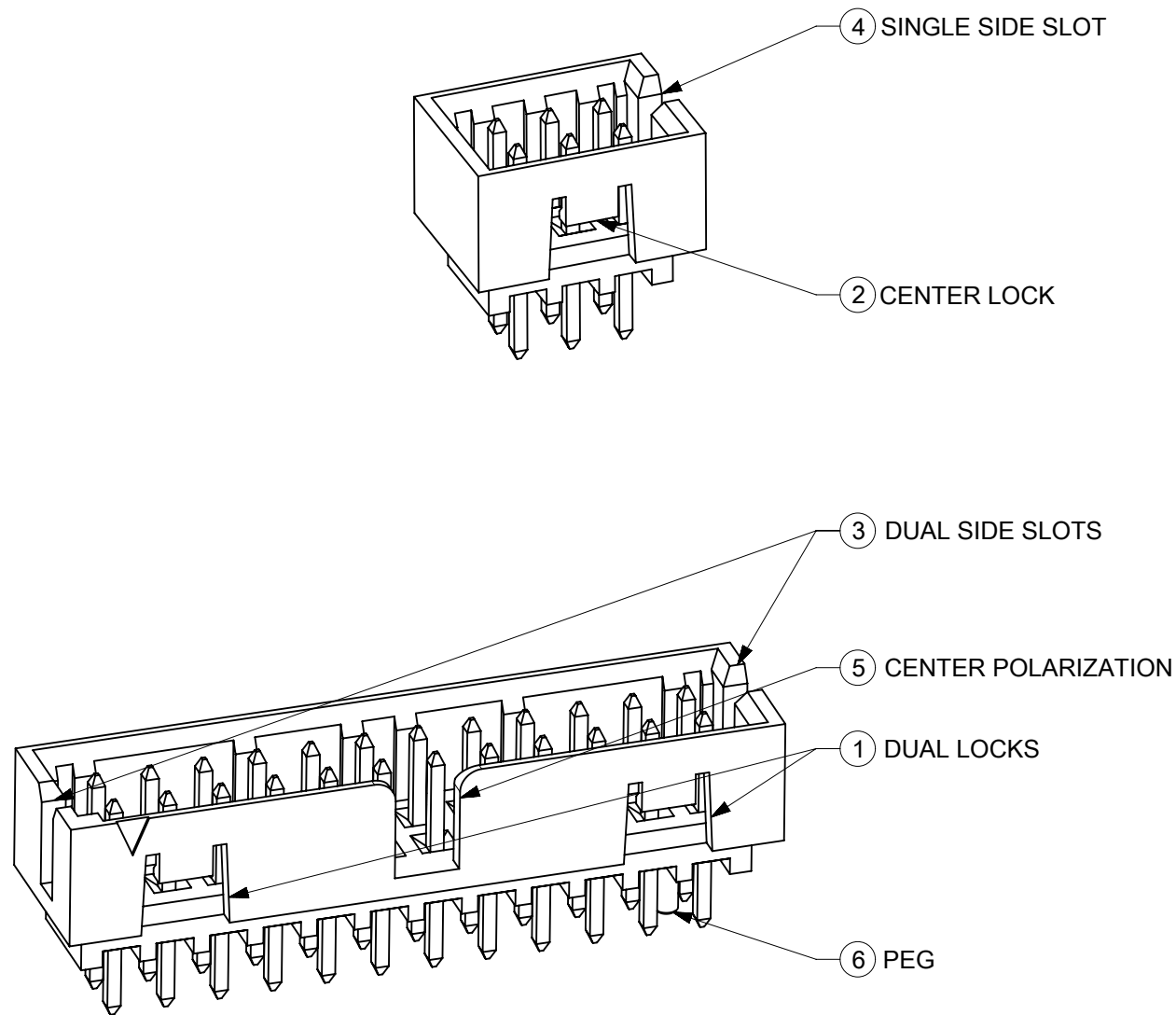


FEATURES SELECTION GUIDE



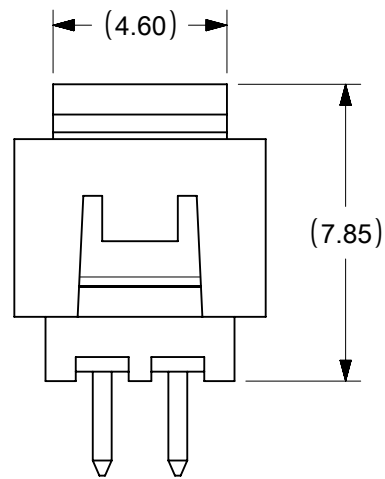
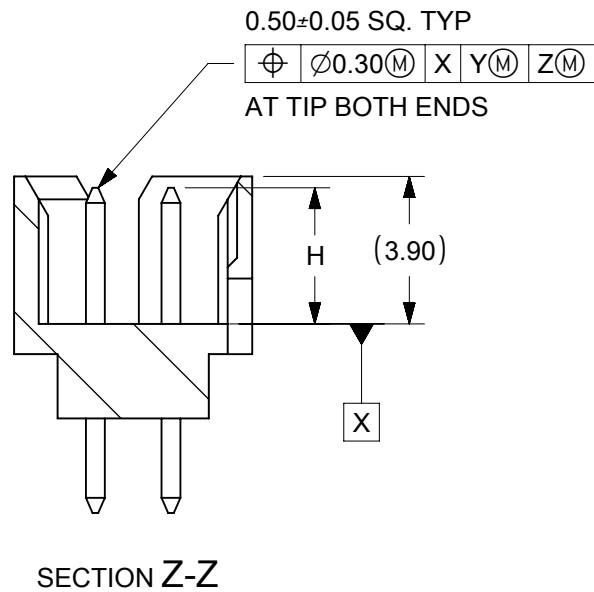
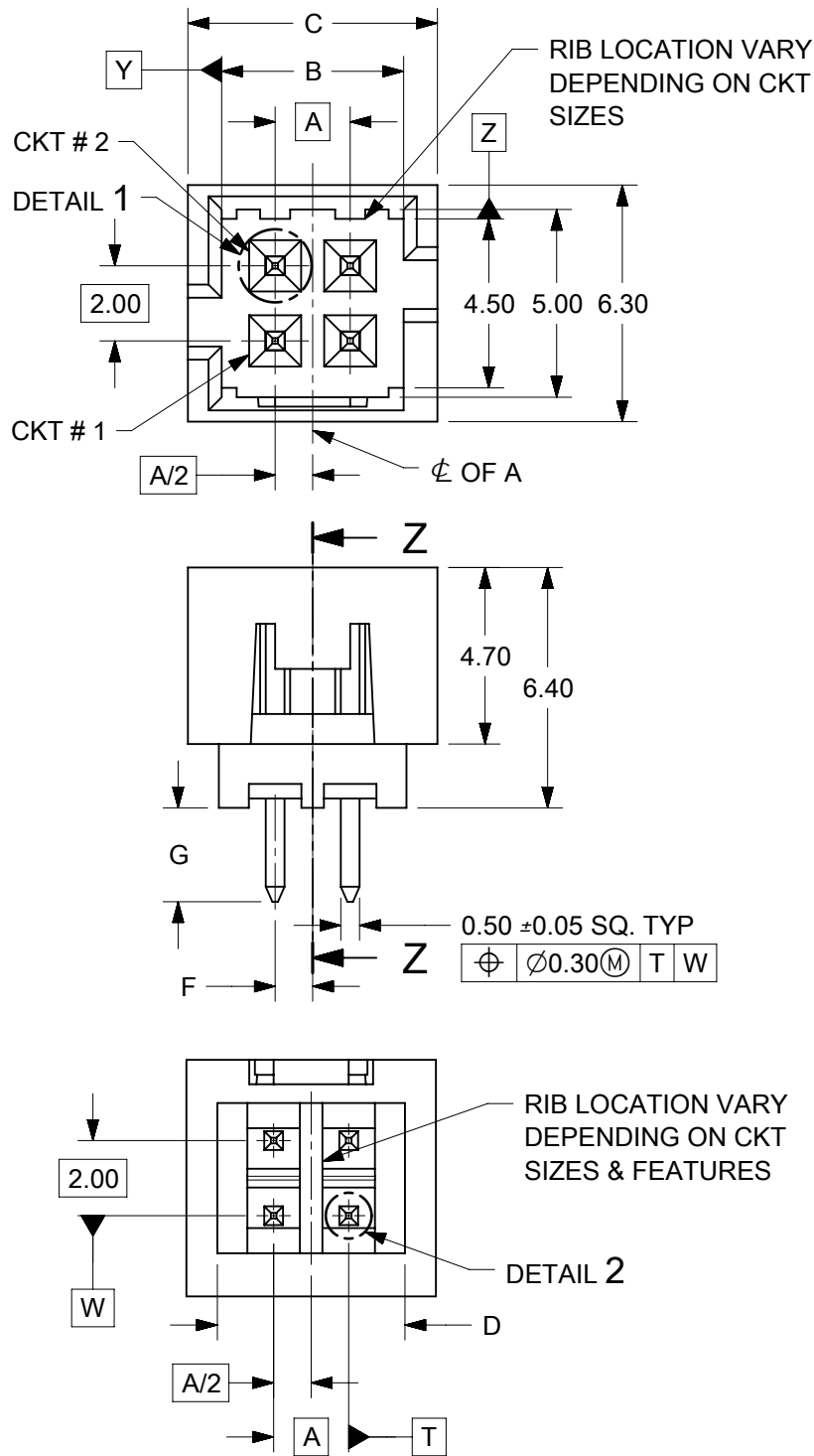
PACKAGING SPECIFICATION TABLE

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

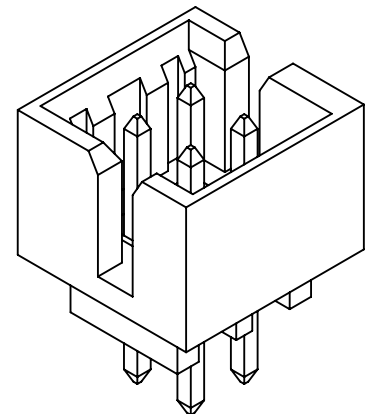
CIRCUIT SIZE		FEATURES						
		FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
		① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3	
