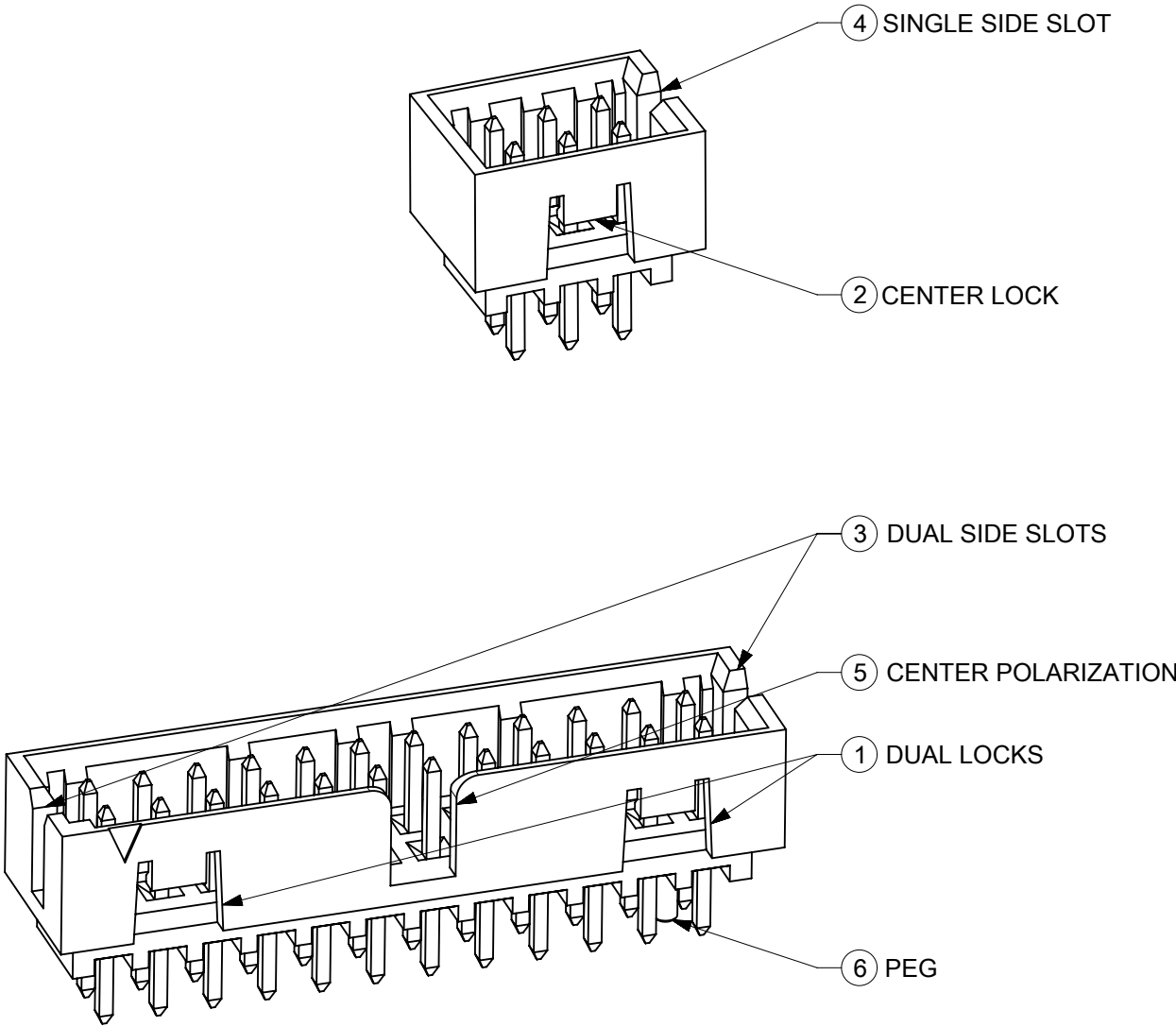


FEATURES SELECTION GUIDE



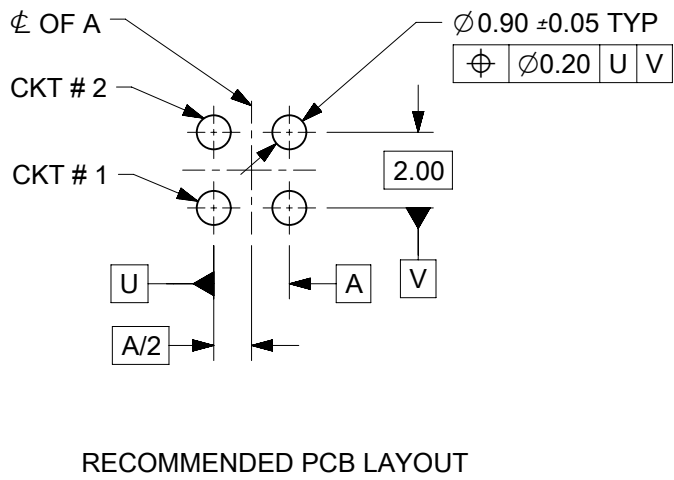
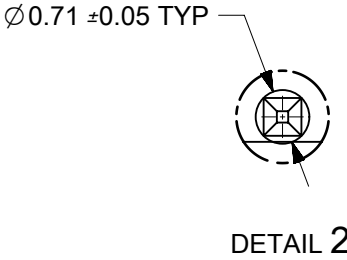
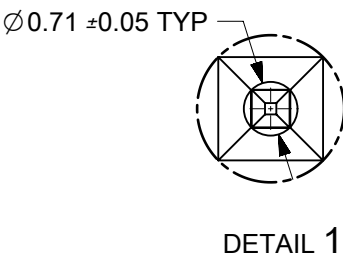
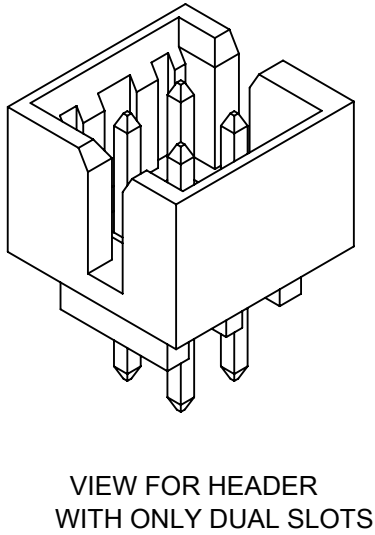
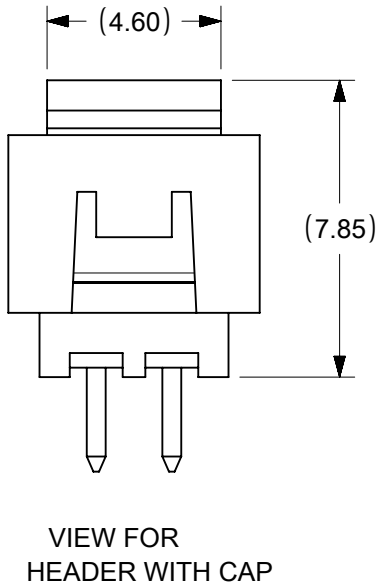
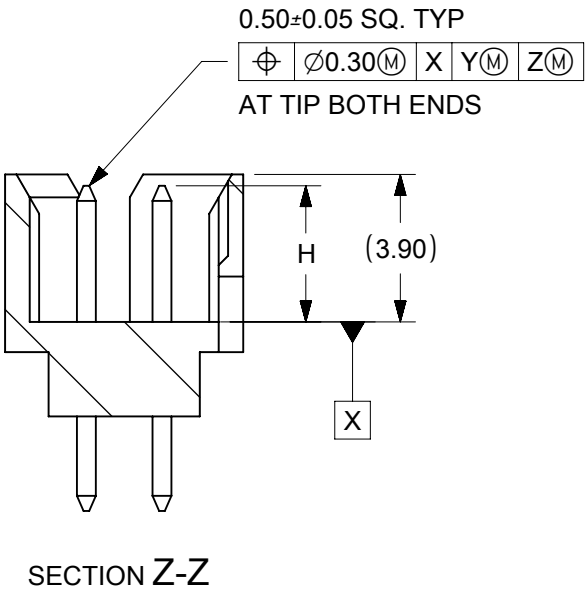
