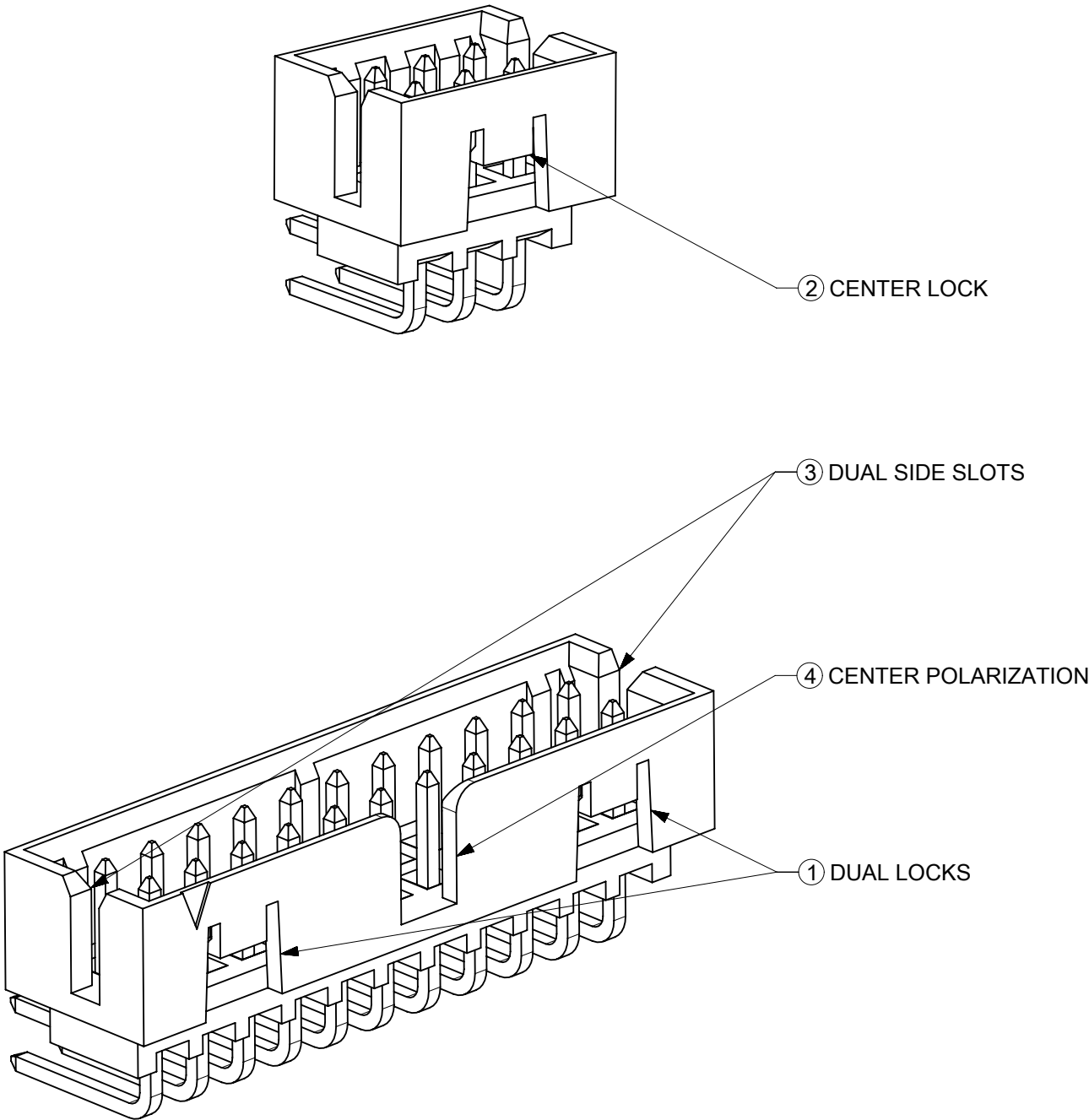


FEATURES SELECTION GUIDE



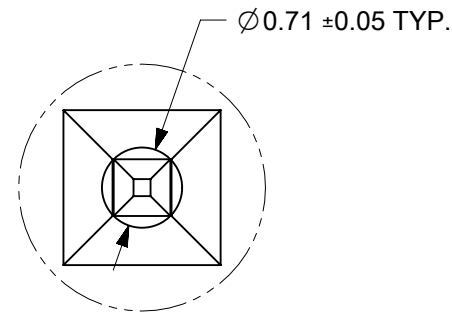
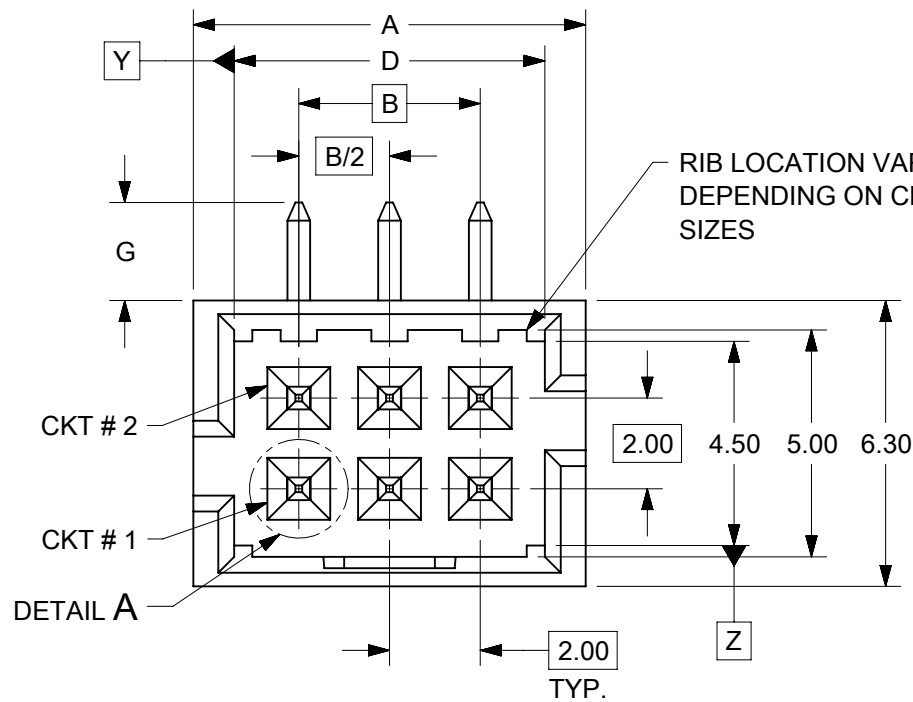
CIRCUIT SIZE	FEATURES				
	FRICTION LOCKS		③ DUAL SIDE SLOTS	④ CENTER POLARIZATION	SHEET NO
	① DUAL	②CENTER			
4 TO 6	N.A	N.A	YES	N.A	2 - 3
	N.A	YES	YES	N.A	
8 TO 12	N.A	N.A	YES	YES	4 - 5
	N.A	YES	YES	N.A	
14 TO 50	YES	N.A	YES	YES	6 - 9
	N.A	N.A	YES	YES	

PACKAGING SPECIFICATION TABLE

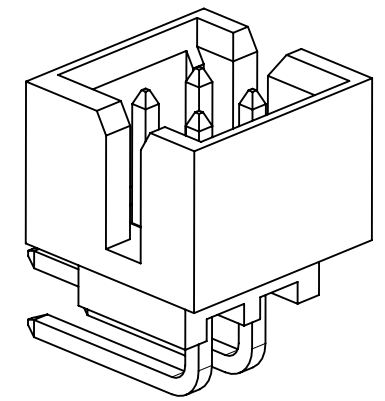
TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR: 87833-0861 87833-1420	PK-87831-002

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
EC NO: 718010 DRWN: DANUSA CHK'D: DANUSA APPR: MRAMAKRISHNA	2022/08/26 2022/09/19 2022/09/19	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex® MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE						
			MM	INCH	MM		NTS								
		4 PLACES		±	±	DRWN BY		DATE							
		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		
A13		REV							DOCUMENT NUMBER			DOC TYPE	DOC PART	SHEET NUMBER	
									SD-87833-0001			PSD	001	1 OF 9	

