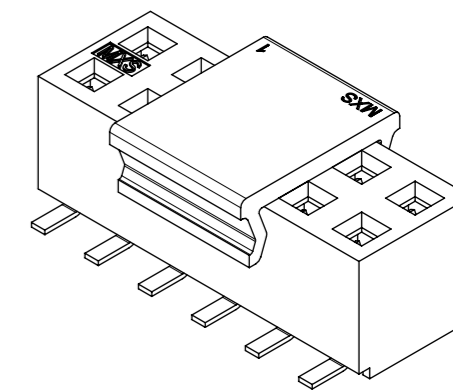
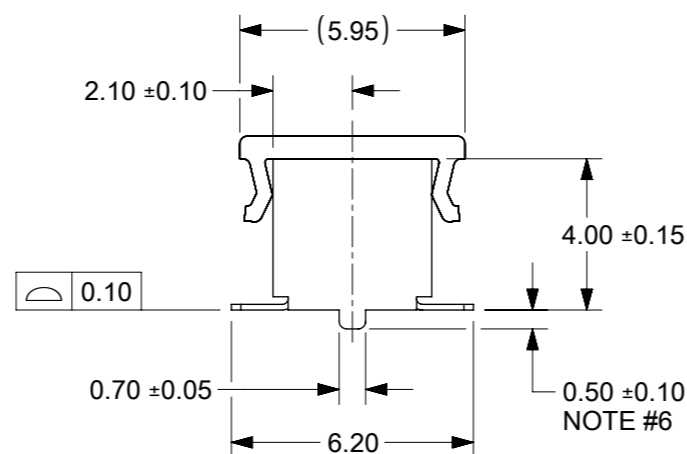
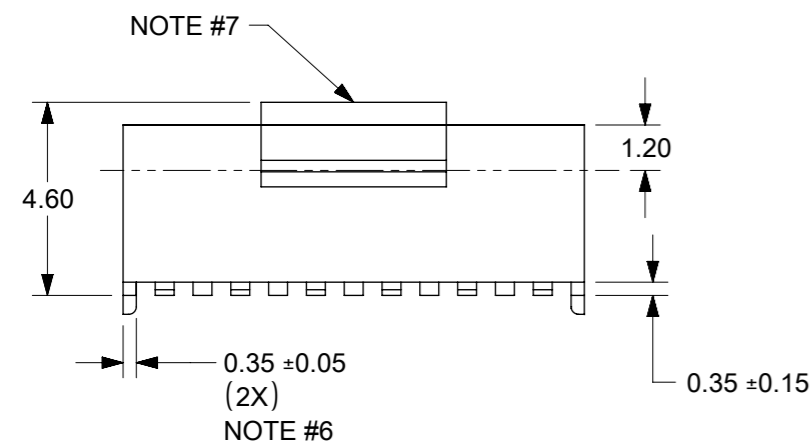


ISOMETRIC VIEW WITHOUT CAP

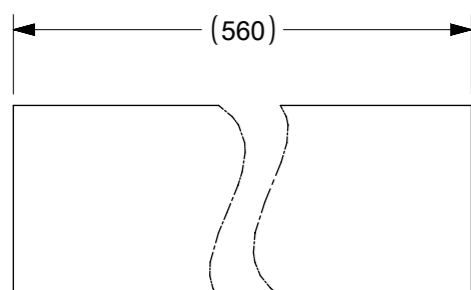


ISOMETRIC VIEW WITH CAP

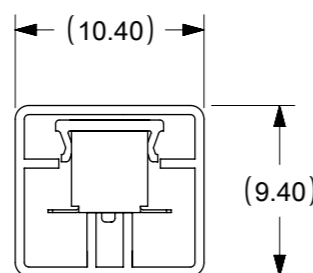


NOTES:

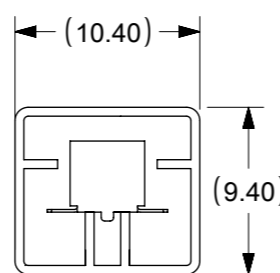
- PLATING FINISH :
 - 0.76µm MIN. GOLD IN CONTACT AREA
1.27µm MIN TIN IN SOLDER TAIL AREA
BOTH OVER 1.27µm MIN NICKEL OVERALL
 - 0.38µm MIN GOLD IN CONTACT AREA
1.27µm MIN TIN IN SOLDER TAIL AREA
BOTH OVER 1.27µm MIN NI OVERALL
 - 0.05µm MIN. GOLD IN CONTACT AREA
1.90µm MIN TIN IN SOLDER TAIL AREA
BOTH OVER 1.27µm MIN NICKEL OVERALL
- MATERIAL:
 - HOUSING : NYLON 4/6, 94V-0, COLOUR BLACK
 - CAP : NYLON, GLASS FILLED, COLOUR BLACK
 - TERMINAL : COPPER ALLOY
 - EMBOSS TAPE : CLEAR POLYSTYRENE
 - COVER TAPE : CLEAR POLYESTER
- PRODUCT SPECIFICATION PS-87380 APPLIES
- COPLANARITY OF SOLDER TAILS ARE TO BE MEASURED BY RESTING THE PART ON A FLAT GAUGE SURFACE
- OTHER PLATING OPTIONS AVAILABLE. PLEASE CONTACT FACTORY
- PEG, PCB HOLE AND CAP ARE OPTIONAL. SEE PART TABLE FOR PART CONFIGURATON
- POSITION OF CAP TO BE LOCATED AT CENTER OF DIM A REGARDLESS OF CKT SIZES.
- 12 CKT SIZE SHOWN FOR ILLUSTRATION ONLY. SEE CHART FOR ALL AVAILABLE PART SIZES. 22 CKT ILLUSTRATED FOR TAPE/REEL VERSION ON SHT 2.
- FOR PACKING QTY PER REEL REFER TO TABLE A IN SHT 2.
- PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.



CONNECTOR ORIENTATION IN TUBE

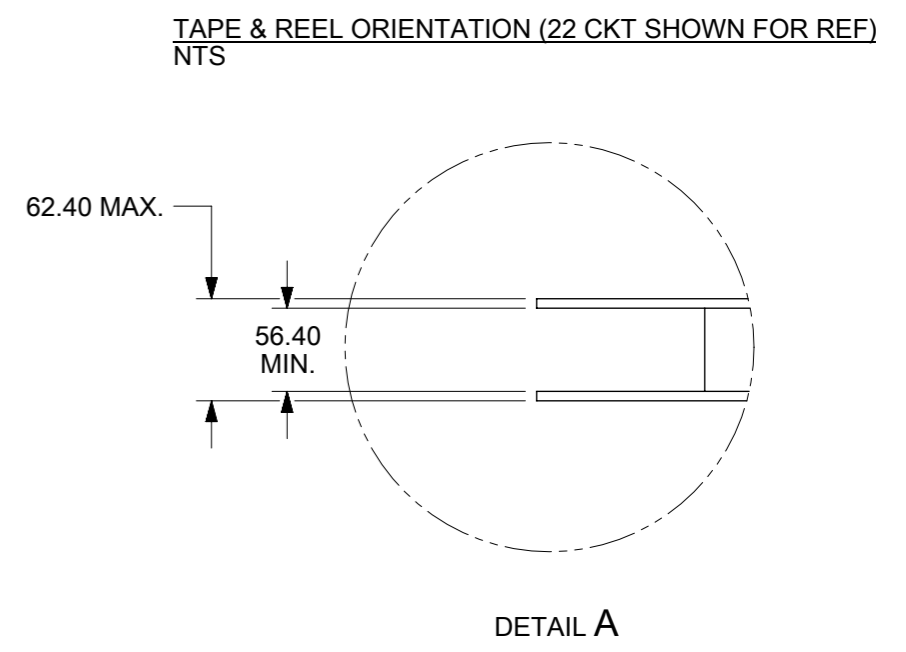
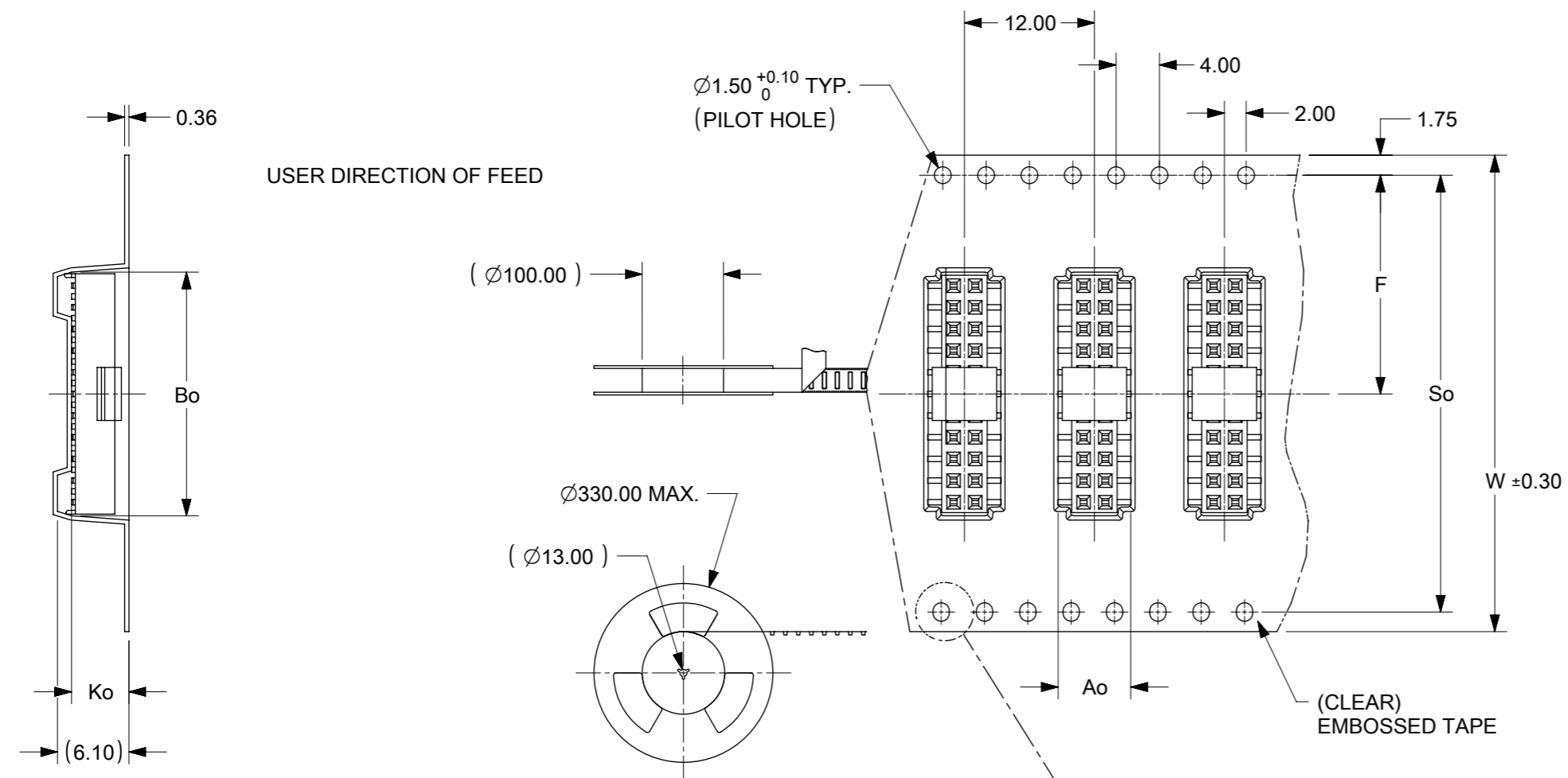