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	N.A	YES	N.A	N.A		
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5	
	N.A	N.A	YES	N.A	N.A	YES		
	N.A	YES	YES	N.A	N.A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

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
= 0 =											

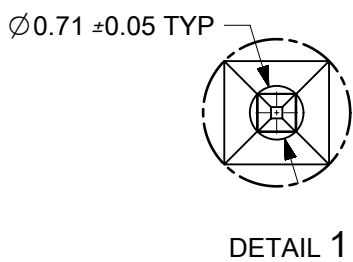
4 CIRCUITS



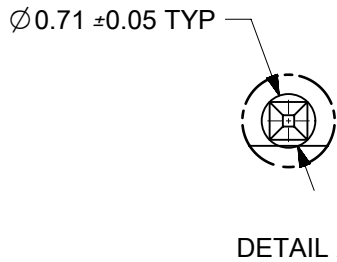
VIEW FOR
HEADER WITH CAP



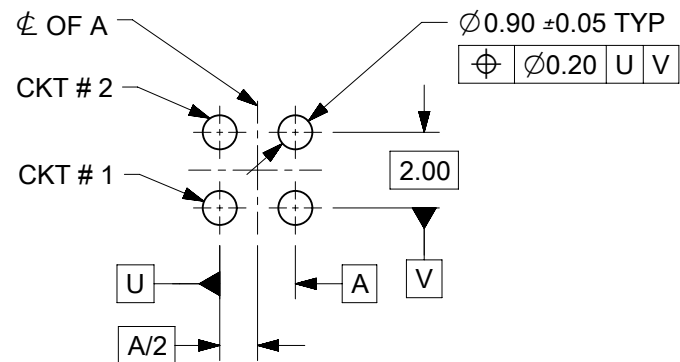
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



