

Excellent Integrated System Limited

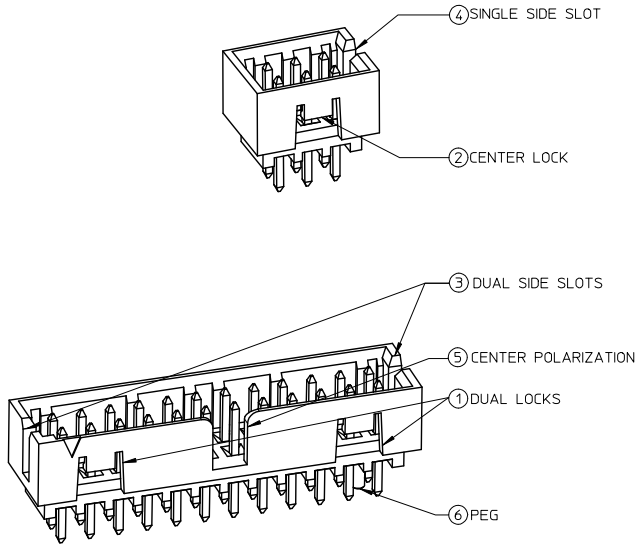
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)
[87831-0420](#)

For any questions, you can email us directly:
sales@integrated-circuit.com

FEATURES SELECTION GUIDE



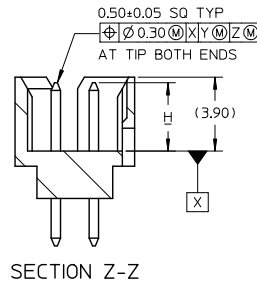
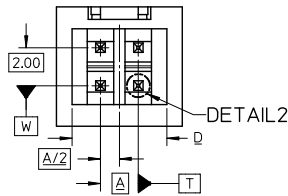
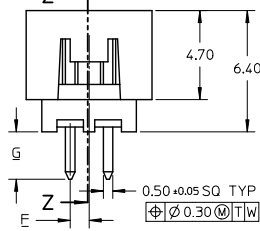
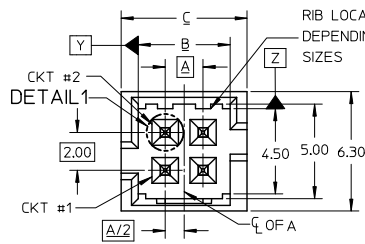
CIRCUIT SIZE	FEATURES						SHEET NO
	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A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

PACKAGING SPECIFICATION TABLE

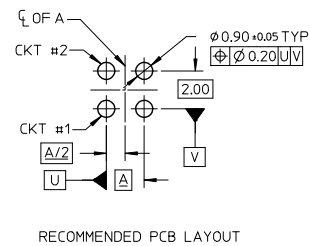
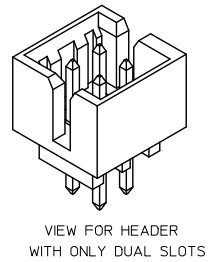
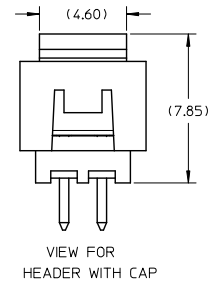
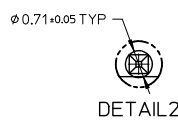
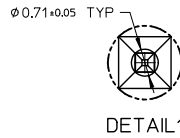
TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR:	PK-87831-002
87831-0419 87831-0645	
87831-5141 87831-0632	
87831-0443 87831-5119	
87831-5241 87831-1011	
87831-5242 87831-1420	
87831-0643	

ADD PK TABLE EC NO: S2017-0022 DRAWN BY: 2016/07/04 CHECKED BY: 2016/07/27 APPROVED BY: 2016/07/28 APP: KHL IM	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	 THIRD ANGLE PROJECTION		
					MM ONLY		NTS	METRIC			
					DRAWN BY: GMEARLY DATE: 2015/04/15		TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex				
					CHECKED BY: CGOH DATE: 2015/06/29						
					APPROVED BY: KHL IM DATE: 2015/06/29						
					MATERIAL NO.					DOCUMENT NO.	
					SEE TABLE		SD-87831-0001			SHEET NO. 1 OF 13	
					SIZE: A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

