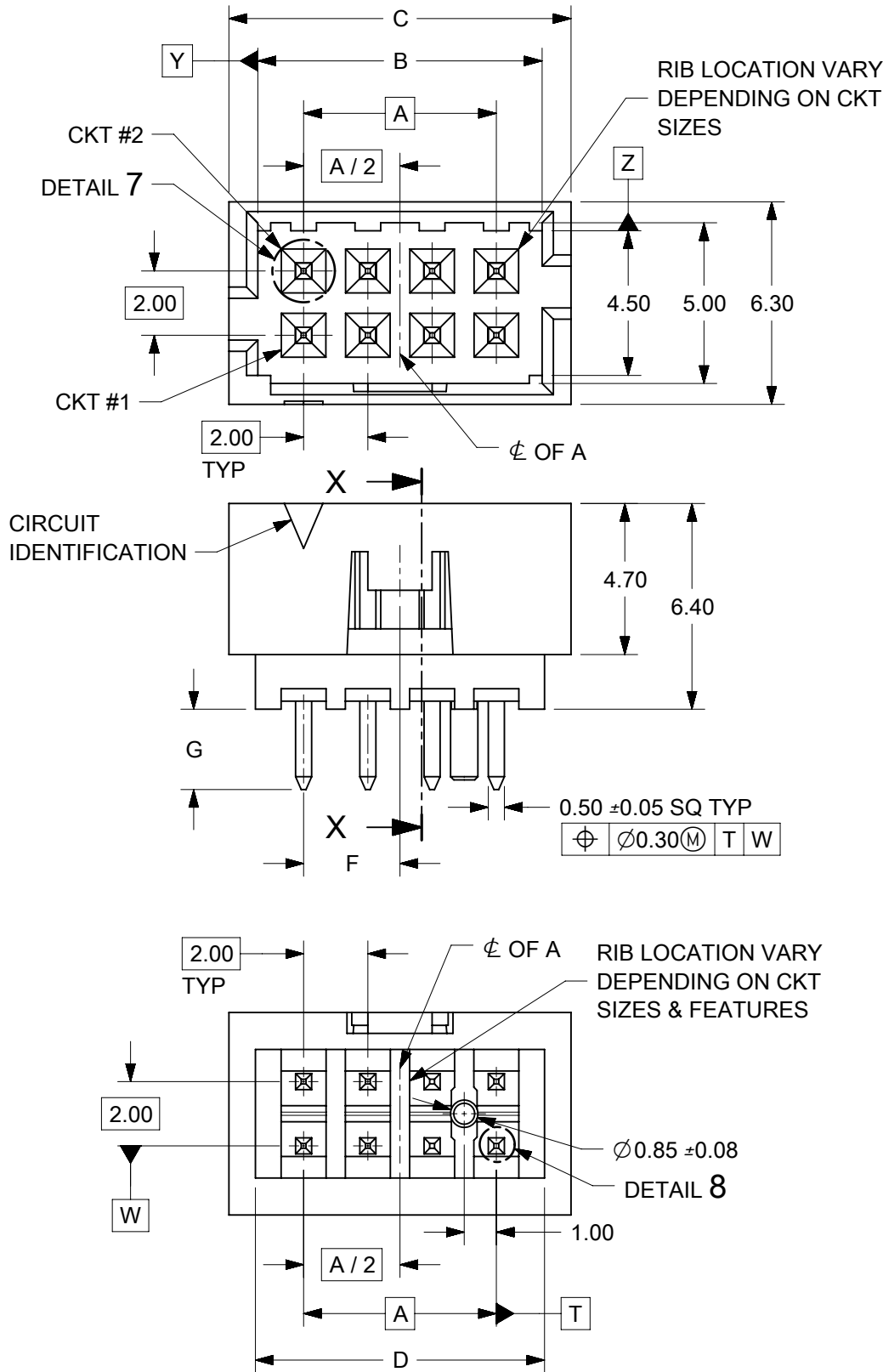
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