PART WITH CAP IN TUBE

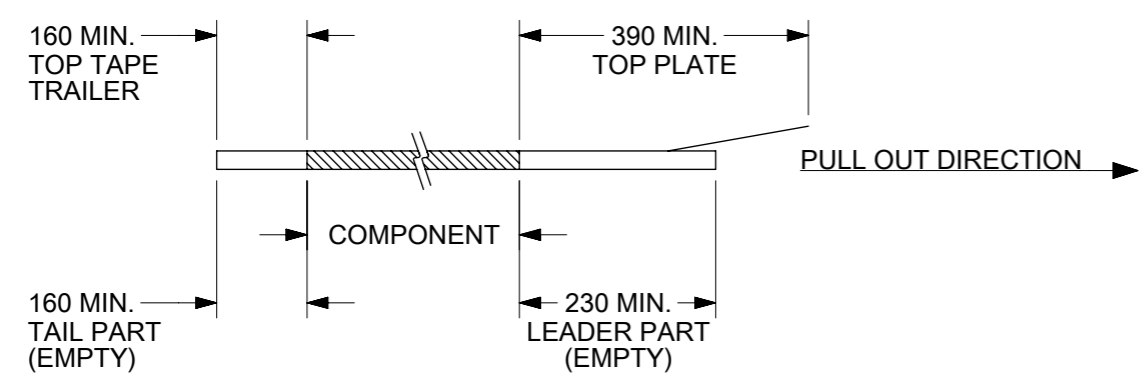


PART W/O CAP IN TUBE

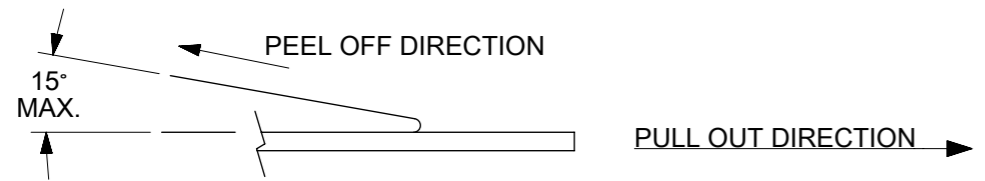
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	DIMENSION UNITS	SCALE			
▽ = 0	mm	NTS			PRODUCT CUSTOMER DRAWING
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				
▽ = 0	ANGULAR TOL ± 3.0°				DOCUMENT NUMBER
▽ = 0	4 PLACES ±			873810001-SD	
▽ = 0	3 PLACES ±				DOC TYPE
▽ = 0	2 PLACES ± 0.2			DOC PART	
▽ = 0	1 PLACE ±			REVISION	
▽ = 0	0 PLACES ±				
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0			A3-SIZE	87381	MATERIAL NUMBER
					CUSTOMER
					GENERAL MARKET
					SHEET NUMBER
					1 OF 7



NOTES:
1. LEADER AND TRAILER TAPE



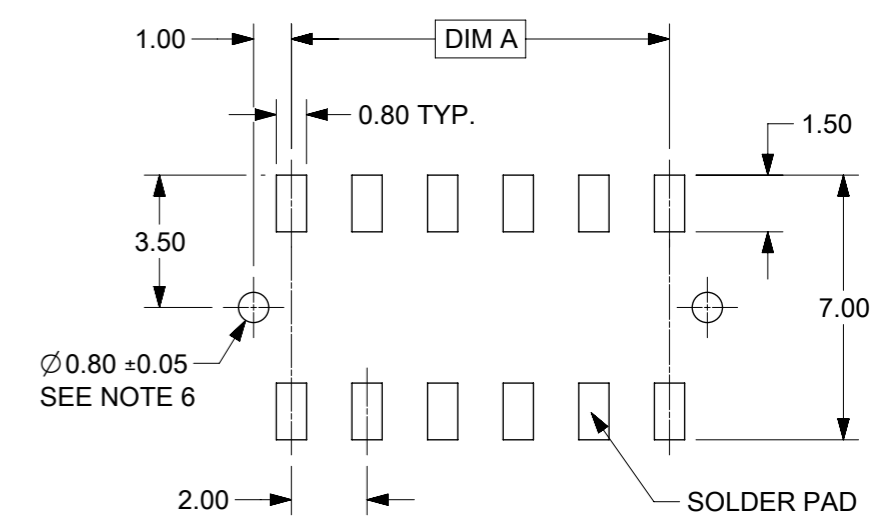
2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



- 3. PACKAGING STANDARD IS AS PER EIA-481.
- 4. TAPE & REEL QUANTITY = SEE TABLE A FOR QTY / REEL.

TABLE A

PART NO IN T&R	QTY/REEL
87381-9013	500
87381-9016	800
87381-9030	800
87381-9027	800
87381-9028	800



SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex	
$\nabla = 0$	mm	SCALE	NTS	EC NO: 736158			
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: DANUSA		2023/01/23	MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT.	
$\nabla = 0$	ANGULAR TOL $\pm 3.0^\circ$		CHK'D: DANUSA		2023/01/25	PRODUCT CUSTOMER DRAWING	
$\nabla = 0$	4 PLACES \pm		APPR: MRAMAKRISHNA		2023/02/03	DOCUMENT NUMBER	
$\nabla = 0$	3 PLACES \pm		INITIAL REVISION:		873810001-SD		
$\nabla = 0$	2 PLACES ± 0.2		DRWN: SCS02		2018/08/07	DOC TYPE	DOC PART
$\nabla = 0$	1 PLACE \pm		APPR: MRAMAKRISHNA		2019/07/09	000	A2
$\nabla = 0$	0 PLACES \pm		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	MATERIAL NUMBER	CUSTOMER
$\nabla = 0$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING		SERIES	GENERAL MARKET	REVISION
			A3-SIZE		87381	2 OF 7	

9	8		7	6		5	4		3		2	1	
CKT. SIZE	PART W/O CAP IN TUBE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN T&R	PLATING FINISH	PEG	A	B	W	So	Ao	F	Bo	Ko
E 04	---	87381-0405	---	1	NO	2.00	4.00	---	---	---	---	---	---
	---	87381-0409	---	2									
	---	87381-0415	---	1	YES								
	---	87381-0419	---	2									
06	87381-0607	87381-0605	---	1	NO	4.00	6.00	24.00	---	7.00	11.50	6.50	4.80
	87381-0608	87381-0609	---	2									
	87381-0637	---	---	3									
	87381-0617	87381-0615	87381-9012	1	YES								
	87381-0618	87381-0619	87381-9013	2									
	87381-0638	---	87381-9011	3									
D 08	87381-0807	87381-0805	---	1	NO	6.00	8.00	24.00	---	7.00	11.50	8.50	4.80
	87381-0808	87381-0809	---	2									
	87381-0837	---	---	3									
	87381-0817	87381-0815	---	1	YES								
	87381-0818	87381-0819	87381-9016	2									
	87381-0838	---	---	3									
C 10	87381-1007	87381-1005	---	1	NO	8.00	10.00	24.00	---	7.00	11.50	10.50	4.80
	87381-1008	87381-1009	---	2									
	87381-1037	---	---	3									
	87381-1017	87381-1015	87381-9030	1	YES								
	87381-1018	87381-1019	---	2									
	87381-1038	---	---	3									
12	87381-1207	87381-1205	---	1	NO	10.00	12.00	---	---	---	---	---	---
	87381-1208	87381-1209	---	2									
	87381-1237	---	---	3									
	87381-1217	87381-1215	---	1	YES								
	87381-1218	87381-1219	---	2									
	87381-1238	---	---	3									
B 14	87381-1407	87381-1405	---	1	NO	12.00	14.00	---	---	---	---	---	---
	87381-1408	87381-1409	---	2									
	87381-1437	---	---	3									
	87381-1417	87381-1415	---	1	YES								
	87381-1418	87381-1419	---	2									
	87381-1438	---	---	3									

<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>													
SYMBOLS = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0		DIMENSION UNITS: mm SCALE: NTS		CURRENT REV DESC: EC NO: 736158 DRWN: DANUSA 2023/01/23 CHK'D: DANUSA 2023/01/25 APPR: MRAMAKRISHNA 2023/02/03				 MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT.					
GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 3.0°		4 PLACES ± 3 PLACES ± 2 PLACES ± 0.2 1 PLACE ± 0 PLACES ±		INITIAL REVISION: DRWN: SCS02 2018/08/07 APPR: MRAMAKRISHNA 2019/07/09				PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 873810001-SD DOC TYPE: PSD DOC PART: 000 REVISION: A2					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING: A3-SIZE		SERIES: 87381		MATERIAL NUMBER:		CUSTOMER: GENERAL MARKET		SHEET NUMBER: 3 OF 7	
DOCUMENT STATUS: P1 RELEASE DATE: 2023/02/03 08:12:09													

9	8	7	6	5	4	3	2	1					
CKT. SIZE	PART W/O CAP IN TUBE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN T&R	PLATING FINISH	PEG	A	B	W	So	Ao	F	Bo	Ko
E 16	87381-1607	87381-1605	---	1	NO	14.00	16.00	TBD	TBD	TBD	TBD	TBD	TBD
	87381-1608	87381-1609	---	2									
	87381-1637	---	---	3									
	87381-1617	87381-1615	87381-1627	1	YES								
	87381-1618	87381-1619	---	2									
	87381-1638	---	---	3									

18	87381-1807	87381-1805	---	1	NO	16.00	18.00	---	---	---	---	---	---
	87381-1808	87381-1809	---	2									
	87381-1837	---	---	3									
	87381-1817	87381-1815	87381-1820	(A2) 1	YES								
	87381-1818	87381-1819	---	2									
	87381-1838	---	---	3									

D 20	87381-2007	87381-2005	---	1	NO	18.00	20.00	---	---	---	---	---	---
	87381-2008	87381-2009	---	2									
	87381-2037	---	---	3									
	87381-2017	87381-2015	---	1	YES								
	87381-2018	87381-2019	---	2									
	87381-2038	---	---	3									

C 22	87381-2207	87381-2205	---	1	NO	20.00	22.00	---	---	---	---	---	---
	87381-2208	87381-2209	---	2									
	87381-2237	---	---	3									
	87381-2217	87381-2215	---	1	YES								
	87381-2218	87381-2219	---	2									
	87381-2238	---	---	3									