4 CIRCUITS



SECTION Z-Z



RECOMMENDED PCB LAYOUT

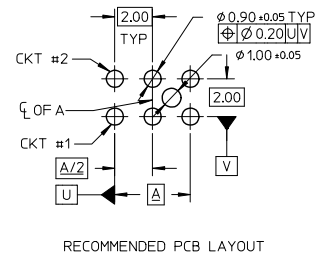
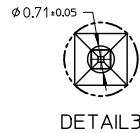
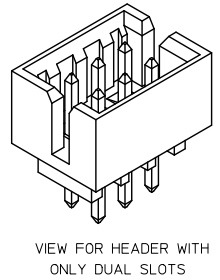
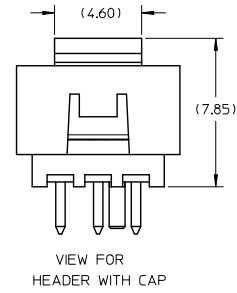
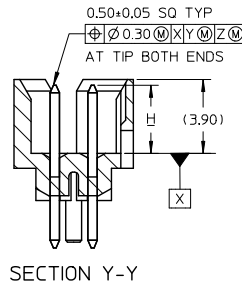
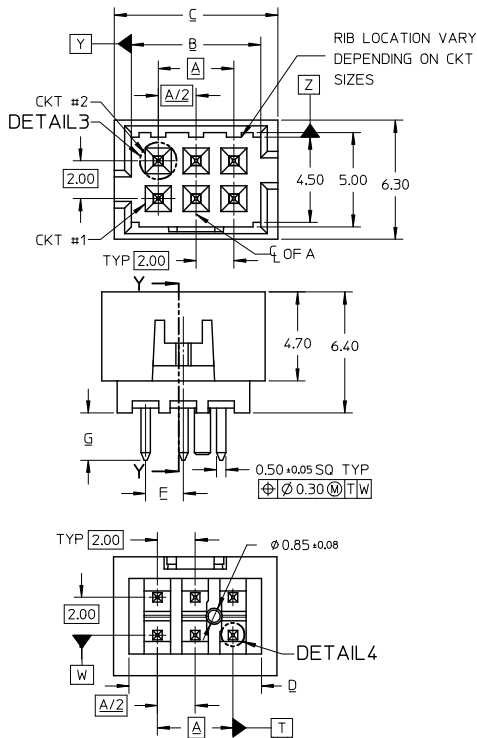
NOTES:

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)

EDIT NOTE 4 EC NO: S2017-0022 DRAWN BY: 2016/07/04 CHKD: SCHEONG 2016/07/27 APPR: KHLIM 2016/07/28 REV A5	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
		 =0  =0  =0		mm	INCH	DRAWN BY GMEARLY	DATE 2015/04/15	TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex DOCUMENT NO. SD-87831-0001	SHEET NO. 2 OF 13
			4 PLACES	± ---	± ---	CHECKED BY CGOH	DATE 2015/06/29		
			3 PLACES	± ---	± ---	APPROVED BY	DATE		
			2 PLACES	± 0.20	± ---	KHLIM	2015/06/29		
			1 PLACE	± ---	± ---	MATERIAL NO.	SEE TABLE		
		0 PLACE	± ---	± ---	ANGULAR ± 3°		INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX			

	10	9	8	7	6	5	4	3	2	1												
	4 CIRCUITS																					
F	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						F				
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H			
E	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	N.A	YES	YES	N.A	N.A	N.A						1.00	2.50		3.60±0.20		
		87831-0441	87831-0456	N.A	2																	
		87831-0442	N.A	N.A	3																	
		87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A							2.80			2.50	3.60 ^{+0.15} _{-0.10}
		87831-5142	N.A	N.A	3																	
		87831-6141	N.A	N.A	2																	
87831-6142	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A	2.50	3.60 ^{+0.15} _{-0.10}											
87831-0443	N.A	N.A	2																			
87831-0444	N.A	N.A	3																			
D																					D	
C																					C	
B																					B	
A	PLATING OPTIONS: 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTETIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL. SEE SHEET 1.2,4,6,8-10 EC NO: S2017-0022 2016/07/04 2016/07/27 2016/07/28 DRW:GMENARLY CHKD:SCHEONG APPR:KHLIM REV A5 QUALITY SYMBOLS √=0 √=0 √=0 DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE MM ONLY DRAWN BY DATE 2015/04/15 CHECKED BY DATE 2015/06/29 CGOH APPROVED BY DATE 2015/06/29 KHLIM MATERIAL NO. SEE TABLE SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex DOCUMENT NO. SD-87831-0001 SHEET NO. 3 OF 13 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				A	
	10	9	8	7	6	5	4	3	2	1												

