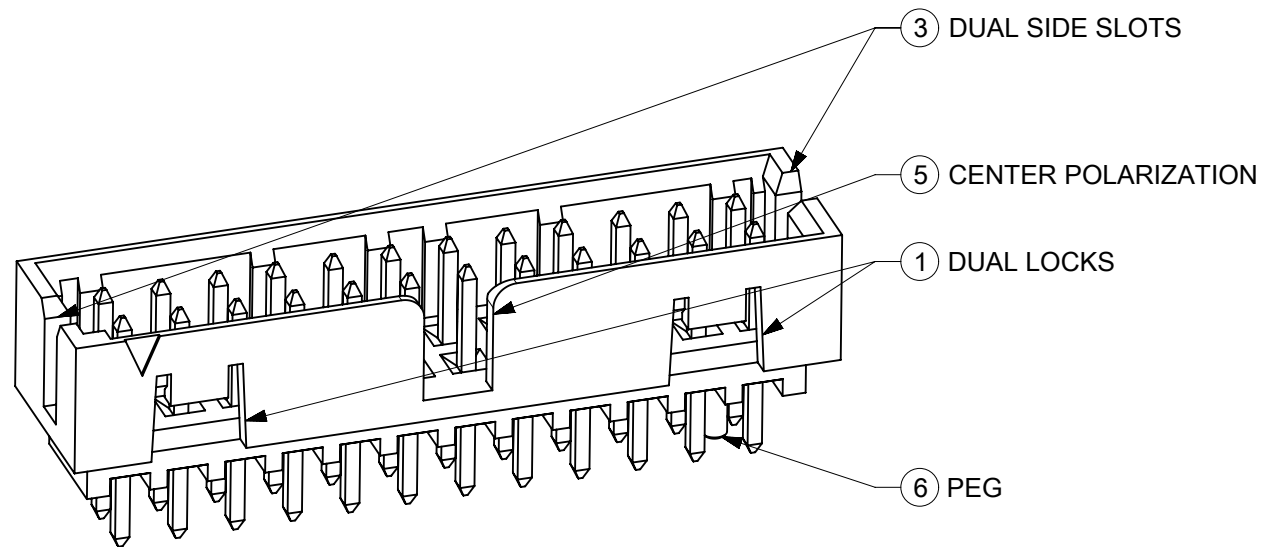
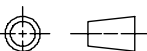


Diagram illustrating the 15-pin D-sub connector. The connector is shown from a perspective view, highlighting the single side slot (4) and the center lock (2).

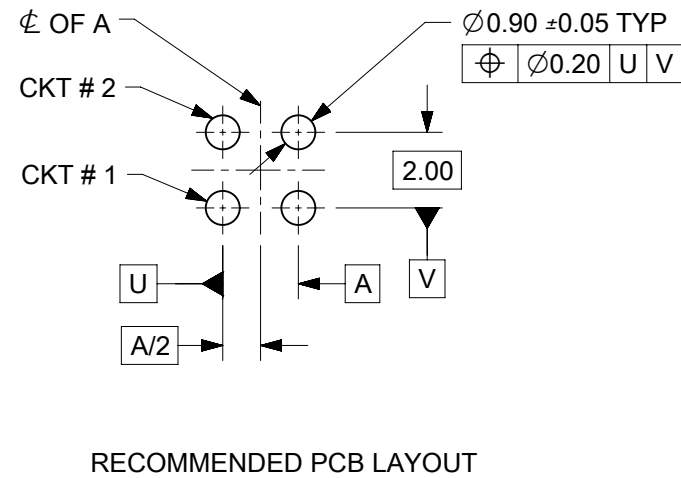
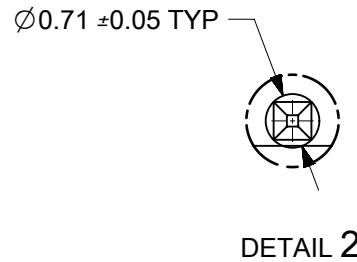
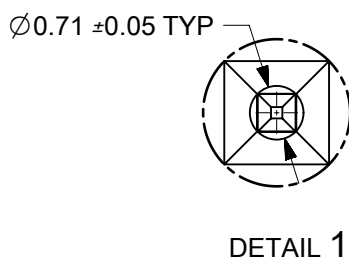
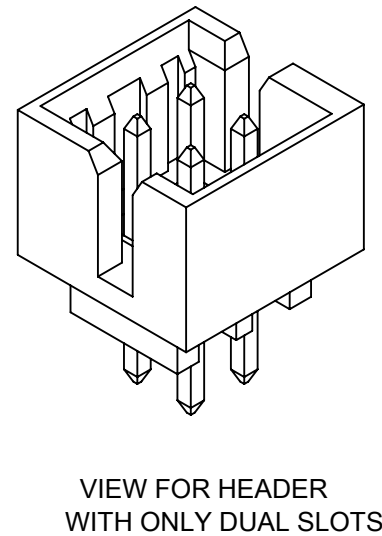
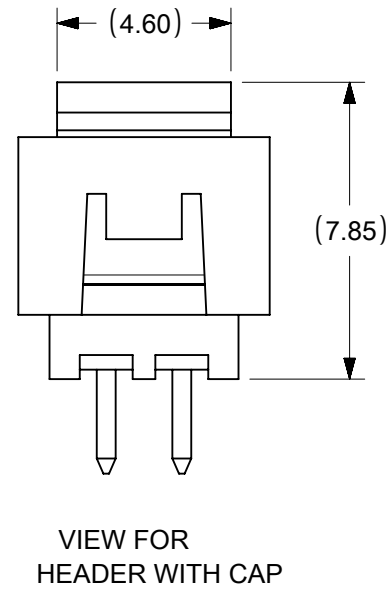
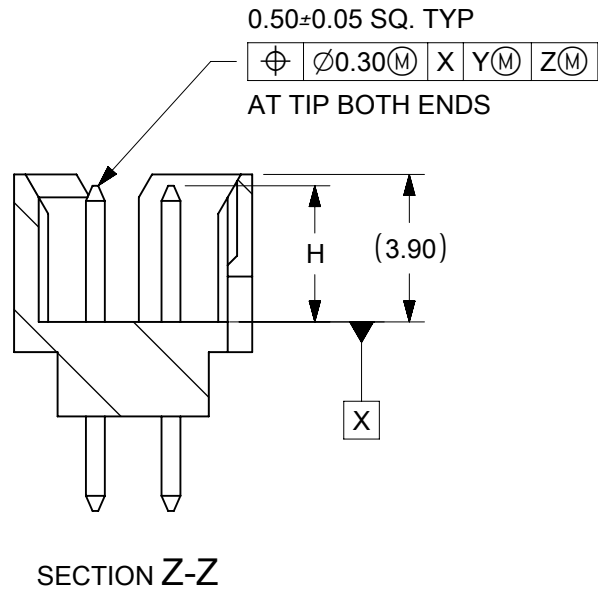
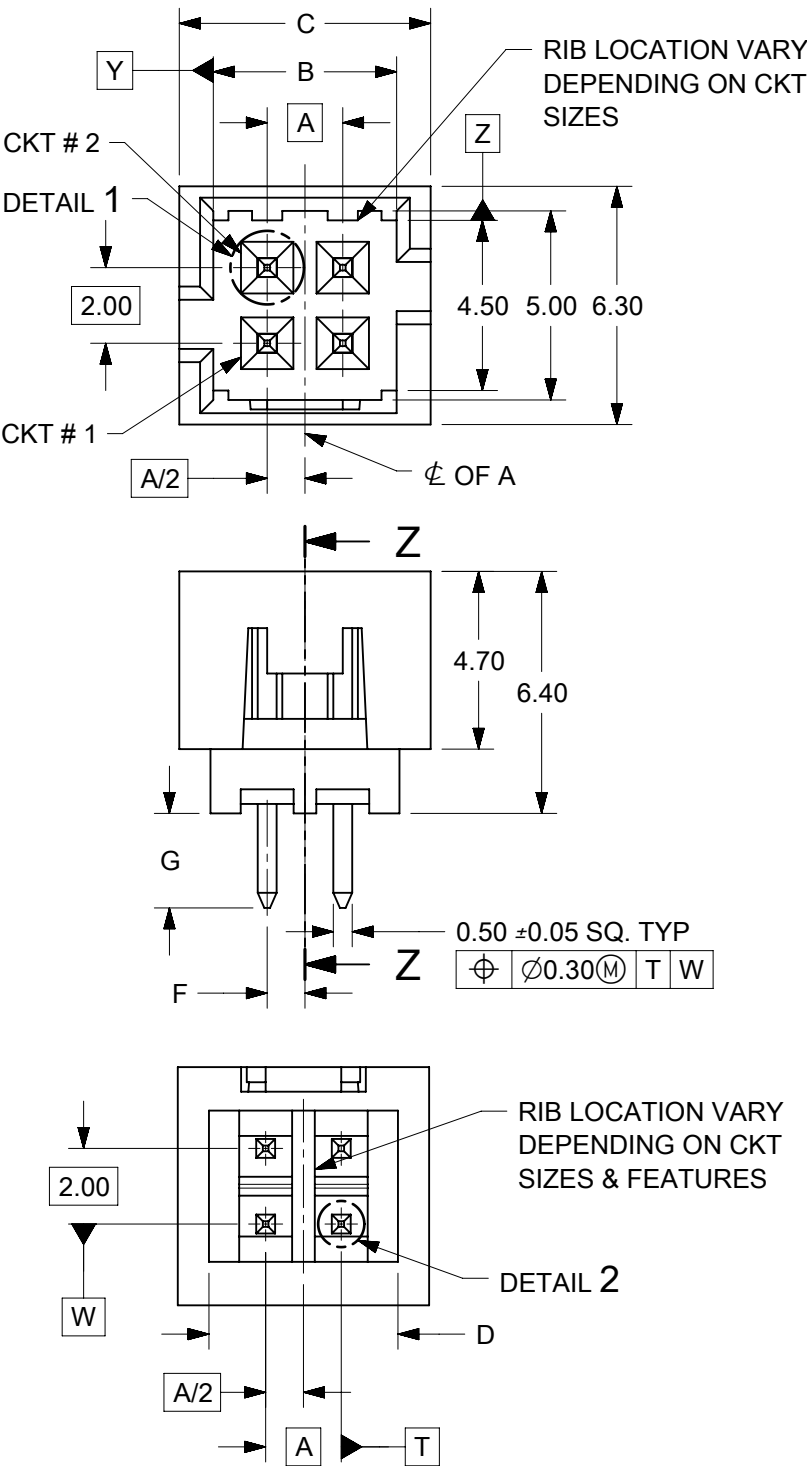


TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR:	PK-87831-002
87831-0419 87831-0645	
87831-5141 87831-5119	
87831-0443 87831-1011	
87831-5241 87831-1420	
87831-5242 87831-0643	

		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	

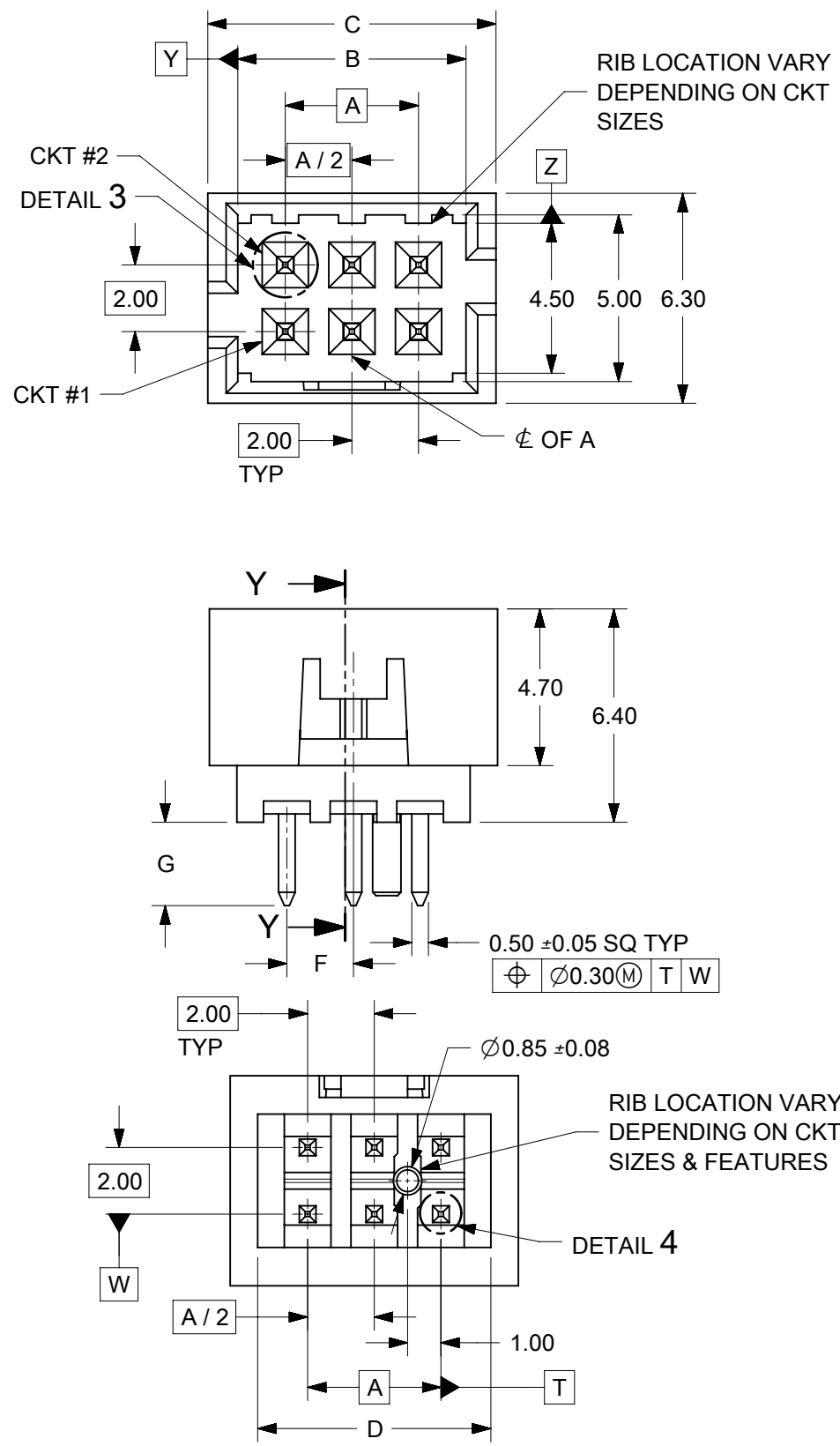
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHK'D: GJEEVANSURES APPR: ISHWARG	2018/07/26	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS MM		SCALE NTS		molex®								
	2018/07/26		MM	INCH	DRWN BY		DATE										
	2018/08/03	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										
		0 PLACES	±	±	KHLIM		2015/06/29										
		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			
	A15	REV								DOCUMENT NUMBER			DOC TYPE		DOC PART		SHEET NUMBER
									SD-87831-0001			PSD		001		1 OF 13	

