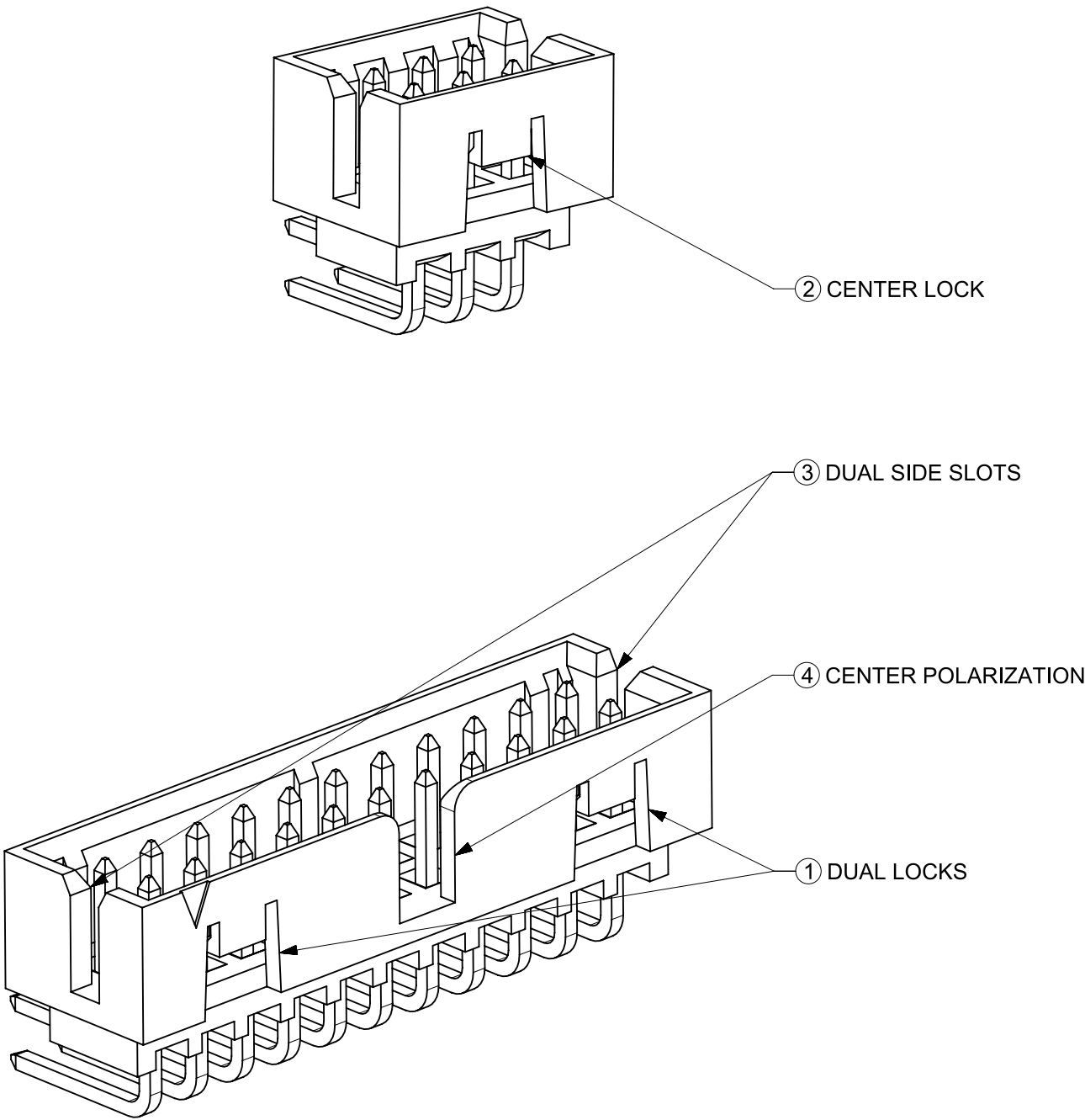


FEATURES SELECTION GUIDE



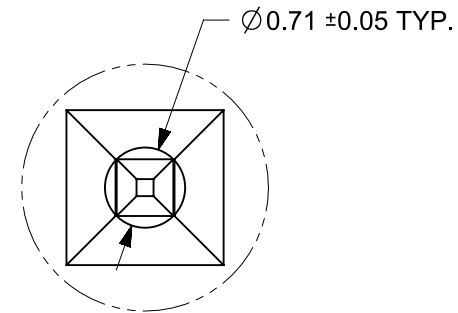
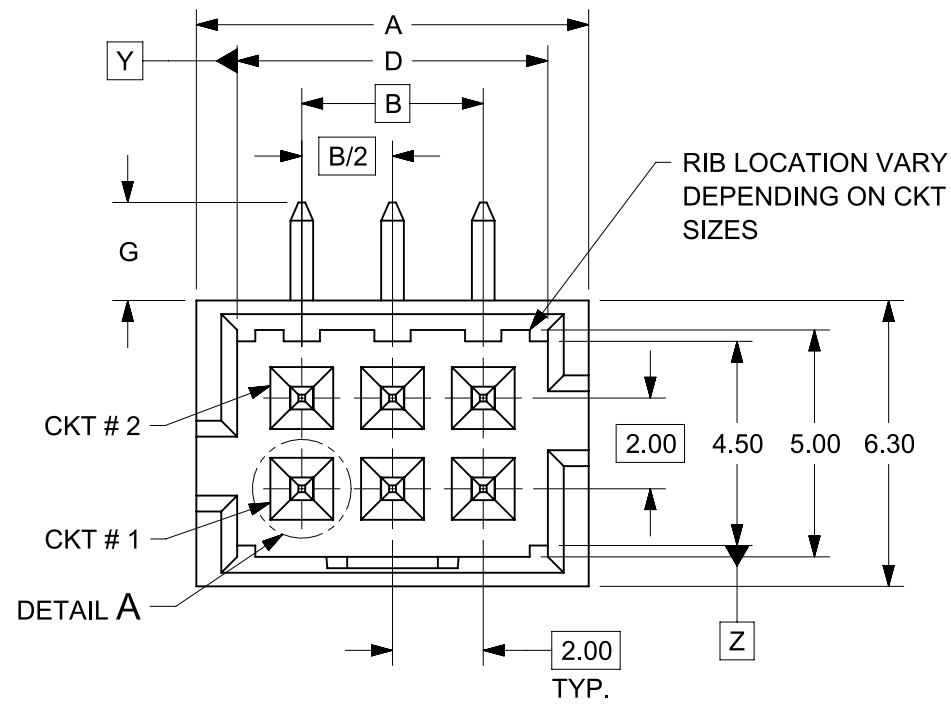
CIRCUIT SIZE	FEATURES				
	FRICTION LOCKS		③ DUAL SIDE SLOTS	④ CENTER POLARIZATION	SHEET NO
	① DUAL	② CENTER			
4 TO 6	N.A	N.A	YES	N.A	2 - 3
	N.A	YES	YES	N.A	
8 TO 12	N.A	N.A	YES	YES	4 - 5