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

10	9	8	7	6	5	4	3	2	1
----	---	---	---	---	---	---	---	---	---

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

8 TO 12 CIRCUITS

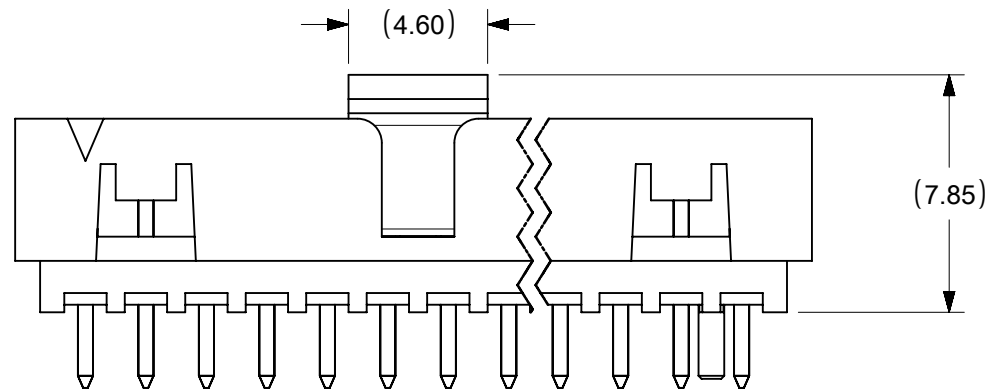
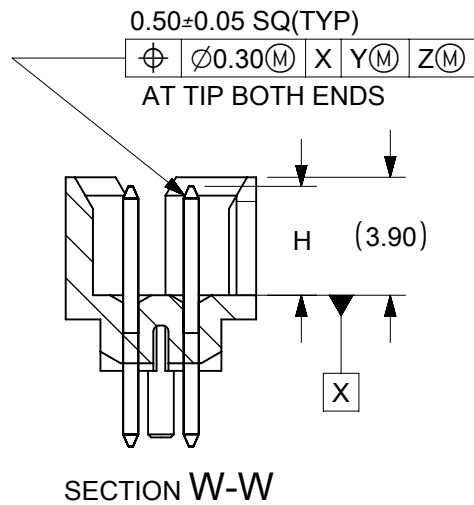
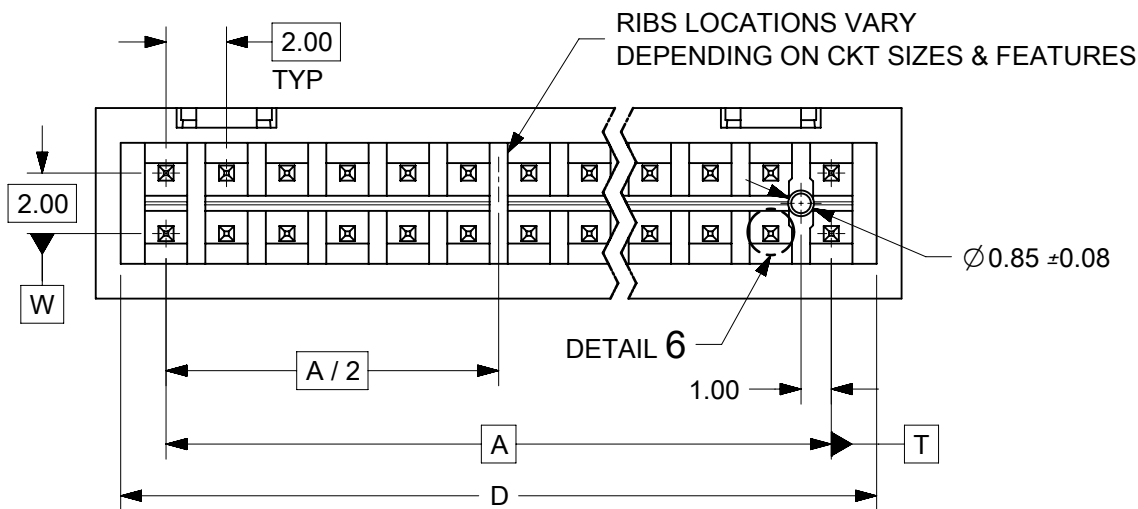
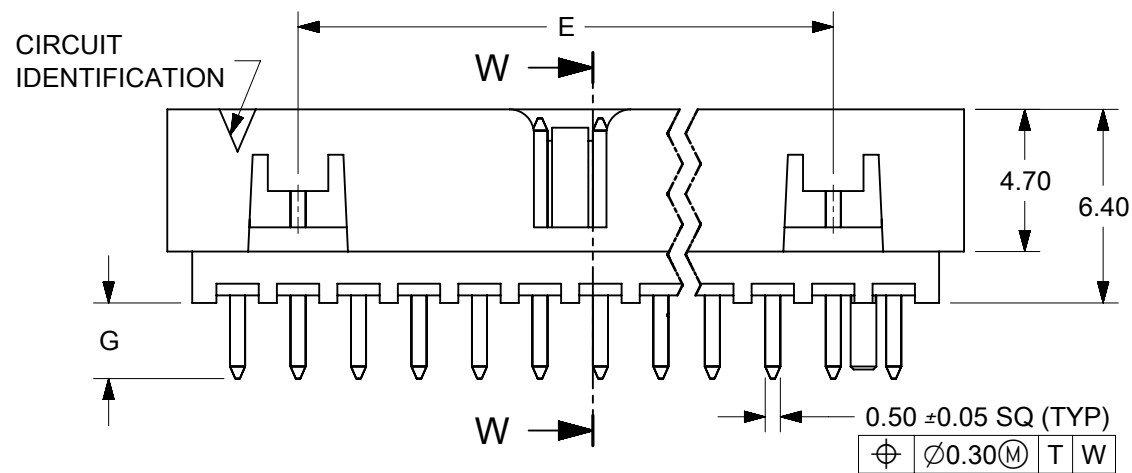
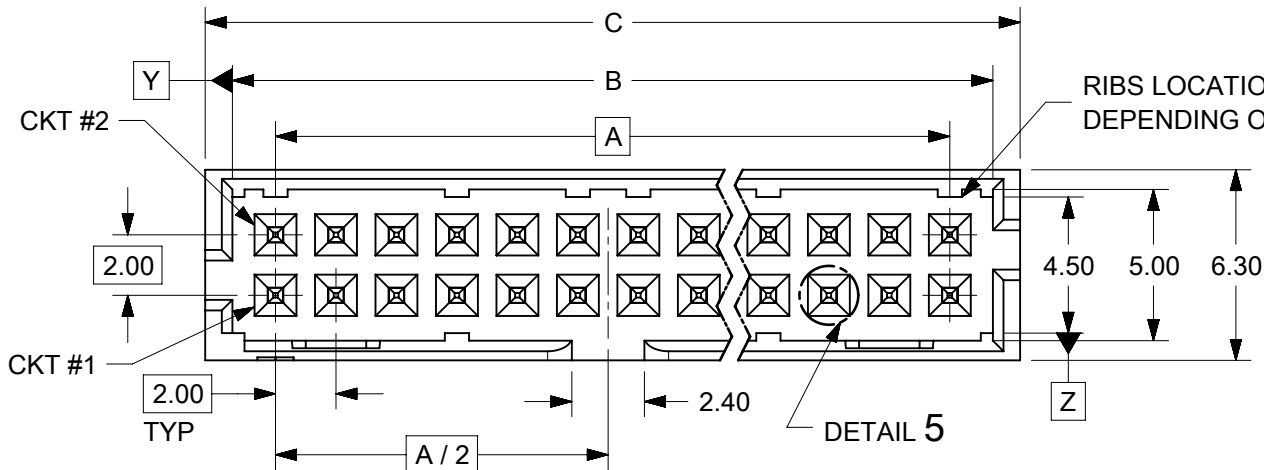


- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES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

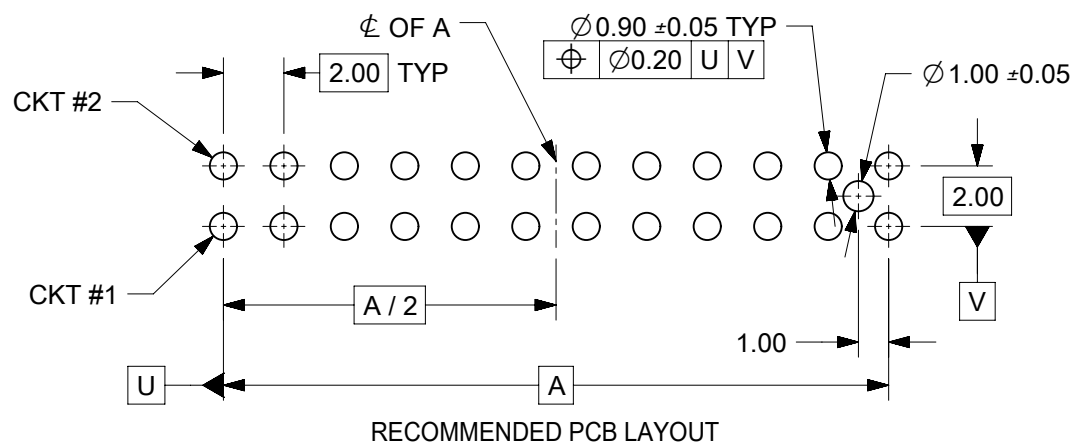
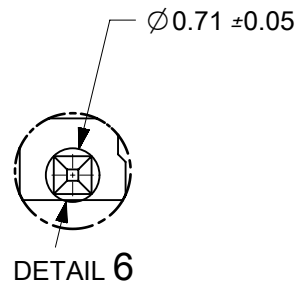
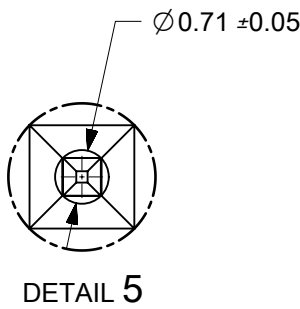
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
	mm	NTS
	GENERAL TOLERANCES (UNLESS SPECIFIED)	
∇ = 0	4 PLACES	\pm
∇ = 0	3 PLACES	\pm
∇ = 0	2 PLACES	\pm 0.2 \pm
∇ = 0	1 PLACE	\pm
∇ = 0	0 PLACES	\pm
∇ = 0	ANGULAR TOL	\pm 3.0 °
∇ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
∇ = 0	THIRD ANGLE PROJECTION	DRAWING
∇ = 0	A3-SIZE	SERIES
∇ = 0	87831	MATERIAL NUMBER
∇ = 0	SEE TABLE	CUSTOMER
∇ = 0	GENERAL MARKET	SHEET NUMBER
∇ = 0	6 OF 14	

CURRENT REV DESC: ADDED BTB DIST.		EC NO: 619055	
DRWN: NMANE02		2019/03/25	
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	
SD-87831-0001		DOC TYPE	
PSD		DOC PART	
001		REVISION	
A16		PRODUCT CUSTOMER DRAWING	

14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



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

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.				<div>molex</div>									
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									
				INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				PRODUCT CUSTOMER DRAWING									
				DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD	DOC PART 001	REVISION A16							
				THIRD ANGLE PROJECTION				DRAWING A3-SIZE		SERIES 87831		MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 9 OF 14	

10	9	8	7	6	5	4	3	2	1										
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																			
10	9	8	7	6	5	4	3	2	1										