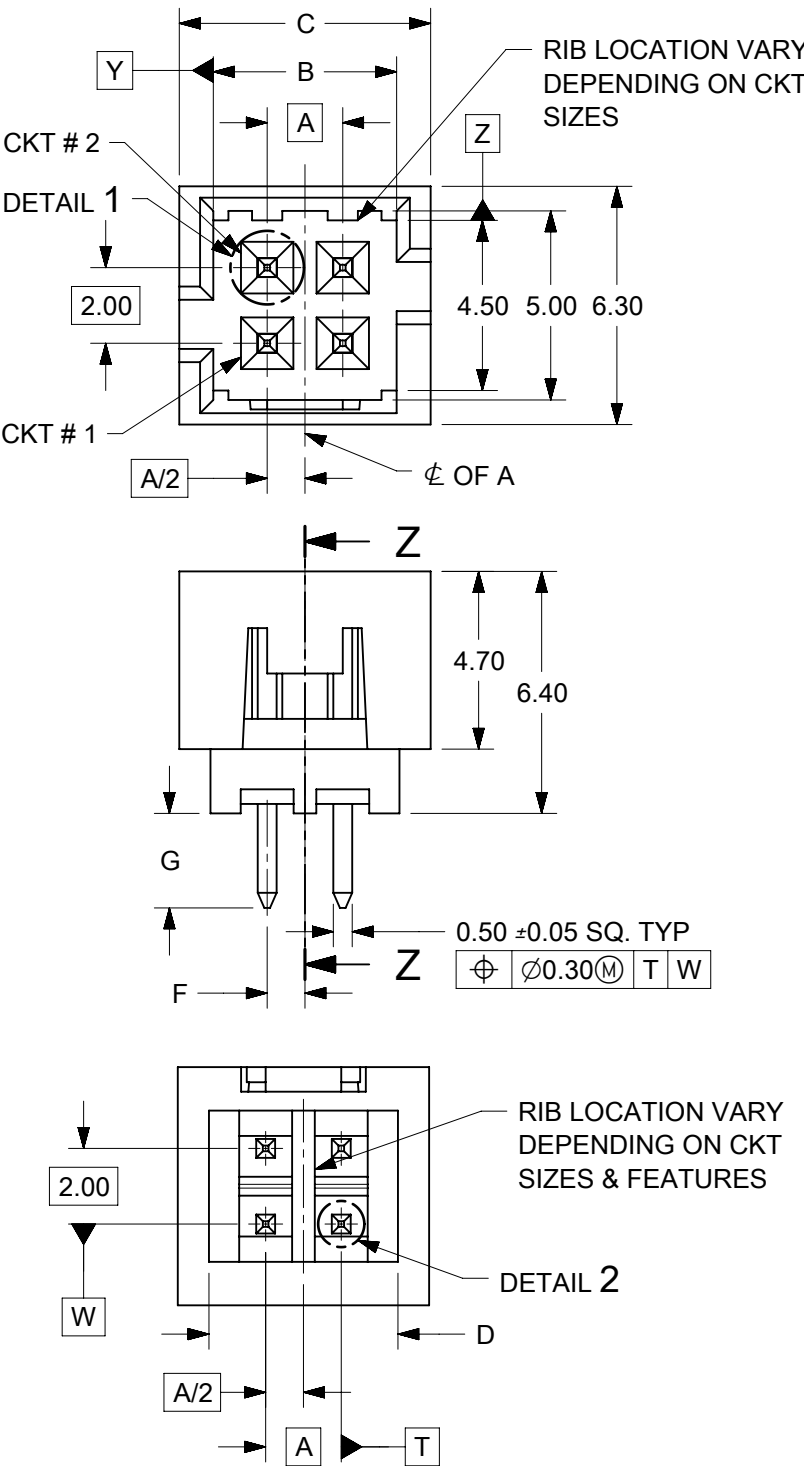
FEATURES							
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		5 CENTER POLARIZATION	6 PEG	SHEET NO
	1 DUAL	2 CENTER	3 DUAL	4 SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A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

