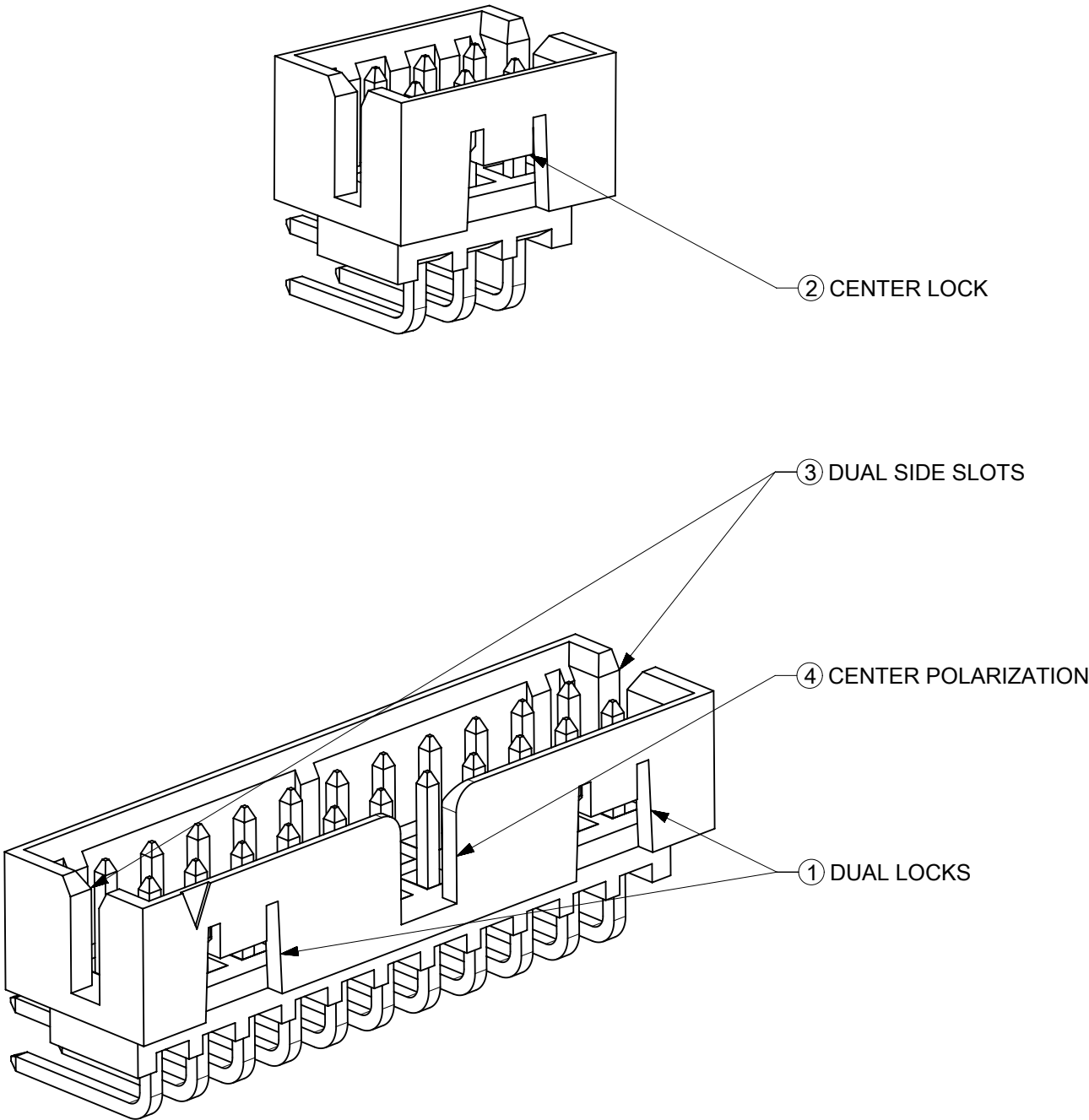


FEATURES SELECTION GUIDE

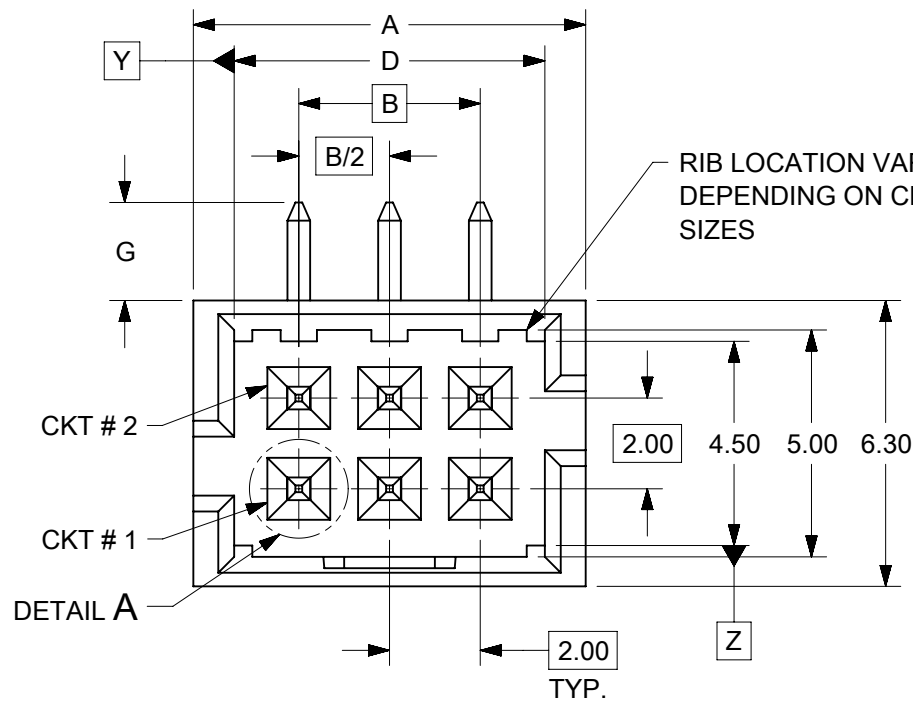


CIRCUIT SIZE	FEATURES				
	FRICTION LOCKS		③ DUAL SIDE SLOTS	④ CENTER POLARIZATION	SHEET NO
	① DUAL	②CENTER			
4 TO 6	N.A	N.A	YES	N.A	2 - 3
	N.A	YES	YES	N.A	
8 TO 12	N.A	N.A	YES	YES	4 - 5
	N.A	YES	YES	N.A	
14 TO 50	YES	N.A	YES	YES	6 - 9
	N.A	N.A	YES	YES	

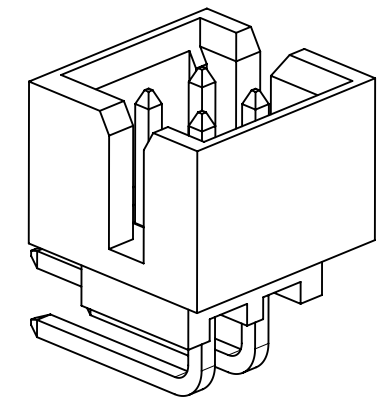
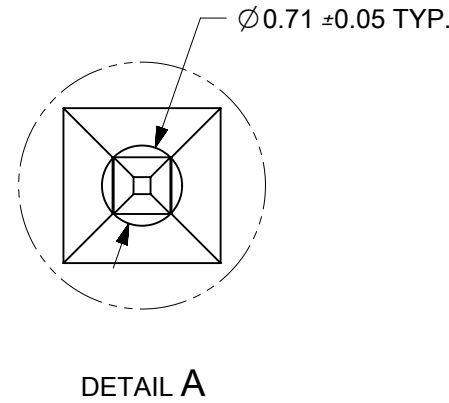
PACKAGING SPECIFICATION TABLE

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

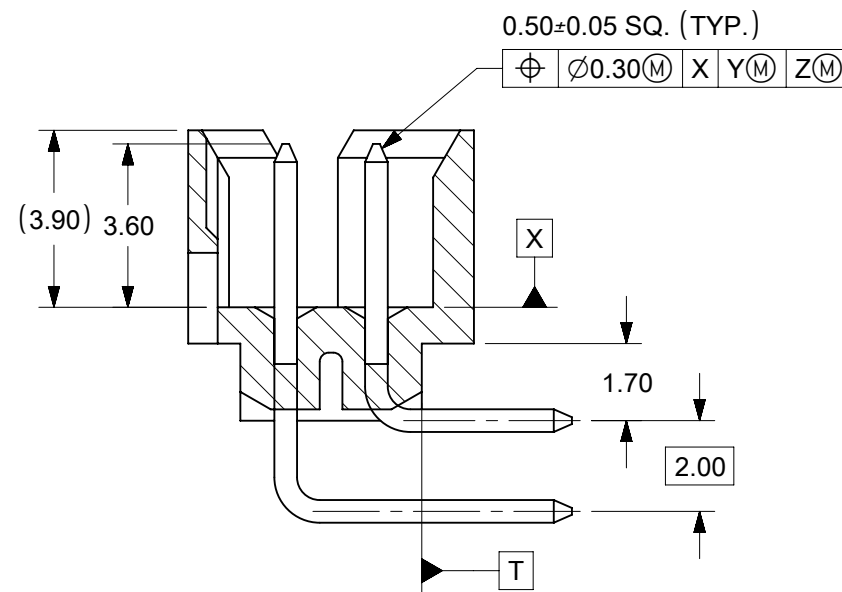
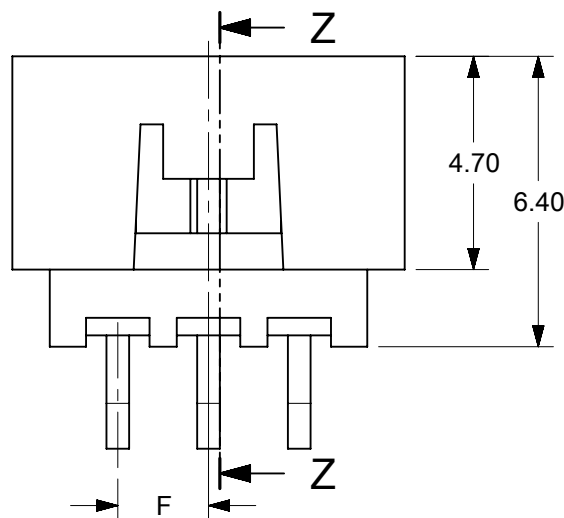
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																
ADDED P/N 87833-1240 EC NO: 619199 DRWN: NMANE02 CHK'D: NMANE02 APPR: MRAMAKRISHNA	2019/03/29 2019/06/18 2019/06/18	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex®							
			MM	INCH	MM		NTS									
		4 PLACES	±	±	DRWN BY		DATE		MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE							
		3 PLACES	±	±	GMENARLY		2015/09/29									
		2 PLACES	± 0.2	±	CHK'D BY		DATE									
		1 PLACES	±	±	CGOH		2015/10/30									
		0 PLACES	±	±	APPR BY		DATE									
		ANGULAR TOL ± 3.0			KHLIM		2015/11/03		PRODUCT CUSTOMER DRAWING							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES	MATERIAL NUMBER		CUSTOMER				
					A3				87833	SEE TABLE		GENERAL MARKET				
DOCUMENT NUMBER									DOC TYPE		DOC PART	SHEET NUMBER				
A9		REV					SD-87833-0001		PSD		001		1 OF 9			