	N.A	YES	YES	N.A	
14 TO 50	YES	N.A	YES	YES	6 - 9
	N.A	N.A	YES	YES	

PACKAGING SPECIFICATION TABLE

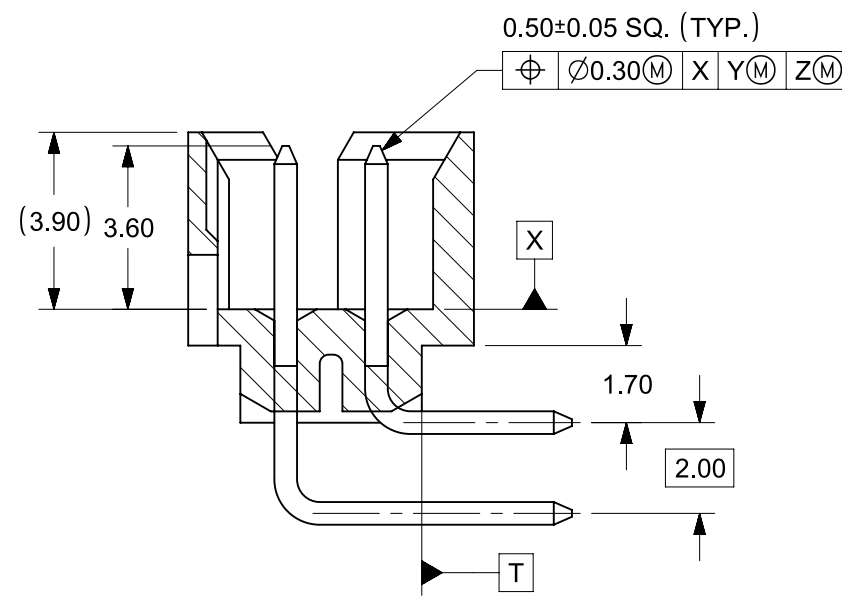
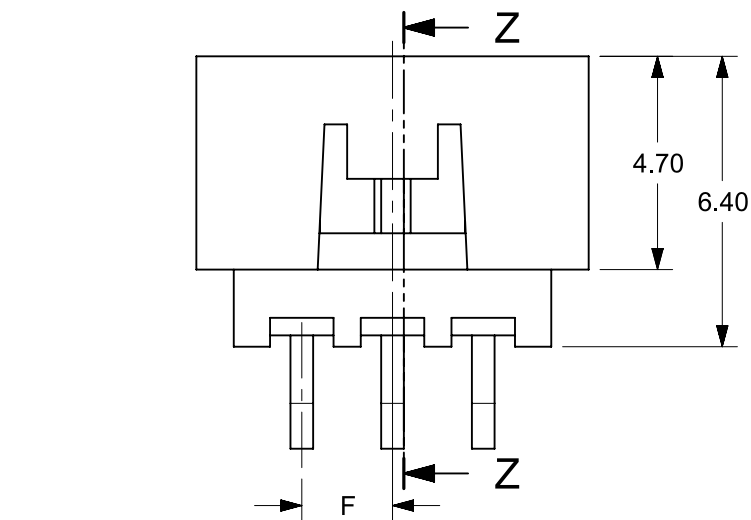
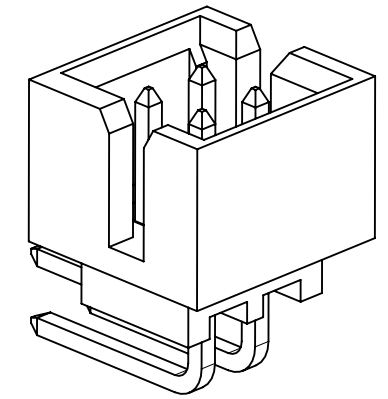
TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR: 87833-0861 87833-1420	PK-87831-002