24	87381-2407	87381-2405	---	1	NO	22.00	24.00	---	---	---	---	---	---
	87381-2408	87381-2409	---	2									
	87381-2437	---	---	3									
	87381-2417	87381-2415	---	1	YES								
	87381-2418	87381-2419	---	2									
	87381-2438	---	---	3									

B 26	87381-2607	87381-2605	---	1	NO	24.00	26.00	---	---	---	---	---	---
	87381-2608	87381-2609	---	2									
	87381-2637	---	---	3									
	87381-2617	87381-2615	87381-2620	(A1) 1	YES								
	87381-2618	87381-2619	---	2									
	87381-2638	---	---	3									

<p>SYMBOLS</p> <table border="1"> <tr> <td></td> <td>= 0</td> <td>mm</td> <td>NTS</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">ANGULAR TOL ± 3.0°</td> </tr> <tr> <td></td> <td>= 0</td> <td>4 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>3 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>2 PLACES</td> <td>± 0.2</td> </tr> <tr> <td></td> <td>= 0</td> <td>1 PLACE</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>0 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">THIRD ANGLE PROJECTION</td> </tr> </table>														= 0	mm	NTS		= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			= 0	ANGULAR TOL ± 3.0°			= 0	4 PLACES	±		= 0	3 PLACES	±		= 0	2 PLACES	± 0.2		= 0	1 PLACE	±		= 0	0 PLACES	±		= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			= 0	THIRD ANGLE PROJECTION		<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p> <p>CURRENT REV DESC:</p> <p>EC NO: 736158 DRWN: DANUSA 2023/01/23 CHK'D: DANUSA 2023/01/25 APPR: MRAMAKRISHNA 2023/02/03</p> <p>INITIAL REVISION: DRWN: SCS02 2018/08/07 APPR: MRAMAKRISHNA 2019/07/09</p>				<p>molex</p> <p>MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT.</p> <p>PRODUCT CUSTOMER DRAWING</p>		<p>DOCUMENT NUMBER</p> <p>873810001-SD</p>		<p>DOC TYPE</p> <p>PSD</p>	<p>DOC PART</p> <p>000</p>	<p>REVISION</p> <p>A2</p>	<p>MATERIAL NUMBER</p> <p>87381</p>	<p>CUSTOMER</p> <p>GENERAL MARKET</p>	<p>SHEET NUMBER</p> <p>4 OF 7</p>
	= 0	mm	NTS																																																															
	= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																
	= 0	ANGULAR TOL ± 3.0°																																																																
	= 0	4 PLACES	±																																																															
	= 0	3 PLACES	±																																																															
	= 0	2 PLACES	± 0.2																																																															
	= 0	1 PLACE	±																																																															
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	= 0	THIRD ANGLE PROJECTION																																																																

9	8		7	6		5	4	3		2	1		
CKT. SIZE	PART W/O CAP IN TUBE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN T&R	PLATING FINISH	PEG	A	B	W	So	Ao	F	Bo	Ko
E 28	87381-2807	87381-2805	---	1	NO	30.00	28.00	---	---	---	---	---	---
	87381-2808	87381-2809	---	2									
	87381-2837	---	---	3									
	87381-2817	87381-2815	---	1	YES								
	87381-2818	87381-2819	---	2									
	87381-2838	---	---	3									
30	87381-3007	87381-3005	---	1	NO	28.00	30.00	56.00	52.40	7.00	26.20	30.50	4.80
	87381-3008	87381-3009	---	2									
	87381-3037	---	---	3									
	87381-3017	87381-3015	87381-9015	1	YES								
	87381-3018	87381-3019	---	2									
	87381-3038	---	---	3									
D 32	87381-3207	87381-3205	---	1	NO	30.00	32.00	---	---	---	---	---	---
	87381-3208	87381-3209	---	2									
	87381-3237	---	---	3									
	87381-3217	87381-3215	---	1	YES								
	87381-3218	87381-3219	---	2									
	87381-3238	---	---	3									
C 34	87381-3407	87381-3405	---	1	NO	32.00	34.00	---	---	---	---	---	---
	87381-3408	87381-3409	---	2									
	87381-3437	---	---	3									
	87381-3417	87381-3415	---	1	YES								
	87381-3418	87381-3419	---	2									
	87381-3438	---	---	3									
36	87381-3607	87381-3605	---	1	NO	34.00	36.00	---	---	---	---	---	---
	87381-3608	87381-3609	---	2									
	87381-3637	---	---	3									
	87381-3617	87381-3615	---	1	YES								
	87381-3618	87381-3619	---	2									
	87381-3638	---	---	3									
B 38	87381-3807	87381-3805	---	1	NO	36.00	38.00	---	---	---	---	---	---
	87381-3808	87381-3809	---	2									
	87381-3837	---	---	3									
	87381-3817	87381-3815	---	1	YES								
	87381-3818	87381-3819	---	2									
	87381-3838	---	---	3									

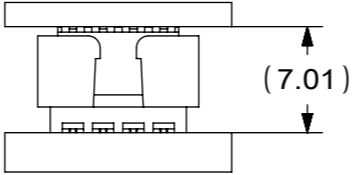
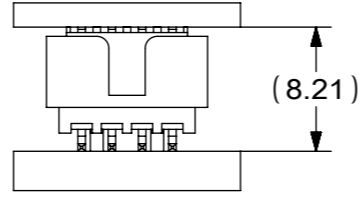
<p>SYMBOLS</p> <table border="1"> <tr> <td></td> <td>= 0</td> <td>mm</td> <td>NTS</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">ANGULAR TOL ± 3.0°</td> </tr> <tr> <td></td> <td>= 0</td> <td>4 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>3 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>2 PLACES</td> <td>± 0.2</td> </tr> <tr> <td></td> <td>= 0</td> <td>1 PLACE</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td>0 PLACES</td> <td>±</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td> </tr> <tr> <td></td> <td>= 0</td> <td colspan="2">THIRD ANGLE PROJECTION</td> </tr> </table>													= 0	mm	NTS		= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			= 0	ANGULAR TOL ± 3.0°			= 0	4 PLACES	±		= 0	3 PLACES	±		= 0	2 PLACES	± 0.2		= 0	1 PLACE	±		= 0	0 PLACES	±		= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			= 0	THIRD ANGLE PROJECTION		<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p> <p>CURRENT REV DESC:</p> <p>EC NO: 736158 DRWN: DANUSA 2023/01/23 CHK'D: DANUSA 2023/01/25 APPR: MRAMAKRISHNA 2023/02/03</p> <p>INITIAL REVISION: DRWN: SCS02 2018/08/07 APPR: MRAMAKRISHNA 2019/07/09</p> <p>DRAWING: A3-SIZE SERIES: 87381 MATERIAL NUMBER: 873810001-SD CUSTOMER: GENERAL MARKET</p>												<p>molex</p> <p>MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT.</p> <p>PRODUCT CUSTOMER DRAWING</p> <p>DOCUMENT NUMBER: 873810001-SD DOC TYPE: PSD DOC PART: 000 REVISION: A2</p> <p>SHEET NUMBER: 5 OF 7</p>											
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	= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																									
	= 0	ANGULAR TOL ± 3.0°																																																																									
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<p>DOCUMENT STATUS: P1 RELEASE DATE: 2023/02/03 08:12:09</p>																																																																											


9	8	7	6	5	4	3	2	1					
CKT. SIZE	PART W/O CAP IN TUBE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN T&R	PLATING FINISH	PEG	A	B	W	So	Ao	F	Bo	Ko
E	87381-4007	87381-4005	---	1	NO	38.00	40.00	---	---	---	---	---	---
	87381-4008	87381-4009	---	2									
	87381-4037	---	---	3									
	87381-4017	87381-4015	---	1	YES								
	87381-4018	87381-4019	---	2									
	87381-4038	---	---	3									
D	87381-4207	87381-4205	---	1	NO	40.00	42.00	---	---	---	---	---	---
	87381-4208	87381-4209	---	2									
	87381-4237	---	---	3									
	87381-4217	87381-4215	---	1	YES								
	87381-4218	87381-4219	---	2									
	87381-4238	---	---	3									
C	87381-4407	87381-4405	---	1	NO	42.00	44.00	---	---	---	---	---	---
	87381-4408	87381-4409	---	2									
	87381-4437	---	---	3									
	87381-4417	87381-4415	---	1	YES								
	87381-4418	87381-4419	---	2									
	87381-4438	---	---	3									
B	87381-4607	87381-4605	---	1	NO	44.00	46.00	---	---	---	---	---	---
	87381-4608	87381-4609	---	2									
	87381-4637	---	---	3									
	87381-4617	87381-4615	---	1	YES								
	87381-4618	87381-4619	---	2									
	87381-4638	---	---	3									
A	87381-4807	87381-4805	---	1	NO	46.00	48.00	---	---	---	---	---	---
	87381-4808	87381-4809	---	2									
	87381-4837	---	---	3									
	87381-4817	87381-4815	---	1	YES								
	87381-4818	87381-4819	---	2									
	87381-4838	---	---	3									
A	87381-5007	87381-5005	---	1	NO	48.00	50.00	72.00	68.40	7.00	34.20	50.50	4.80
	87381-5008	87381-5009	---	2									
	87381-5037	---	---	3									
	87381-5017	87381-5015	87381-9028	1	YES								
	87381-5018	87381-5019	87381-9027	2									
	87381-5038	---	---	3									

SYMBOLS = 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:		 MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT. PRODUCT CUSTOMER DRAWING	
	DIMENSION UNITS	SCALE	EC NO: 736158			DOCUMENT NUMBER
	mm	NTS	DRWN: DANUSA 2023/01/23			DOC TYPE
	GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: DANUSA 2023/01/25			DOC PART
	ANGULAR TOL ± 3.0°		APPR: MRAMAKRISHNA 2023/02/03			REVISION
	4 PLACES ±		INITIAL REVISION:			873810001-SD
	3 PLACES ±		DRWN: SCS02 2018/08/07			
	2 PLACES ± 0.2		APPR: MRAMAKRISHNA 2019/07/09			PSD
	1 PLACE ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			000
	0 PLACES ±		THIRD ANGLE PROJECTION			A2
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING		SHEET NUMBER		
		A3-SIZE		6 OF 7		