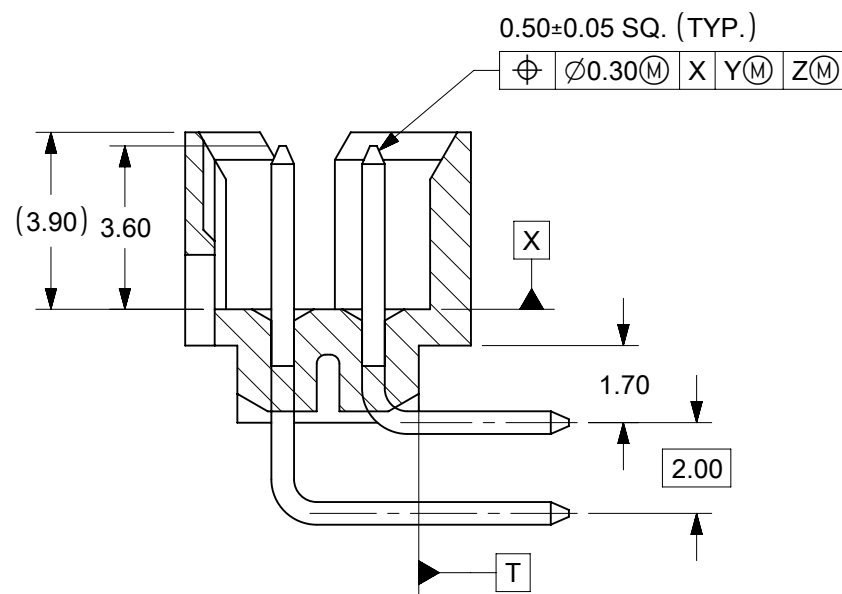
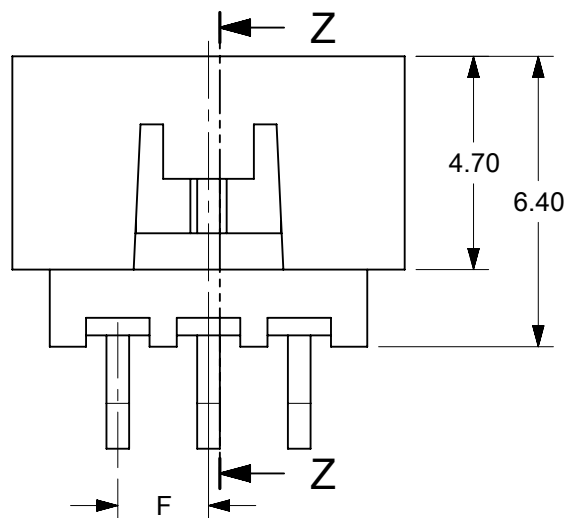
RELEASE STATUS	P1	RELEASE DATE	2022/09/19	07:59:04
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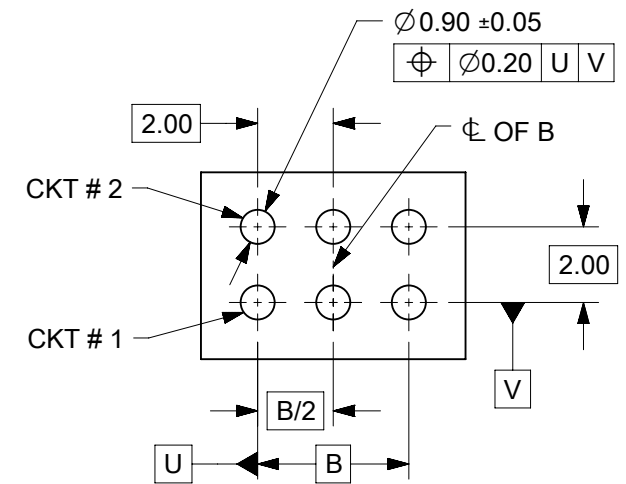
DETAIL A