FUNCTIONAL 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: Adding New Part Numbers					
		mm		5:1							
$\nabla_A = 0$		GENERAL TOLERANCES (UNLESS SPECIFIED)						molex MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE PRODUCT CUSTOMER DRAWING			
$\nabla_C = 0$											
$\nabla_P = 0$											
DIVISIONAL SYMBOLS											
		ANGULAR TOL ± 3°				STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10					
		4 PLACES		±							
		3 PLACES		±							
		2 PLACES		± 0.200							
		1 PLACE		±		THIRD ANGLE PROJECTION					
		0 PLACES		±						DRAWING	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						A3-SIZE		87833	

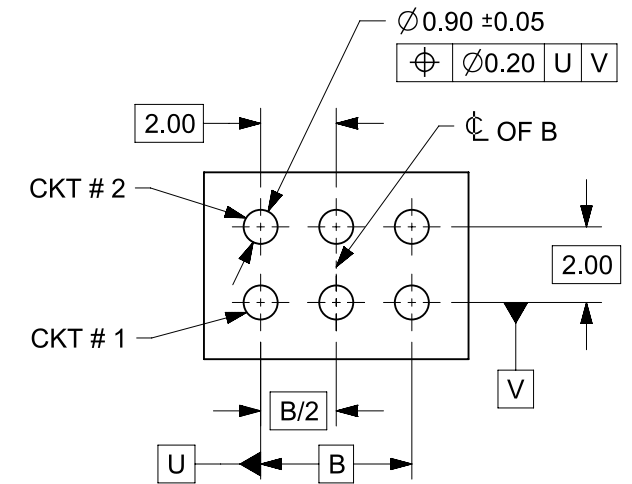
4 TO 6 CIRCUITS



DETAIL A



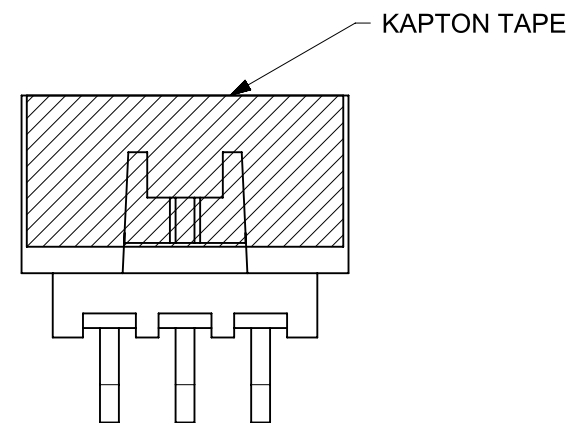
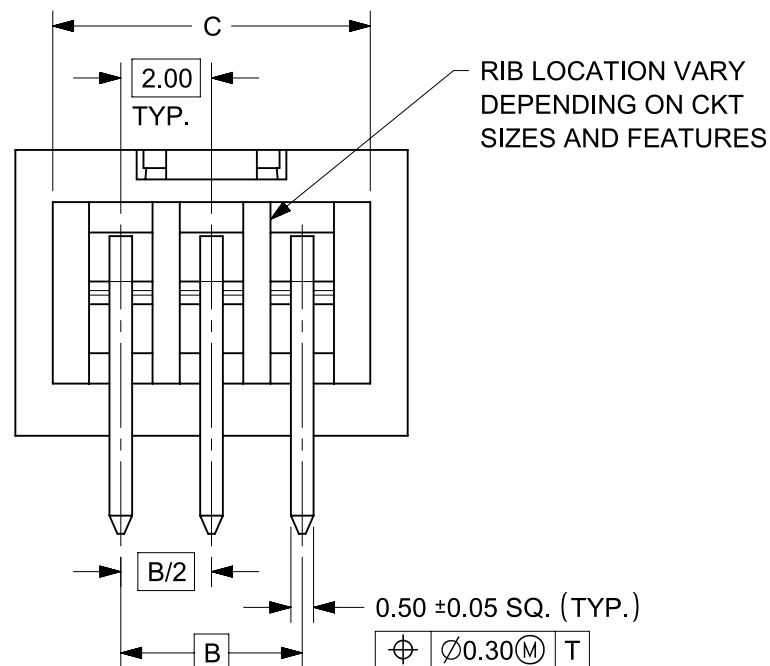
SECTION Z-Z