10

9

8

7

6

5

4

3

2

1

32 TO 40 CIRCUITS

CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
32	87831-3219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20
	87831-3220	N.A	N.A	2														
	87831-3221	N.A	N.A	3														
	87831-3236	N.A	N.A	4	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

FORMAT: Mol-lega-master-ib-prod-A3

REVISION: D

DATE: 2018/01/18

9

8

7

6

5

4

3

2

1

SYMBOLS

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

0

▽

=

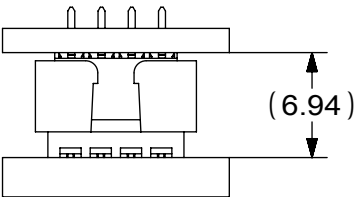
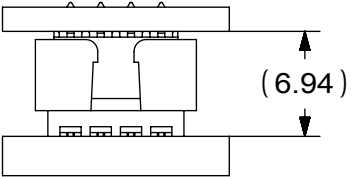
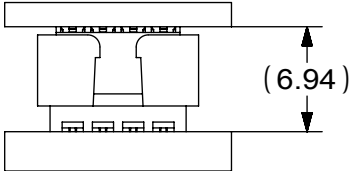
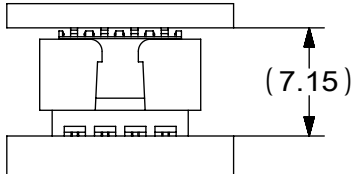
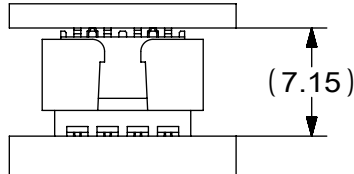
0