6 CIRCUITS



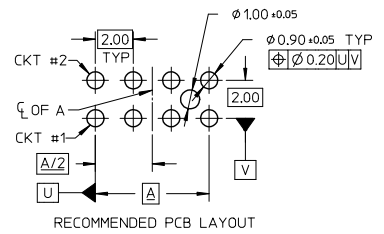
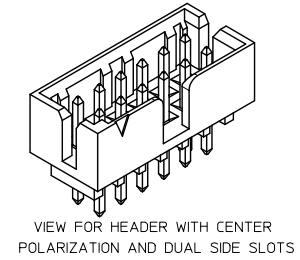
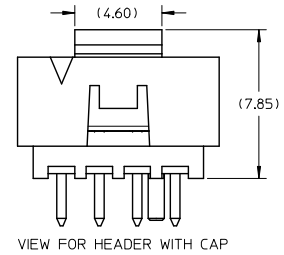
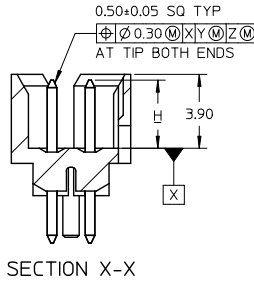
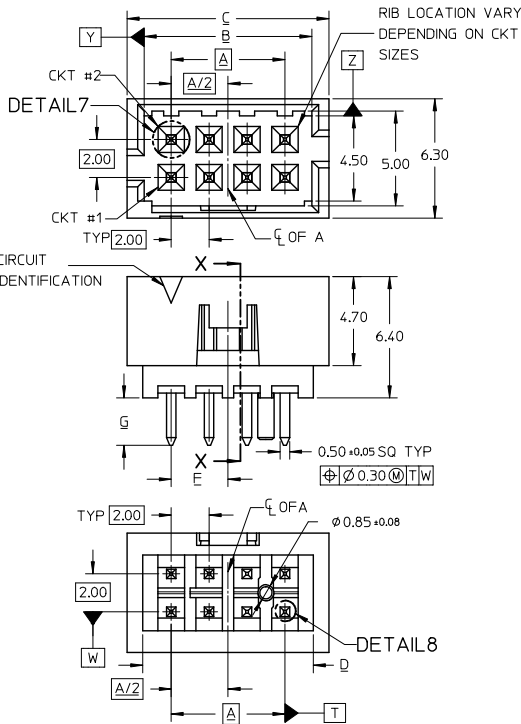
NOTES:

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: 5110 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)

EDIT NOTE 4 EC NO: S2017-0022 DRAWN BY: GMENARLY CHKD: SCHEONG APPR: KHL IM REV: A5	2016/07/04	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	2016/07/27							MM ONLY		NTS	METRIC		
	2016/07/28												
					DRAWN BY		DATE		TITLE				
					GMENARLY		2015/04/15		MILLIGRID				
					CHECKED BY		DATE		2MM PITCH, THROUGH HOLE				
					CGOH		2015/06/29		VERTICAL SHROUDED HEADER				
					APPROVED BY		DATE		molex				
					KHL IM		2015/06/29						
					MATERIAL NO.		DOCUMENT NO.						
				ANGULAR ± 3 °				SEE TABLE					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SD-87831-0001					
								SHEET NO. 4 OF 13					
								THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