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		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	2017/09/08 2017/12/01 2018/01/02	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®						
					MM		NTS								
					DRWN BY		DATE								
		4 PLACES	±		±	GMENARLY		2015/04/15		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
		3 PLACES	±		±	CHK'D BY		DATE							
		2 PLACES	±	0.2	±	CGOH		2015/06/29							
		1 PLACES	±		±	APPR BY		DATE		PRODUCT CUSTOMER DRAWING					
		0 PLACES	±		±	KHLIM		2015/06/29							
		ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION								
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS													
A12	REV				A3			DOCUMENT NUMBER		DOC TYPE	DOC PART	SHEET NUMBER			
								87831		SEE TABLE		GENERAL MARKET			
								SD-87831-0001		PSD	001	1 OF 13			

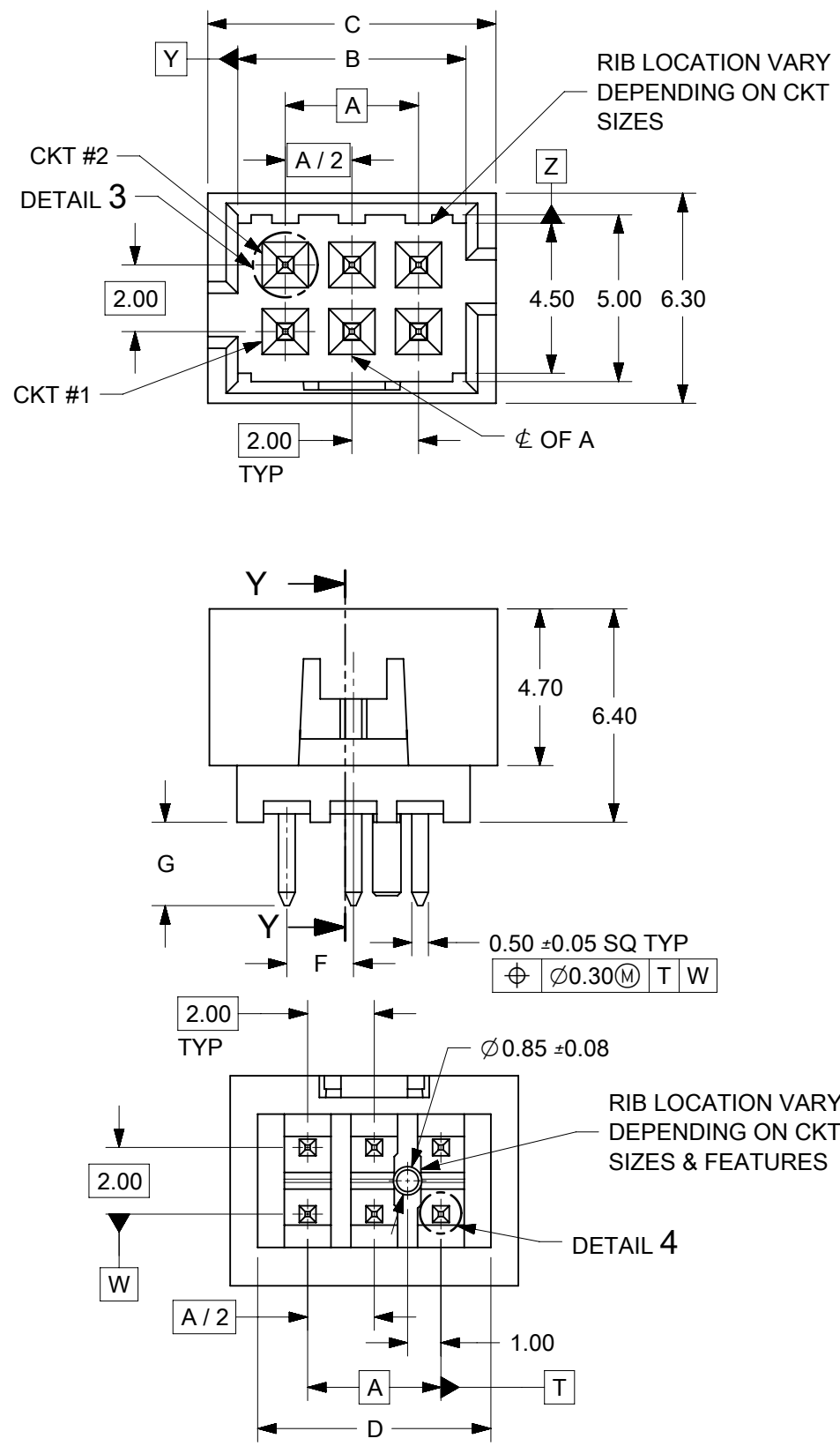
4 CIRCUITS



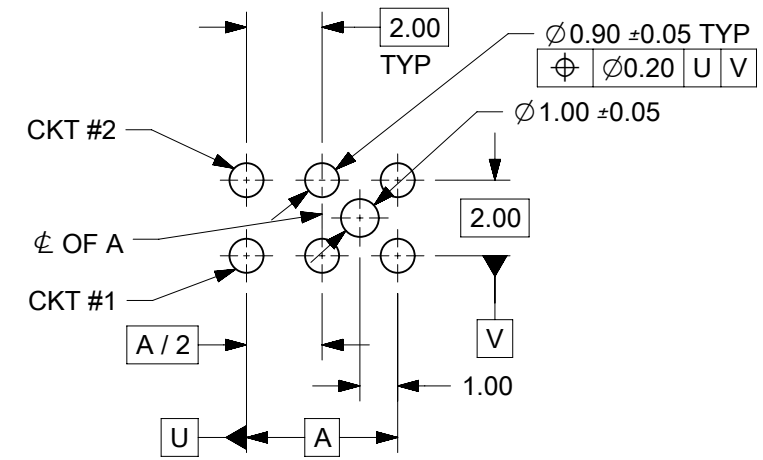
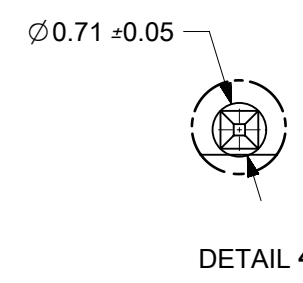
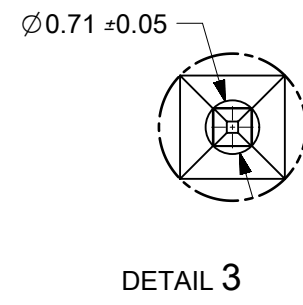
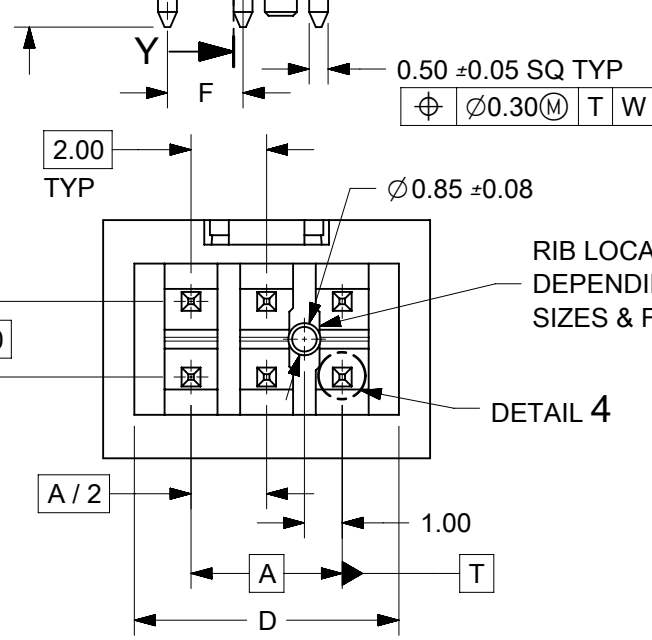
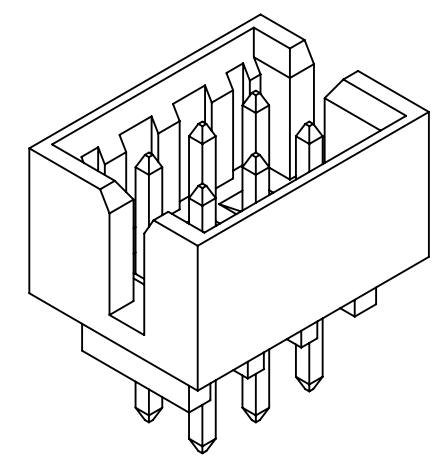
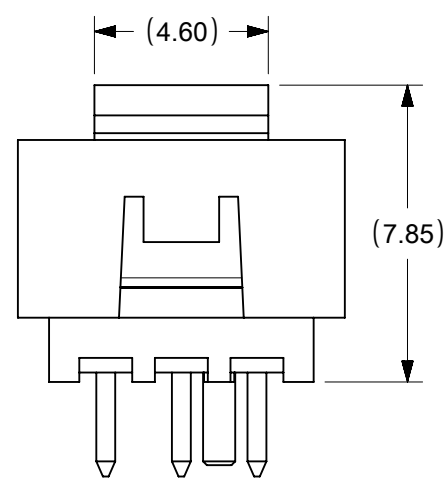
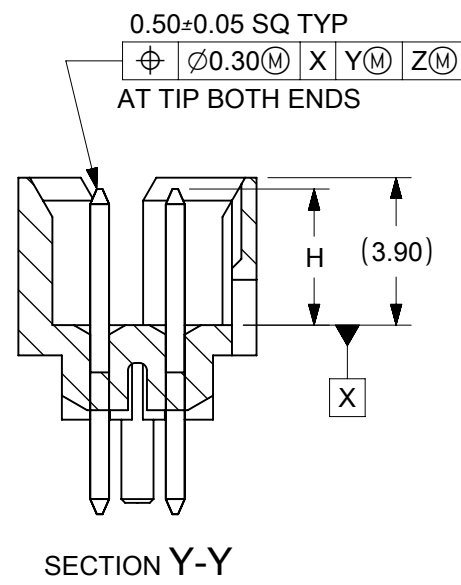
NOTES:

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)

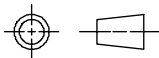
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SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	2017/09/08 2017/12/01 2018/01/02	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®							
			MM	INCH	MM		NTS									
		4 PLACES	±		DRWN BY		DATE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
					GMENARLY		2015/04/15									
		3 PLACES	±		CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING							
					CGOH		2015/06/29									
		2 PLACES	± 0.2		APPR BY		DATE		SERIES				MATERIAL NUMBER		CUSTOMER	
					KHLIM		2015/06/29									
		1 PLACES	±		DRAWING SIZE		THIRD ANGLE PROJECTION		78731		SEE TABLE		GENERAL MARKET			
		0 PLACES	±													
ANGULAR TOL ± 3.0			A3				DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																
A12		REV	SD-87831-0001													