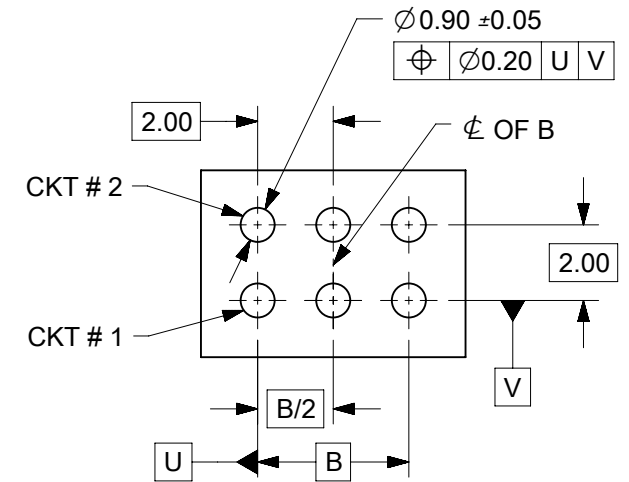
4 TO 6 CIRCUITS



ISO VIEW OF HEADER
DUAL SIDE SLOTS



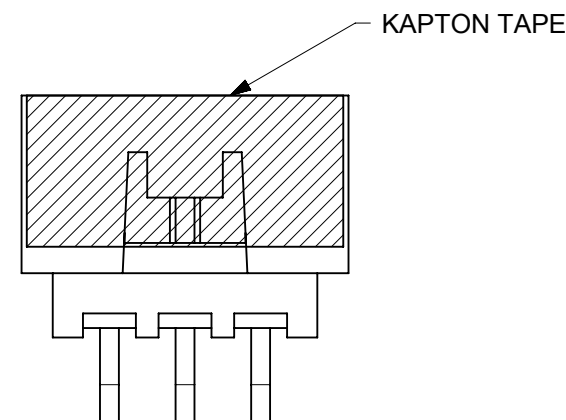
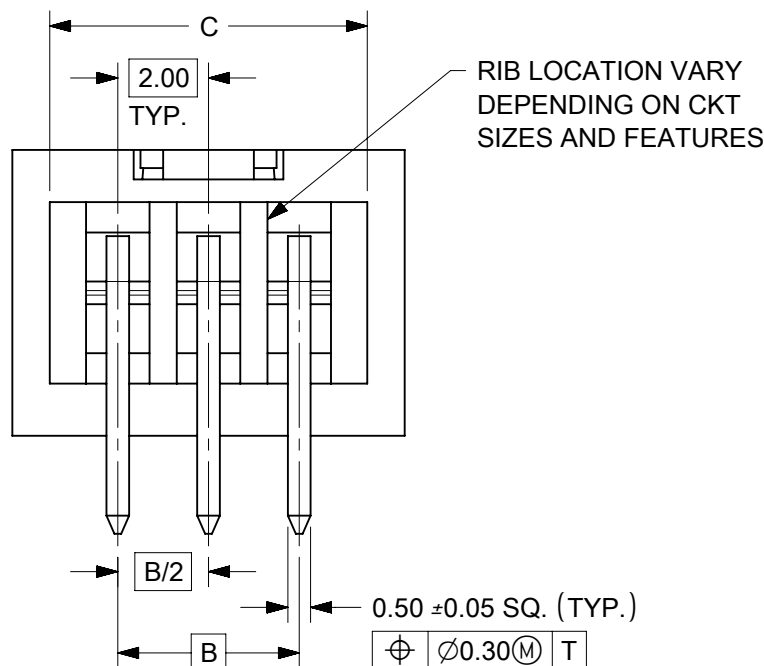
SECTION Z-Z



RECOMMENDED PCB LAYOUT

NOTES:

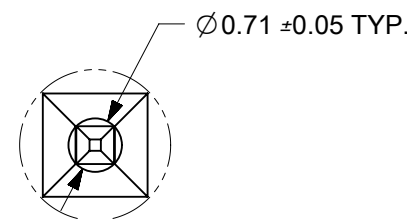
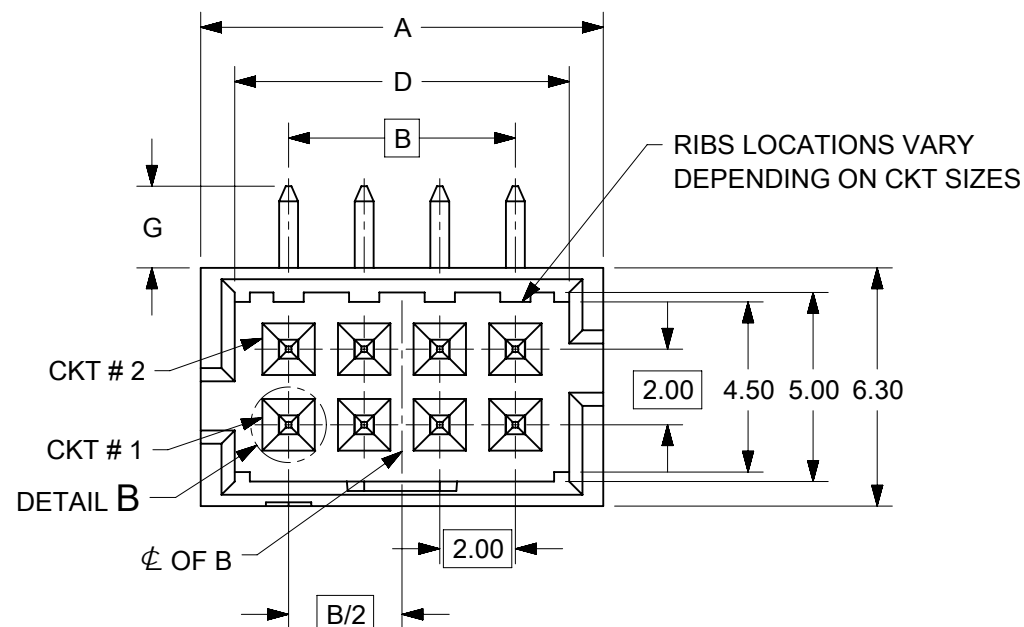
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK.
PIN: 0.50mm SQ. PHOSPHOR BRONZE.
2. FINISHES: REFER TO PLATING OPTIONS.
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND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



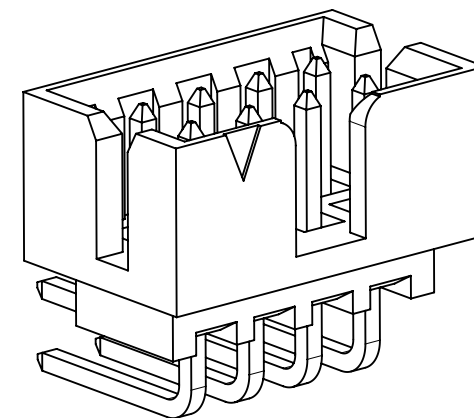
KAPTON TAPE

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
ADDED P/N 87833-1240 EC NO: 619199 DRWN: NMANE02 CHK'D: NMANE02 REV APPR: MRAMAKRISHNA	2019/03/29 2019/06/18 2019/06/18	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS	SCALE		molex® MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE							
			MM		NTS										
				MM	INCH	DRWN BY		DATE							
			4 PLACES	±	±	GMENARLY		2015/09/29							
			3 PLACES	±	±	CHK'D BY		DATE							
			2 PLACES	± 0.2	±	CGOH		2015/10/30							
			1 PLACES	±	±	APPR BY		DATE							
			0 PLACES	±	±	KHLIM		2015/11/03		PRODUCT CUSTOMER DRAWING					
			ANGULAR TOL ± 3.0			DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES	MATERIAL NUMBER		CUSTOMER		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	A3		87833		SEE TABLE		GENERAL MARKET					
DOCUMENT NUMBER						DOC TYPE	DOC PART	SHEET NUMBER							
SD-87833-0001						PSD	001	2 OF 9							

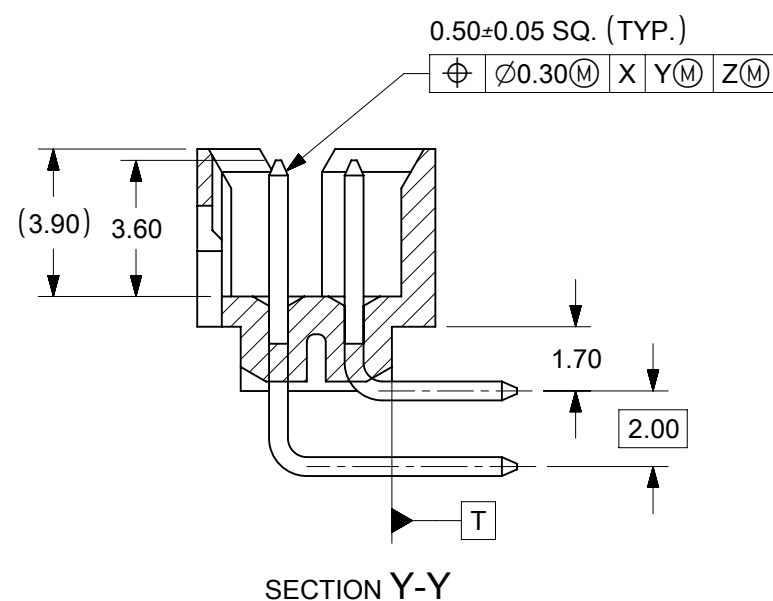
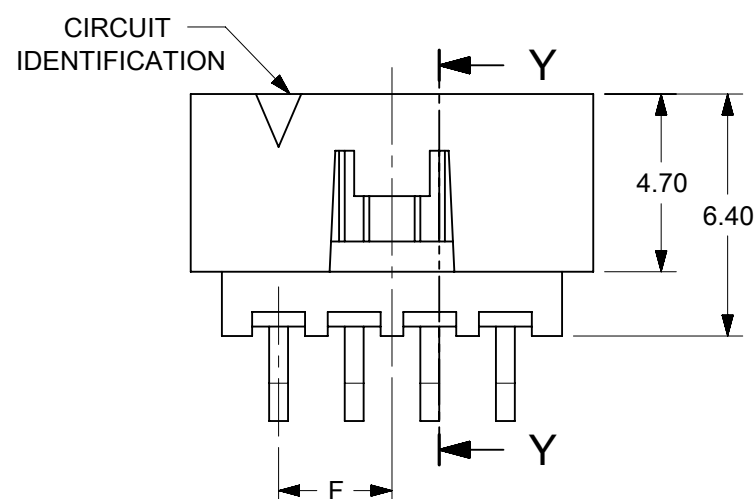
8 TO 12 CIRCUITS