4 CIRCUITS

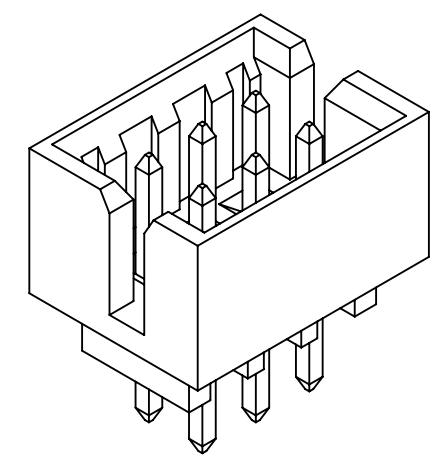
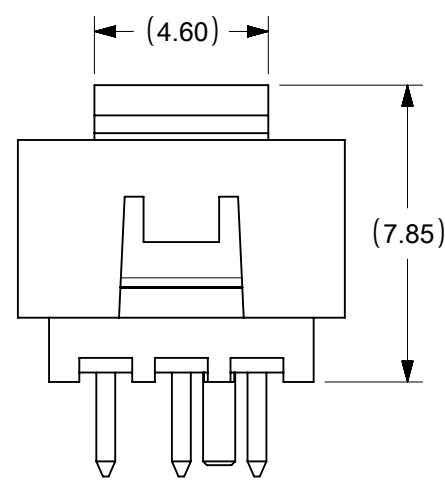
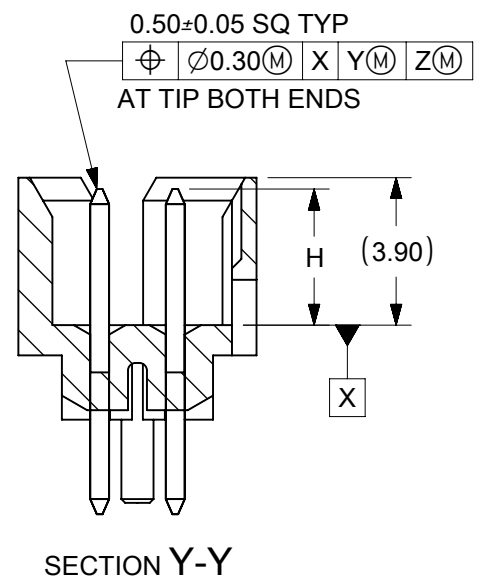


- NOTES:
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE
 2. FINISHES: REFER TO PLATING OPTIONS
 3. PRODUCT SPECIFICATION: PS-87831-027
 4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHK'D: GJEEVANSURES APPR: ISHWARG		2018/07/26 2018/07/26 2018/08/03	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				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3				SERIES	MATERIAL NUMBER	
A15	REV	87831	SEE TABLE		GENERAL MARKET							
		DOCUMENT NUMBER		DOC TYPE	DOC PART					SHEET NUMBER		
					SD-87831-0001		PSD	001	2 OF 13			

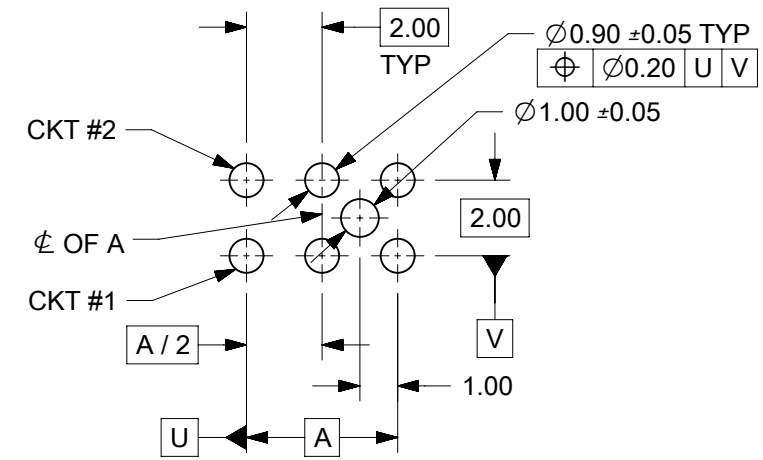


6 CIRCUITS



VIEW FOR HEADER WITH CAP

VIEW FOR HEADER WITH ONLY DUAL SLOTS

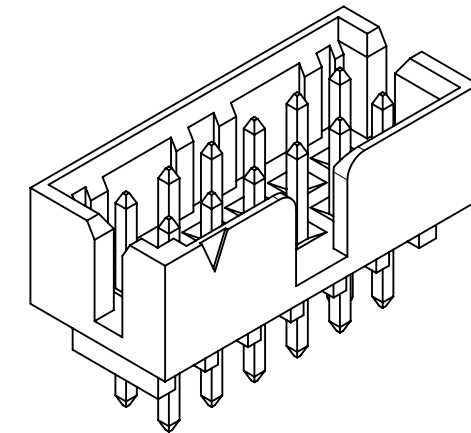
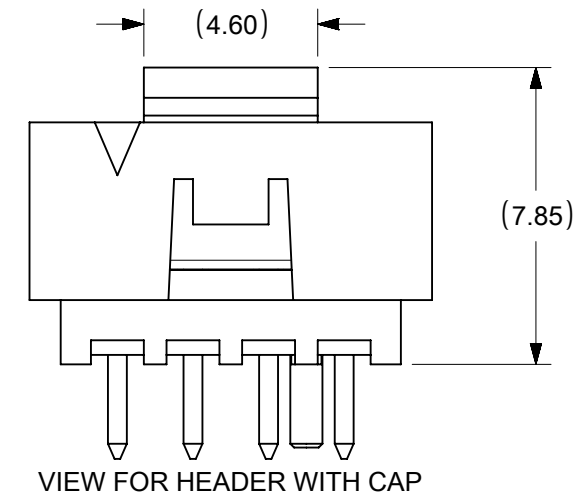
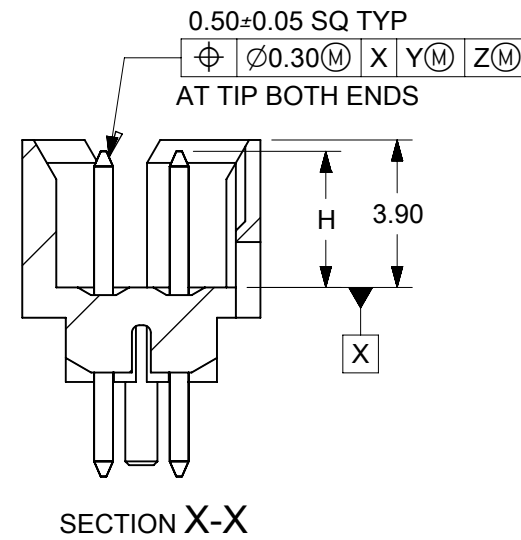
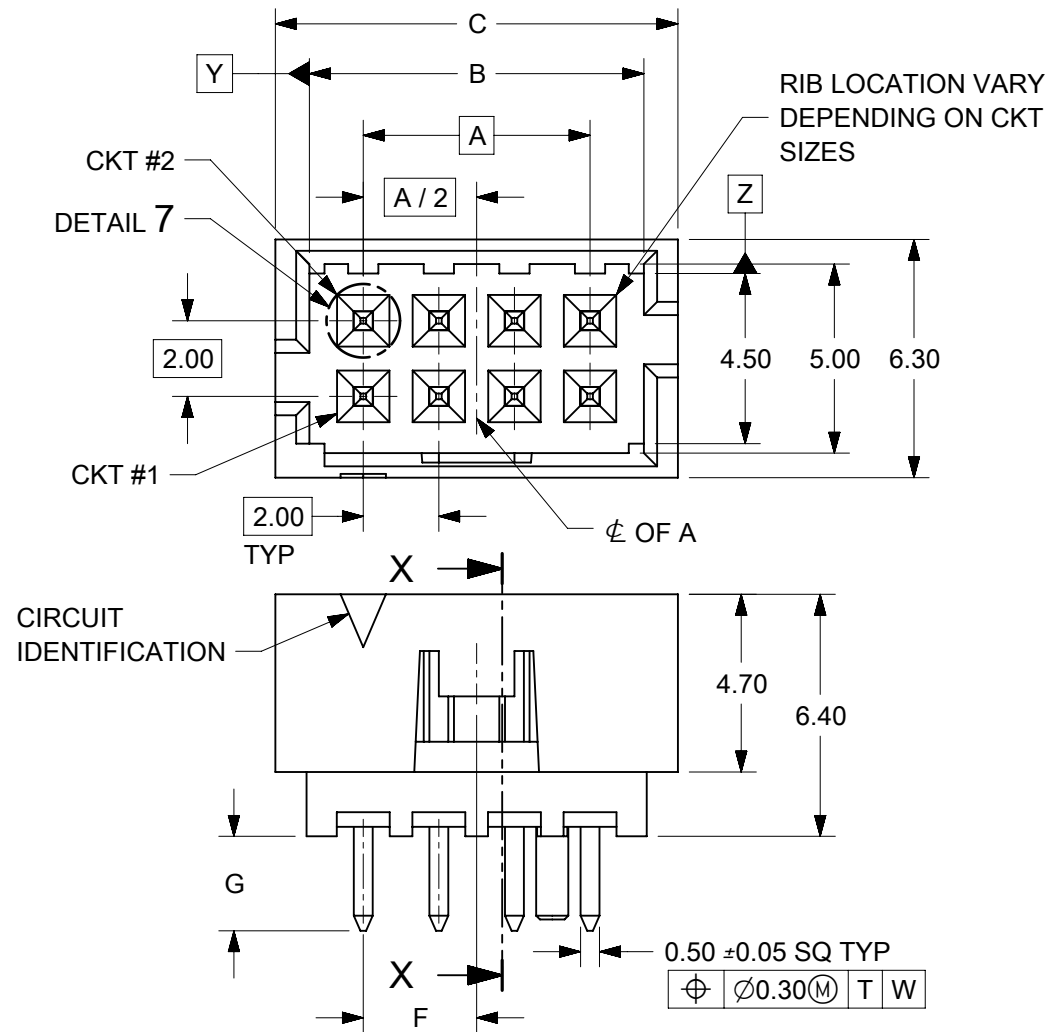