			PSD													
			001													
			2 OF 13													



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: 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)

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SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM		2017/09/08 2017/12/01 2018/01/02		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE		molex®		
						MM		NTS				
			MM	INCH	DRWN BY		DATE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER			
		4 PLACES	±	±	GMENARLY		2015/04/15					
		3 PLACES	±	±	CHK'D BY		DATE					
		2 PLACES	± 0.2	±	CGOH		2015/06/29					
		1 PLACES	±	±	APPR BY		DATE					
		0 PLACES	±	±	KHLIM		2015/06/29		PRODUCT CUSTOMER DRAWING			
		ANGULAR TOL ± 3.0		DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES				MATERIAL NUMBER
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3				87831		SEE TABLE		GENERAL MARKET
DOCUMENT NUMBER SD-87831-0001								DOC TYPE PSD	DOC PART 001	SHEET NUMBER 4 OF 13		
A12		REV										

9		8		7		6		5		4		3		2		1						
6 CIRCUITS																						
6	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			
	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	2.50		3.60±0.20			
	87831-0629	N.A	N.A	3																		
	87831-0641	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A										2.00	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						2.80	3.60 ^{+0.15} -0.10					
	87831-5242	N.A	N.A	3																		
	87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A								2.50		3.60±0.20		
	87831-6242	N.A	N.A	3																		
	87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						2.50					3.60±0.20	
	87831-0644	N.A	N.A	3																		
	87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	YES								2.50	3.60±0.20			
	87831-0646	N.A	N.A	3																		
	87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES						2.50						3.60±0.20
	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							2.50	3.60±0.20				
87831-5136	N.A	N.A	4																			

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.