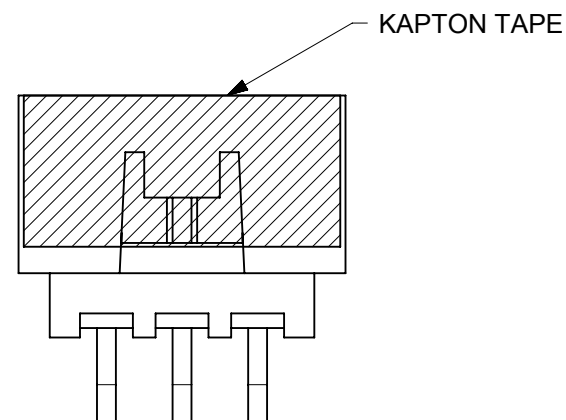
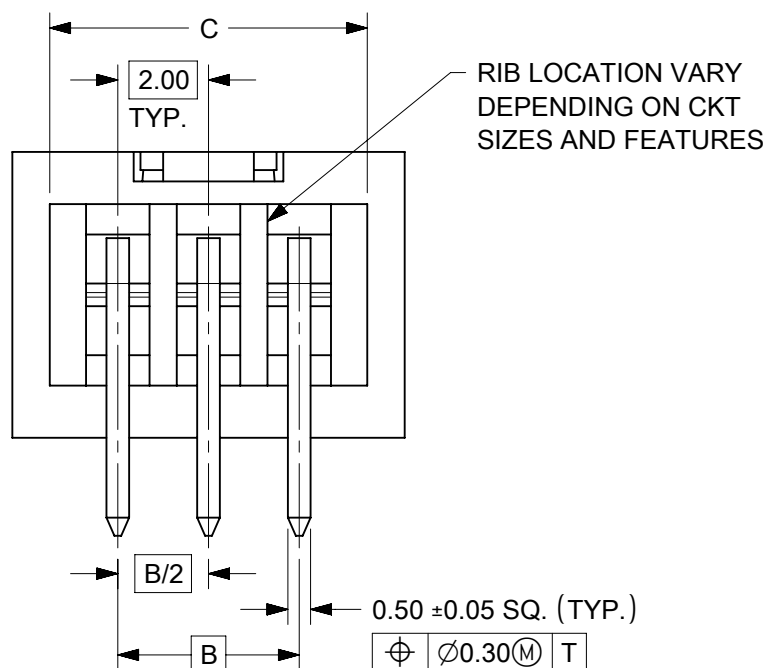
ISO VIEW OF HEADER
DUAL SIDE SLOTS



SECTION Z-Z



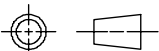
RECOMMENDED PCB LAYOUT



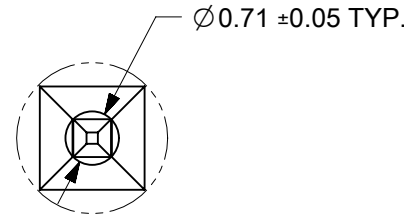
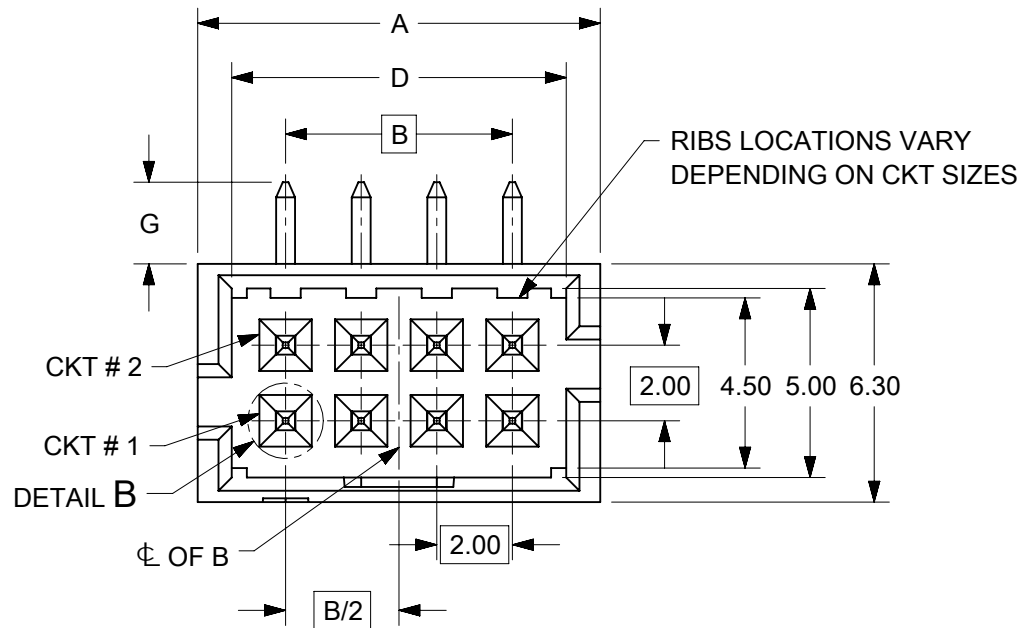
KAPTON TAPE