RECOMMENDED PCB LAYOUT

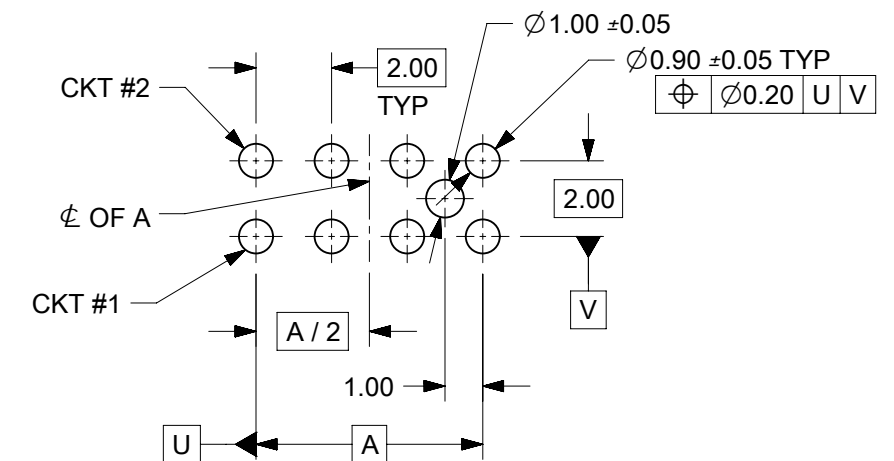
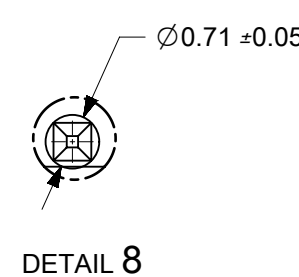
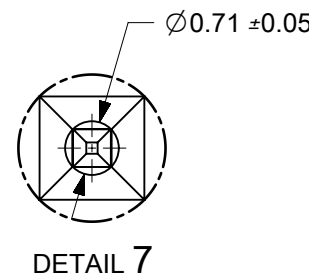
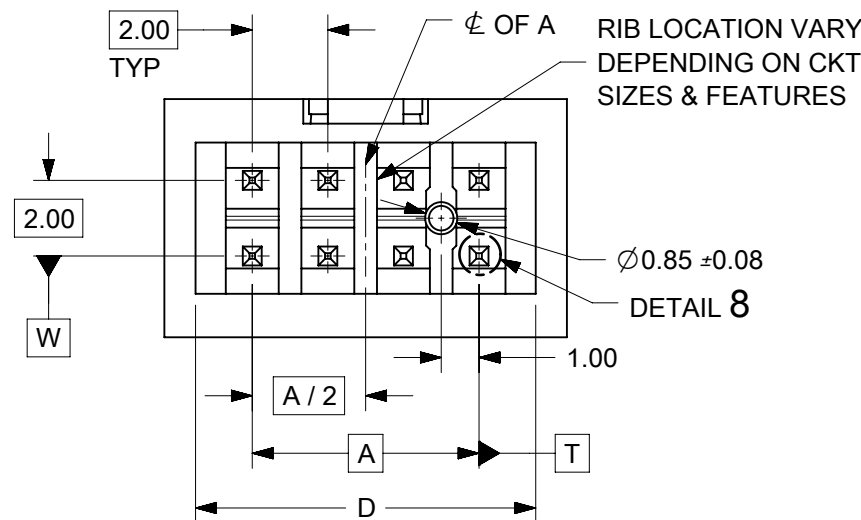
- NOTES:
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 2. FINISHES: REFER TO PLATING OPTIONS
 3. PRODUCT SPECIFICATION: PS-87831-027
 4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHK'D: GJEEVANSURES REV APPR: ISHWARG		2018/07/26	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE		molex®										
		2018/07/26			MM		NTS												
		2018/08/03		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						
A15		REV							SD-87831-0001		PSD		001	4 OF 13					

8 TO 12 CIRCUITS



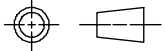
VIEW FOR HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