RECOMMENDED PCB LAYOUT

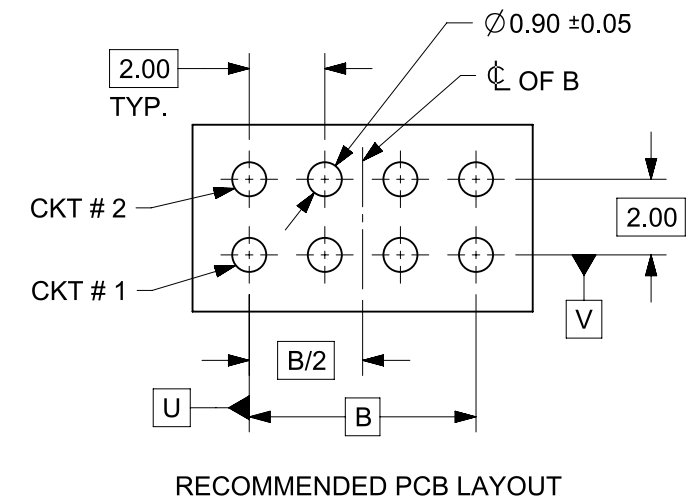
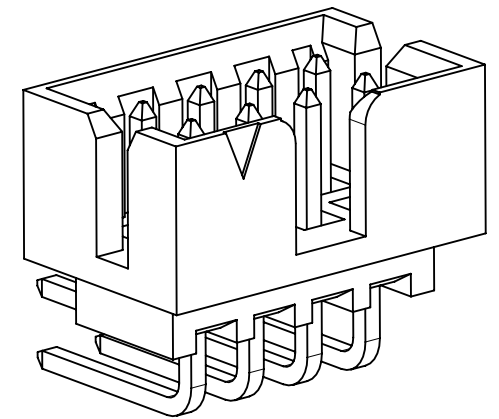
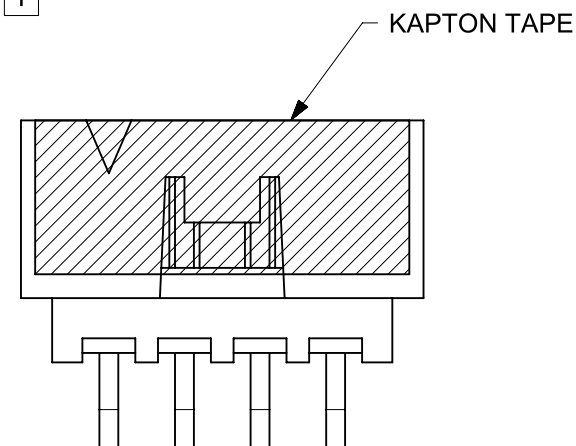
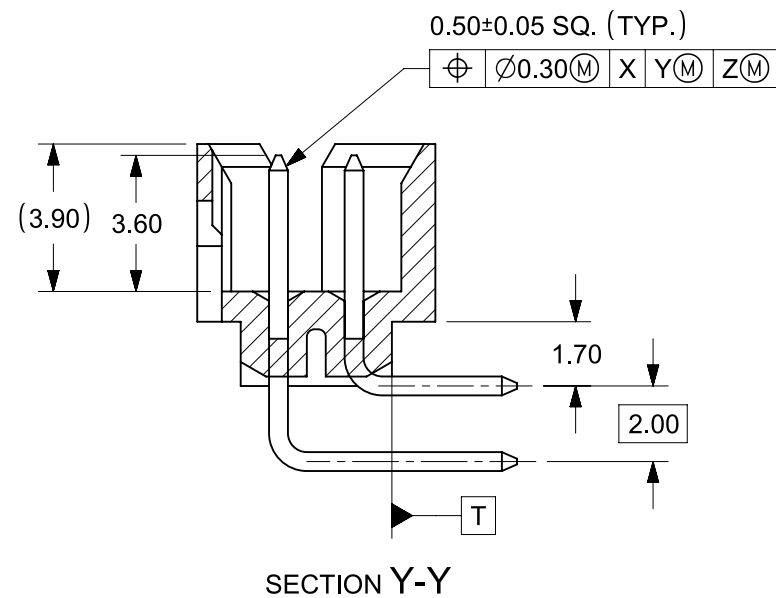
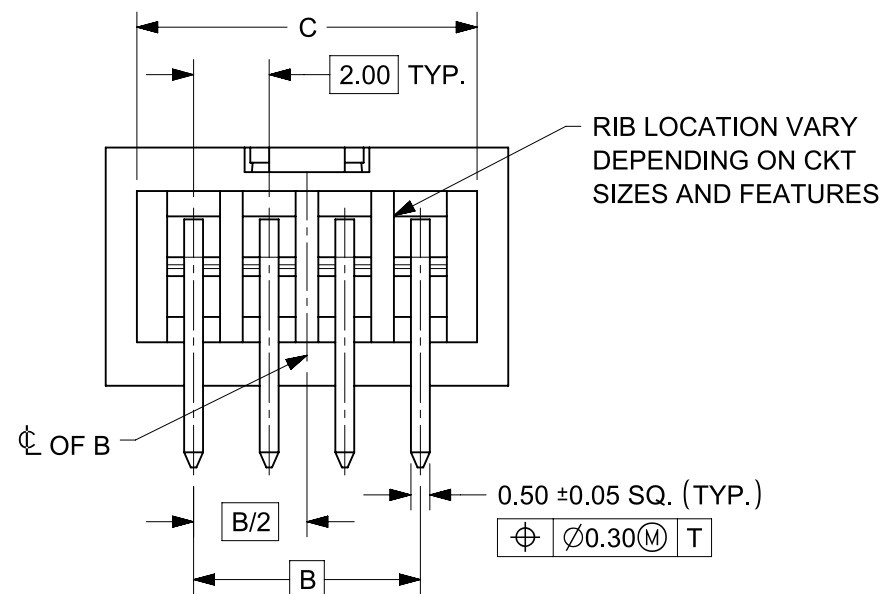
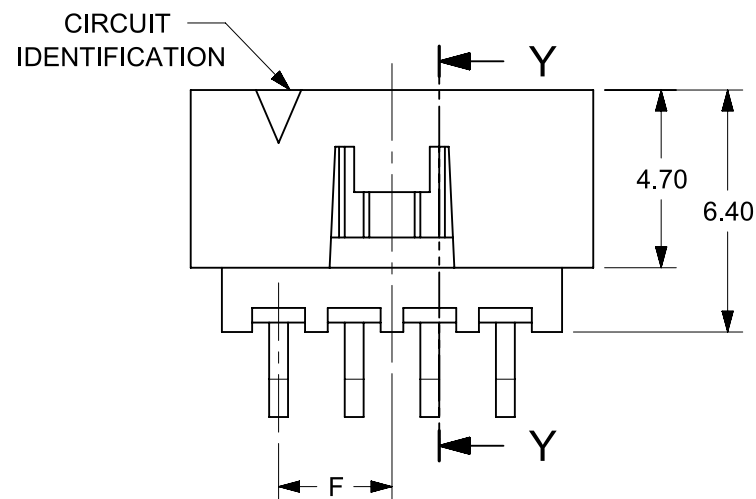
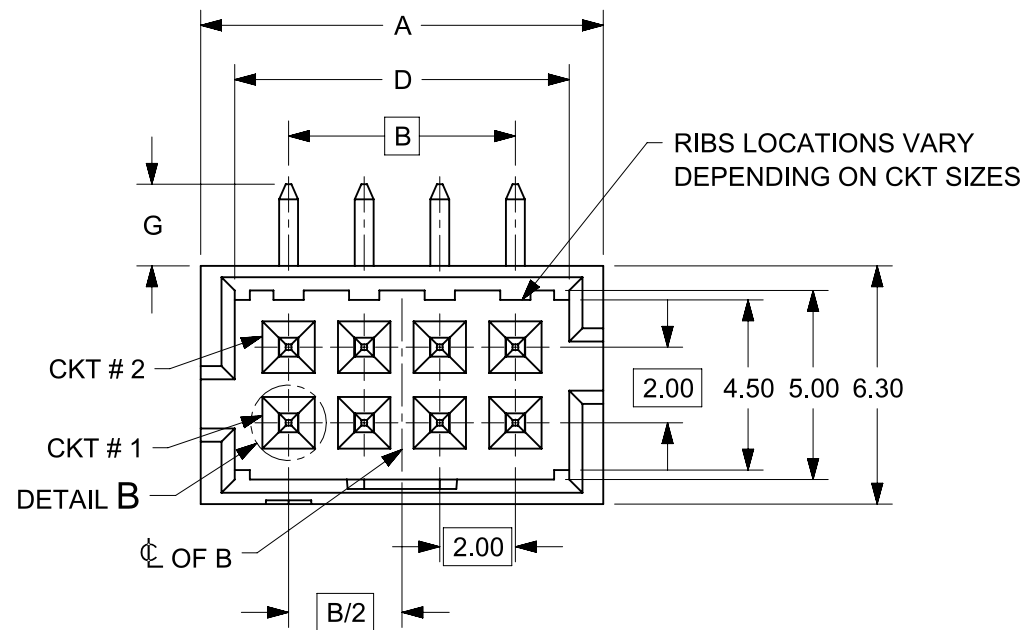
NOTES:

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)
6. FOR ILLUSTRATION PURPOSE, 6 CIRCUITS HEADER IS SHOWN.

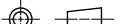


FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
	DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers			molex					
	mm		5:1										
	GENERAL TOLERANCES (UNLESS SPECIFIED)		STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10					MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE					
ANGULAR TOL ± 3°													
4 PLACES ±		PRODUCT CUSTOMER DRAWING											
DIVISIONAL SYMBOLS	3 PLACES ±		DOCUMENT NUMBER			DOC TYPE		DOC PART		REVISION			
	2 PLACES ± 0.200												
	1 PLACE ±												
	0 PLACES ±												
	DRAWING WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
		A3-SIZE		87833		SEE TABLE		GENERAL MARKET		2 OF 9			

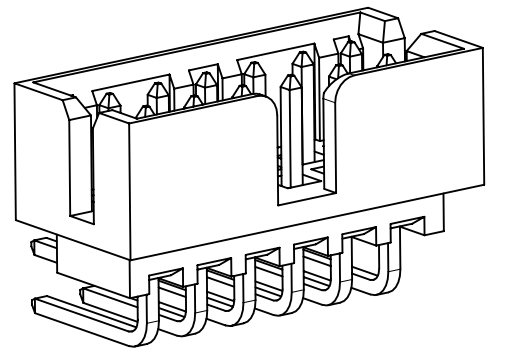
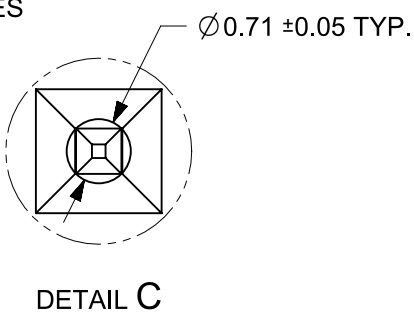
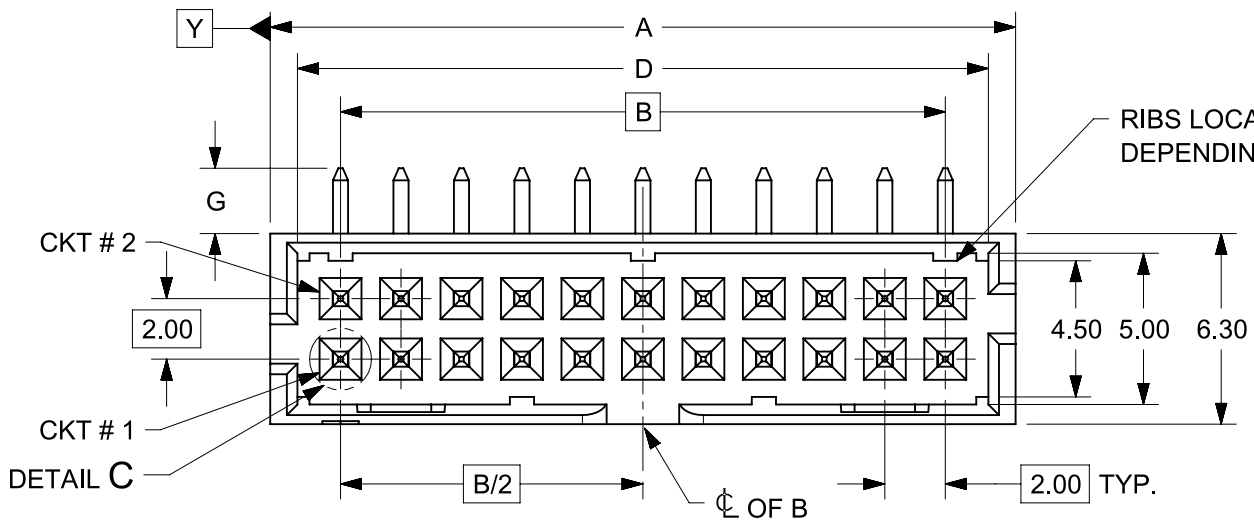
DETAIL B