NOTES:

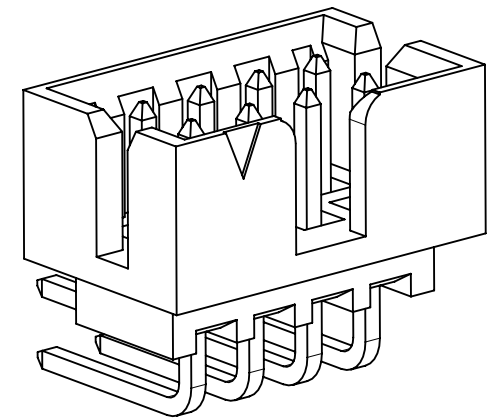
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK.
PIN: 0.50mm SQ. PHOSPHOR BRONZE.
2. FINISHES: REFER TO PLATING OPTIONS.
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
EC NO: 718010 DRWN: DANUSA CHK'D: DANUSA REV APPR: MRAMAKRISHNA	2022/08/26 2022/09/19 2022/09/19	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS		SCALE		molex® MILLIGRID, 2MM PITCH SHROUDED HEADER R/A, THROUGH HOLE						
			MM	INCH	MM		NTS								
		4 PLACES	±		±	DRWN BY		DATE		GMENARLY 2015/09/29					
		3 PLACES	±		±	CHK'D BY		DATE							
		2 PLACES	± 0.2		±	CGOH		2015/10/30							
		1 PLACES	±		±	APPR BY		DATE		PRODUCT CUSTOMER DRAWING					
		0 PLACES	±		±	KHLIM		2015/11/03							
		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	
A13		REV					SD-87833-0001			PSD		001		2 OF 9	