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SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	2017/09/08 2017/12/01 2018/01/02	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex® MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER													
			MM	INCH	MM	NTS																
		4 PLACES	±		±	DRWN BY		DATE		PRODUCT CUSTOMER DRAWING												
		3 PLACES	±		±	GMENARLY		2015/04/15														
		2 PLACES	±	0.2	±	CHK'D BY		DATE		SERIES 87831									MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET	
		1 PLACES	±		±	CGOH		2015/06/29														
		0 PLACES	±		±	APPR BY		DATE		DOCUMENT NUMBER SD-87831-0001									DOC TYPE PSD	DOC PART 001	SHEET NUMBER 5 OF 13	
		ANGULAR TOL ± 3.0			DRAWING SIZE A3		THIRD ANGLE PROJECTION															
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																				

RELEASE STATUS

P1

RELEASE DATE

02.01.2018

09:07:52

9

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7

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5

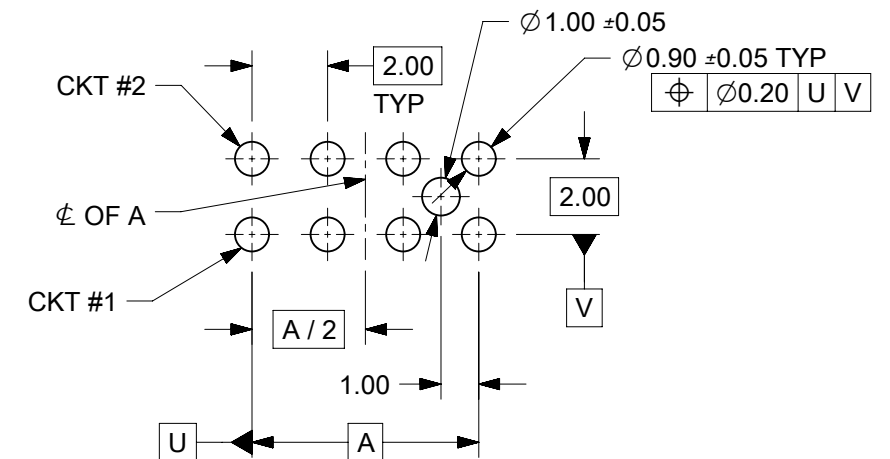
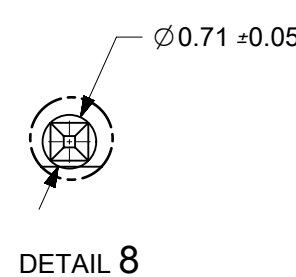
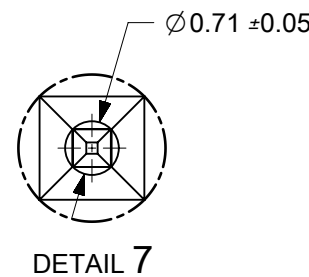
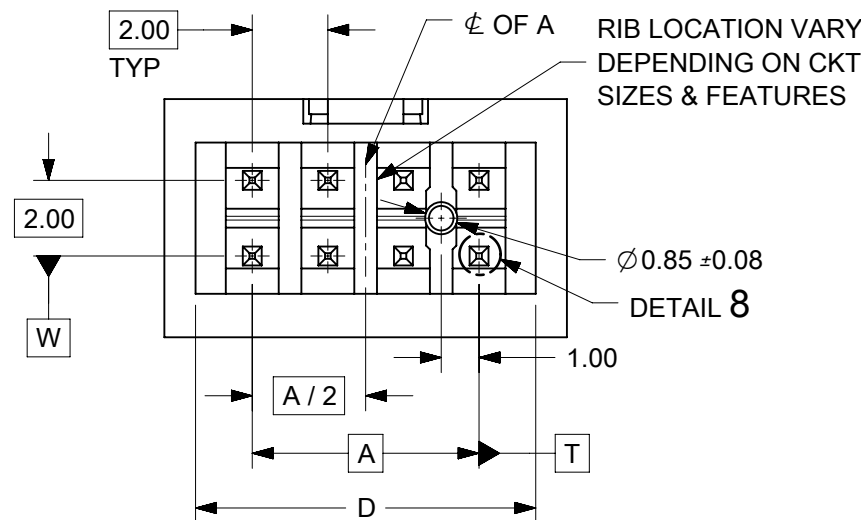
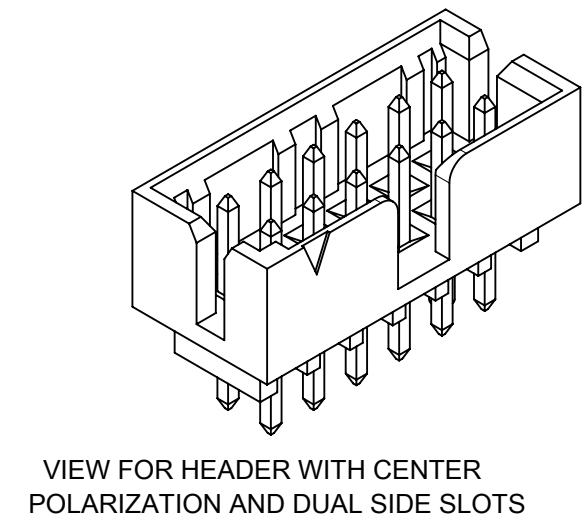
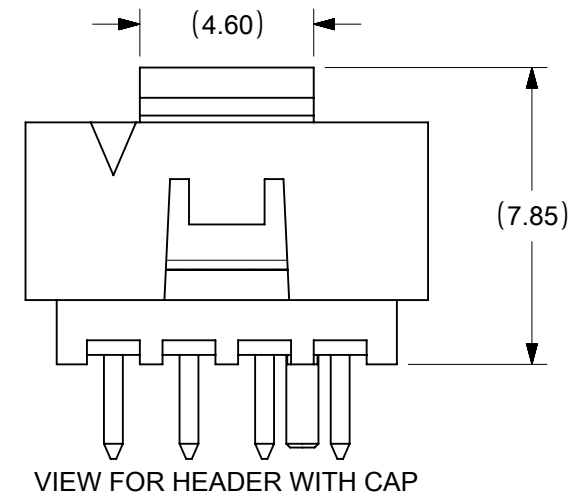
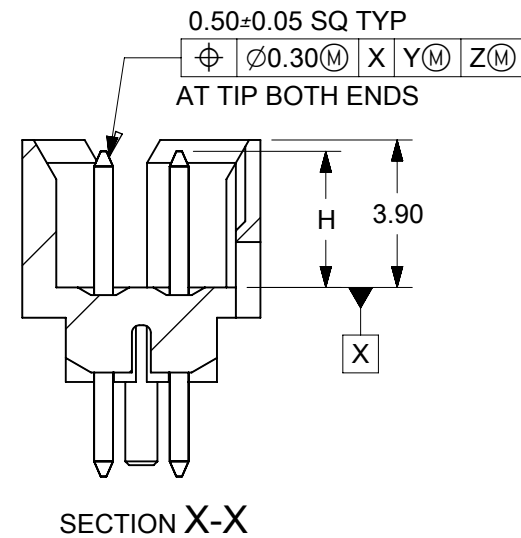
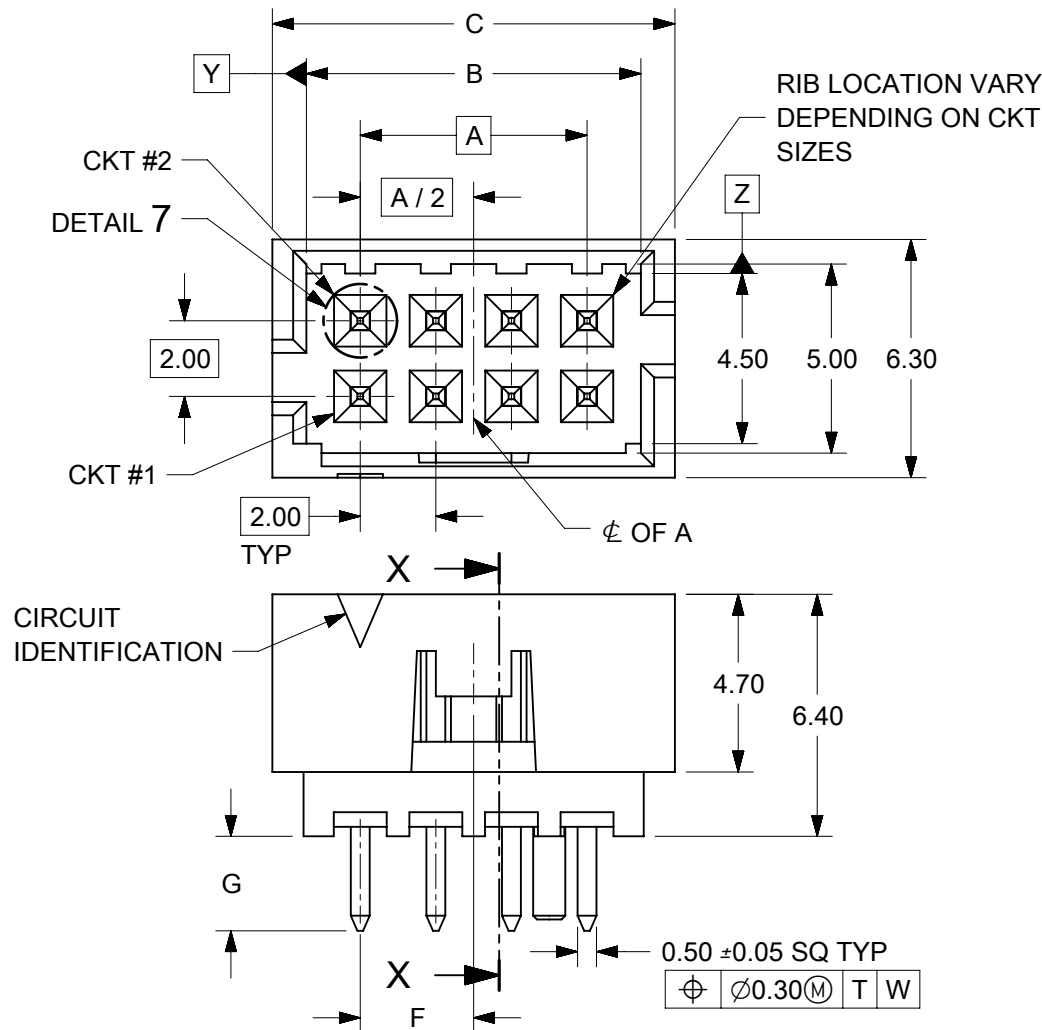
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3