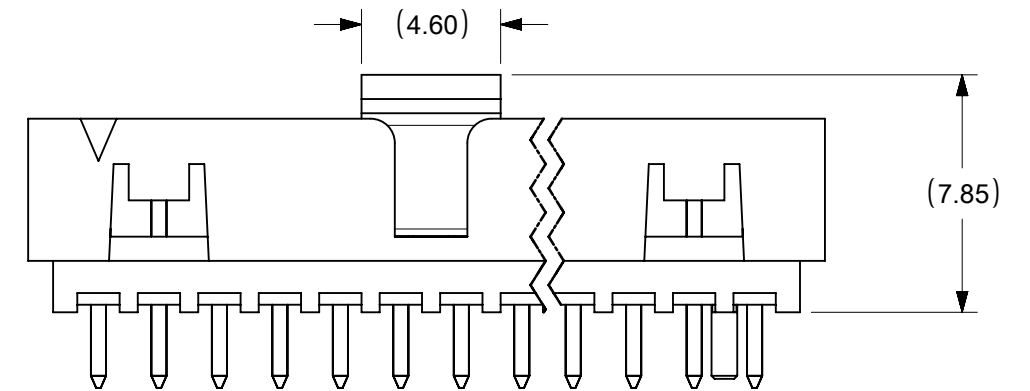
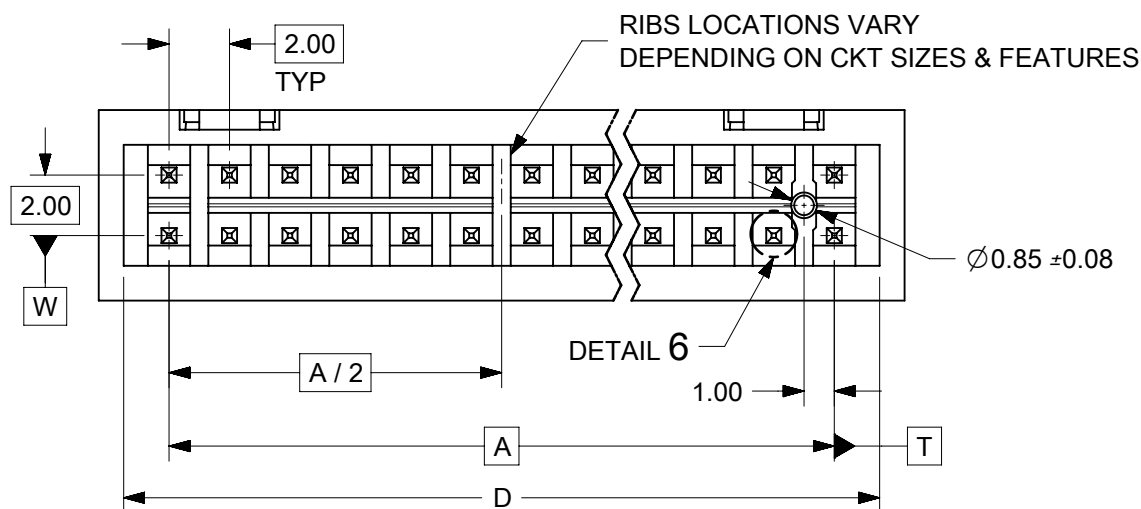
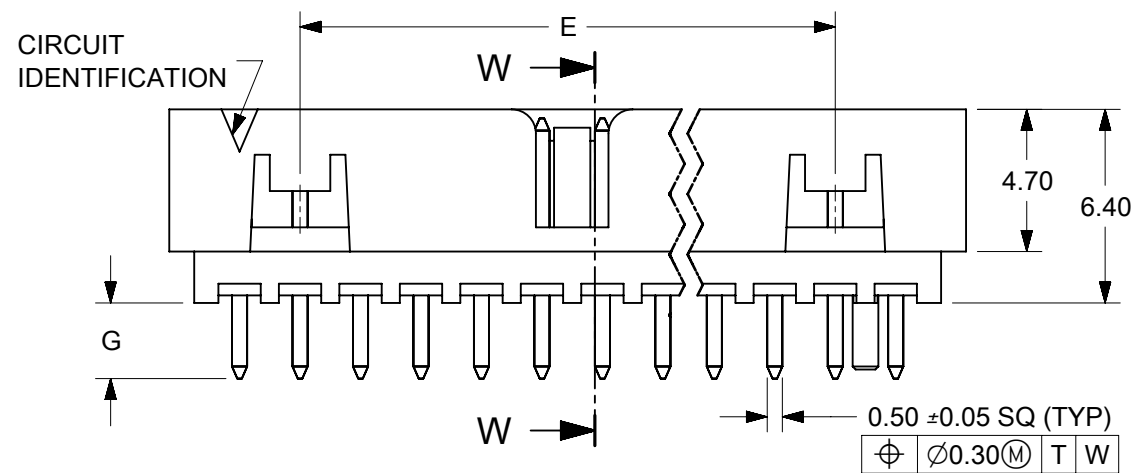
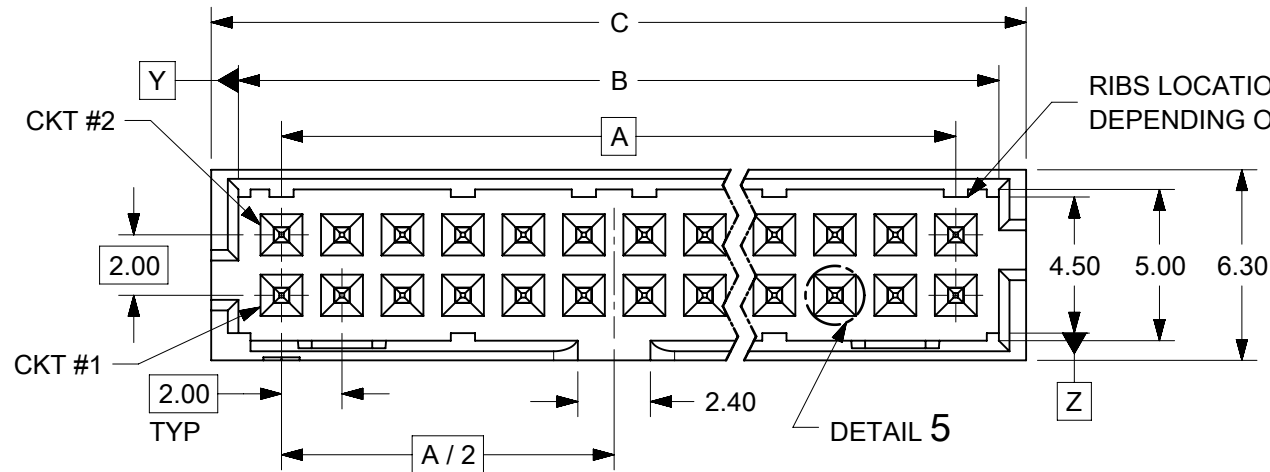
RECOMMENDED PCB LAYOUT

NOTES:

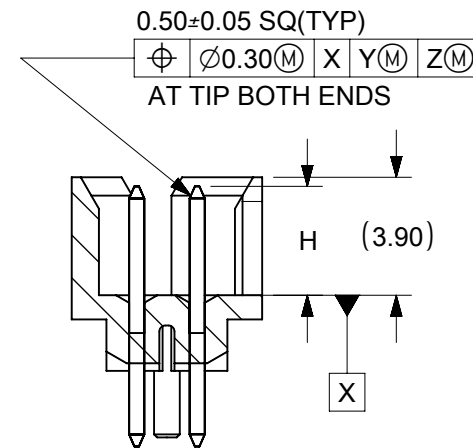
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHK'D: GJEEVANSURES REV APPR: ISHWARG	2018/07/26 2018/07/26 2018/08/03	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		
A15	REV								SD-87831-0001		PSD	001	6 OF 13		

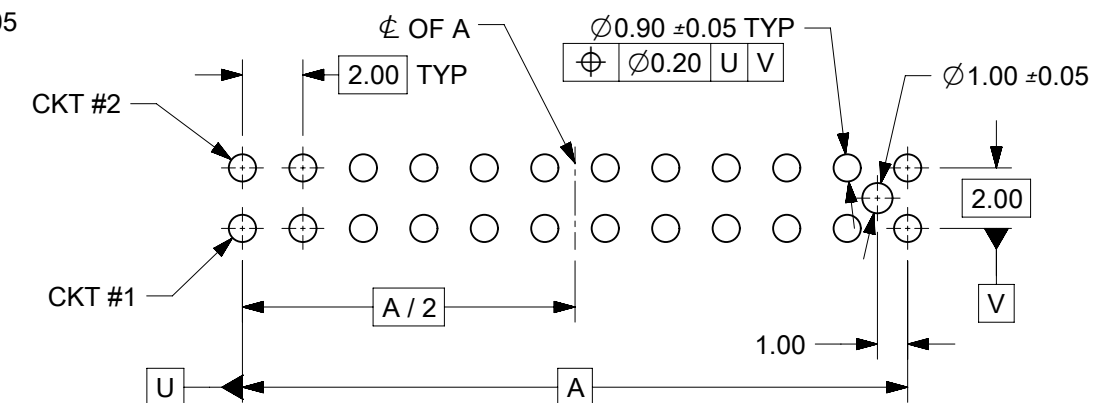
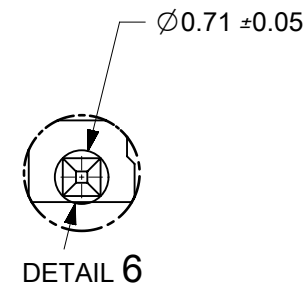
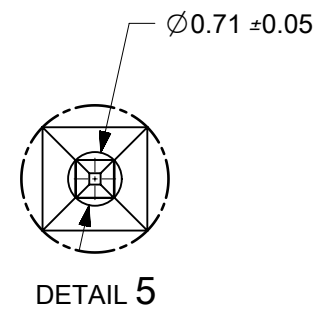
14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