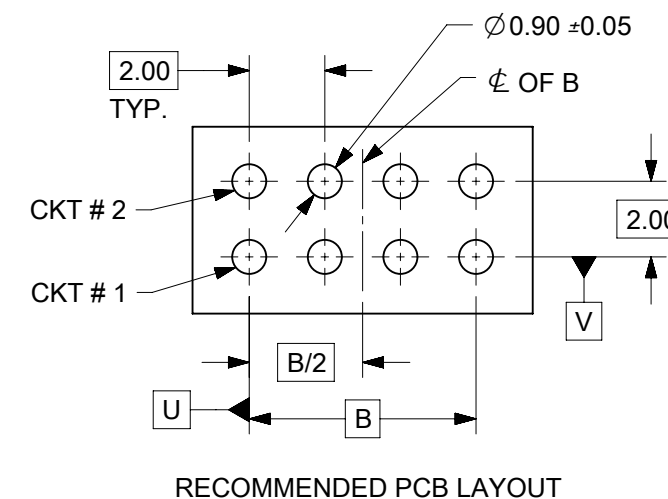
DETAIL B



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



SECTION Y-Y



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

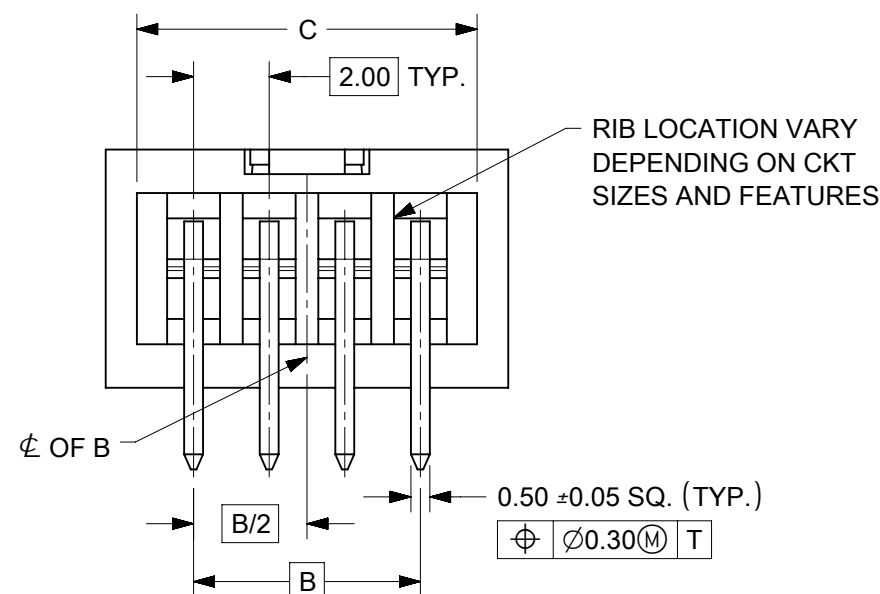
AND CRIMP TERMINAL: 50394 SERIES.

B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES.

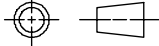
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE:

79107 (GOLD PLATED), 78787 (TIN PLATED)