2

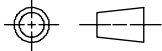
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8 TO 12 CIRCUITS

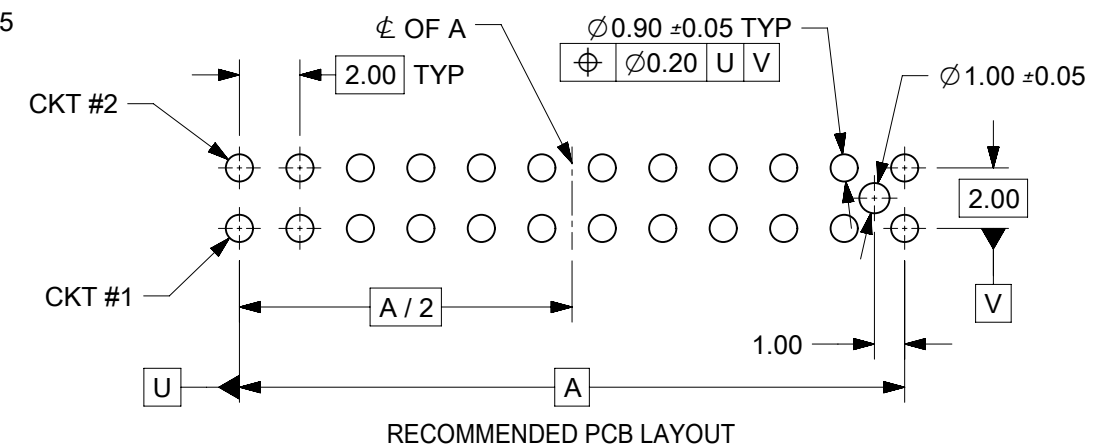
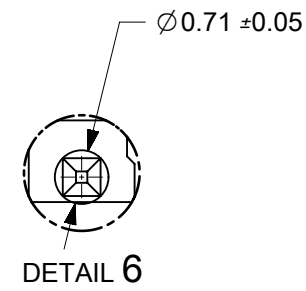
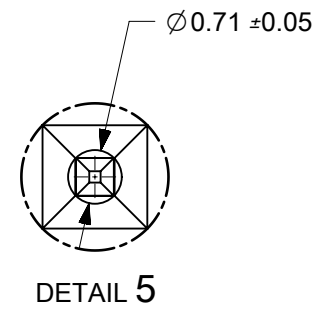
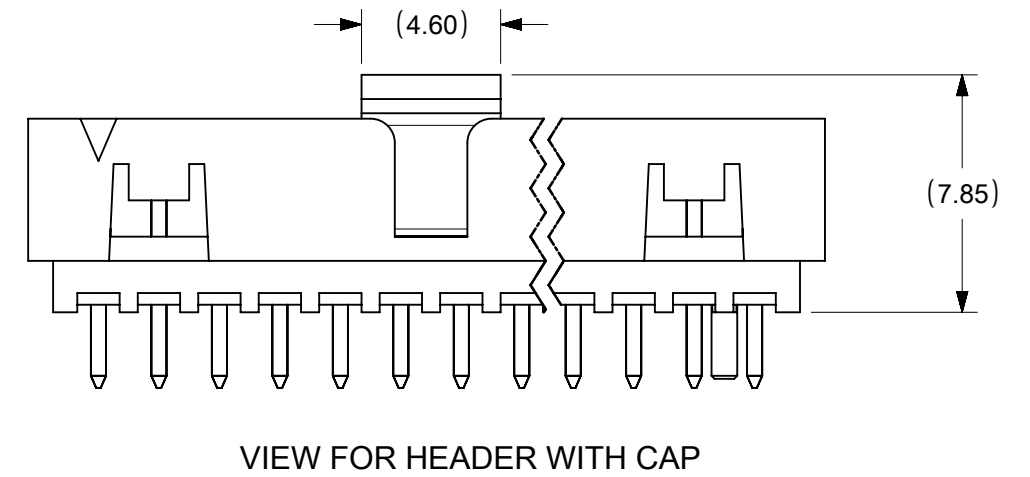
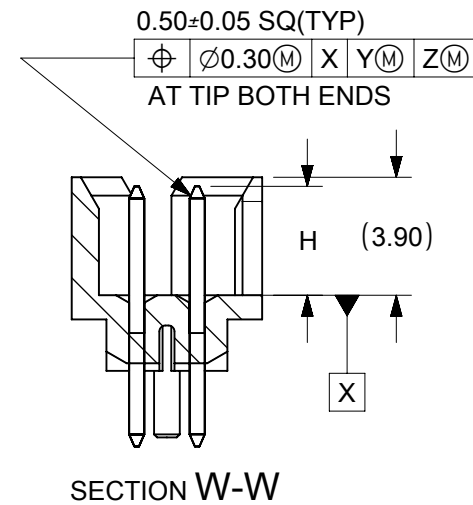
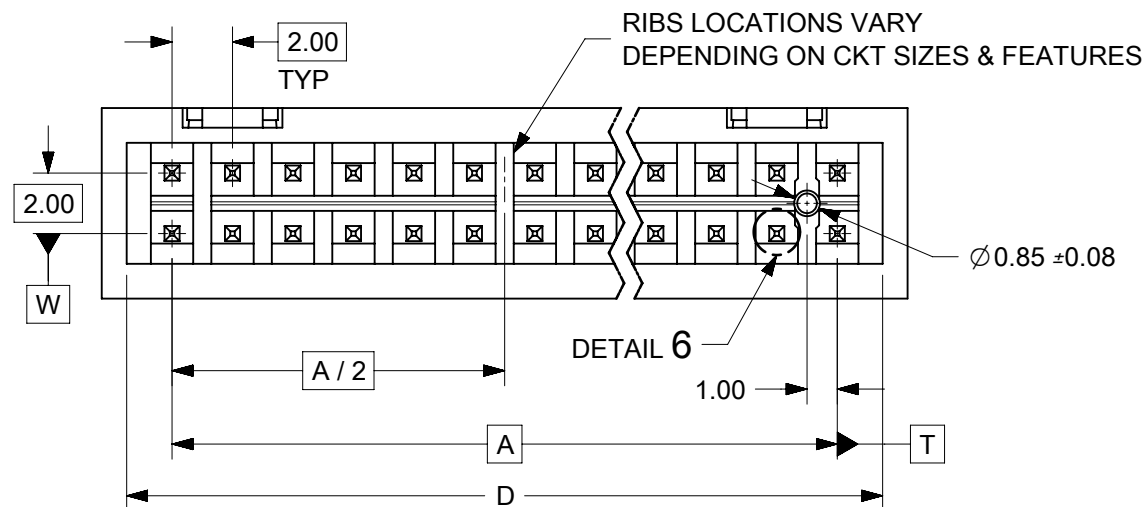
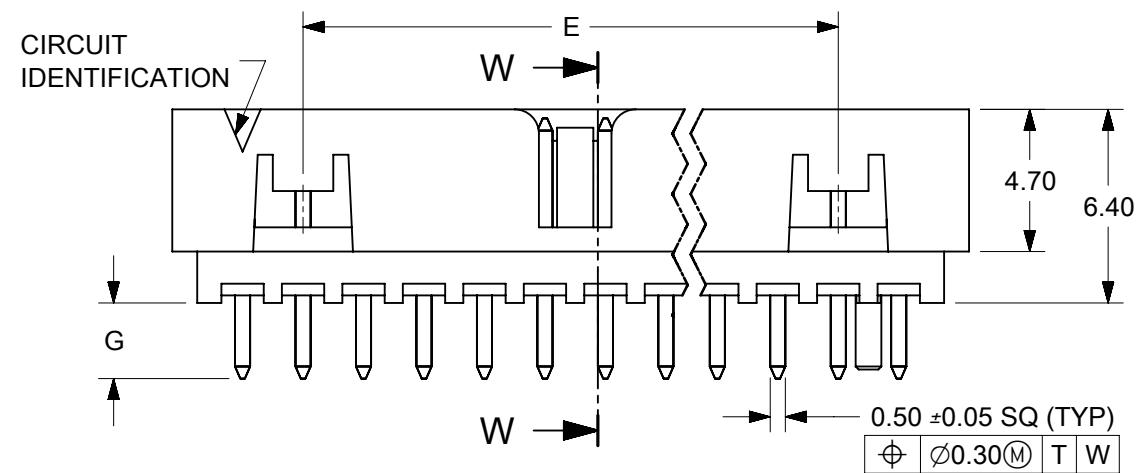
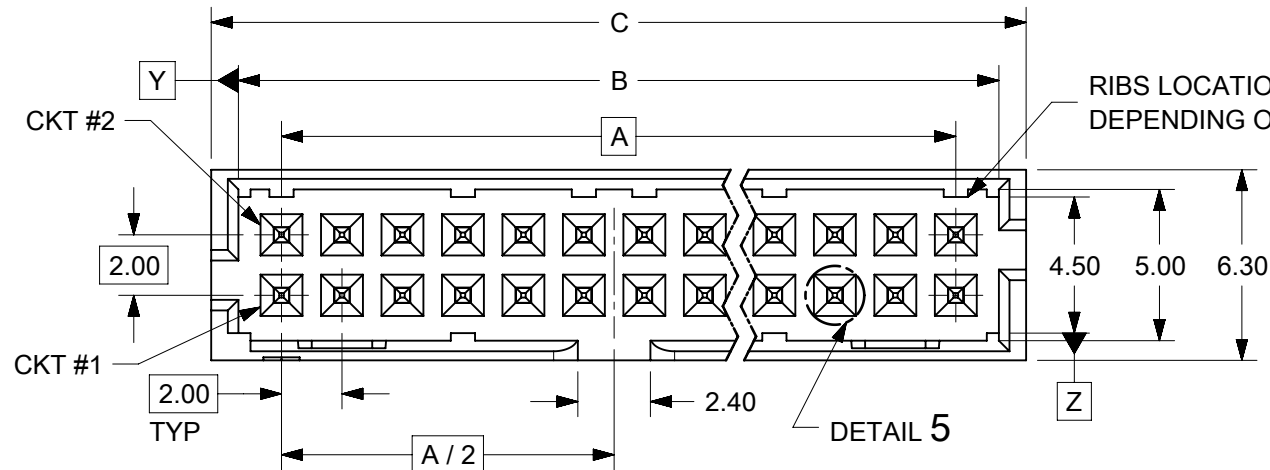