	10	9	8	7	6	5	4	3	2	1																		
	6 CIRCUITS																											
F	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							F									
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H									
E	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	E								
		87831-0620	N.A	N.A	2												N.A	2.50										
		87831-0621	N.A	N.A	3												N.A	N.A			YES	N.A	N.A	YES	N.A	2.50		
		87831-0636	N.A	N.A	4																				N.A	2.50		
		87831-0628	N.A	N.A	2	N.A	N.A	YES	N.A	N.A	YES						2.00	2.50	3.60 ^{+0.15} _{-0.10}									
		87831-0629	N.A	N.A	3													3.50										
		87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A							2.50			2.80							
		87831-0642	N.A	87831-5552	3																2.50							
		87831-5241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						2.50		3.50									
		87831-5242	N.A	N.A	3														2.80									
D		87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A							2.50	2.50		3.60±0.20							
		87831-6242	N.A	N.A	3														2.50									
		87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						2.50		2.50									
		87831-0644	N.A	N.A	3														2.50									
		87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES							2.50	2.50									
		87831-0646	N.A	N.A	3														2.50									
		87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES						2.50		2.50									
		87831-5119	N.A	N.A	1														N.A		N.A	YES	N.A	YES	N.A	2.50	3.60±0.20	
C																					C							
B																					B							
A	PLATING OPTIONS: 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL. SEE SHEET 1.2,4,6,8-10 EC NO: S2017-0022 DRWNGENARLY 2016/07/04 CHKD:SCHEONG 2016/07/27 APPR:KHLIM 2016/07/28 QUALITY SYMBOLS √=0 √=0 √=0 GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± --- ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE MM ONLY DRAWN BY DATE GMENARLY 2015/04/15 CHECKED BY DATE CGOH 2015/06/29 APPROVED BY DATE KHLIM 2015/06/29 MATERIAL NO. SEE TABLE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER DOCUMENT NO. SD-87831-0001 SHEET NO. 5 OF 13																											
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8 TO 12 CIRCUITS

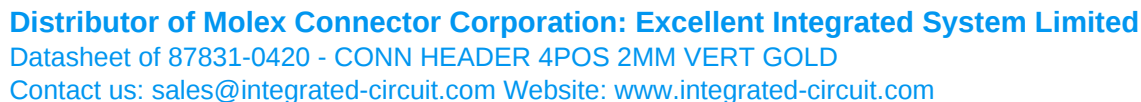


NOTES:

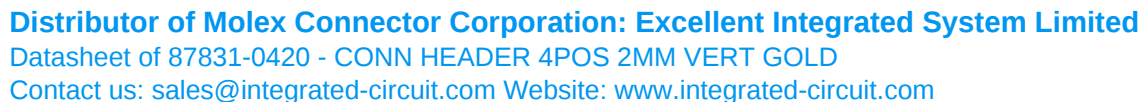
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50MM SQ PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP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

EDIT NOTE 4 EC NO: S2077-0022 DRAWN:GEMARLY CHKD:SCHEONG APPR:KHLIM	2016/07/04 2016/07/27 2016/07/28	QUALITY SYMBOLS	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	 THIRD ANGLE PROJECTION	
							MM ONLY		NTS	METRIC		
					mm	INCH	DRAWN BY	DATE	TITLE			
				 =0	4 PLACES	± ---	± ---	GEMENARLY	2015/04/15	MILLIGRID		
				 =0	3 PLACES	± ---	± ---	CHECKED BY	DATE	2MM PITCH, THROUGH HOLE		
				 =0	2 PLACES	± 0.20	± ---	CGOH	2015/06/29	VERTICAL SHROUDED HEADER		
				 =0	1 PLACE	± ---	± ---	APPROVED BY	DATE	molex		
				 =0	0 PLACE	± ---	± ---	KHLIM	2015/06/29			
				ANGULAR ± 3 °			MATERIAL NO.		DOCUMENT NO.			SHEET NO.
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-87831-0001			6 OF 13