DETAIL 1



DETAIL 2



RECOMMENDED PCB LAYOUT

NOTES:

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

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

CURRENT REV DESC: ADDED BTB DIST.		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	
		A3-SIZE 87831	

DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
SD-87831-0001		PSD	001	A16
SEE TABLE		GENERAL MARKET		2 OF 14

10	9	8	7	6	5	4	3	2	1									
4 CIRCUITS																		
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
4	87831-0419	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	2.00	4.85	6.65	5.00	N.A	N.A	2.50	3.60±0.20
	87831-0420	N.A	N.A	2														
	87831-0421	N.A	N.A	3														
	87831-0436	N.A	N.A	4														
	87831-0441	87831-0456	N.A	2	N.A	YES	YES	N.A	N.A	N.A						1.00	2.50	
	87831-0442	N.A	87831-5565	3														
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	3.50								
	87831-5142	N.A	N.A	3														
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	2.80								
	87831-6142	N.A	N.A	3														
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A							2.50	
	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.

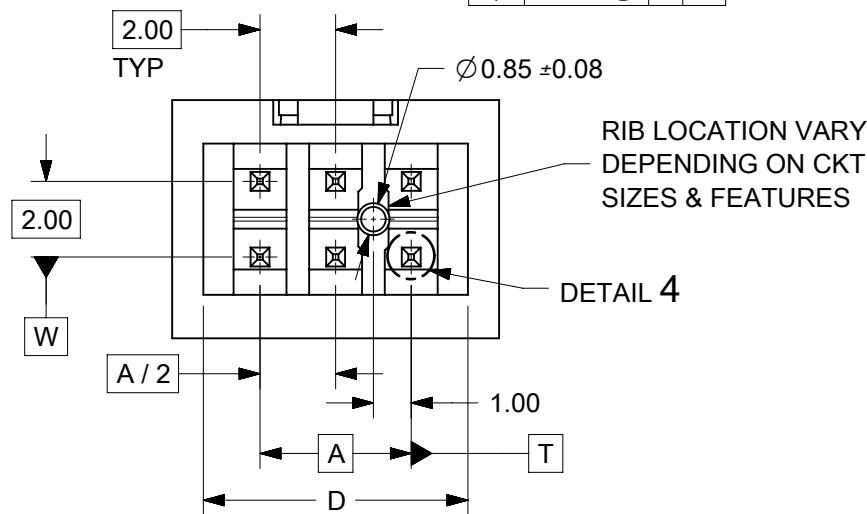
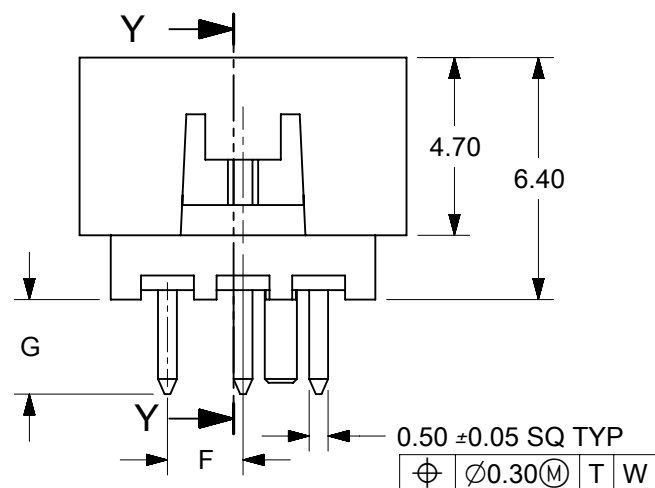
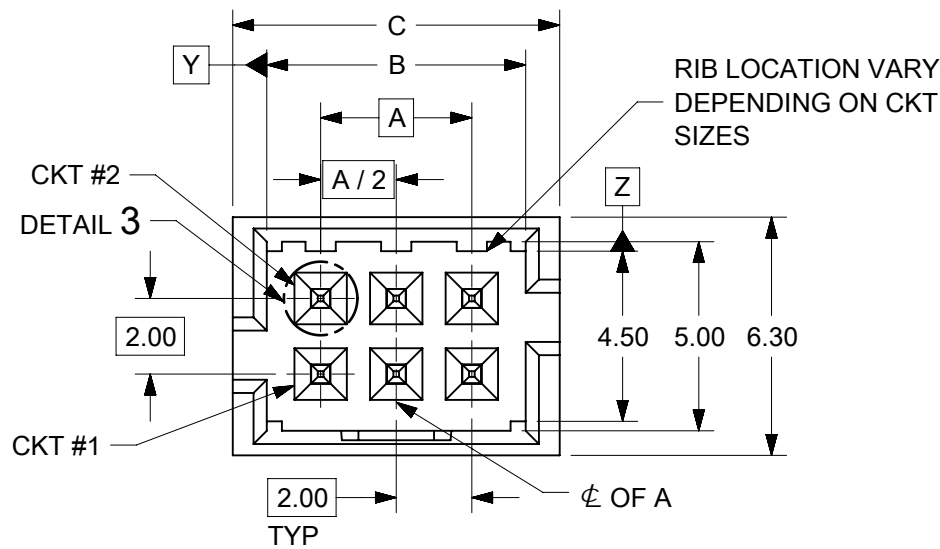
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

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.