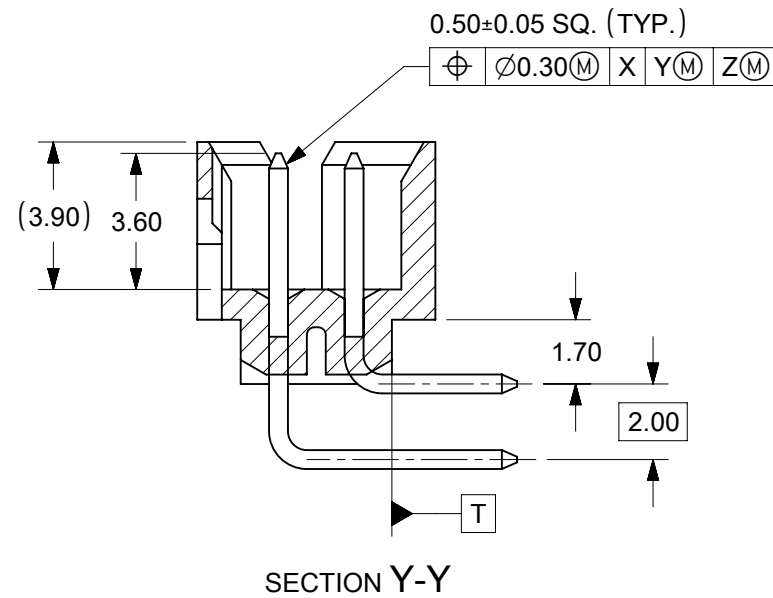
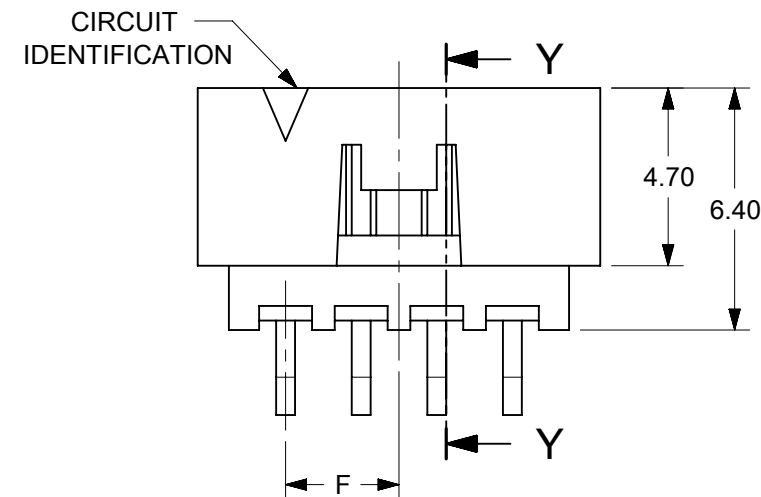
8 TO 12 CIRCUITS