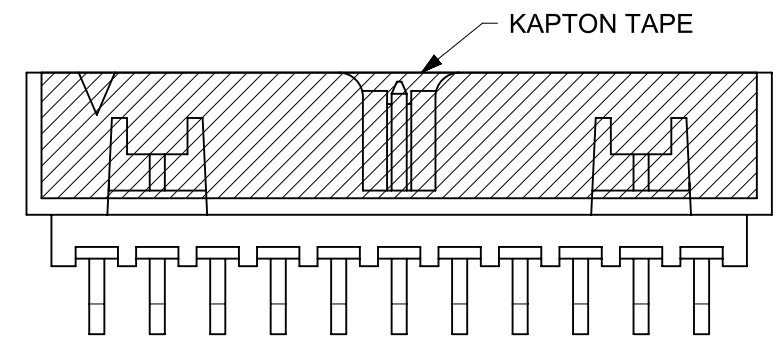
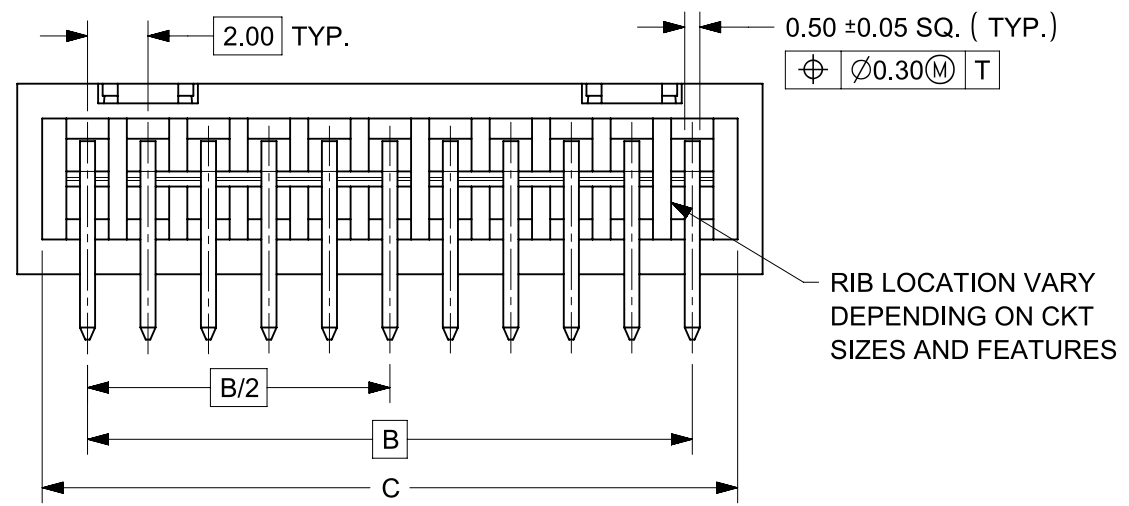
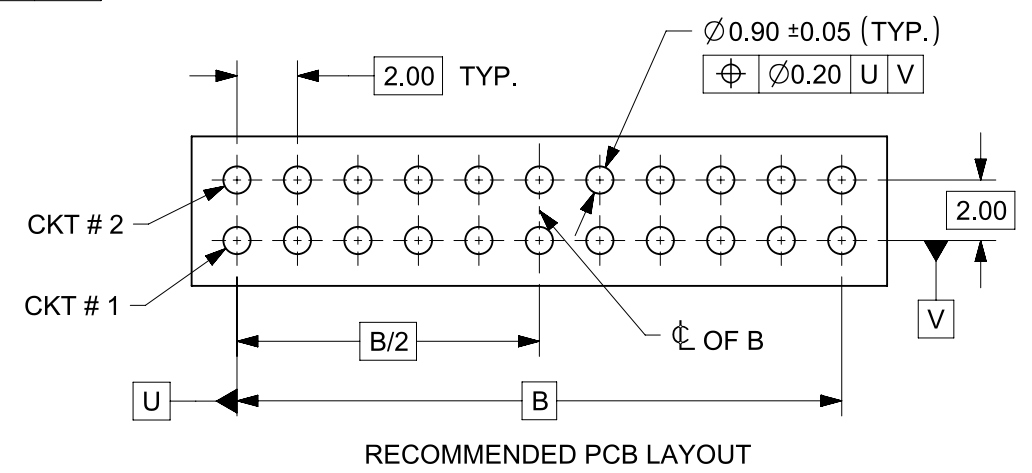
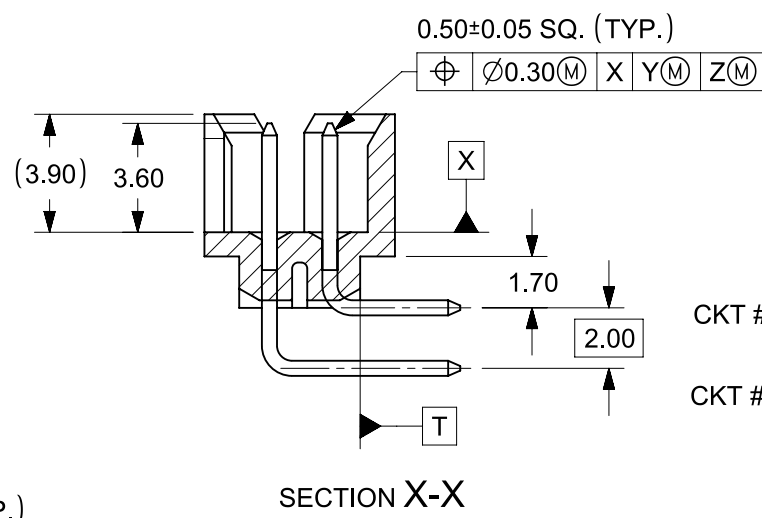
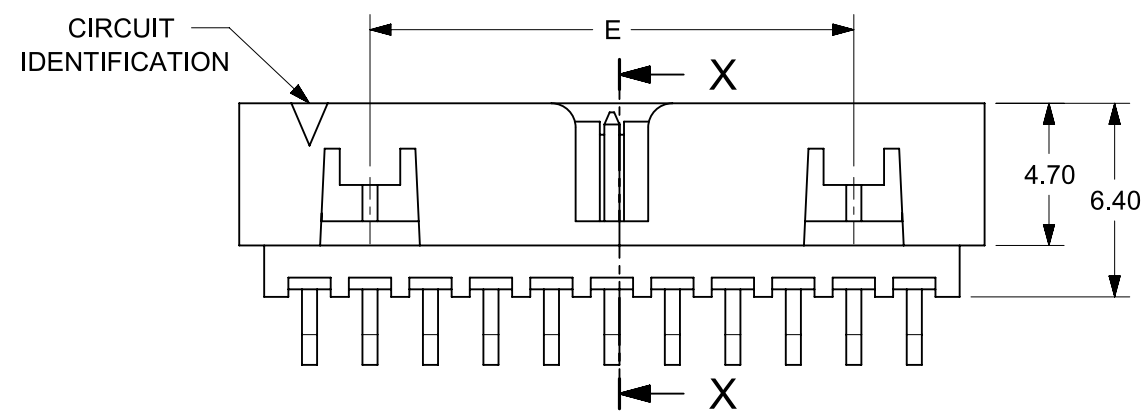
- NOTES:
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE.
 2. FINISHES: REFER TO PLATING OPTIONS.
 3. PRODUCT SPECIFICATION: PS-87831-027
 4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 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)
 6. FOR ILLUSTRATION PURPOSE, 8 CIRCUIT HEADER IS SHOWN.