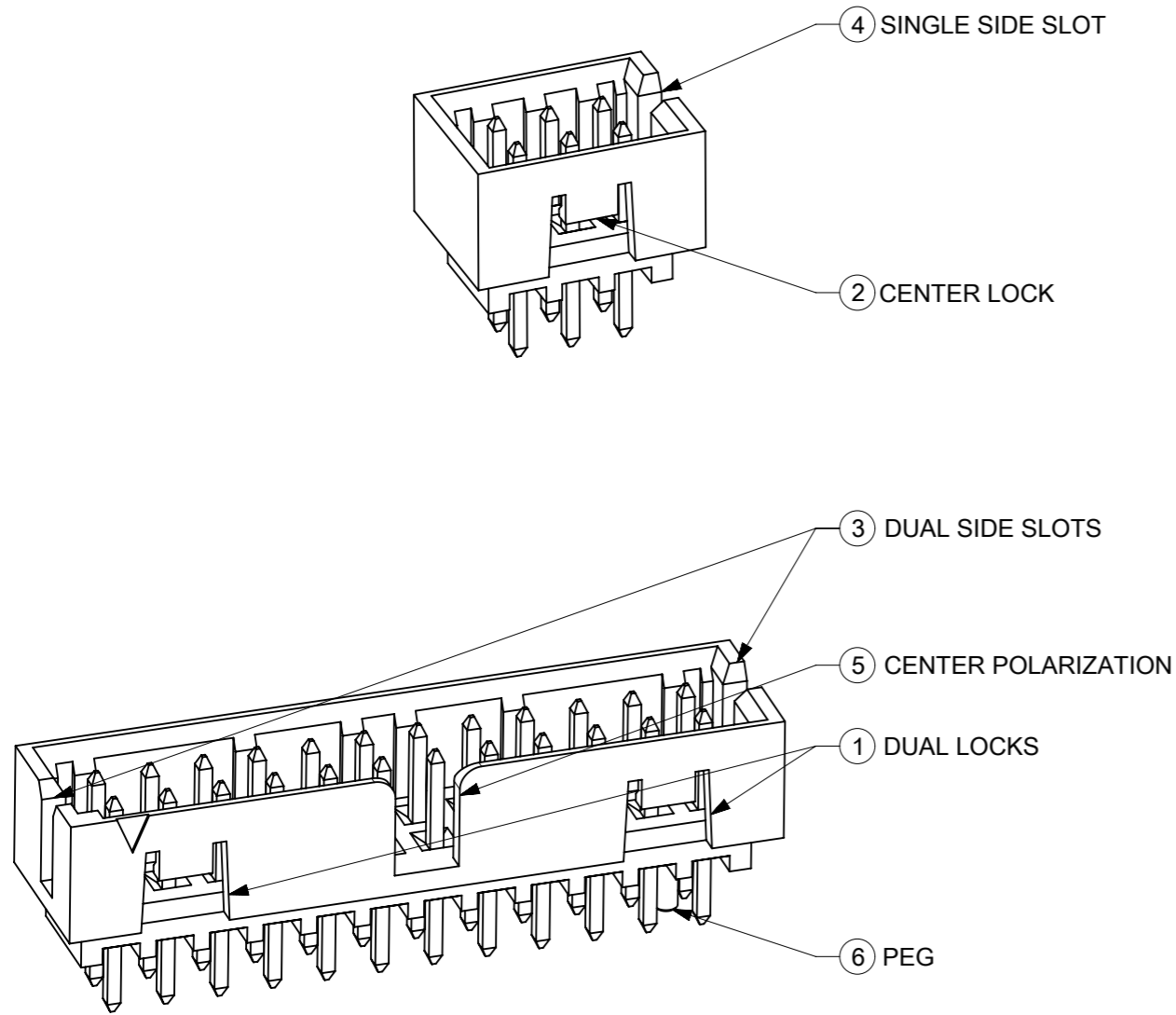
DOCUMENT STATUS | P1 | RELEASE DATE | 2023/02/03 08:12:09

BOARD TO BOARD (BTB) DISTANCE

RECEPTACLE	MATES WITH(HEADER)	BTB DISTANCE	PICTORIAL VIEW
87381	87831	7.01	
	87832	8.21	

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:		 MGRID TOP ENTRY RECEPTACLE 4MM HEIGHT, SMT.				
	DIMENSION UNITS	SCALE	EC NO: 736158					DOCUMENT NUMBER
	mm	NTS	DRWN: DANUSA 2023/01/23		873810001-SD	PSD	000	A2
	GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: DANUSA 2023/01/25		PRODUCT CUSTOMER DRAWING			
	ANGULAR TOL ± 3.0°		APPR: MRAMAKRISHNA 2023/02/03		INITIAL REVISION:			
	4 PLACES ±		DRWN: SCS02 2018/08/07		MATERIAL NUMBER			
	3 PLACES ±		APPR: MRAMAKRISHNA 2019/07/09		CUSTOMER			
	2 PLACES ± 0.2		THIRD ANGLE PROJECTION		SERIES			
	1 PLACE ±		DRAWING		MATERIAL NUMBER			
	0 PLACES ±		A3-SIZE		87381			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NUMBER		7 OF 7				

FEATURES SELECTION GUIDE



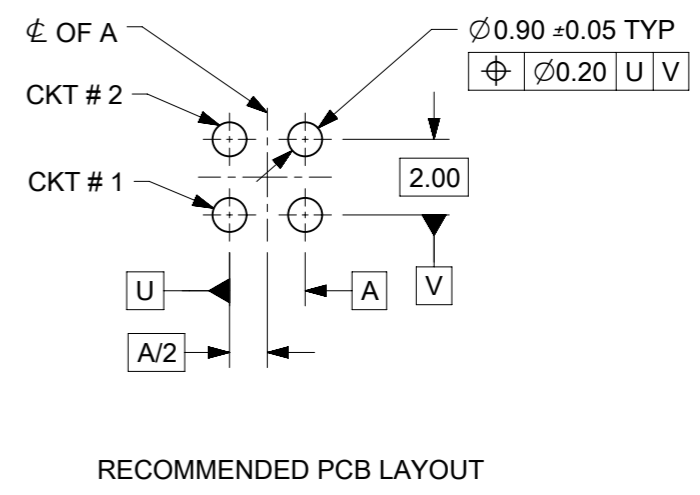
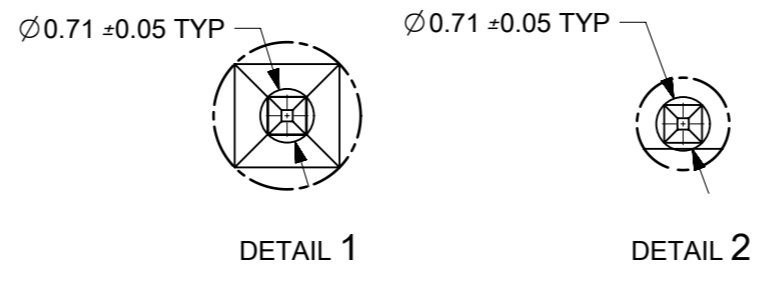
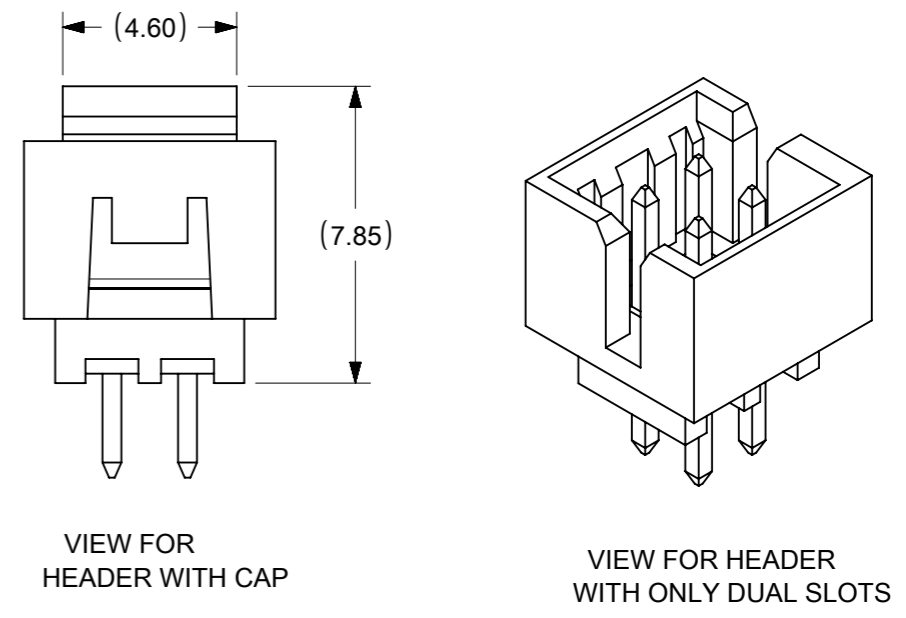
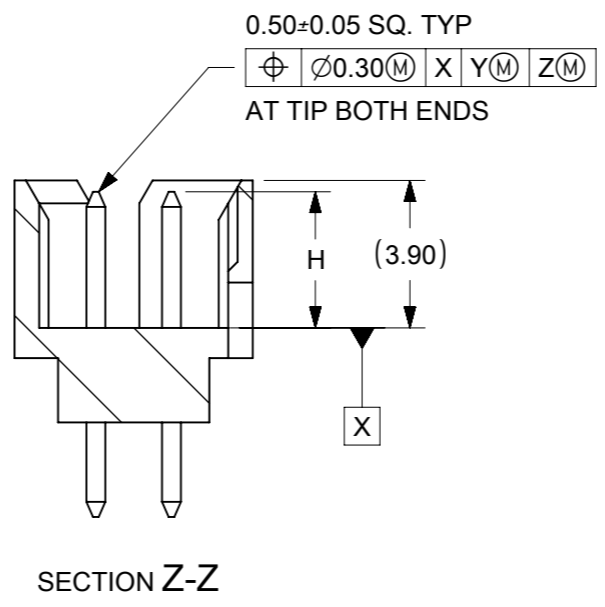
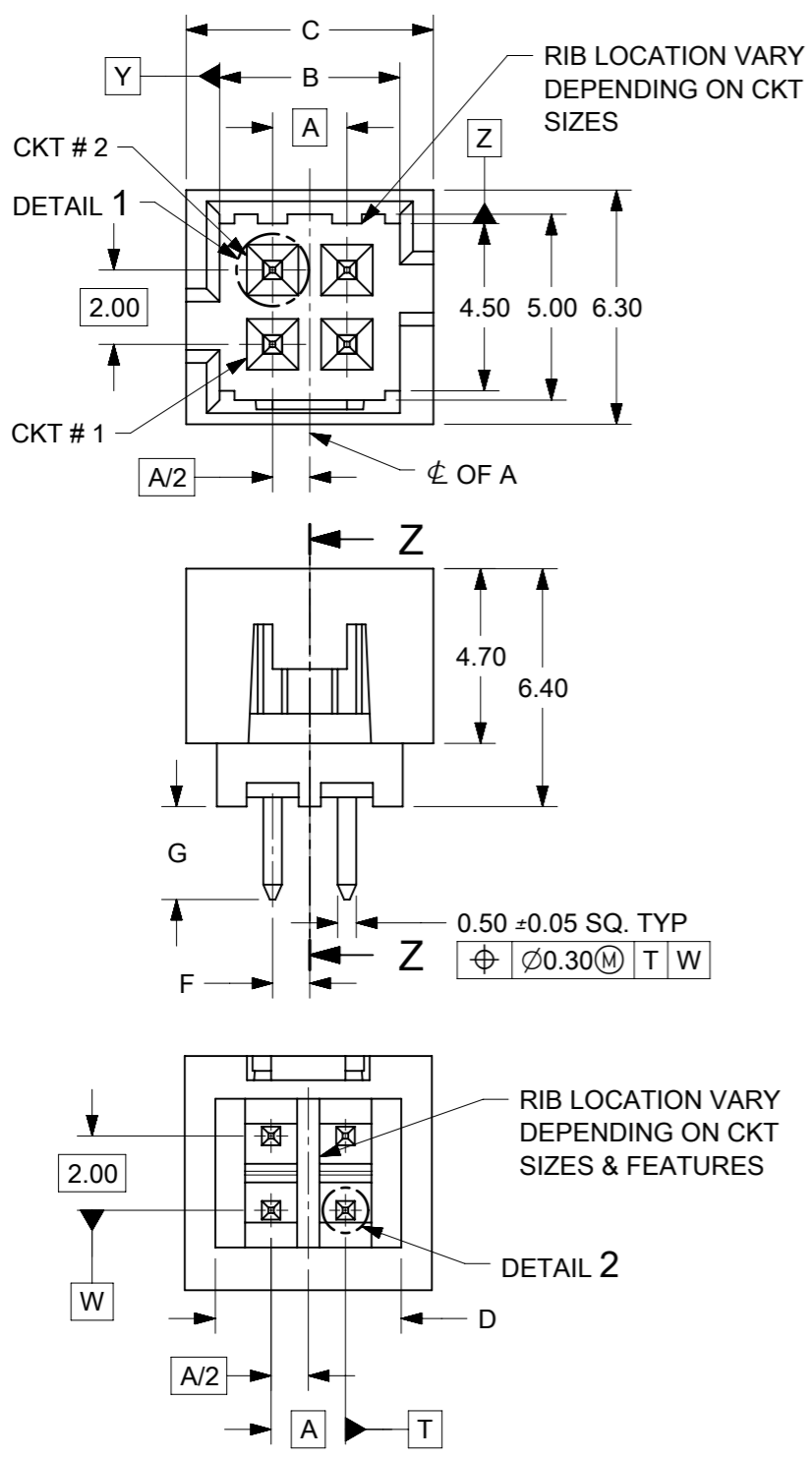
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	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: mm INCH SCALE: NTS GENERAL TOLERANCES (UNLESS SPECIFIED): 4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.2 ± 1 PLACE ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0°	EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09	PRODUCT CUSTOMER DRAWING 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: 1 OF 14					