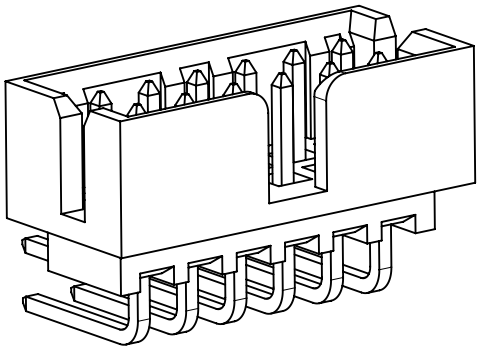
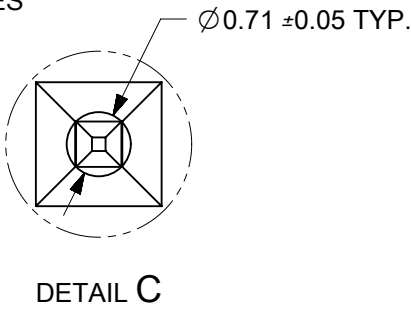
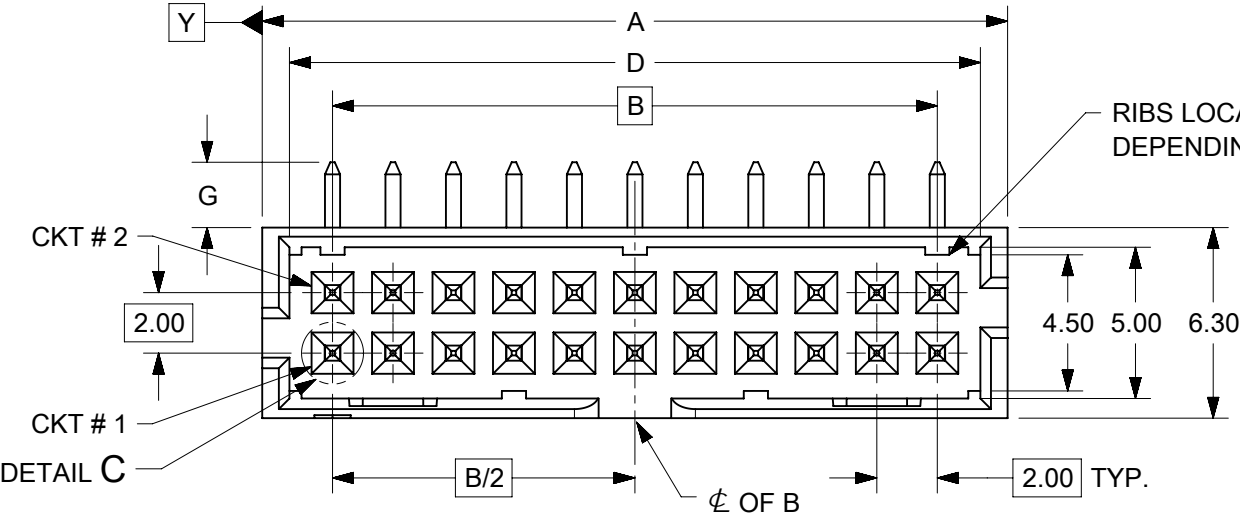
6. FOR ILLUSTRATION PURPOSE, 8 CIRCUIT HEADER IS SHOWN.



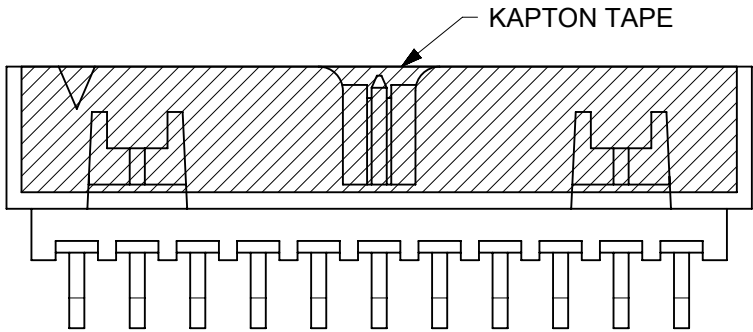
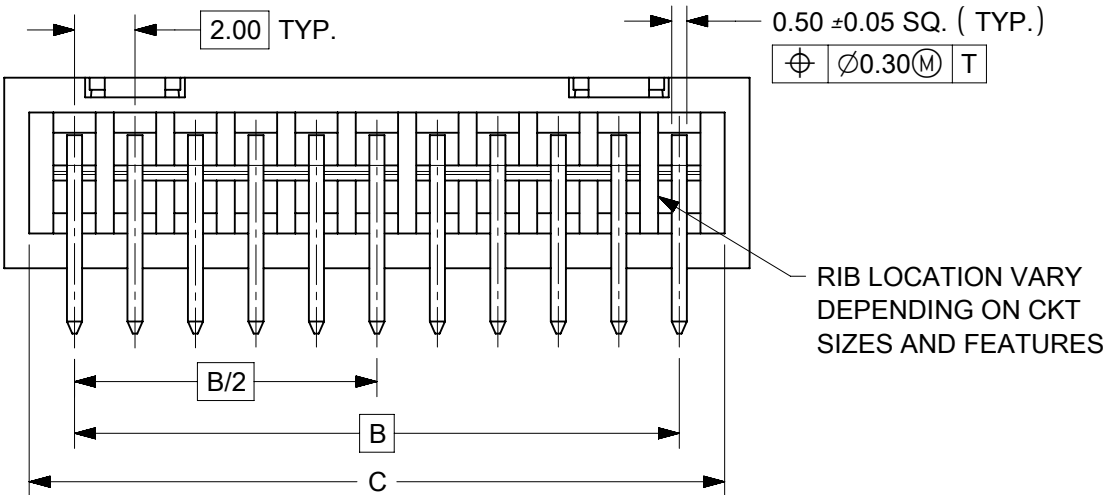
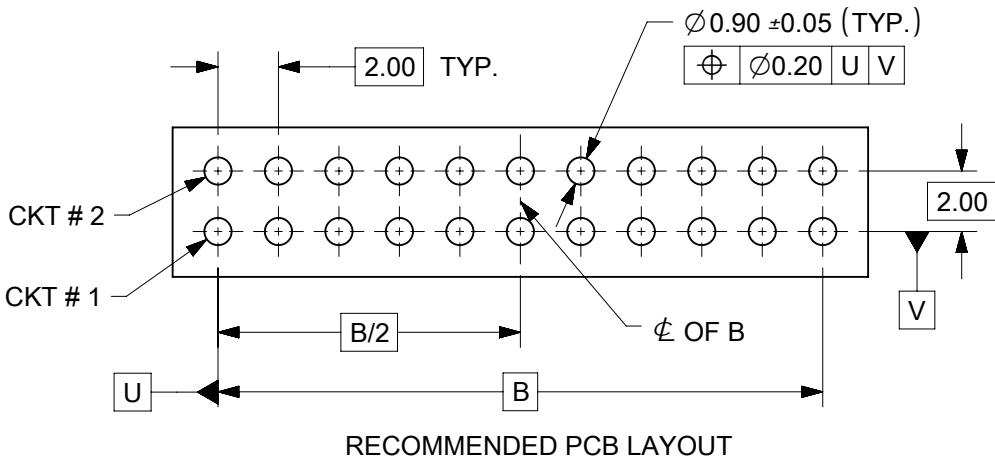
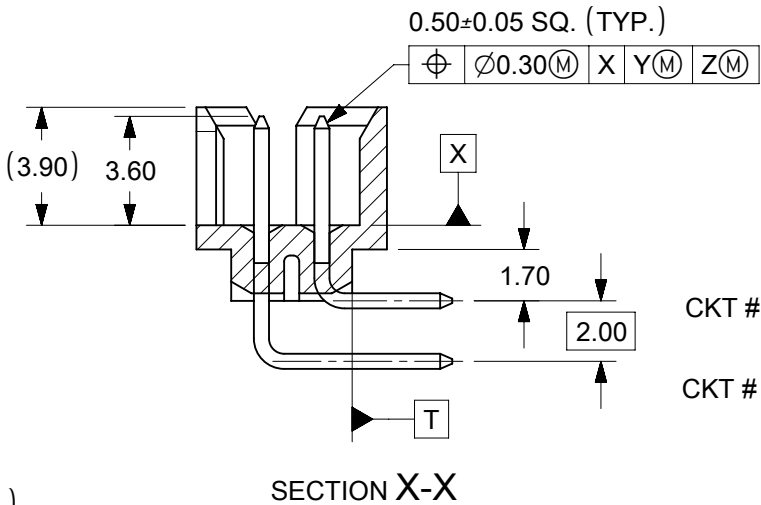
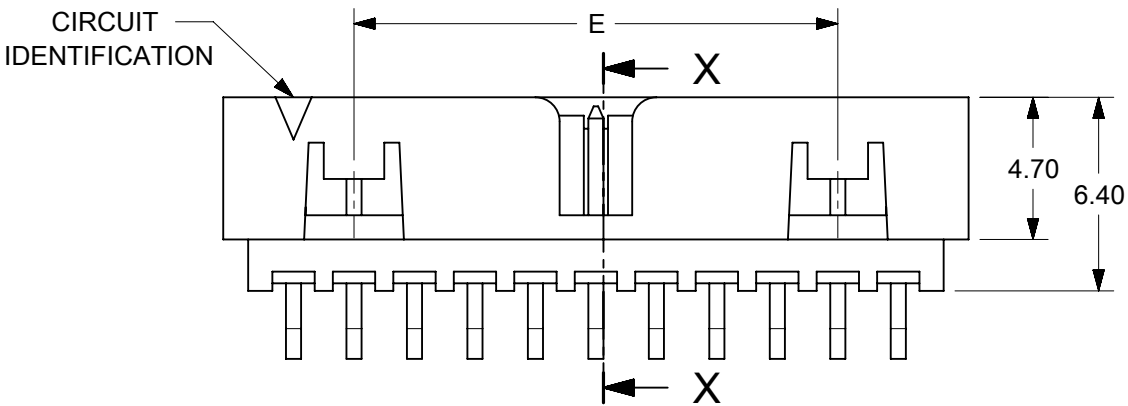
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