FUNCTIONAL SYMBOLS $F_A = 0$ $F_C = 0$ $F_P = 0$ DIVISIONAL 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: Adding New Part Numbers			molex MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE							
	mm		5:1												
	GENERAL TOLERANCES (UNLESS SPECIFIED)				STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10										
	ANGULAR TOL ± 3°														
	4 PLACES		±												
	3 PLACES		±												
	2 PLACES		± 0.200												
	1 PLACE		±												
	0 PLACES		±												
PRODUCT CUSTOMER DRAWING				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION					
				SD-87833-0001		PSD		001		A15					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		87833		SEE TABLE		GENERAL MARKET		4 OF 9	

14 TO 50 CIRCUITS



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



- 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)
 - FOR ILLUSTRATION PURPOSE, 22 CIRCUITS HEADER IS SHOWN.

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
F_A = 0 F_C = 0 F_P = 0	DIMENSION UNITS	SCALE	CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE PRODUCT CUSTOMER DRAWING			
	mm	5:1								
	GENERAL TOLERANCES (UNLESS SPECIFIED)		STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10							
	ANGULAR TOL ± 3°						SD-87833-0001	PSD	001	A15
	4 PLACES	±								
	3 PLACES	±								
	2 PLACES	± 0.200								
1 PLACE	±									
0 PLACES	±									
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
				A3-SIZE	87833	SEE TABLE	GENERAL MARKET		6 OF 9	