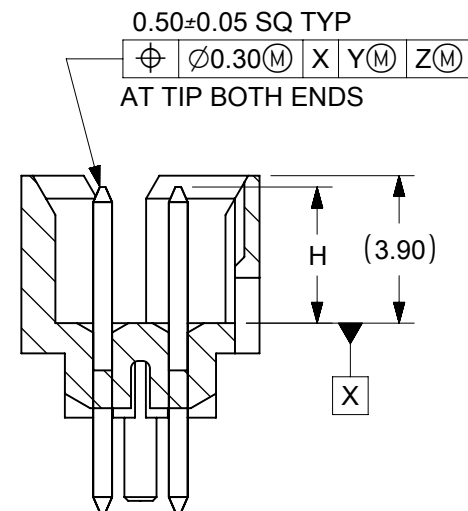
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

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						
		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										2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		
	= 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												
	= 0	1 PLACE	±	±	DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD		DOC PART 001		REVISION A16			
	= 0	0 PLACES	±	±												
	= 0	ANGULAR TOL ± 3.0 °														
	= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING A3-SIZE		SERIES 87831		MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 3 OF 14	
	= 0															

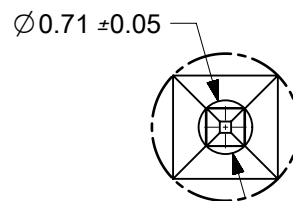
DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12					
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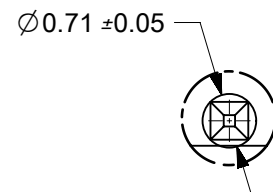
6 CIRCUITS