4 CIRCUITS



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

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADDED BTB DIST.			
	DIMENSION UNITS	SCALE				
▽ = 0	mm	NTS			MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)					
▽ = 0		MM	INCH			PRODUCT CUSTOMER DRAWING
▽ = 0	4 PLACES ±					
▽ = 0	3 PLACES ±					DOCUMENT NUMBER SD-87831-0001
▽ = 0	2 PLACES ±	0.2				
▽ = 0	1 PLACE ±					DOC TYPE PSD
▽ = 0	0 PLACES ±					
⊠ = 0	ANGULAR TOL ± 3.0°				DOC PART 001	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	REVISION A16
▽ = 0				A3-SIZE	87831	
DOCUMENT STATUS		P1	RELEASE DATE	2019/07/09	06:47:12	SHEET NUMBER 2 OF 14

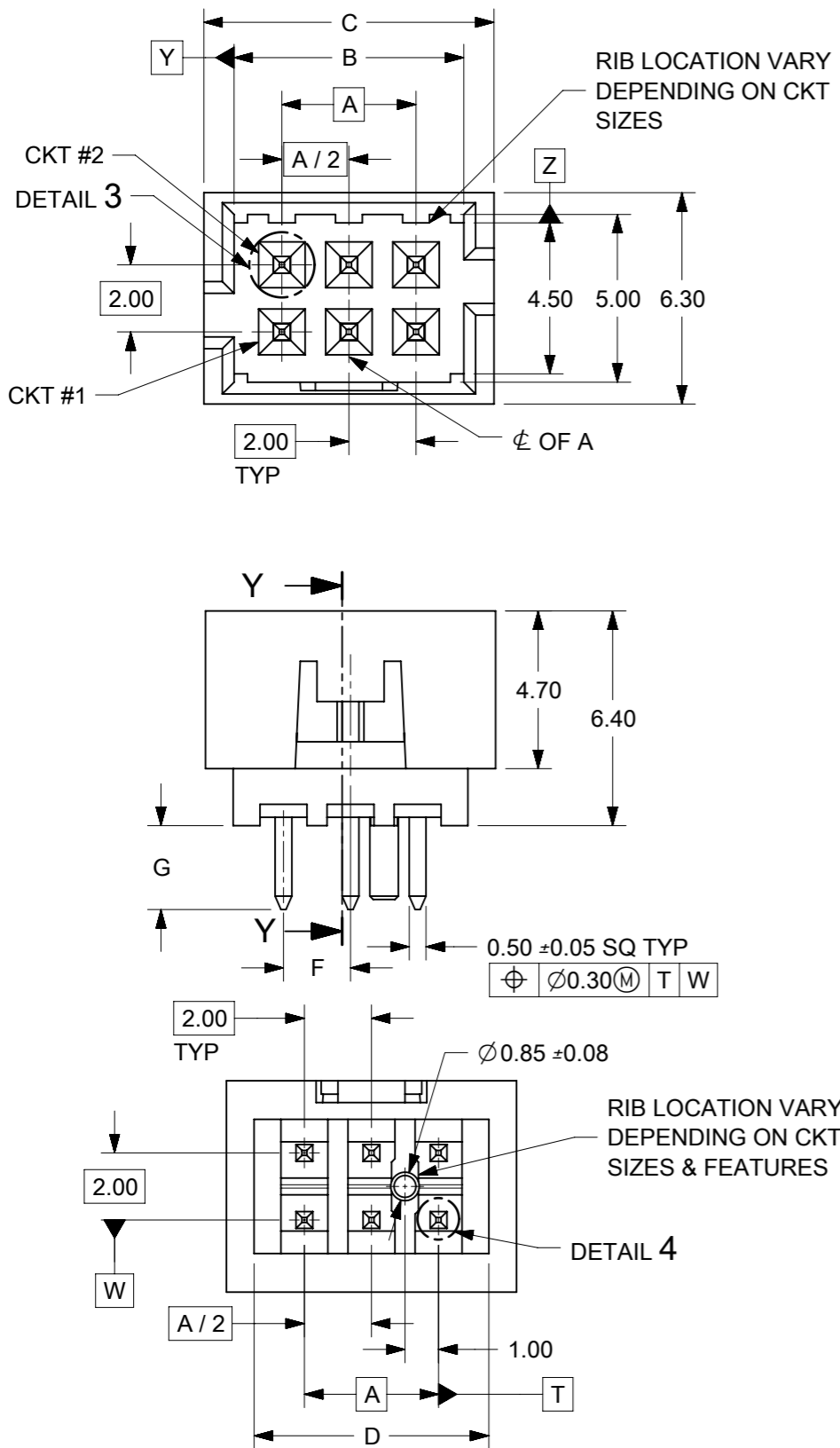
4 CIRCUITS

CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
4	87831-0419	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	2.00	4.85	6.65	5.00	N.A	N.A	2.50	3.60±0.20						
	87831-0420	N.A	N.A	2																				
	87831-0421	N.A	N.A	3																				
	87831-0436	N.A	N.A	4																				
	87831-0441	87831-0456	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	1.00	2.50	3.60±0.20
	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	N.A	N.A	1.00	3.50	3.60±0.20
	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	N.A	N.A	1.00	2.80	3.60±0.20
	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	N.A	N.A	1.00	2.50	3.60±0.20
	87831-0444	N.A	N.A	3																				

PLATING OPTIONS:

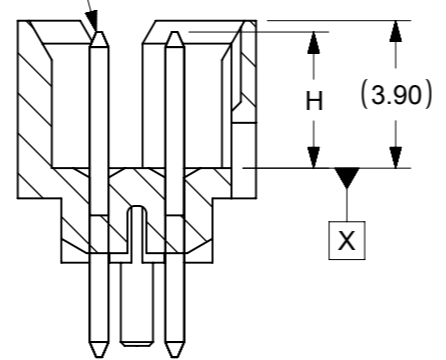
- 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µin GOLD IN CONTACT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

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
▽ = 0	mm	SCALE	CURRENT REV DESC: ADDED BTB DIST.
▽ = 0	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	SERIES
		A3-SIZE	87831
EC NO: 619055		DRWN: NMANE02	2019/03/25
DRWN: NMANE02		CHK'D: NMANE02	2019/07/09
APPR: MRAMAKRISHNA		2019/07/09	
INITIAL REVISION:		DOCUMENT NUMBER	DOC TYPE
DRWN: GMENARLY		SD-87831-0001	PSD
APPR: KHLIM		DOC PART	REVISION
2015/04/15		001	A16
2015/06/29		SHEET NUMBER	
SEE TABLE		3 OF 14	

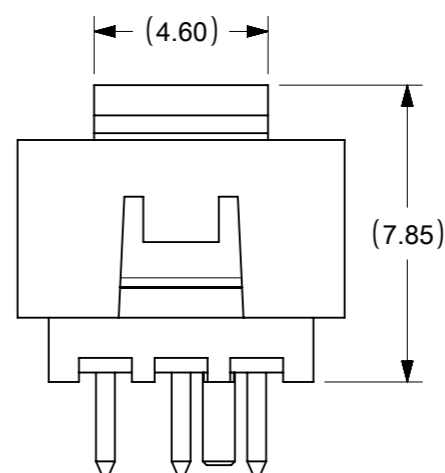


6 CIRCUITS

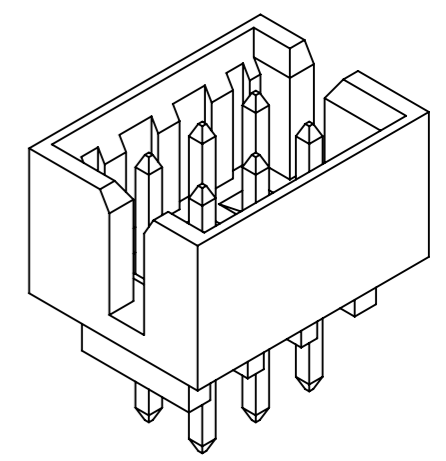
0.50±0.05 SQ TYP
 \ominus Ø0.30(M) X Y(M) Z(M)
 AT TIP BOTH ENDS