ADDED P/N 87833-1240 EC NO: 619199 DRWN: NMANE02 CHKD: NMANE02 APPR: MRAMAKRISHNA		2019/03/29		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE		molex®									
		2019/06/18				MM		NTS											
		2019/06/18				MM		INCH		DRWN BY		DATE		MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE					
		2019/06/18				4 PLACES		±		±		GMENARLY						2015/09/29	
		2019/06/18				3 PLACES		±		±		CHK'D BY						DATE	
		2019/06/18				2 PLACES		± 0.2		±		CGOH						2015/10/30	
		2019/06/18				1 PLACES		±		±		APPR BY						DATE	
		2019/06/18				0 PLACES		±		±		KHLIM		2015/11/03		PRODUCT CUSTOMER DRAWING			
		2019/06/18				ANGULAR TOL ± 3.0		DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER					
		2019/06/18				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3				87833		SEE TABLE		GENERAL MARKET			
2019/06/18		A9		REV				DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER					
2019/06/18								SD-87833-0001		PSD		001		4 OF 9					

14 TO 50 CIRCUITS



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS



- 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, 22 CIRCUITS HEADER IS SHOWN.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				
ADDED P/N 87833-1240 EC NO: 619199 DRWN: NMANE02 CHK'D: NMANE02 APPR: MRAMAKRISHNA	2019/03/29 2019/06/18 2019/06/18	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS			SCALE		molex® MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE												
			MM			NTS														
			DRWN BY			DATE														
			GMENARLY			2015/09/29														
			4 PLACES			±	MM	±	INCH		CHK'D BY		DATE		PRODUCT CUSTOMER DRAWING					
			3 PLACES			±	MM	±	CGOH		2015/10/30									
			2 PLACES			±	0.2	±	APPR BY		DATE									
			1 PLACES			±	MM	±	KHLIM		2015/11/03									
			0 PLACES			±	MM	±	DRAWING SIZE		THIRD ANGLE PROJECTION		SERIES		MATERIAL NUMBER		CUSTOMER			
			ANGULAR TOL ± 3.0			A3				87833		SEE TABLE		GENERAL MARKET						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							DOCUMENT NUMBER		DOC TYPE		DOC PART		SHEET NUMBER							
							SD-87833-0001		PSD		001		6 OF 9							