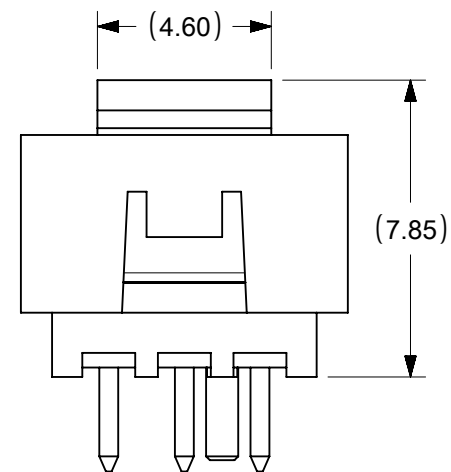
SECTION Y-Y



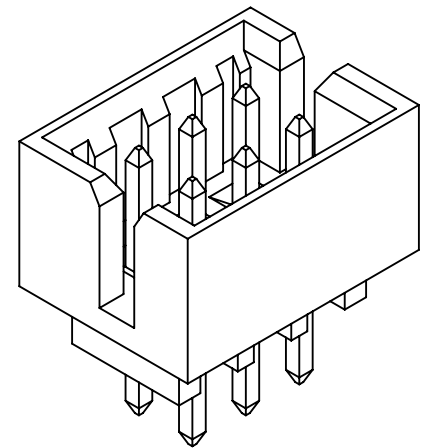
DETAIL 3



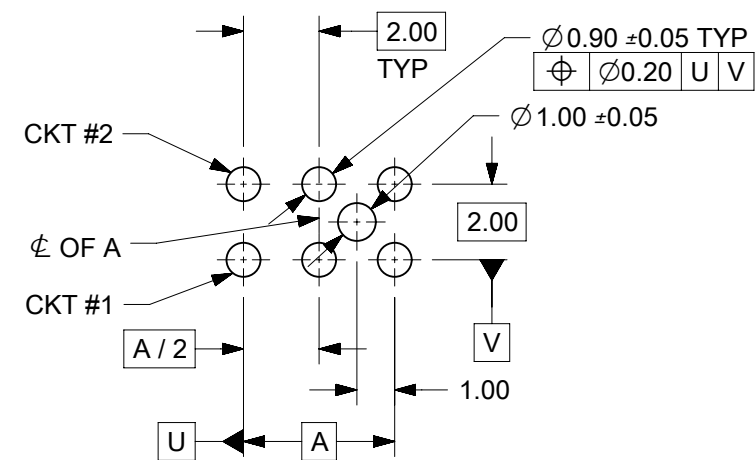
DETAIL 4



VIEW FOR
HEADER WITH CAP



VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

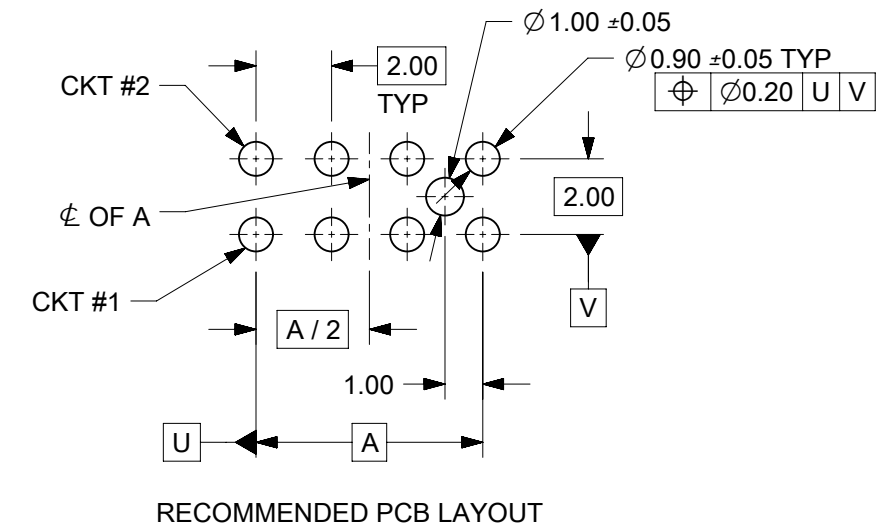