SECTION Y-Y

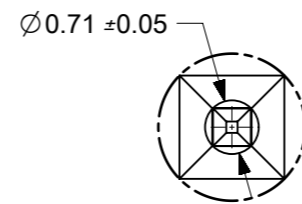


VIEW FOR HEADER WITH CAP

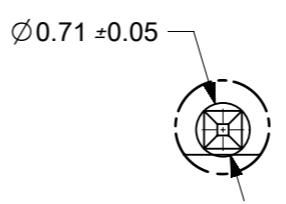


VIEW FOR HEADER WITH ONLY DUAL SLOTS

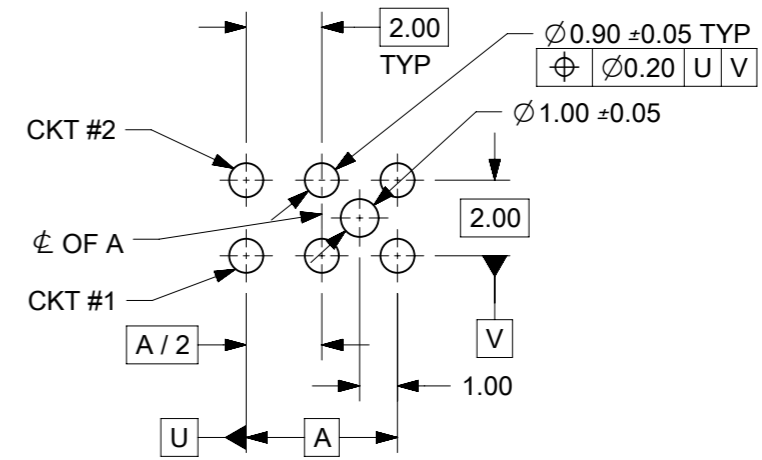
0.50 ± 0.05 SQ TYP
 \ominus Ø0.30(M) T W



DETAIL 3



DETAIL 4



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

6 CIRCUITS

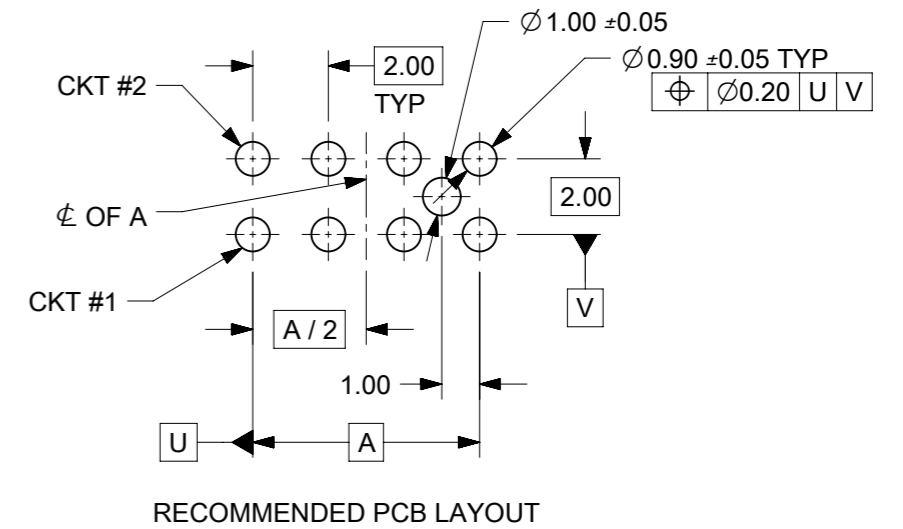
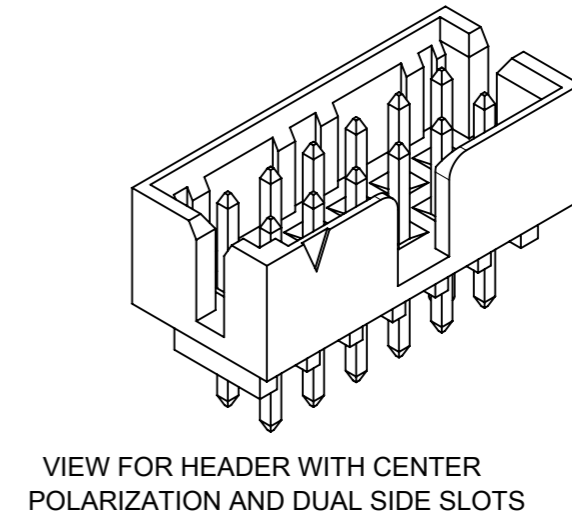
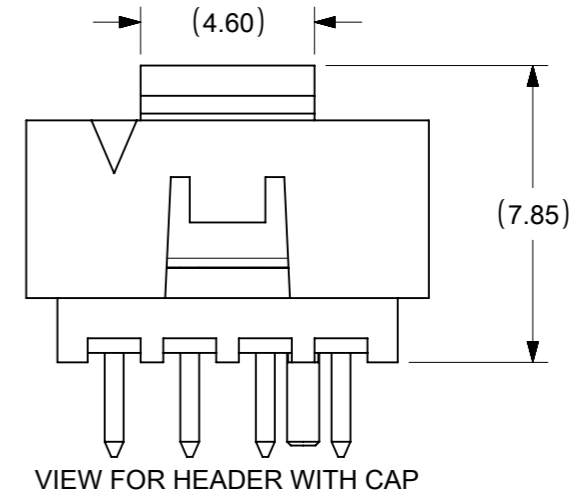
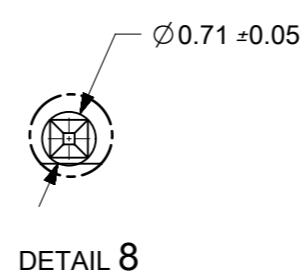
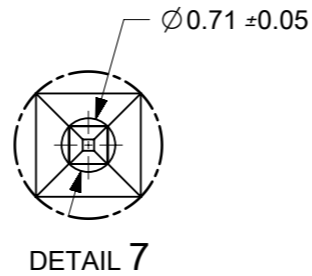
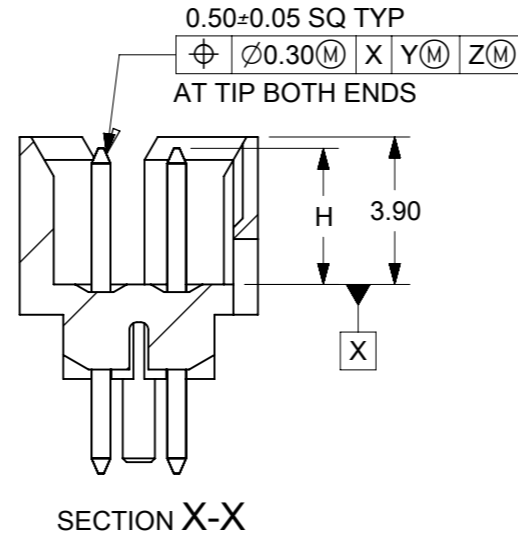
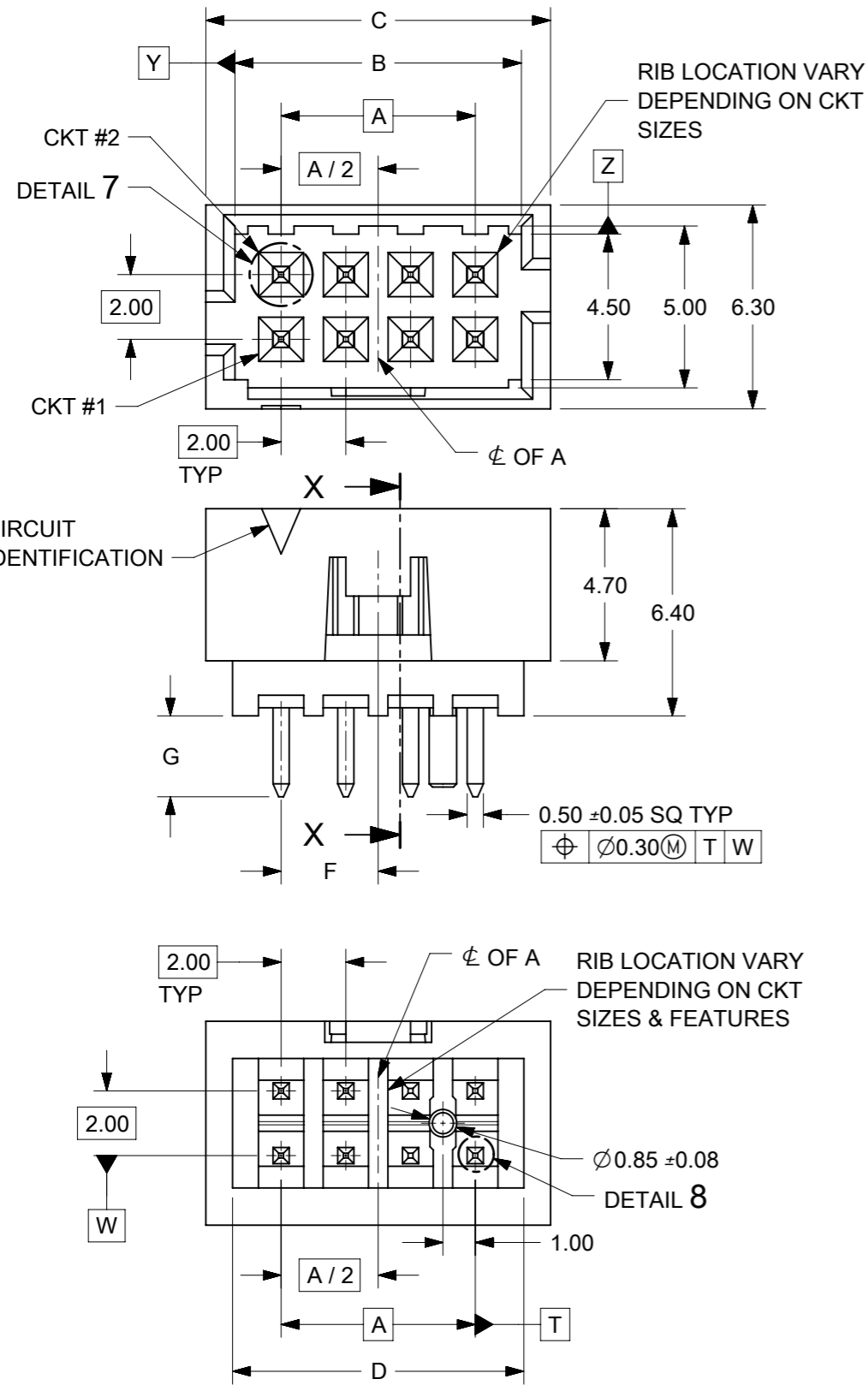
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	N.A	2.50	3.60±0.20						
	87831-0620	N.A	N.A	2																				
	87831-0621	N.A	N.A	3																				
	87831-0636	N.A	N.A	4																				
	87831-0628	N.A	N.A	2	N.A	N.A	YES	N.A	N.A	YES						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-0629	N.A	N.A	3																				
	87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.50	N.A	2.80	N.A	2.50
	87831-0642	N.A	87831-5552	3																				
	87831-5241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-5242	N.A	N.A	3																				
	87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-6242	N.A	N.A	3																				
	87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-0644	N.A	N.A	3																				
	87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						YES	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-0646	N.A	N.A	3																				
	87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES						N.A	N.A		N.A	2.50	N.A	2.50	N.A	2.50
	87831-5119	N.A	N.A	1																				
87831-5121	N.A	N.A	3	N.A	N.A	YES	N.A	YES	N.A	N.A	N.A	N.A	N.A	2.50	N.A	2.50	N.A	3.60±0.20						
87831-5136	N.A	N.A	4																					