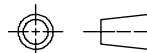
SECTION W-W



RECOMMENDED PCB LAYOUT

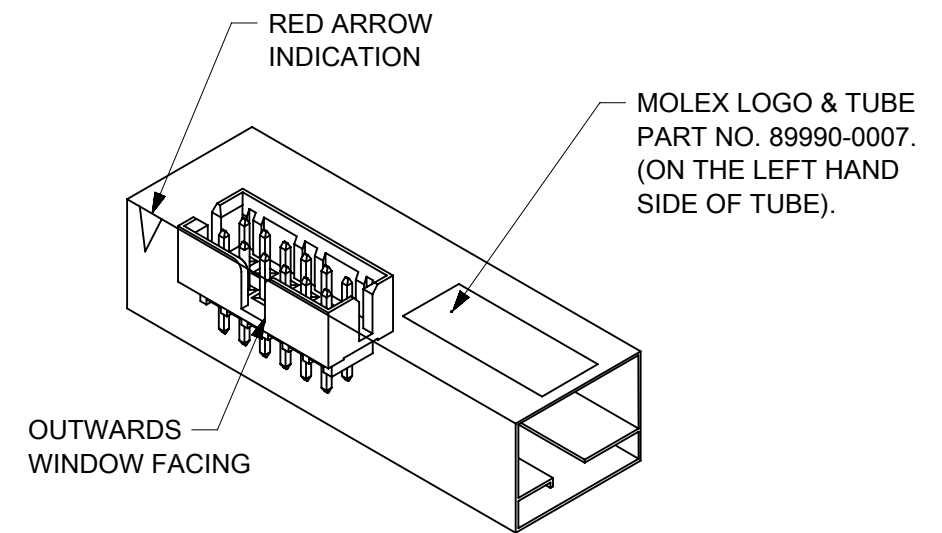
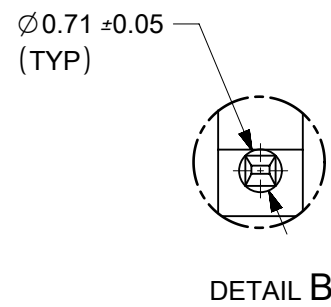
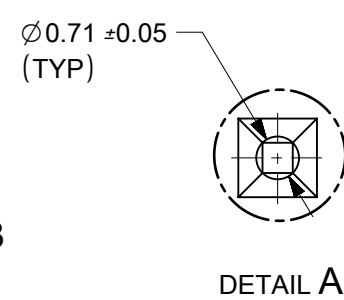
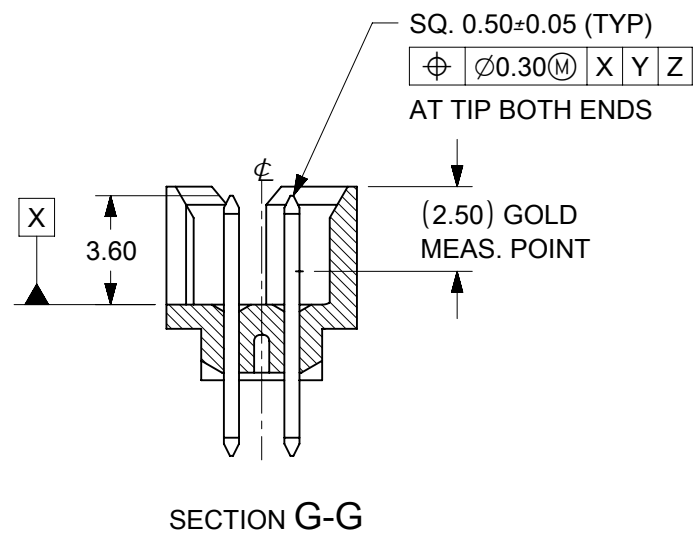
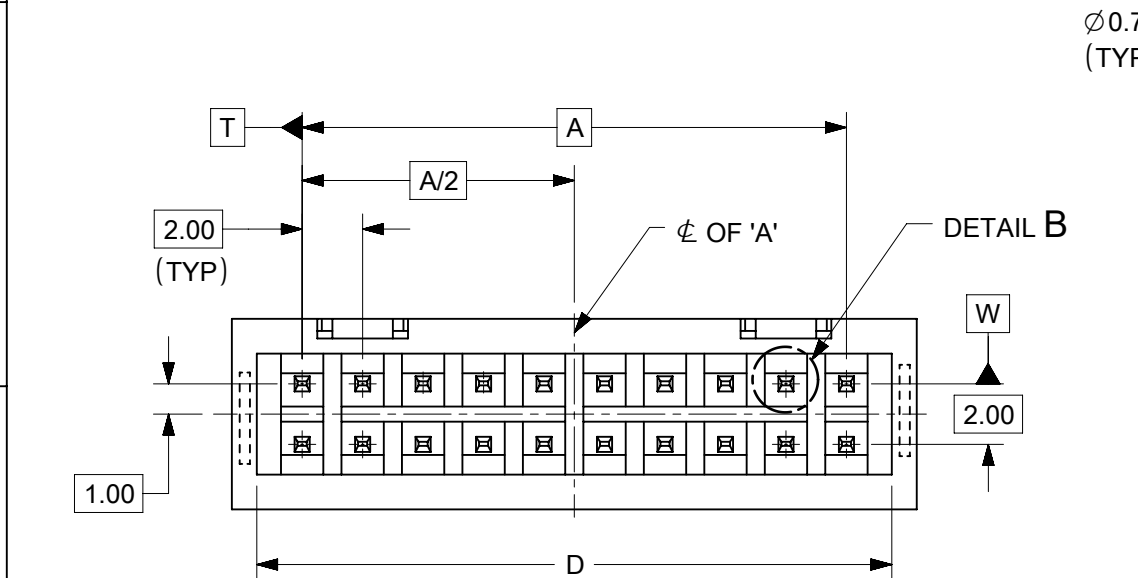
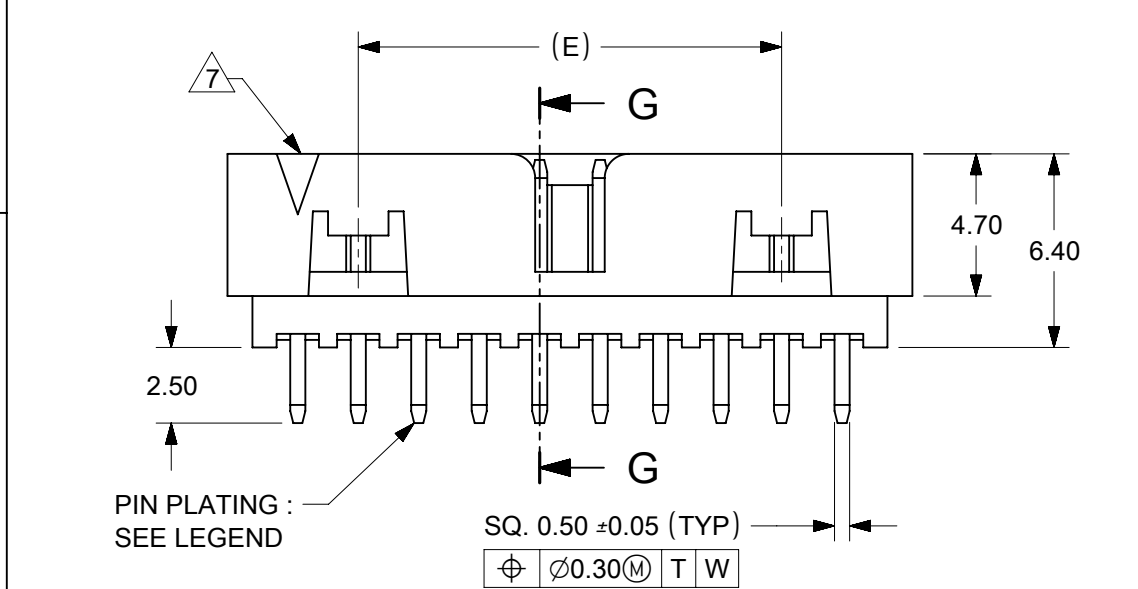
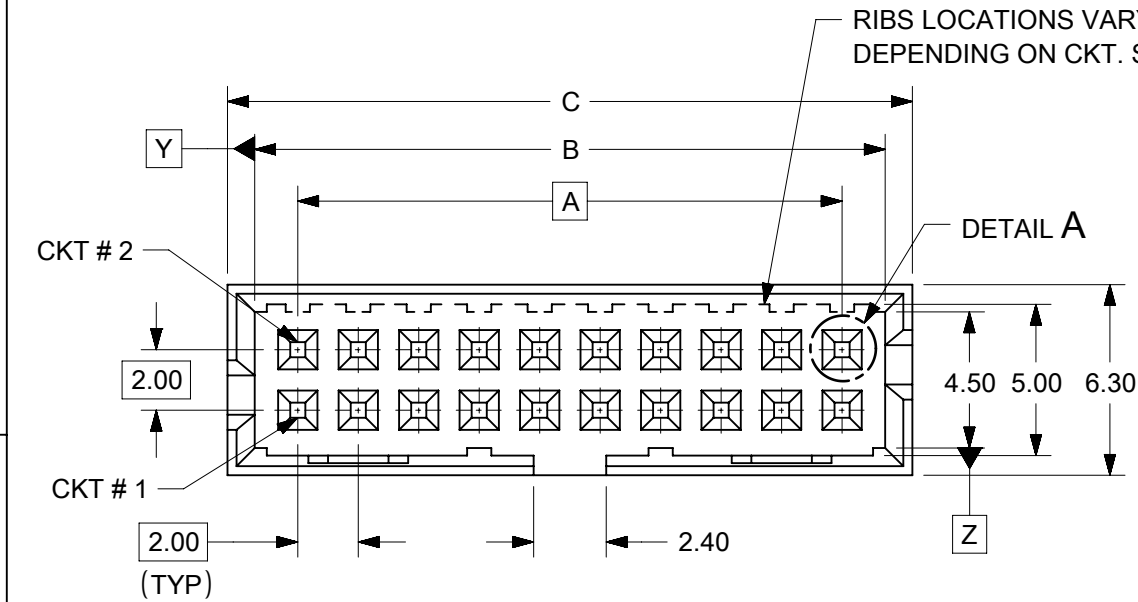
- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES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