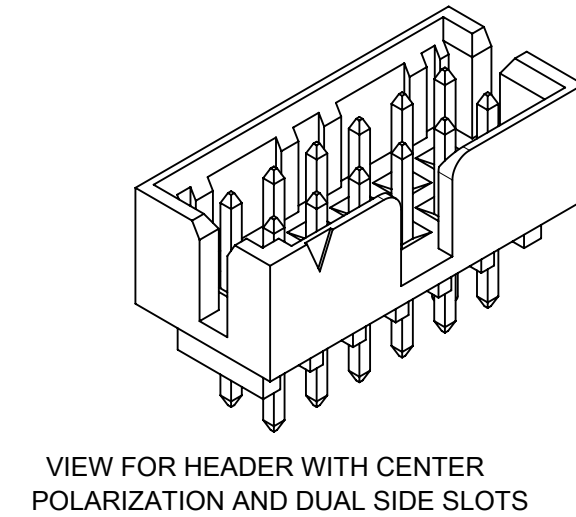
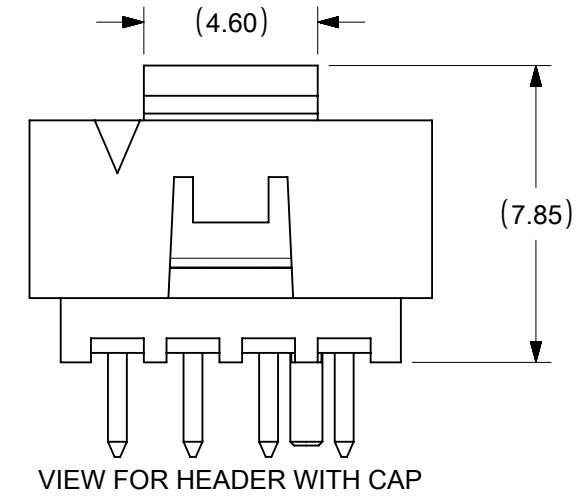
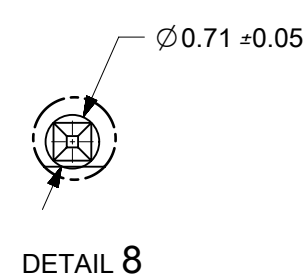
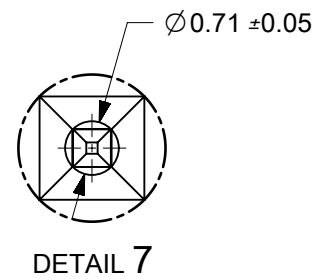
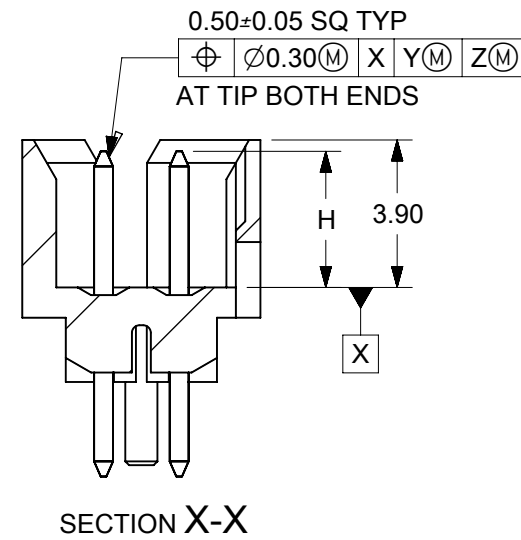
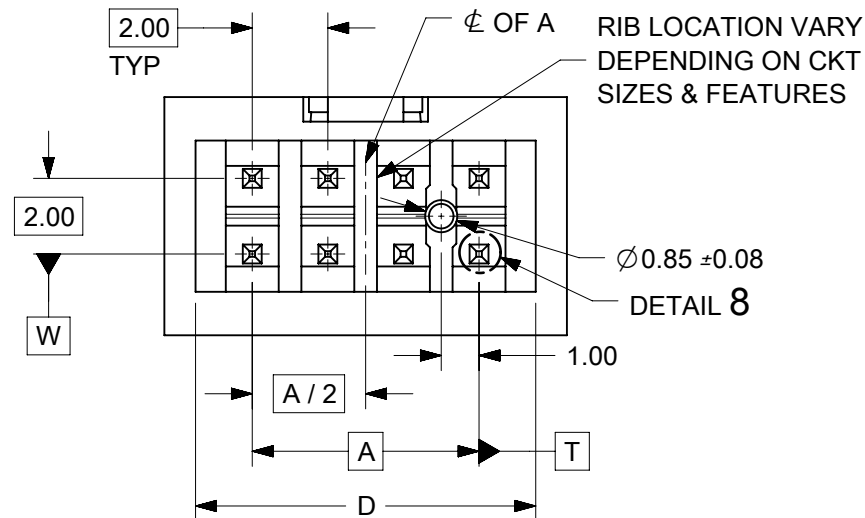
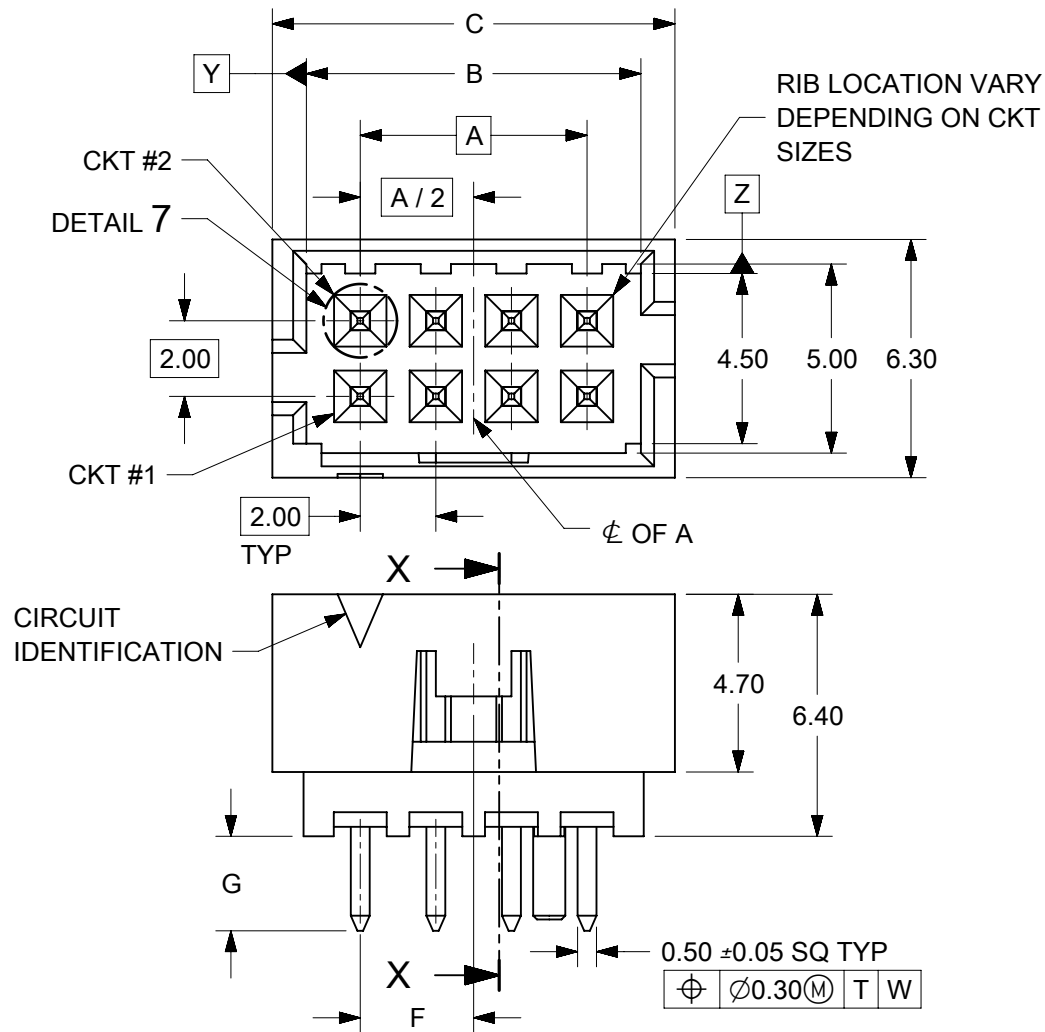
NOTES:

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

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

CURRENT REV DESC: ADDED BTB DIST.		molex	
EC NO: 619055		MILLIGRID	
DRWN: NMANE02 2019/03/25		2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
CHK'D: NMANE02 2019/07/09		PRODUCT CUSTOMER DRAWING	
APPR: MRAMAKRISHNA 2019/07/09		DOCUMENT NUMBER	
INITIAL REVISION:		SD-87831-0001	
DRWN: GMENARLY 2015/04/15		DOC TYPE	
APPR: KHLIM 2015/06/29		PSD	
THIRD ANGLE PROJECTION		DOC PART	
DRAWING		001	
SERIES		REVISION	
A3-SIZE		A16	

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)

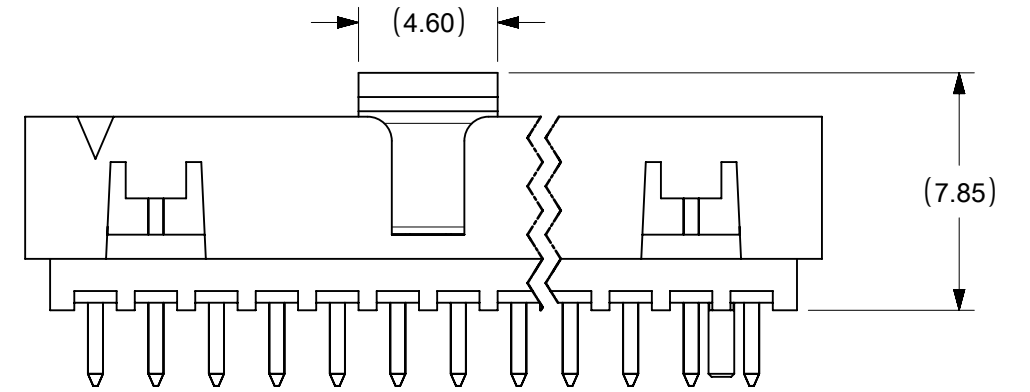
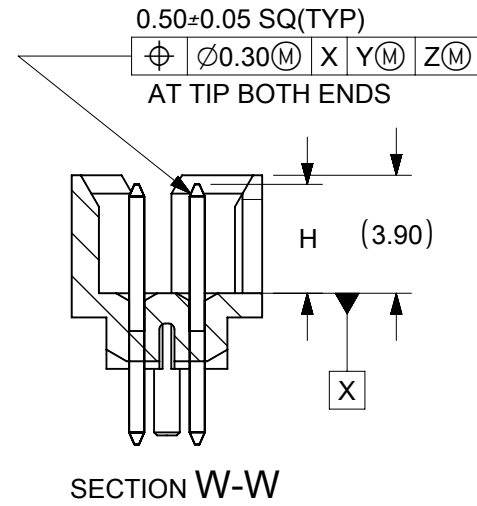
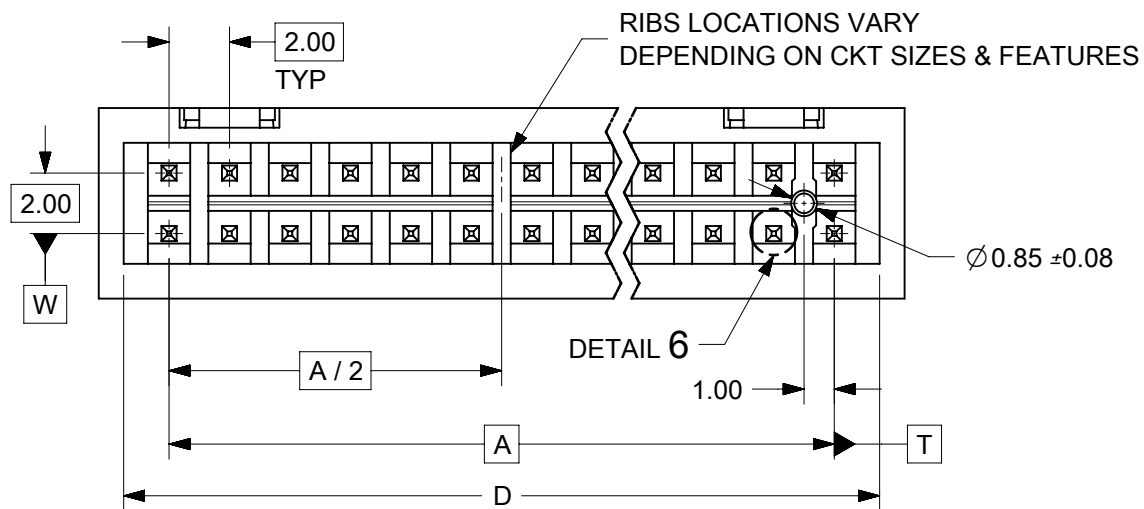
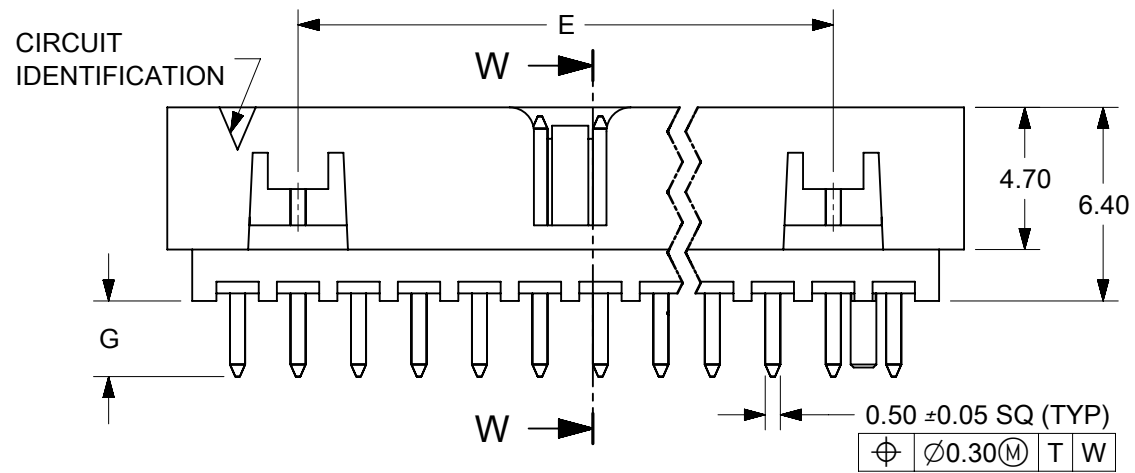
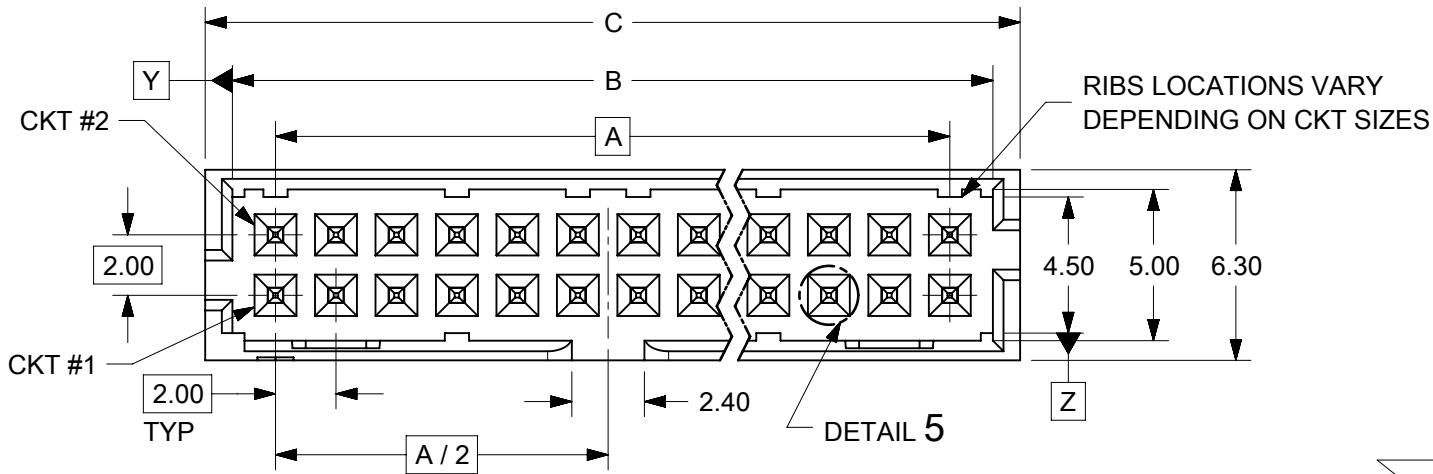
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
$\nabla = 0$	mm	NTS
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)	
$\nabla = 0$		MM INCH
$\nabla = 0$	4 PLACES $\pm$	$\pm$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

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

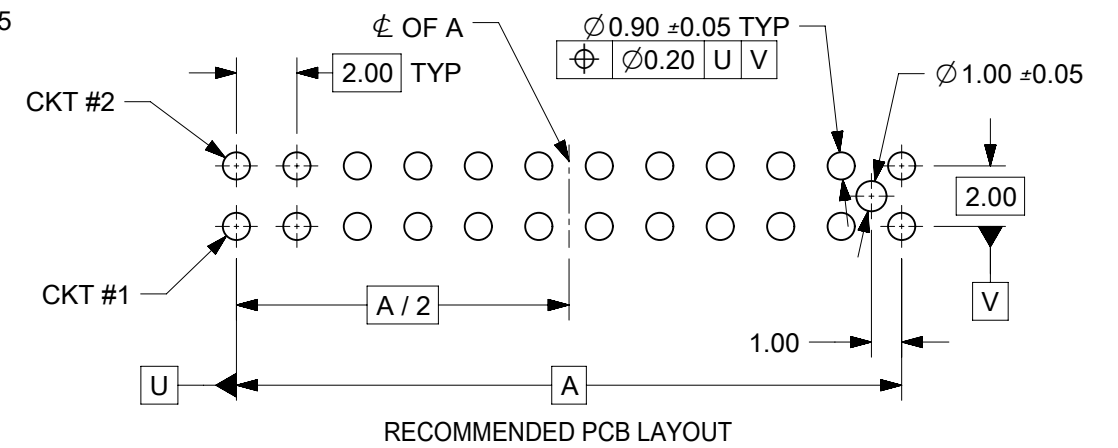
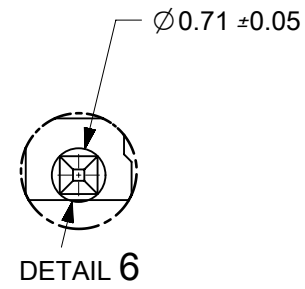
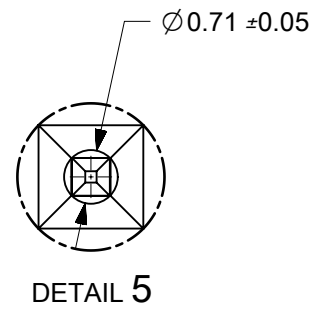
DOCUMENT NUMBER			DOC TYPE	DOC PART	REVISION
SD-87831-0001			PSD	001	A16