10	9	8	7	6	5	4	3	2	1																																																																																																																												
14 TO 24 CIRCUITS																																																																																																																																					
CKT SIZE	ASSY. P/N WITHOUT KAPTON IN TUBE	ASSY. P/N WITH KAPTON IN TUBE	ASSY. P/N WITH KAPTON IN T&R	ASSY. P/N WITHOUT KAPTON IN T&R	PLATING OPTIONS	FRICTION LOCKS		DUAL SIDE SLOTS	CENTER POLARI ZATION	DIMENSION																																																																																																																											
						DUAL	CENTER			A	B	C	D	E	F	G (SOLDER TAIL)																																																																																																																					
14	87833-1419	N.A	N.A	N.A	1	YES	N.A	YES	YES	16.65	12.00	15.00	14.85	8.00	N.A	2.16																																																																																																																					
	87833-1420	N.A	N.A	N.A	2																																																																																																																																
	87833-1421	N.A	N.A	N.A	3																																																																																																																																
	87833-5320	N.A	N.A	N.A	2	YES	N.A	YES	YES							3.18																																																																																																																					
	87833-5321	N.A	N.A	N.A	3																																																																																																																																
	87833-1436	N.A	N.A	N.A	3												YES	N.A	YES	YES	3.50																																																																																																																
	87833-7520	N.A	87833-7420	N.A	2												YES	N.A	YES	YES	1.70																																																																																																																
16	87833-1619	N.A	N.A	N.A	1	YES	N.A	YES	YES	18.65	14.00	17.00	16.85	10.00	N.A	2.16																																																																																																																					
	87833-1620	N.A	N.A	N.A	2																																																																																																																																
	87833-1621	N.A	87833-7821	N.A	3																																																																																																																																
	87833-6120	N.A	87833-7120	N.A	2											YES	N.A	YES	YES	3.18																																																																																																																	
18	87833-1819	N.A	N.A	N.A	1	YES	N.A	YES	YES	20.65	16.00	19.00	18.85	12.00	N.A	2.16																																																																																																																					
	87833-1820	N.A	N.A	N.A	2																																																																																																																																
	87833-1821	N.A	N.A	N.A	3																																																																																																																																
	87833-6220	N.A	N.A	N.A	2											YES	N.A	YES	YES	3.18																																																																																																																	
20	87833-2019	N.A	N.A	N.A	1	YES	N.A	YES	YES	22.65	18.00	21.00	20.85	14.00	N.A	2.16																																																																																																																					
	87833-2020	N.A	87833-7220	N.A	2																																																																																																																																
	87833-2021	N.A	N.A	N.A	3																																																																																																																																
	87833-6520	N.A	N.A	N.A	2	YES	N.A	YES	YES							3.18																																																																																																																					
	87833-6521	N.A	N.A	(A14) 87833-2037	3																																																																																																																																
	87833-2036	N.A	N.A	N.A	3												YES	N.A	YES	YES	3.50																																																																																																																
22	87833-2219	N.A	N.A	N.A	1	YES	N.A	YES	YES	24.65	20.00	23.00	22.85	16.00	N.A	2.16																																																																																																																					
	87833-2220	N.A	N.A	N.A	2																																																																																																																																
	87833-2221	N.A	N.A	N.A	3																																																																																																																																
24	87833-2419	N.A	N.A	N.A	1	YES	N.A	YES	YES	26.65	22.00	25.00	24.85	18.00	N.A	2.16																																																																																																																					
	87833-2420	N.A	87833-7020	N.A	2																																																																																																																																
	87833-2421	N.A	N.A	N.A	3																																																																																																																																
	87833-7320	N.A	N.A	N.A	2	YES	N.A	YES	YES							2.00																																																																																																																					
	87833-2436	N.A	N.A	N.A	3	YES	N.A	YES	YES							3.50																																																																																																																					
	87833-6920	N.A	N.A	N.A	2	YES	N.A	YES	YES							3.27																																																																																																																					
<u>PLATING OPTIONS:</u> 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 MIN. 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 MIN. GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																																																																					
<table><tr><td rowspan="10">FUNCTIONAL SYMBOLS</td><td colspan="16">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr><tr><td colspan="2">DIMENSION UNITS</td><td colspan="2">SCALE</td><td colspan="6" rowspan="3">CURRENT REV DESC: Adding New Part Numbers</td><td colspan="4" rowspan="3"> molex </td></tr><tr><td colspan="2">mm</td><td colspan="2">1:1</td></tr><tr><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td></tr><tr><td colspan="2">ANGULAR TOL</td><td colspan="2">± 3°</td><td colspan="6" rowspan="5">STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10</td><td colspan="2">DOCUMENT NUMBER</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td></tr><tr><td colspan="2">4 PLACES</td><td colspan="2">±</td><td colspan="4" rowspan="2">SD-87833-0001</td><td rowspan="2">PSD</td><td rowspan="2">001</td><td rowspan="2">A15</td></tr><tr><td colspan="2">3 PLACES</td><td colspan="2">±</td></tr><tr><td colspan="2">2 PLACES</td><td colspan="2">± 0.200</td><td colspan="4" rowspan="2">PRODUCT CUSTOMER DRAWING</td><td colspan="4" rowspan="2">MATERIAL NUMBER</td><td colspan="2" rowspan="2">CUSTOMER</td><td colspan="2" rowspan="2">SHEET NUMBER</td></tr><tr><td colspan="2">1 PLACE</td><td colspan="2">±</td></tr><tr><td colspan="2">0 PLACES</td><td colspan="2">±</td><td colspan="4" rowspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">THIRD ANGLE PROJECTION</td><td>DRAWING</td><td>SERIES</td><td colspan="2">GENERAL MARKET</td><td colspan="2">7 OF 9</td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td></tr></table>																	FUNCTIONAL 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: Adding New Part Numbers						molex				mm		1:1		GENERAL TOLERANCES (UNLESS SPECIFIED)		ANGULAR TOL		± 3°		STATUS: Production DRWN: Meghraj Boodagatti 2026-06-03 CHK'D: Meghraj Boodagatti 2026-06-10 APPR: Saravanakumar Murugesan 2026-06-10						DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	4 PLACES		±		SD-87833-0001				PSD	001	A15	3 PLACES		±		2 PLACES		± 0.200		PRODUCT CUSTOMER DRAWING				MATERIAL NUMBER				CUSTOMER		SHEET NUMBER		1 PLACE		±		0 PLACES		±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	GENERAL MARKET		7 OF 9															
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																																																																																																																				
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	mm		1:1																																																																																																																																		
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	1 PLACE		±																																																																																																																																		
	0 PLACES		±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	GENERAL MARKET		7 OF 9																																																																																																																						
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