PLATING OPTIONS:

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

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

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	
▽ = 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
		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	
DOCUMENT NUMBER		DOC TYPE	DOC PART
SD-87831-0001		PSD	001
REVISION		A16	
DOCUMENT NUMBER		DOC TYPE	DOC PART
SD-87831-0001		PSD	001
REVISION		A16	
MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
SEE TABLE		GENERAL MARKET	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.
- 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	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
	A3-SIZE	SERIES
	87831	MATERIAL NUMBER
	SEE TABLE	CUSTOMER
	GENERAL MARKET	SHEET NUMBER
	7 OF 14	

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

CURRENT REV DESC: ADDED BTB DIST.

molex

MILLIGRID
 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

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

10 TO 12 CIRCUITS

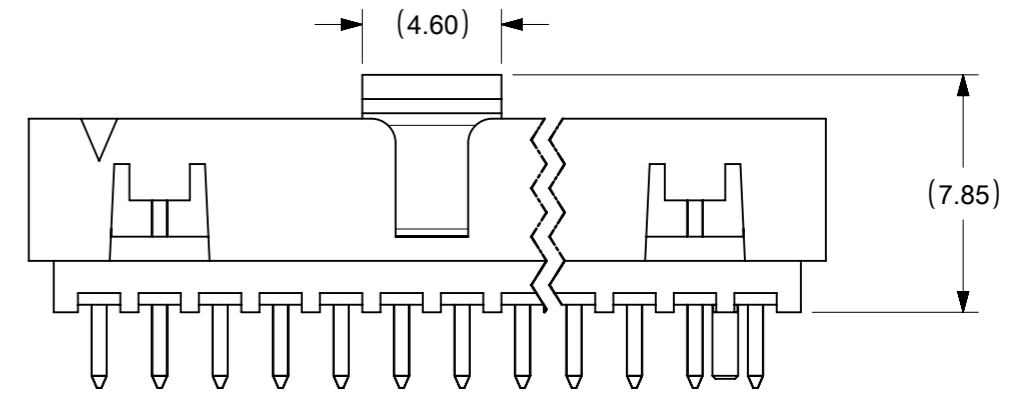
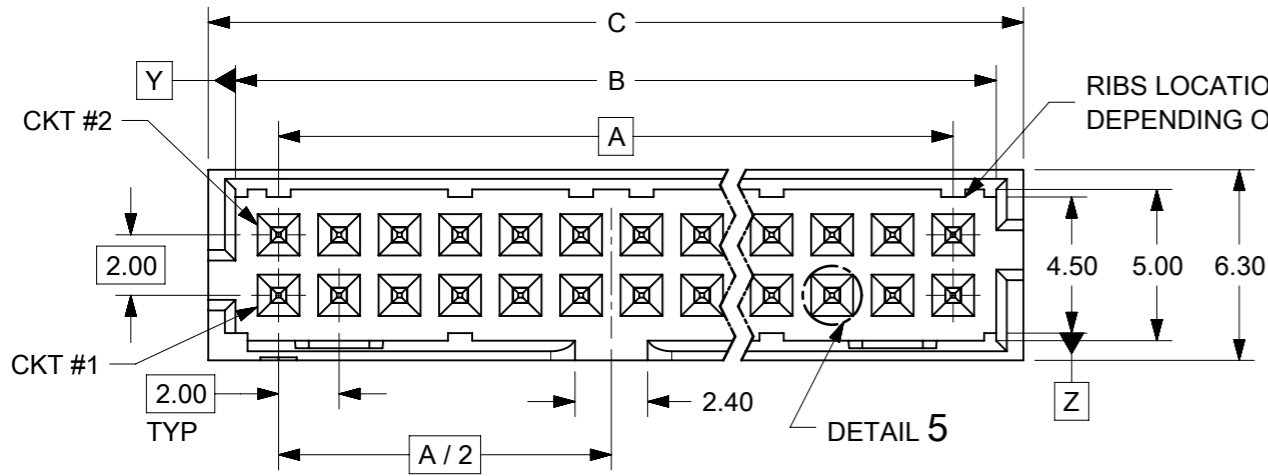
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
10	87831-1019	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	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	N.A		N.A	N.A	N.A	4.00	2.50	
	87831-1029	N.A	87831-5557	3																				
	87831-1035	N.A	N.A	3																				
	87831-1041	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	N.A	2.50
	87831-1042	N.A	87831-5553	3																				
	87831-1032	N.A	N.A	2																				
	87831-1043	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	N.A	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	N.A	N.A	N.A	N.A	N.A	N.A	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																					
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	N.A		N.A	N.A	N.A	N.A	N.A	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	N.A		N.A	N.A	N.A	N.A	N.A	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	N.A		N.A	N.A	N.A	N.A	N.A	2.50	
87831-1255	87831-1256	N.A	2																					
87831-1232	N.A	N.A	2																					

PLATING OPTIONS:

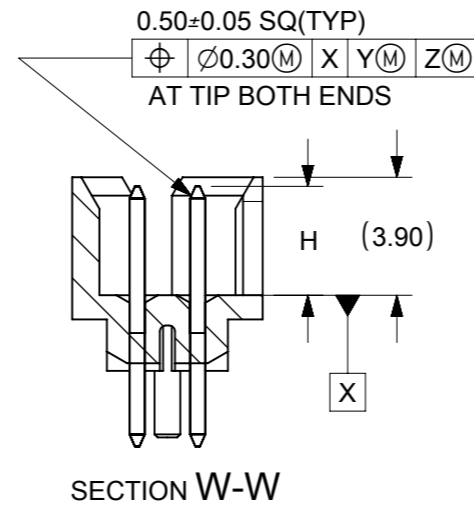
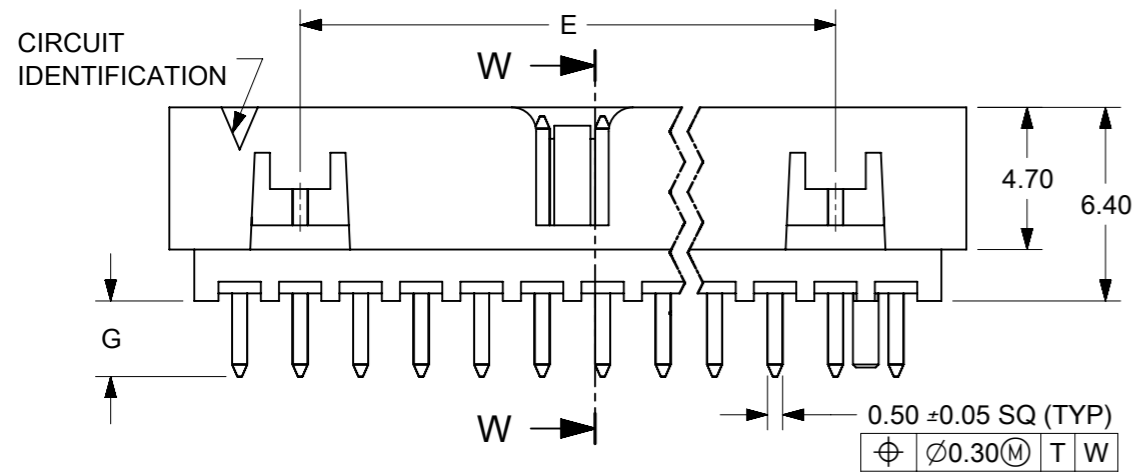
- 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
- 3 - 0.76µm/30µin GOLD IN CONTACT 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
▽ = 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	THIRD ANGLE PROJECTION
▽ = 0	DRWN: NMANE02 2019/03/25	DRWING
▽ = 0	CHK'D: NMANE02 2019/07/09	SERIES
▽ = 0	APPR: MRAMAKRISHNA 2019/07/09	MATERIAL NUMBER
▽ = 0	INITIAL REVISION:	CUSTOMER
▽ = 0	DRWN: GMENARLY 2015/04/15	SEE TABLE
▽ = 0	APPR: KHLIM 2015/06/29	GENERAL MARKET
▽ = 0	DOCUMENT NUMBER	SHEET NUMBER
▽ = 0	SD-87831-0001	8 OF 14

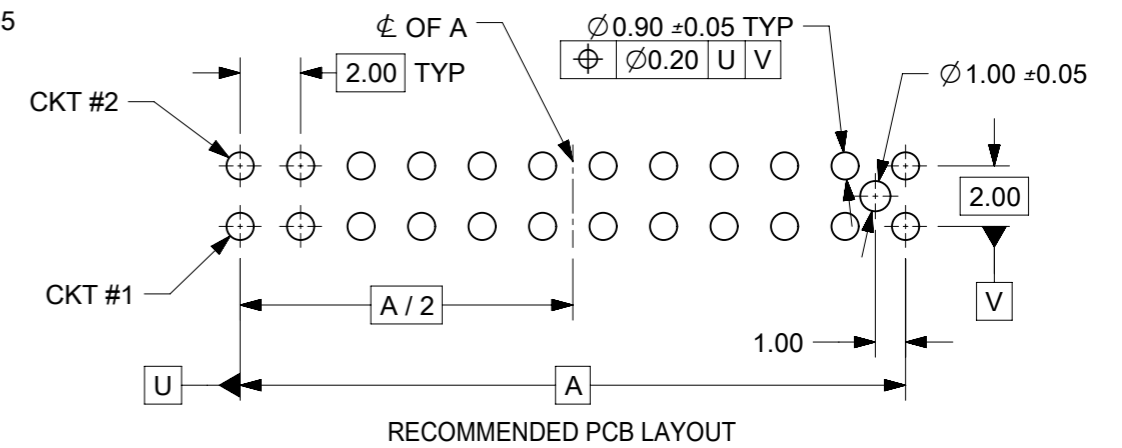
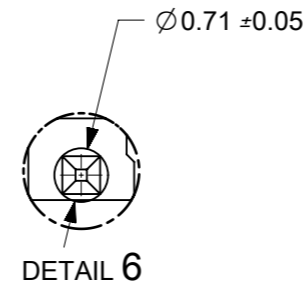
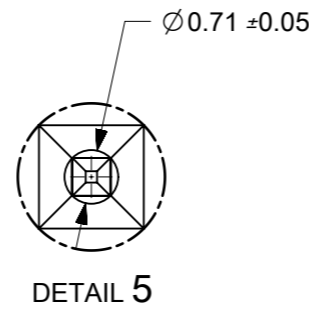
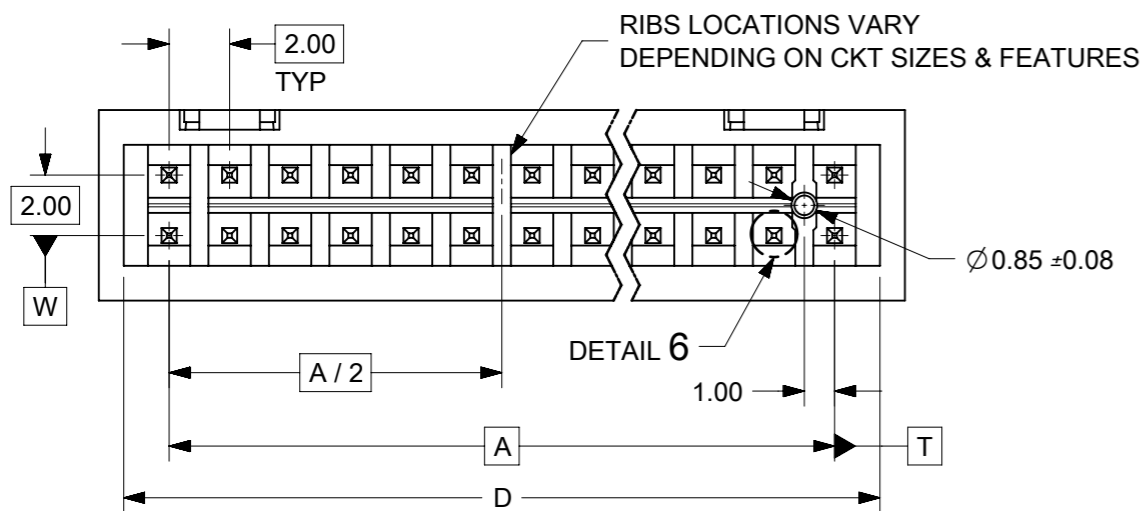
14 TO 50 CIRCUITS