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

ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHKD: GJEEVANSURES APPR: ISHWARG		2018/07/26		2018/07/26		2018/08/03		molex®						
		GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE							
			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							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3				SERIES		MATERIAL NUMBER		CUSTOMER	
A15		REV							87831		SEE TABLE		GENERAL MARKET	
						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	A14 87831-5564	2	YES	N.A	YES	N.A	YES	YES							2.50	3.60±0.20										
		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	A13 87831-2041	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																												
	ADD P/N 87831-2445	EC NO: 601974	2018/07/26	DRWN: SCS02	CHK'D: GJEEVANSURES	2018/07/26	APPR: ISHWARG	2018/08/03	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														
3 PLACES									±		±	CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING													
2 PLACES									±	0.2	±	CGOH		2015/06/29															
1 PLACES									±		±	APPR BY		DATE		SERIES 87831				MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET							
0 PLACES									±		±	KHLIM		2015/06/29															
ANGULAR TOL ± 3.0									DRAWING SIZE		THIRD ANGLE PROJECTION		DOCUMENT NUMBER SD-87831-0001				DOC TYPE PSD		DOC PART 001		SHEET NUMBER 10 OF 13								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									A3																				
RELEASE STATUS		P1	RELEASE DATE		2018/08/03		00:10:23		9		8		7		6		5		4		3		2		1				
FORMAT: Met-lega-master-ib-prod-A3		REVISION: C		DATE: 2017/02/08		9		8		7		6		5		4		3		2		1							

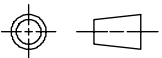
9		8		7		6		5		4		3		2		1			
32 TO 40 CIRCUITS																			
E	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
	32	87831-3219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20
		87831-3220	N.A	N.A	2														
		87831-3221	N.A	N.A	3														
		87831-3236	N.A	N.A	4														
		87831-3228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
87831-3229	N.A	N.A	3																
D	34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20
		87831-3420	N.A	N.A	2														
		87831-3421	N.A	N.A	3														
		87831-3436	N.A	N.A	4														
		87831-3428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-3429	N.A	N.A	3														
		87831-3435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50	
C	36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20
		87831-3620	N.A	87831-5564	2														
		87831-3621	N.A	N.A	3														
		87831-3636	N.A	N.A	4														
		87831-3628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-3629	N.A	N.A	3														
	38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A							36.00	
87831-3820		N.A	N.A	2															
87831-3821		N.A	N.A	3															
87831-3836		N.A	N.A	4															
87831-3828		N.A	N.A	2	YES	N.A	YES	N.A	YES	YES	2.50								
87831-3829		N.A	N.A	3															
B	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
		87831-4020	N.A	N.A	2														
		87831-4021	N.A	N.A	3														
		87831-4036	N.A	N.A	4														
		87831-4028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-4029	N.A	N.A	3														
		87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
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. RELEASE STATUS P1 RELEASE DATE 2018/08/03 00:10:23 ADD P/N 87831-2445 EC NO: 601974 DRWN: SCS02 CHK'D: GJEEVANSURES REV / APPR: ISHWARG 2018/07/26 2018/07/26 2018/08/03 GENERAL TOLERANCES (UNLESS SPECIFIED) MM INCH 4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.2 ± 1 PLACES ± ± 0 PLACES ± ± ANGULAR TOL ± 3.0 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION UNITS MM SCALE NTS DRWN BY DATE GMENARLY 2015/04/15 CHK'D BY DATE CGOH 2015/06/29 APPR BY DATE KHLIM 2015/06/29 DRAWING SIZE THIRD ANGLE PROJECTION A3 SERIES MATERIAL NUMBER CUSTOMER 87831 SEE TABLE GENERAL MARKET DOCUMENT NUMBER DOC TYPE DOC PART SHEET NUMBER SD-87831-0001 PSD 001 12 OF 13																			
9		8		7		6		5		4		3		2		1			



ORIENTATION OF PART IN TUBE
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)

NOTES:

- FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
- MATERIAL :
HOUSING : GLASS-FILLED NYLON, UL94V-0, COLOR BLACK.
PIN : 0.50mm SQ. PHOSPHOR BRONZE.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 & 6
- WITH CENTRE POLARISATION SLOT FOR 87831-5119 & 87831-6120.
- NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
- CKT 4 AND 6 HAS NO IDENTIFICATION TAG.
- REFER TO PART 87831-**4* FOR CENTRE LOCKING SLOT OPTION FOR 4 TO 12 CKT.
- THIS HEADER MATES WITH MOLEX :
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
b) 2mm MILLIGRID DUAL ROW IDT, 87568 SERIES.
c) 2mm MILLIGRID DUAL ROW: 79107 (GOLD PLATED), 78787 (TIN PLATED)
- PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.
- PACKAGING SPECIFICATION : FOR TUBE : PK-87831-001
FOR T&R : PK-87831-300

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
MIGRATED TO ECTR EC NO: 170249 DRWN: MUM CHKD: CD REV APPR: GGA	2017/11/16 2018/02/07 2018/02/08	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®						
					MM		NTS								
			MM	INCH	DRWN BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF						
		4 PLACES	±	±	ATSEE		2003/10/03								
		3 PLACES	±	±	CHK'D BY		DATE								
		2 PLACES	± 0.2	±	KCLING		2003/11/07								
		1 PLACES	±	±	APPR BY		DATE		PRODUCT CUSTOMER DRAWING						
		0 PLACES	±	±	SKTOH		2003/11/07								
		ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER			CUSTOMER	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3				87831		SEE TABLE			GENERAL MARKET	
DOCUMENT NUMBER									DOC TYPE		DOC PART	SHEET NUMBER			
C3	REV							SD-87831-011			PSD		001	1 OF 3	

ASSY. P/N IN TUBE	CKT SIZE	DIMENSION				
		A	B	C	D	E
87831-04** 	4	2.00	4.85	6.65	5.00	----
87831-06** 	6	4.00	6.85	8.65	7.00	----
87831-08**	8	6.00	8.85	10.65	9.00	----
87831-10**	10	8.00	10.85	12.65	11.00	----
87831-12**	12	10.00	12.85	14.65	13.00	----
87831-14**	14	12.00	14.85	16.65	15.00	8.00
87831-16**	16	14.00	16.85	18.65	17.00	10.00
87831-18**	18	16.00	18.85	20.65	19.00	12.00
87831-20**	20	18.00	20.85	22.65	21.00	14.00
87831-22**	22	20.00	22.85	24.65	23.00	16.00
87831-24**	24	22.00	24.85	26.65	25.00	18.00
87831-26**	26	24.00	26.85	28.65	27.00	20.00
87831-28**	28	26.00	28.85	30.65	29.00	22.00
87831-30**	30	28.00	30.85	32.65	31.00	24.00
87831-32**	32	30.00	32.85	34.65	33.00	26.00
87831-34**	34	32.00	34.85	36.65	35.00	28.00
87831-36**	36	34.00	36.85	38.65	37.00	30.00
87831-38**	38	36.00	38.85	40.65	39.00	32.00
87831-40**	40	38.00	40.85	42.65	41.00	34.00
87831-42**	42	40.00	42.85	44.65	43.00	36.00
87831-44**	44	42.00	44.85	46.65	45.00	38.00
87831-46**	46	44.00	46.85	48.65	47.00	40.00
87831-48**	48	46.00	48.85	50.65	49.00	42.00
87831-50**	50	48.00	50.85	52.65	51.00	44.00