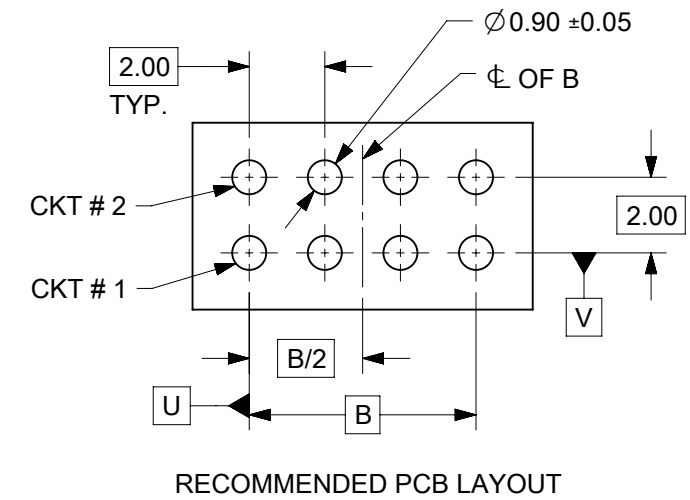
DETAIL B



ISO VIEW OF HEADER WITH CENTER POLARIZATION AND DUAL SIDE SLOTS

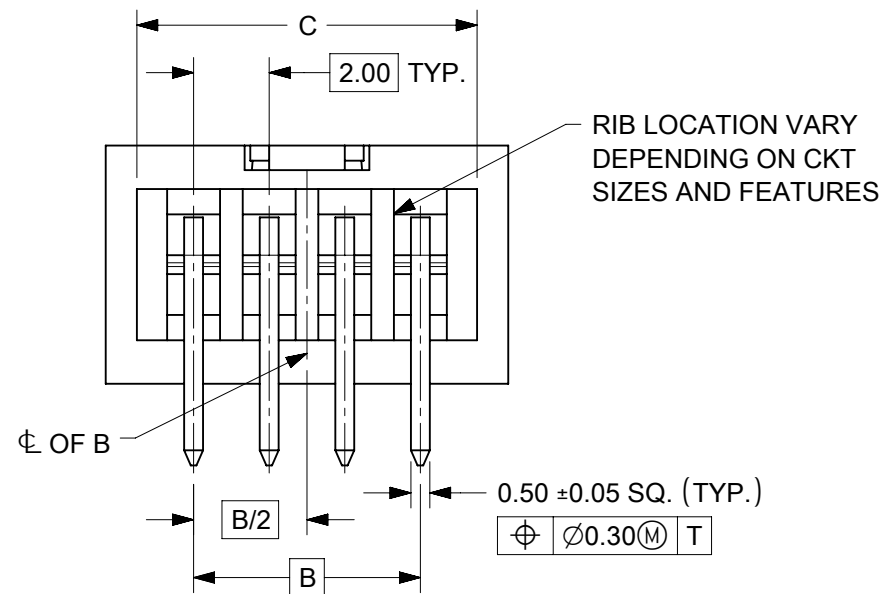


SECTION Y-Y



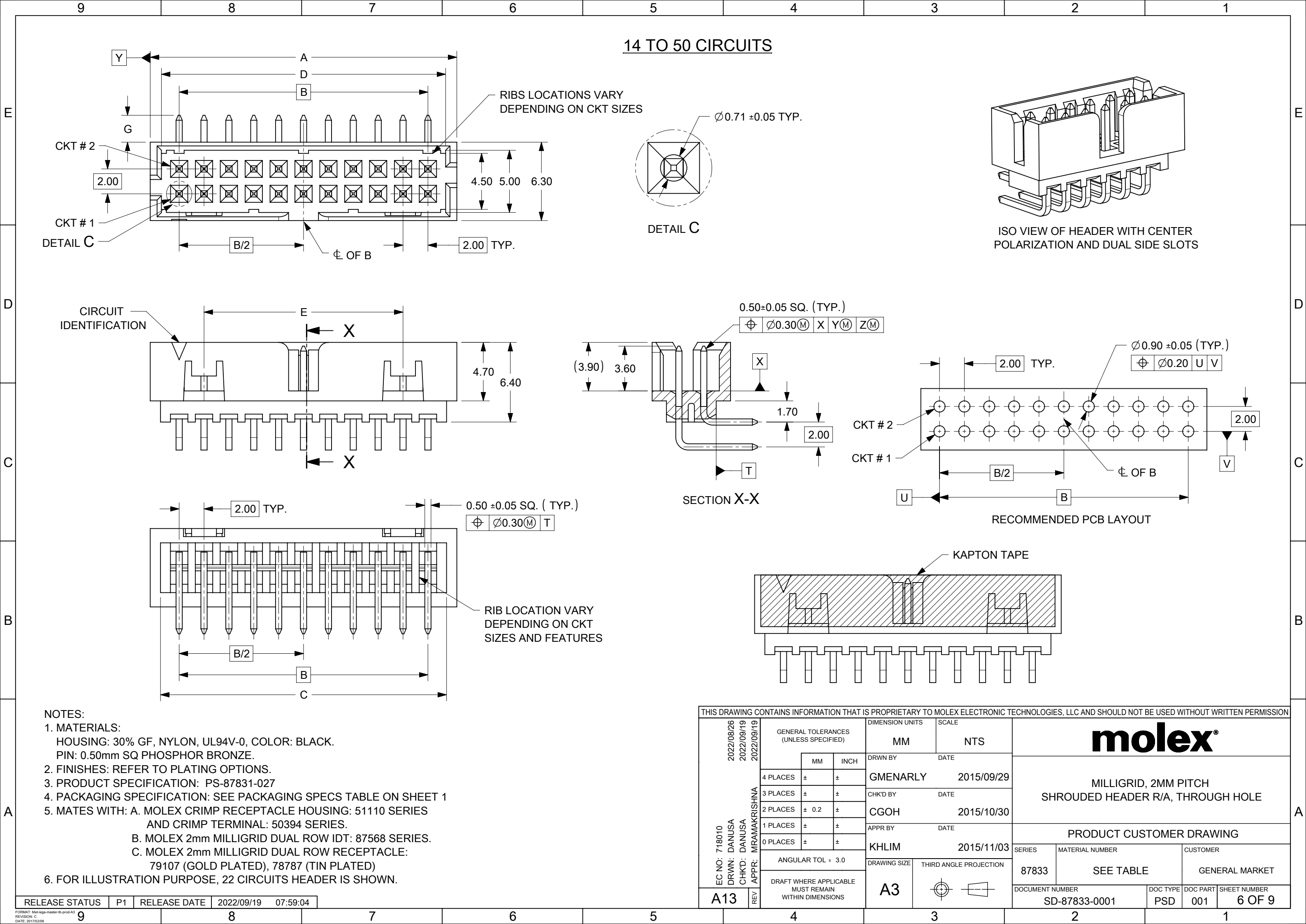
RECOMMENDED PCB LAYOUT

- 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

EC NO: 718010 DRWN: DANUSA CHK'D: DANUSA REV / APPR: MRAMAKRISHNA	2022/08/26 2022/09/19 2022/09/19	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION UNITS	SCALE	molex®						
			MM	INCH		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	
		A13	REV	A3						87833	SEE TABLE		GENERAL MARKET
DOCUMENT NUMBER										SD-87833-0001		DOC TYPE	PSD



9		8		7		6		5		4		3		2		1	
14 TO 24 CIRCUITS																	
E	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	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											
N.A	N.A	87833-7420	N.A	2	YES	N.A	YES	YES	1.70								
D	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											3.18
		87833-1621	N.A	87833-7821	N.A	3											
		87833-6120	N.A	87833-7120	N.A	2											YES
C	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											3.18
		87833-1821	N.A	N.A	N.A	3											
		87833-6220	N.A	N.A	N.A	2											YES
B	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	87833-2037	3											
		87833-2036	N.A	N.A	N.A	3											
A	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											
A	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
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. RELEASE STATUS P1 RELEASE DATE 2022/09/19 07:59:04																	
9		8		7		6		5		4		3		2		1	

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2022/08/26

2022/09/19

2022/09/19

718010

DANUSA

DANUSA

MIRAMAKRISHNA

EC NO:

DRWN:

CHK'D:

APPR:

A13

REV

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

SCALE

MM

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

<

[illegible]

		9		8		7		6		5		4		3		2		1						
40 TO 50 CIRCUITS																								