▽

=

0</

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

▽ = 0

▽ = 0

▽ = 0

▽ = 0

▽ = 0

▽ = 0

▽ = 0

▽ = 0

▽ = 0

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

mo

lex

MILLIGRID

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

SD-87831-0001

PSD

001

A16

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

GENERAL MARKET

14 OF 14

THIRD ANGLE PROJECTION

DRAWING

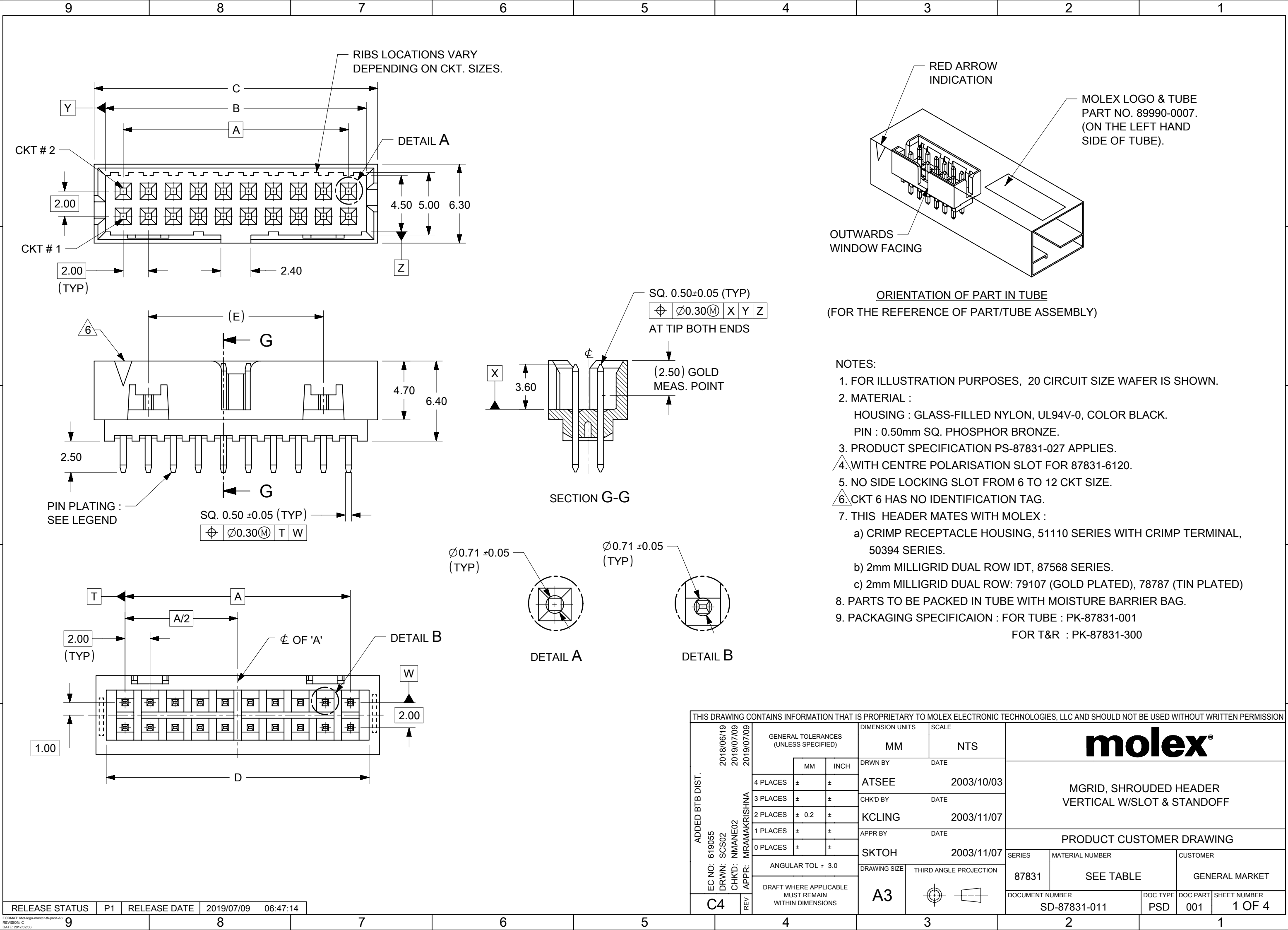
SERIES

A3-SIZE

87831

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

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



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 APPR: MRAMAKRISHNA	2018/06/19 2019/07/09 2019/07/09	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®							
					MM		NTS									
			MM	INCH	DRWN BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF							
		4 PLACES	±	±	ATSEE		2003/10/03									
		3 PLACES	±	±	CHK'D BY		DATE									
		2 PLACES	± 0.2	±	KCLING		2003/11/07									
		1 PLACES	±	±	APPR BY		DATE									
		0 PLACES	±	±	SKTOH		2003/11/07		PRODUCT CUSTOMER DRAWING							
		ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION						SERIES	MATERIAL NUMBER		CUSTOMER
		C4	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3				87831		SEE TABLE		GENERAL MARKET	
DOCUMENT NUMBER											DOC TYPE		DOC PART		SHEET NUMBER	
SD-87831-011											PSD		001		1 OF 4	

9

8

7

6

5

4

3

2

1

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	<div><div>4</div></div> 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		<div>molex®</div>							
				MM		NTS									
		4 PLACES	±	MM	±	INCH	±		DRWN BY		DATE				
		ATSEE		2003/10/03											
		3 PLACES	±			CHK'D BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF					
		KCLING		2003/11/07											
		2 PLACES	± 0.2			APPR BY		DATE		PRODUCT CUSTOMER DRAWING					
		SKTOH		2003/11/07											
		1 PLACES	±			DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER		CUSTOMER	
		A3				87831		SEE TABLE		GENERAL MARKET					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER					
C4		REV		SD-87831-011		PSD		001		2 OF 4					