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		DOCUMENT NUMBER
▽ = 0	4 PLACES ±				SD-87831-0001
▽ = 0	3 PLACES ±				DOC TYPE
▽ = 0	2 PLACES ±	0.2			PSD
▽ = 0	1 PLACE ±				DOC PART
▽ = 0	0 PLACES ±				001
▽ = 0	ANGULAR TOL ±	3.0°			REVISION
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0				A3-SIZE	87831
		MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	
		SEE TABLE	GENERAL MARKET	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														
	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.


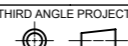
SYMBOLS ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0 ▽ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE mm NTS	CURRENT REV DESC: ADDED BTB DIST.	<p>molex</p> MILLIGRID 2MM PITCH, THROUGH HOLE 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																		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>MM</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±</td> <td>±</td> <td>±</td> </tr> <tr> <td>3 PLACES ±</td> <td>±</td> <td>±</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.2 ±</td> <td>±</td> </tr> <tr> <td>1 PLACE ±</td> <td>±</td> <td>±</td> </tr> <tr> <td>0 PLACES ±</td> <td>±</td> <td>±</td> </tr> </table>						MM	INCH	4 PLACES ±	±	±	3 PLACES ±	±	±	2 PLACES ±	0.2 ±	±	1 PLACE ±	±	±	0 PLACES ±	±	±
		MM	INCH																				
4 PLACES ±	±	±																					
3 PLACES ±	±	±																					
2 PLACES ±	0.2 ±	±																					
1 PLACE ±	±	±																					
0 PLACES ±	±	±																					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																							
PRODUCT CUSTOMER DRAWING		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29		DOCUMENT NUMBER SD-87831-0001																			
DOCUMENT STATUS P1 RELEASE DATE 2019/07/09 06:47:12		THIRD ANGLE PROJECTION 		DOC TYPE DOC PART REVISION PSD 001 A16																			
MATERIAL NUMBER CUSTOMER SEE TABLE GENERAL MARKET		DRAWING SERIES A3-SIZE 87831		SHEET NUMBER 10 OF 14																			

22 TO 30 CIRCUITS

CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
22	87831-2219	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	20.00	22.85	24.65	23.00	16.00	N.A	2.50	3.60±0.20
	87831-2220	N.A	N.A	N.A	2														
	87831-2221	N.A	N.A	N.A	3														
	87831-2236	N.A	N.A	N.A	4														
	87831-2228	N.A	N.A	N.A	2														
	87831-2229	N.A	N.A	N.A	3														
24	87831-2419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	22.00	24.85	26.65	25.00	18.00	N.A	2.50	3.60±0.20
	87831-2420	N.A	N.A	87831-7420	2														
	87831-2421	N.A	N.A	N.A	3														
	87831-2436	N.A	N.A	N.A	4														
	87831-2428	N.A	N.A	N.A	2														
	87831-2429	N.A	N.A	N.A	3														
	87831-2435	N.A	N.A	N.A	3														
	87831-2445	N.A	N.A	N.A	3														
87831-2410	N.A	N.A	N.A	2															
26	87831-2619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	24.00	26.85	28.65	27.00	20.00	N.A	2.50	3.60±0.20
	87831-2620	87831-2630	87831-5555	N.A	2														
	87831-2621	N.A	N.A	N.A	3														
	87831-2636	N.A	N.A	N.A	4														
	87831-2628	N.A	N.A	N.A	2														
	87831-2629	N.A	N.A	N.A	3														
	87831-2610	N.A	N.A	N.A	2														
28	87831-2819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	26.00	28.85	30.65	29.00	22.00	N.A	2.50	3.60±0.20
	87831-2820	N.A	N.A	N.A	2														
	87831-2821	N.A	N.A	N.A	3														
	87831-2836	N.A	N.A	N.A	4														
	87831-2828	N.A	N.A	N.A	2														
	87831-2829	N.A	N.A	N.A	3														
30	87831-3019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	28.00	30.85	32.65	31.00	24.00	N.A	2.50	3.60±0.20
	87831-3020	N.A	N.A	N.A	2														
	87831-3021	N.A	N.A	N.A	3														
	87831-3036	N.A	N.A	N.A	4														
	87831-3028	N.A	N.A	N.A	2														
	87831-3029	N.A	N.A	N.A	3														
	87831-3035	N.A	N.A	N.A	3														
	87831-3010	87831-3030	87831-3050	N.A	2														

PLATING OPTIONS:

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


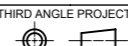
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				
	DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED BTB DIST.																
	mm		NTS		 MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																
	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	ANGULAR TOL ± 3.0°			INITIAL REVISION:																	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRWN: GMENARLY 2015/04/15																	
▽ = 0				APPR: KHLIM 2015/06/29																	
THIRD ANGLE PROJECTION				DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER											
				A3-SIZE		87831		SEE TABLE		GENERAL MARKET											
DOCUMENT NUMBER								DOC TYPE		DOC PART		REVISION									
SD-87831-0001								PSD		001		A16									
DOCUMENT STATUS				P1		RELEASE DATE		2019/07/09		06:47:12											
DATE 2018/01/11				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														
	87831-3229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20
	87831-3420	N.A	N.A	2														
	87831-3421	N.A	N.A	3														
	87831-3436	N.A	N.A	4														
	87831-3428	N.A	N.A	2														
	87831-3429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50	
36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20
	87831-3620	N.A	87831-5564	2														
	87831-3621	N.A	N.A	3														
	87831-3636	N.A	N.A	4														
	87831-3628	N.A	N.A	2														
	87831-3629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	36.00	38.85	40.65	39.00	32.00	N.A	2.50	3.60±0.20
	87831-3820	N.A	N.A	2														
	87831-3821	N.A	N.A	3														
	87831-3836	N.A	N.A	4														
	87831-3828	N.A	N.A	2														
	87831-3829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
40	87831-4019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	38.00	40.85	42.65	41.00	34.00	N.A	2.50	3.60±0.20
	87831-4020	N.A	N.A	2														
	87831-4021	N.A	N.A	3														
	87831-4036	N.A	N.A	4														
	87831-4028	N.A	N.A	2														
	87831-4029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50	

PLATING OPTIONS:

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

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
	DIMENSION UNITS		SCALE		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°		APPR: KHLIM 2015/06/29					
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	
▽ = 0					A3-SIZE	87831	SEE TABLE	GENERAL MARKET	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	YES	N.A	YES	N.A	YES	YES								
	87831-4228	N.A	N.A	2														
	87831-4229	N.A	N.A	3														
44	87831-4419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	42.00	44.85	46.65	45.00	38.00	N.A	2.50	3.60±0.20
	87831-4420	N.A	N.A	2														
	87831-4421	N.A	N.A	3														
	87831-4436	N.A	N.A	4														
	87831-4428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES								
	87831-4429	N.A	N.A	3														
	87831-4435	N.A	N.A	3														
46	87831-4619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	44.00	46.85	48.65	47.00	40.00	N.A	2.50	3.60±0.20
	87831-4620	N.A	N.A	2														
	87831-4621	N.A	N.A	3														
	87831-4636	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-4628	N.A	N.A	2														
	87831-4629	N.A	N.A	3														
48	87831-4819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	46.00	48.85	50.65	49.00	42.00	N.A	2.50	3.60±0.20
	87831-4820	N.A	N.A	2														
	87831-4821	N.A	N.A	3														
	87831-4836	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-4828	N.A	N.A	2														
	87831-4829	N.A	N.A	3														
50	87831-5019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	48.00	50.85	52.65	51.00	44.00	N.A	2.50	3.60±0.20
	87831-5020	N.A	N.A	2														
	87831-5021	N.A	N.A	3														
	87831-5036	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES								
	87831-5028	N.A	N.A	2														
	87831-5029	N.A	N.A	3														
	87831-5035	N.A	N.A	3														

PLATING OPTIONS:

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

SYMBOLS ▽ = 0 ▽ = 0 ▽ = 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 PRODUCT CUSTOMER DRAWING	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	MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 13 OF 14																		
	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>MM</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±</td> <td></td> <td></td> </tr> <tr> <td>3 PLACES ±</td> <td></td> <td></td> </tr> <tr> <td>2 PLACES ±</td> <td>0.2</td> <td></td> </tr> <tr> <td>1 PLACE ±</td> <td></td> <td></td> </tr> <tr> <td>0 PLACES ±</td> <td></td> <td></td> </tr> </table>							MM	INCH	4 PLACES ±			3 PLACES ±			2 PLACES ±	0.2		1 PLACE ±			0 PLACES ±		
							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 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 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0	DIMENSION UNITS mm NTS	SCALE NTS	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.							
	GENERAL TOLERANCES (UNLESS SPECIFIED)		molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
		MM				INCH				
	= 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0	4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.2 ± 1 PLACE ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0°	EC NO: 619055 DRWN: NMANE02 2019/03/25 CHK'D: NMANE02 2019/07/09 APPR: MRAMAKRISHNA 2019/07/09	PRODUCT CUSTOMER DRAWING						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 	DRAWING A3-SIZE	SERIES 87831	MATERIAL NUMBER SD-87831-0001	CUSTOMER GENERAL MARKET	DOC TYPE PSD	DOC PART 001	REVISION A16	SHEET NUMBER 14 OF 14