RECOMMENDED PCB LAYOUT

- 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)

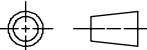
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SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	2017/09/08 2017/12/01 2018/01/02	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®					
					MM		NTS							
			MM	INCH	DRWN BY		DATE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
		4 PLACES	±	±	GMENARLY		2015/04/15							
		3 PLACES	±	±	CHK'D BY		DATE							
		2 PLACES	± 0.2	±	CGOH		2015/06/29							
		1 PLACES	±	±	APPR BY		DATE							
		0 PLACES	±	±	KHLIM		2015/06/29		PRODUCT CUSTOMER DRAWING					
		ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION			SERIES	MATERIAL NUMBER		CUSTOMER	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3				87831		SEE TABLE		GENERAL MARKET	
DOCUMENT NUMBER									DOC TYPE		DOC PART		SHEET NUMBER	
SD-87831-0001									PSD		001		6 OF 13	
A12		REV												

14 TO 50 CIRCUITS



- NOTES:
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RELEASE STATUS	P1	RELEASE DATE	02.01.2018	09:07:52
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SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
		MM	INCH	MM		NTS						
	4 PLACES	±	±	DRWN BY		DATE		PRODUCT CUSTOMER DRAWING				
	3 PLACES	±	±	GMENARLY		2015/04/15						
	2 PLACES	± 0.2	±	CHK'D BY		DATE		SERIES				
	1 PLACES	±	±	CGOH		2015/06/29						
	0 PLACES	±	±	APPR BY		DATE		MATERIAL NUMBER				
	ANGULAR TOL ± 3.0			KHLIM		2015/06/29						
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWING SIZE		THIRD ANGLE PROJECTION		CUSTOMER				
				A3								
A12	REV			DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER		
				SD-87831-0001		PSD		001		9 OF 13		

9		8		7		6		5		4		3		2		1						
14 TO 20 CIRCUITS																						
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				
		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	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-1429	N.A	87831-5563	3																	
		87831-1435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								3.50			
		87831-1410	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50				
		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				
		87831-1620	N.A	N.A	2																	
		87831-1621	N.A	N.A	3																	
		87831-1636	N.A	N.A	4																	
		87831-1628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-1629	N.A	87831-5559	3																	
		87831-1635	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								3.50			
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				
		87831-1820	N.A	87831-5566	2																	
		87831-1821	N.A	N.A	3																	
		87831-1836	N.A	N.A	4																	
		87831-1828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-1829	N.A	N.A	3																	
B	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				
		87831-2020	N.A	N.A	2																	
		87831-2021	N.A	N.A	3																	
		87831-2036	N.A	N.A	4																	
		87831-2028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
		87831-2029	N.A	N.A	3																	
		87831-2035	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES								3.50			
		87831-2010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50				
		87831-2011	N.A	N.A	3																	
A	PLATING OPTIONS:																					
	1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
	2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
	3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
	4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																					
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					
	SHT5, 10 ADD OPTIONS EC NO: 168777 DRWN: GMENARLY CHK'D: SCHEONG REV APPR: KHLIM	2017/09/08 2017/12/01 2018/01/02	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®												
				MM	INCH	MM		NTS														
			4 PLACES	±	±	DRWN BY		DATE		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER												
			3 PLACES	±	±	GMENARLY		2015/04/15														
			2 PLACES	± 0.2	±	CHK'D BY		DATE														
			1 PLACES	±	±	CGOH		2015/06/29														
			0 PLACES	±	±	APPR BY		DATE		PRODUCT CUSTOMER DRAWING												
			ANGULAR TOL ± 3.0			KHLIM		2015/06/29														
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER			CUSTOMER										
A12			REV	A3					87831		SEE TABLE			GENERAL MARKET								
RELEASE STATUS					P1	RELEASE DATE		02.01.2018	09:07:52	DOCUMENT NUMBER								DOC TYPE		DOC PART	SHEET NUMBER	
SD-87831-0001					PSD		001		10 OF 13													
9		8		7		6		5		4		3		2		1						
FORMAT: Met-lega-master-ib-prod-A3 REVISION: C DATE: 2017/02/08																						