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	6 OF 14

14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



NOTES:

- ## 1. MATERIALS:

HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK

PIN: 0.50mm SQ PHOSPHOR BRONZE

2. FINISHES: REFER TO PLATING OPTIONS

- ### 3. PRODUCT SPECIFICATION: PS-87831-027

4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1

AND CRIMP TERMINAL: 50394 SERIES

B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES

C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE:

79107 (GOLD PLATED), 78787 (TIN PLATED)

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.				molex					
mm		NTS											
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
	MM	INCH											
4 PLACES	±	±											
3 PLACES	±	±											
2 PLACES	± 0.2	±											
1 PLACE	±	±	PRODUCT CUSTOMER DRAWING				DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD	DOC PART 001	REVISION A16
0 PLACES	±	±											
ANGULAR TOL	± 3.0 °		THIRD ANGLE PROJECTION		DRAWING A3-SIZE	SERIES 87831	MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 9 OF 14		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS													

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													3.50							
	87831-2435	N.A	N.A	N.A	3													2.80							
	87831-2445	N.A	N.A	N.A	3													3.50							
	87831-2410	N.A	N.A	N.A	2													YES		N.A	YES	N.A	YES	N.A	
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													3.50							
	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	

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

▽ = 0

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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

SERIES

SD-87831-0001

PSD

001

A16

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

EC NO: 619055

DRWN: NMANE02

CHK'D: NMANE02

APPR: MRAMAKRISHNA

2019/03/25

2019/07/09

2019/07/09

2015/04/15

2015/06/29

2015/06/29

A3-SIZE

87831

SEE TABLE

GENERAL MARKET

11 OF 14

CURRENT REV DESC: ADDED BTB DIST.

molex

MILLIGRID

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

SD-87831-0001

PSD

001

A16

SEE TABLE

GENERAL MARKET

11 OF 14

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														
	87831-3228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3229	N.A	N.A	3														
34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20
	87831-3420	N.A	N.A	2														
	87831-3421	N.A	N.A	3														
	87831-3436	N.A	N.A	4														
	87831-3428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3429	N.A	N.A	3														
	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	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3629	N.A	N.A	3														
38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	36.00	38.85	40.65	39.00	32.00	N.A	2.50	3.60±0.20
	87831-3820	N.A	N.A	2														
	87831-3821	N.A	N.A	3														
	87831-3836	N.A	N.A	4														
	87831-3828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3829	N.A	N.A	3														
40	87831-4019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	38.00	40.85	42.65	41.00	34.00	N.A	2.50	3.60±0.20
	87831-4020	N.A	N.A	2														
	87831-4021	N.A	N.A	3														
	87831-4036	N.A	N.A	4														
	87831-4028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4029	N.A	N.A	3														
	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.

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

DOCUMENT STATUS	P1	RELEASE DATE	2019/07/09	06:47:12
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SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	= 0	DIMENSION UNITS	SCALE
		mm	NTS
	= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
			MM
	= 0	4 PLACES	±
		3 PLACES	±
	= 0	2 PLACES	± 0.2
		1 PLACE	±
	= 0	0 PLACES	±
		ANGULAR TOL ± 3.0 °	
	= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
		THIRD ANGLE PROJECTION	DRAWING
	= 0		
		A3-SIZE	87831

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:		2015/04/15	
DRWN: GMENARLY		2015/06/29	
APPR: KHLIM			

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

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	12 OF 14

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		CURRENT REV DESC: ADDED BTB DIST.		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
	DIMENSION UNITS SCALE		mm NTS						EC NO: 619055 DRWN: NMANE02 CHK'D: NMANE02 APPR: MRAMAKRISHNA 2019/03/25 2019/07/09 2019/07/09			
	GENERAL TOLERANCES (UNLESS SPECIFIED)											
	MM INCH		4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2		INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM		DOCUMENT NUMBER DOC TYPE		DOC PART REVISION			
	1 PLACE ± 0 PLACES ± ANGULAR TOL ± 3.0 °		THIRD ANGLE PROJECTION DRAWING		SERIES MATERIAL NUMBER		CUSTOMER SHEET NUMBER					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				A3-SIZE 87831		SEE TABLE GENERAL MARKET		12 OF 14			

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BOARD TO BOARD (BTB) DISTANCE																																																																																																																								
<table><thead><tr><th>HEADER</th><th>MATES WITH (RECEPTACLE)</th><th>BTB DIST.</th><th>PICTORIAL VIEW</th></tr></thead><tbody><tr><td rowspan="5">87831</td><td>79107</td><td>6.94</td><td></td></tr><tr><td>78787</td><td>6.94</td><td></td></tr><tr><td>79108</td><td>6.94</td><td></td></tr><tr><td>79109</td><td>7.15</td><td></td></tr><tr><td>78788</td><td>7.15</td><td></td></tr></tbody></table>										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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	78788	7.15																																																																																																																						
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SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																																																																																																							
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			MM	INCH																																																																																																																				
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	3 PLACES ±		±	±																																																																																																																				
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