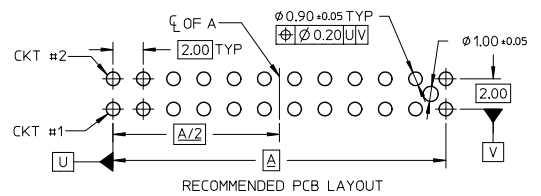
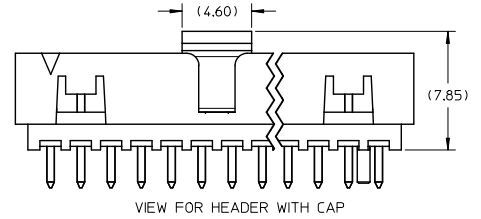
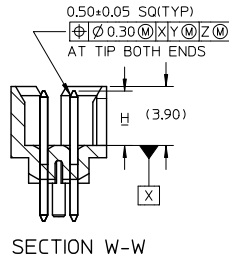
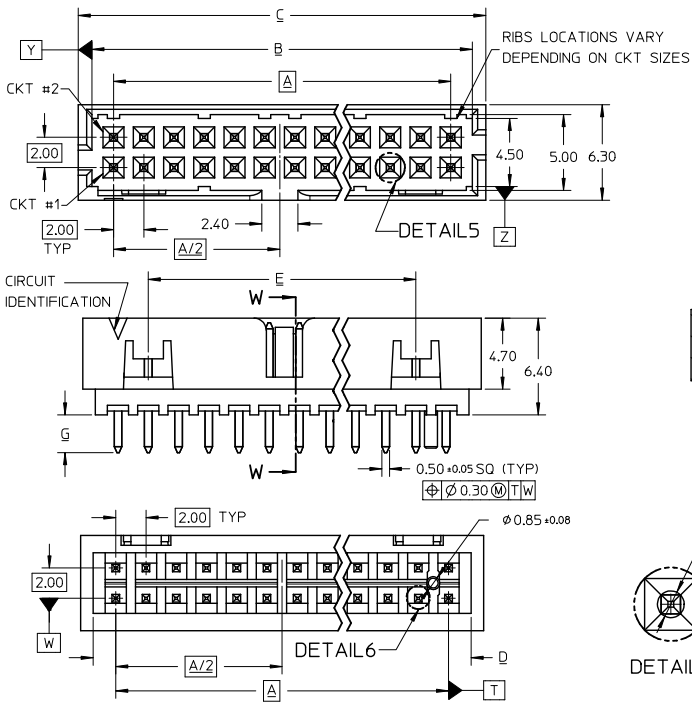
A5	REV	DESCRIPTION	SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
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lb_frame_A3_P_AM_T Rev. G 2012/01/11	9	8	7	6	5	4	3	2	1
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[illegible]

14 TO 50 CIRCUITS



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)

EDIT NOTE 4		EC NO: S207-0022		DRAWN BY: GMENARLY		2016/07/04		APPROVED BY: CHYK-SHEUNG		2016/07/28					
REV		DESCRIPTION		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
								MM ONLY		NTS		METRIC			
				 =0		4 PLACES ± --- ± ---		DRAWN BY: GMENARLY		DATE: 2015/04/15		TITLE: MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
				 =0		3 PLACES ± --- ± ---		CHECKED BY: CGOH		DATE: 2015/06/29					
				 =0		2 PLACES ± 0.20 ± ---		APPROVED BY: KHLIM		DATE: 2015/06/29					
						1 PLACE ± --- ± ---									
						0 PLACE ± --- ± ---						molex			
						ANGULAR ± 3 °		MATERIAL NO.		SEE TABLE		DOCUMENT NO.		SHEET NO.	
						DRAFT WHERE APPLICABLE						SD-87831-0001		9 OF 13	
						MUST REMAIN WITHIN DIMENSIONS		SIZE: A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