RELEASE STATUS

P1

RELEASE DATE

2019/07/09

06:47:14

9

8

7

6

5

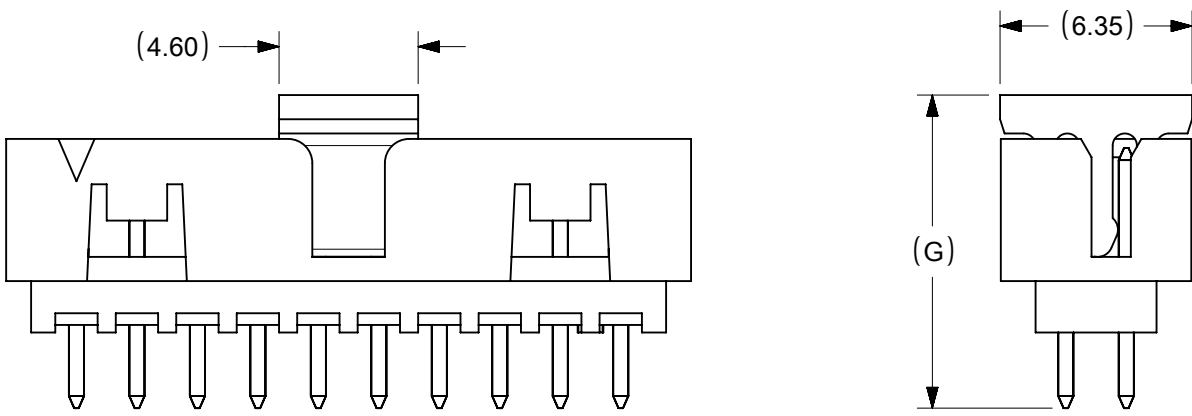
4

3

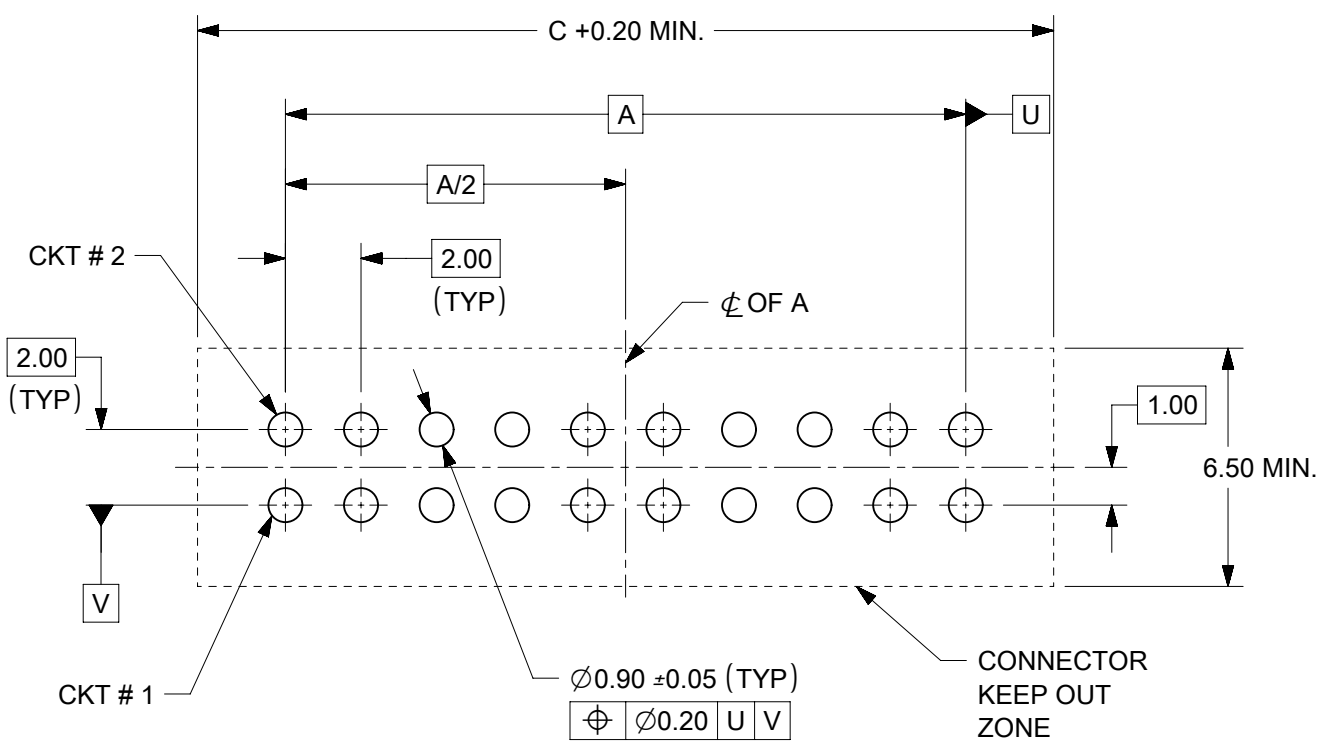
2

1

CAP INFORMATION



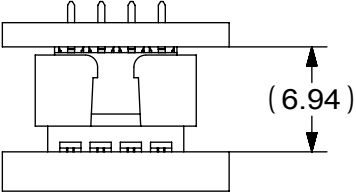
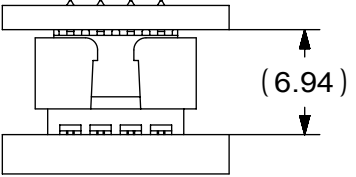
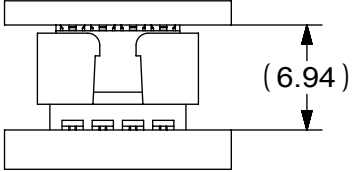
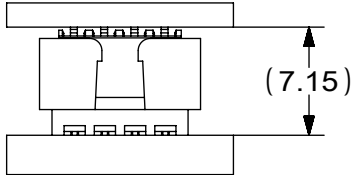
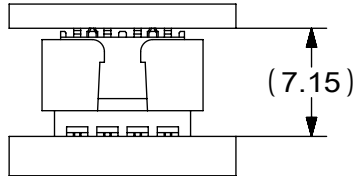
ILLUSTRATED VIEWS WITH CAP



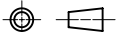
RECOMMENDED PCB PATTERN

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 CHK'D: NMANE02 REV APPR: MRAMAKRISHNA		2018/06/19 2019/07/09 2019/07/09		GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		<div>molex®</div>							
							MM		NTS									
					MM		INCH		DRWN BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF					
		4 PLACES		±	±	ATSEE		2003/10/03										
		3 PLACES		±	±	CHK'D BY		DATE										
		2 PLACES		± 0.2	±	KCLING		2003/11/07										
		1 PLACES		±	±	APPR BY		DATE		PRODUCT CUSTOMER DRAWING								
		0 PLACES		±	±	SKTOH		2003/11/07										
					ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION			SERIES		MATERIAL NUMBER		CUSTOMER	
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3					87831		SEE TABLE		GENERAL MARKET	
C4		REV						DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER				
								SD-87831-011		PSD		001		3 OF 4				

BOARD TO BOARD (BTB) DISTANCE

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

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

DIMENSION UNITS		SCALE	
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		THIRD ANGLE PROJECTION 	DRAWING A3-SIZE

CURRENT REV DESC: ADDED BTB DIST.

EC NO: 619055

DRWN: SCS02

CHK'D: NMANE02

APPR: MRAMAKRISHNA

2018/06/19

2019/07/09

2019/07/09

INITIAL REVISION:

DRWN: DRWN BY

APPR: APPR BY

XXXX/XX/XX

XXXX/XX/XX

DOCUMENT NUMBER

SD-87831-011

DOC TYPE

PSD

DOC PART

001

REVISION

C4

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

GENERAL MARKET

4 OF 4

Mouser Electronics

Authorized Distributor

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

Molex:

[87831-5119](#) [87831-5554](#)