E	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 POLARIZATI ON	DIMENSION													
							DUAL	CENTER			A	B	C	D	E	F	G (SOLDER TAIL)							
40	87833-4019	N.A	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	N.A	2																			
	87833-4021	N.A	N.A	N.A	3																			
D	42	87833-4219	N.A	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	N.A	2																		
		87833-4221	N.A	N.A	N.A	3																		
		87833-4222	N.A	87833-4322	87833-4223	3	YES	N.A	YES	YES							3.50							
D	44	87833-4419	N.A	N.A	N.A	1	44.65	40.00	43.00	42.85	2.16	42.00	45.00	44.85	38.00	N.A	2.16							
		87833-4420	N.A	N.A	N.A	2																		
		87833-4421	N.A	N.A	N.A	3																		
		87833-4424	N.A	N.A	N.A	2																		
		87833-4425	N.A	N.A	N.A	3	N.A	N.A	YES	YES										2.92				
C	46	87833-4619	N.A	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	N.A	2																		
		87833-4621	N.A	N.A	N.A	3																		
C	48	87833-4819	N.A	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	N.A	2																		
		87833-4821	N.A	N.A	N.A	3																		
A	50	87833-5019	N.A	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	N.A	2																		
		87833-5021	N.A	N.A	N.A	3																		
B																								
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 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.																								
RELEASE STATUS		P1	RELEASE DATE		2022/09/19	07:59:04	9		8		7		6		5		4		3		2		1	
FORMAT: Mef-lega-master-db-prod-A3 REVISION: C DATE: 2017/02/08																								

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EC NO: 718010
DRWN: DANUSA
CHK'D: DANUSA
REV / APPR: MRAMAKRISHNA

2022/08/26
2022/09/19
2022/09/19

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

GMENARLY

DATE

2015/09/29

CHK'D BY

CGOH

DATE

2015/10/30

APPR BY

KHLIM

DATE

2015/11/03

DRAWING SIZE

A3

THIRD ANGLE PROJECTION

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