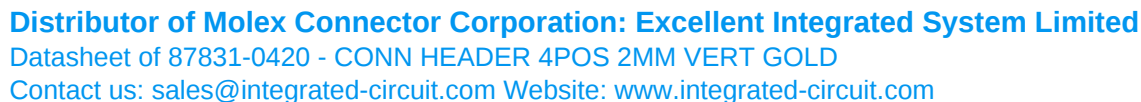
10		9		8		7		6		5		4		3		2		1																																																			
14 TO 20 CIRCUITS																																																																					
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION								F																																																	
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																																																		
E	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	N.A	3																																																																
		87831-1436	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES							YES		YES	YES	YES	YES	YES	YES																																												
		87831-1428	N.A	N.A	2																																																																
		87831-1429	N.A	N.A	3																																																																
		87831-1435	N.A	N.A	3																																																																
87831-1410	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES																																																				
87831-1411	N.A	N.A	3																																																																		
D	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							YES		YES	YES	YES	YES	YES	YES																																												
		87831-1628	N.A	N.A	2																																																																
		87831-1629	N.A	87831-5559	3																																																																
		87831-1635	N.A	N.A	3																																																																
C	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	N.A	2																																																																
		87831-1821	N.A	N.A	3																																																																
		87831-1836	N.A	N.A	4	YES	N.A	YES	N.A	YES	YES							YES		YES	YES	YES	YES	YES	YES																																												
		87831-1828	N.A	N.A	2																																																																
		87831-1829	N.A	N.A	3																																																																
		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	YES	YES	YES	YES	YES	YES	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	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES																																																			
87831-2011	N.A	N.A	3																																																																		
PLATING OPTIONS: 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.																																																																					
ADD 87831-5559 EC NO: S2017-0022 DRWNGENARLY 2016/07/04 CHKD:SCHEONG 2016/07/27 APPR:KHLIM 2016/07/28 A5 REV QUALITY SYMBOLS ▽=0 ▽=0 ▽=0 DESCRIPTION DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS GENERAL TOLERANCES (UNLESS SPECIFIED) <table><tr><td></td><td>mm</td><td>INCH</td></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>± 0.20</td><td>± ---</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr><tr><td>0 PLACE</td><td>± ---</td><td>± ---</td></tr></table> ANGULAR ± 3 ° DIMENSION STYLE MM ONLY <table><tr><td>DRAWN BY</td><td>DATE</td></tr><tr><td>GEMENARLY</td><td>2015/04/15</td></tr><tr><td>CHECKED BY</td><td>DATE</td></tr><tr><td>CGOH</td><td>2015/06/29</td></tr><tr><td>APPROVED BY</td><td>DATE</td></tr><tr><td>KHLIM</td><td>2015/06/29</td></tr></table> MATERIAL NO. SEE TABLE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION SCALE NTS DESIGN UNITS METRIC  THIRD ANGLE PROJECTION TITLE MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER  DOCUMENT NO. SD-87831-0001 SHEET NO. 10 OF 13 <tr><th colspan="2">10</th><th colspan="2">9</th><th colspan="2">8</th><th colspan="2">7</th><th colspan="2">6</th><th colspan="2">5</th><th colspan="2">4</th><th colspan="2">3</th><th colspan="2">2</th><th colspan="2">1</th></tr>																					mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	0 PLACE	± ---	± ---	DRAWN BY	DATE	GEMENARLY	2015/04/15	CHECKED BY	DATE	CGOH	2015/06/29	APPROVED BY	DATE	KHLIM	2015/06/29	10		9		8		7		6		5		4		3		2		1	
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10		9		8		7		6		5		4		3		2		1	
32 TO 40 CIRCUITS																			
F	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							F
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	
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															
32	87831-3229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20	
	87831-3229	N.A	N.A	3															
	87831-3419	N.A	N.A	1															
	87831-3420	N.A	N.A	2															
	87831-3421	N.A	N.A	3															
34	87831-3436	N.A	N.A	4	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	
	87831-3428	N.A	N.A	2															
	87831-3429	N.A	N.A	3															
	87831-3435	N.A	N.A	3															
	87831-3435	N.A	N.A	3															
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	N.A	2															
	87831-3621	N.A	N.A	3															
	87831-3636	N.A	N.A	4															
	87831-3628	N.A	N.A	2															
36	87831-3629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20	
	87831-3629	N.A	N.A	3															
	87831-3819	N.A	N.A	1															
	87831-3820	N.A	N.A	2															
	87831-3821	N.A	N.A	3															
38	87831-3836	N.A	N.A	4	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	
	87831-3828	N.A	N.A	2															
	87831-3829	N.A	N.A	3															
	87831-3829	N.A	N.A	3															
	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															
40	87831-4029	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	38.00	40.85	42.65	41.00	34.00	N.A	2.50	3.60±0.20	
	87831-4029	N.A	N.A	3															
	87831-4010	N.A	N.A	2															
	87831-4010	N.A	N.A	2															
	87831-4010	N.A	N.A	2															
B																			
PLATING OPTIONS:																			
1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.																			
2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.																			
3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.																			
4 - 2.50um/100uin MIN. NICKEL TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.																			
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PLATING OPTIONS:

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

SEE SHEET 12.4.6.8-10 EC NO: S2017-0022 DRAWN BY: GMEARLY CHKD: SCHEONG APPR: KHLIM REV: A5	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	 THIRD ANGLE PROJECTION
					MM ONLY		NTS	METRIC	
				mm	INCH	DRAWN BY	DATE	TITLE	
			4 PLACES	± ---	± ---	GMEARLY	2015/04/15	MILLIGRID	
			3 PLACES	± ---	± ---	CHECKED BY	DATE	2MM PITCH, THROUGH HOLE	
			2 PLACES	± 0.20	± ---	GCHH	2015/06/29	VERTICAL SHROUDED HEADER	
			1 PLACE	± ---	± ---	APPROVED BY	DATE	molex	
			0 PLACE	± ---	± ---	KHLIM	2015/06/29		
			ANGULAR ± 3 °		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87831-0001		
		SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



	10	9	8	7	6	5	4	3	2	1																		
	42 TO 50 CIRCUITS																											
F	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							F									
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H									
	42	87831-4219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	40.00	42.85	44.65	43.00	36.00	N.A	2.50	3.60±0.20									
		87831-4220	N.A	N.A	2																							
		87831-4221	N.A	N.A	3																							
		87831-4236	N.A	N.A	4																							
		87831-4228	N.A	N.A	2																							
		87831-4229	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50										
E	44	87831-4419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	42.00	44.85	46.65	45.00	38.00	N.A	2.50	3.60±0.20									
		87831-4420	N.A	N.A	2																							
		87831-4421	N.A	N.A	3																							
		87831-4436	N.A	N.A	4																							
		87831-4428	N.A	N.A	2																							
		87831-4429	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES															2.50		
		87831-4435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50										
D	46	87831-4619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	44.00	46.85	48.65	47.00	40.00	N.A	2.50	3.60±0.20									
		87831-4620	N.A	N.A	2																							
		87831-4621	N.A	N.A	3																							
		87831-4636	N.A	N.A	4																							
		87831-4628	N.A	N.A	2																							
		87831-4629	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50										
	48	87831-4819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	46.00	48.85	50.65	49.00	42.00	N.A	2.50	3.60±0.20									
		87831-4820	N.A	N.A	2																							
		87831-4821	N.A	N.A	3																							
		87831-4836	N.A	N.A	4																							
		87831-4828	N.A	N.A	2																							
C		87831-4829	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							2.50										
	50	87831-5019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	48.00	50.85	52.65	51.00	44.00	N.A	2.50	3.60±0.20									
		87831-5020	N.A	N.A	2																							
		87831-5021	N.A	N.A	3																							
		87831-5036	N.A	N.A	4																							
		87831-5028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES															2.50		
			87831-5029	N.A	N.A	3																						
		87831-5035	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50										
B	PLATING OPTIONS: 1 - 0.05-0.13um/2-5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 2 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 3 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL. 4 - 2.50um/100uin MIN. MATTE TIN OVER 1.25um/50uin MIN. NICKEL OVERALL.																											
A	SEE SHEET 12,4,6,8-10 EC NO: S2007-0022 DRWNGEN: 2016/07/04 CHKD: SCHEONG APPR: KHL IM 2016/07/28 REV					QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER molex						SHEET NO.						
	A5					F=0 F=0 F=0	4 PLACES ±---- 3 PLACES ±---- 2 PLACES ±0.20 1 PLACE ±---- 0 PLACE ±----			MM ONLY DRAWN BY DATE GMENARLY 2015/04/15 CHECKED BY DATE CGOH 2015/06/29 APPROVED BY DATE KHL IM 2015/06/29		NTS	METRIC	DOCUMENT NO. SEE TABLE SD-87831-0001		13 OF 13 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						SHEET NO. 13 OF 13						
	10	9	8	7	6	5	4	3	2	1																		