		9		8		7		6		5		4		3		2		1		
14 TO 24 CIRCUITS																				
E	D	C	B	A	CKT SIZE	ASSY. P/N WITHOUT KAPTON IN TUBE	ASSY. P/N WITH KAPTON IN TUBE	ASSY. P/N WITH KAPTON IN T&R	PLATING OPTIONS	FRICTION LOCKS		DUAL SIDE SLOTS	CENTER POLARIZATION	DIMENSION						
										DUAL	CENTER			A	B	C	D	E	F	G (SOLDER TAIL)
					14	87833-1419	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	2											
						87833-1421	N.A	N.A	3											
						87833-5320	N.A	N.A	2	YES	N.A	YES	YES							3.18
						87833-5321	N.A	N.A	3											
87833-1436	N.A	N.A	3	YES		N.A	YES	YES	3.50											
N.A	N.A	87833-7420	2	YES	N.A	YES	YES	1.70												
16	87833-1619	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	2																
	87833-1621	N.A	A9 87833-7821	3																
	87833-6120	N.A	87833-7120	2											YES	N.A	YES	YES	3.18	
18	87833-1819	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	2																
	87833-1821	N.A	N.A	3																
	87833-6220	N.A	N.A	2											YES	N.A	YES	YES	3.18	
20	87833-2019	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	2																
	87833-2021	N.A	N.A	3																
	87833-6520	N.A	N.A	2	YES	N.A	YES	YES							3.18					
	87833-6521	N.A	N.A	3																
	87833-2036	N.A	N.A	3												YES	N.A	YES	YES	3.50
22	87833-2219	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	2																
	87833-2221	N.A	N.A	3																
24	87833-2419	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	2																
	87833-2421	N.A	N.A	3																
	87833-7320	N.A	N.A	2	YES	N.A	YES	YES							2.00					
	87833-2436	N.A	N.A	3	YES	N.A	YES	YES							3.50					
	87833-6920	N.A	N.A	2	YES	N.A	YES	YES							3.27					
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 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.																				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION ADDED P/N 87833-1240 EC NO: 619199 DRWN: NMANE02 CHK'D: NMANE02 REV APPR: MRAMAKRISHNA 2019/03/29 2019/06/18 2019/06/18 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 2015/09/29 CHK'D BY DATE CGOH 2015/10/30 APPR BY DATE KHLIM 2015/11/03 DRAWING SIZE A3 THIRD ANGLE PROJECTION SERIES 87833 MATERIAL NUMBER SEE TABLE CUSTOMER GENERAL MARKET DOCUMENT NUMBER SD-87833-0001 DOC TYPE PSD DOC PART 001 SHEET NUMBER 7 OF 9																				
RELEASE STATUS		P1	RELEASE DATE		2019/06/18	15:31:10	9	8	7	6	5	4	3	2	1					

</

9		8		7		6		5		4		3		2		1				
40 TO 50 CIRCUITS																				
E	40	87833-4019		N.A		N.A		1	YES	N.A	YES	YES	42.65	38.00	41.00	40.85	34.00	N.A	2.16	
		87833-4020		N.A		N.A														2
		87833-4021		N.A		N.A														
	42	87833-4219		N.A		N.A		1	YES	N.A	YES	YES	44.65	40.00	43.00	42.85	36.00	N.A	2.16	
		87833-4220		N.A		N.A														2
		87833-4221		N.A		N.A														
	44	87833-4419		N.A		N.A		1	YES	N.A	YES	YES	46.65	42.00	45.00	44.85	38.00	N.A	2.16	
		87833-4420		N.A		N.A														2
		87833-4421		N.A		N.A														
		87833-4424		N.A		N.A		2	N.A	N.A	YES	YES								2.92
		87833-4425		N.A		N.A												3		
	46	87833-4619		N.A		N.A		1	YES	N.A	YES	YES	48.65	44.00	47.00	46.85	40.00		N.A	2.16
		87833-4620		N.A		N.A												2		
		87833-4621		N.A		N.A														
	48	87833-4819		N.A		N.A		1	YES	N.A	YES	YES	50.65	46.00	49.00	48.85	42.00	N.A	2.16	
		87833-4820		N.A		N.A														2
		87833-4821		N.A		N.A														
	50	87833-5019		N.A		N.A		1	YES	N.A	YES	YES	52.65	48.00	51.00	50.85	44.00	N.A	2.16	
87833-5020		N.A		N.A		2														
87833-5021		N.A		N.A			3													

PLATING OPTIONS:
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.
2 - 0.38µm/15µin 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.

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

ADDED P/N 87833-1240

EC NO: 619199

DRWN: NMANE02

CHK'D: NMANE02

REV APPR: MRAMAKRISHNA

2019/03/29

2019/06/18

2019/06/18

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

2015/09/29

CHK'D BY

DATE

CGOH

2015/10/30

APPR BY

DATE

KHLIM

2015/11/03

DRAWING SIZE

THIRD ANGLE PROJECTION

A3

PRODUCT CUSTOMER DRAWING

SERIES

87833

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

DOCUMENT NUMBER

SD-87833-0001

DOC TYPE

PSD

DOC PART

001

SHEET NUMBER

9 OF 9

9		8		7		6		5		4		3		2		1	
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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Molex:

87833-6720