OTHER OPTIONS

ASSY. P/N IN T&R	ASSY. P/N IN TUBE	CKT SIZE	PLATING OPTIONS	VOID POSITION	DIMENSIONS					
					A	B	C	D	E	(G)
----	87831-5120	12	2	1	10.00	12.85	14.65	13.00	----	----
----	87831-5220	44	2	20	42.00	44.85	46.65	45.00	38.00	----
----	87831-5320	24	2	13	22.00	24.85	26.65	25.00	18.00	----
----	87831-5420	34	2	3	32.00	34.85	36.65	35.00	28.00	----
----	87831-5520	20	2	20	18.00	20.85	22.65	21.00	14.00	----
----	87831-5620	28	2	13	26.00	28.85	30.65	29.00	22.00	----
----	87831-5720	34	2	15	32.00	34.85	36.65	35.00	28.00	----
----	87831-5820	40	2	25	38.00	40.85	42.65	41.00	34.00	----
----	87831-5920	20	2	13	18.00	20.85	22.65	21.00	14.00	----
----	87831-6020	24	2	20	22.00	24.85	26.65	25.00	18.00	----
----	87831-5119 	6	1	----	4.00	6.85	8.65	7.00	----	----
----	87831-6120 	6	2	1	4.00	6.85	8.65	7.00	----	----
----	87831-6320	20	2	19	18.00	20.85	22.65	21.00	14.00	----
87831-5554	87831-1420	14	2	----	12.00	14.85	16.65	15.00	8.00	10.35

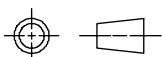
PART NUMBER LEGEND:

87831 - * * * *

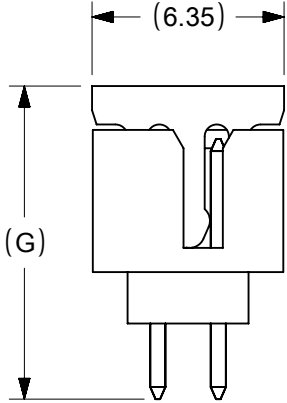
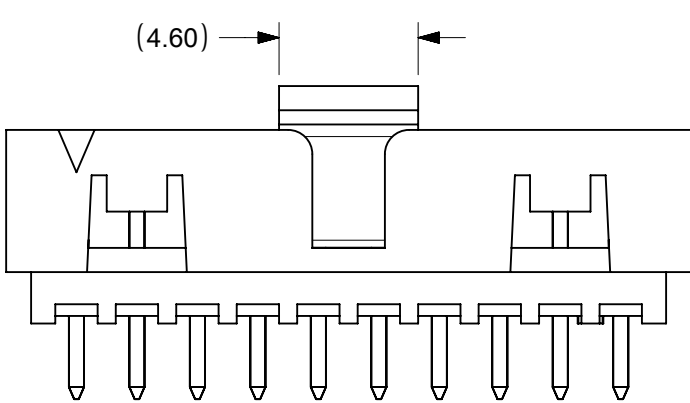
PLATING OPTION —

OPTION 1	**19 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 2	**20 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 3	**21 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.
OPTION 4	**36 - 2.50µm/100µin MIN. TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

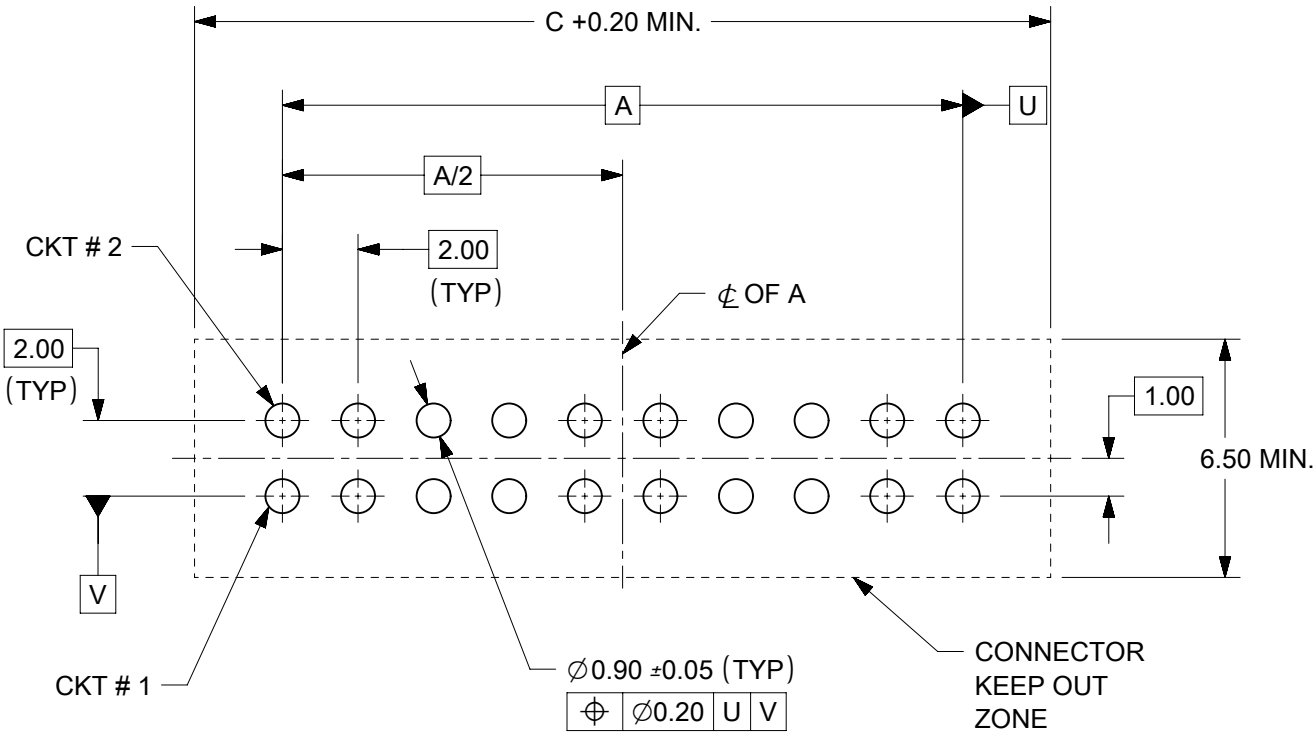
RELEASE STATUS	P1	RELEASE DATE	2018/02/08	14:23:51
----------------	----	--------------	------------	----------

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					
MIGRATED TO ECTR		EC NO: 170249 DRWN: MUM CHKD: CD APPR: GGA		2017/11/16 2018/02/07 2018/02/08		GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®								
									MM		NTS										
								MM	INCH	DRWN BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF							
						4 PLACES	±		±	ATSEE		2003/10/03									
						3 PLACES	±		±	CHK'D BY		DATE									
						2 PLACES	± 0.2		±	KCLING		2003/11/07									
						1 PLACES	±		±	APPR BY		DATE									
						0 PLACES	±		±	SKTOH		2003/11/07		PRODUCT CUSTOMER DRAWING							
						ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION			SERIES		MATERIAL NUMBER			CUSTOMER		
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			A3					87831		SEE TABLE			GENERAL MARKET		
DOCUMENT NUMBER			DOC TYPE		DOC PART									SHEET NUMBER							
C3		REV							SD-87831-011			PSD		001		2 OF 3					

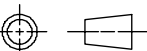
CAP INFORMATION



ILLUSTRATED VIEWS WITH CAP



RECOMMENDED PCB PATTERN

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		
MIGRATED TO ECTR		2017/11/16 2018/02/07 2018/02/08		GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®							
							MM		NTS									
				4 PLACES		±	MM	±	DRWN BY		DATE		MGRID, SHROUDED HEADER VERTICAL W/SLOT & STANDOFF					
				3 PLACES		±	INCH	±	ATSEE		2003/10/03							
				2 PLACES		± 0.2	CHK'D BY		DATE									
				1 PLACES		±	KCLING		2003/11/07									
				0 PLACES		±	APPR BY		DATE									
				ANGULAR TOL = 3.0		SKTOH		2003/11/07		PRODUCT CUSTOMER DRAWING								
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE		THIRD ANGLE PROJECTION										
				C3		REV			A3				87831		SEE TABLE			GENERAL MARKET
						DOCUMENT NUMBER				DOC TYPE		DOC PART		SHEET NUMBER				
						SD-87831-011				PSD		001		3 OF 3				