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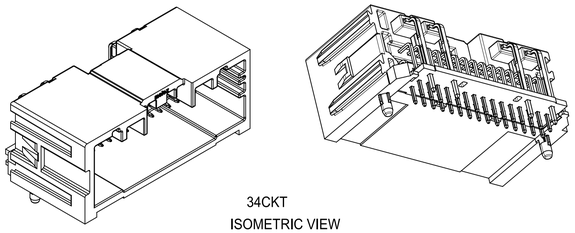
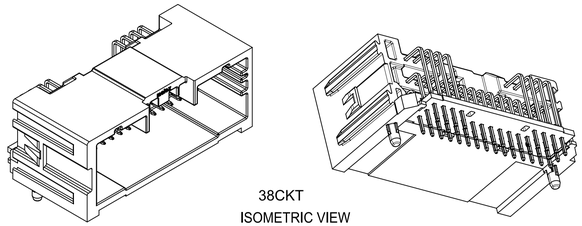
4	DETAIL DIMENSION VIEW
5	DETAIL DIMENSION VIEW
6	REFERENCE PCB LAYOUT



34CKT
ISOMETRIC VIEW
SCALE 2:1



38CKT
ISOMETRIC VIEW
SCALE 2:1

MINI50 34/38CKT RIGHT ANGLE HEADER ASSEMBLY LIST

MATERIAL NUMBER			CKT SIZE	PIN INSERTION DIRCTION	PAP HOLE SHAPE	FLAMMABILITY UL94	POLARIZATION	COLOR	STATUS
TRAY PACKAGING PK-31302-070	TUBE PACKAGING PK-31301-688	TAPE AND REEL PK-47799-0001							
34961-0340	---	---	34	PCB TO MATING	ROUND	HB	A	BLACK	OBSOLETED
34961-0380	---	34961-8380	38	PCB TO MATING	ROUND	HB	A	BLACK	OBSOLETED
34961-0381	---	34961-8381	38	PCB TO MATING	ROUND	HB	B	GREY	OBSOLETED
34961-0382	---	34961-8382	38	PCB TO MATING	ROUND	HB	C	DK GREY	OBSOLETED
34961-0343	34961-7343	34961-8343	34	MATING TO PCB	SQUARE	HB	A	BLACK	SALEABLE
34961-0344	34961-7344	34961-8344	34	MATING TO PCB	SQUARE	HB	B	GREY	SALEABLE
34961-0345	34961-7345	34961-8345	34	MATING TO PCB	SQUARE	HB	C	DK GREY	SALEABLE
34961-0386	34961-7386	34961-8386	38	MATING TO PCB	SQUARE	HB	UPDATED A	BLACK	SALEABLE
34961-0387	34961-7387	34961-8387	38	MATING TO PCB	SQUARE	HB	UPDATED B	GREY	SALEABLE
34961-0388	34961-7388	34961-8388	38	MATING TO PCB	SQUARE	HB	UPDATED C	DK GREY	SALEABLE
---	2133557340	2133558340	34	PCB TO MATING	ROUND	V0	A	BLACK	OBSOLETED
---	2133557341	2133558341	34	PCB TO MATING	ROUND	V0	B	GREY	OBSOLETED
2133550342	2133557342	2133558342	34	PCB TO MATING	ROUND	V0	C	DK GREY	OBSOLETED
---	2133557380	---	38	PCB TO MATING	ROUND	V0	UPDATED A	BLACK	OBSOLETED
2133550381	---	---	38	PCB TO MATING	ROUND	V0	UPDATED B	GREY	OBSOLETED
2133550343	2133557343	2133558343	34	MATING TO PCB	SQUARE	V0	A	BLACK	SALEABLE
2133550344	2133557344	2133558344	34	MATING TO PCB	SQUARE	V0	B	GREY	SALEABLE
2133550345	2133557345	2133558345	34	MATING TO PCB	SQUARE	V0	C	DK GREY	SALEABLE
2133550383	2133557383	2133558383	38	MATING TO PCB	SQUARE	V0	UPDATED A	BLACK	SALEABLE
2133550384	2133557384	2133558384	38	MATING TO PCB	SQUARE	V0	UPDATED B	GREY	SALEABLE
2133550385	2133557385	2133558385	38	MATING TO PCB	SQUARE	V0	UPDATED C	DK GREY	SALEABLE

NOTES: VALID UNLESS OTHERWISE SPECIFIED
1. GENERAL:

a. CONNECTOR HEADER MUST BE VALIDATED TO THE FOLLOWING FUNCTIONAL REQUIREMENTS:
HB VALIDATION SPECIFICATION: GMW3191 JUNE 2012
V0 VALIDATION SPECIFICATION: USCAR-2 REV6
SOLDERABILITY: SMES-152

b. APPLICATION SPECIFICATION: AS-34959-001
TEST SUMMARY:
HB: TS-34961-001
V0: 2133550000-TS
PRODUCT SPECIFICATION:
HB: PS-34959-001
V0: 2133550000-PS
COSMETIC SPECIFICATION: PS-45499-002 Class B
GEOMETRIC TOLERANCING: SEE DIN 16901 TABLE
MATES WITH: SD-34959-030
PACKAGING SPECIFICATION: SEE TABLE.

2. DESIGN: MATERIALS:

a. SHROUD (PLASTIC HOUSING):
HB RESIN - SPS
V0 RESIN - SPS

b. PIN ALIGNMENT PLATE:
HB RESIN - SPS
V0 RESIN - SPS

c. 0.50MM BLADES:
BASE MATERIAL: BRASS
PLATING TYPE: AS NOTED

d. 1.20MM BLADES:
BASE MATERIAL: BRASS
PLATING TYPE: AS NOTED

3. PLATING REQUIREMENTS:

a. UNDERPLATING - OVERALL NICKEL

b. OVERPLATING - OVERALL REFLOWED TIN

4. CROSS-HATCHED AREAS MAKE CONTACT WITH PCB

REV	REV DESCRIPTION	ECN SAP NO.
K3	SHEET 5: REMOVED DIM 34A & 34B	CO-000010261
K2	1. SHEET 1: OBSOLETED PART NUMBERS 349610341, 349610342, 349610383, 349610384, 349610385, 2133550340, 349617340, 349617341, 349617342, 34961-7383, 349617384, 349618340, 349618341, 349618342, 349618383, 349618384, 349618385, 2133550341,2133550380, 349617380, 349617381, 349617382, 349617383, 349617384, 349617385, 2133557381, 2133557382, 2133558380, 2133558381, 2133558382 2. SHEET 5: ADDED DIM 34A & 34B	CO-000006603
K1	SHEET 1: UPDATED PRODUCT STATUS IN ASSEMBLY LIST TABLE SHEET 2: UPDATED 38CKT UPDATED KEY B & KEY C VIEWS	CO-000002963
K	SHEET 5: ADDED DIM28 TO DIM37 ALL SHEET: UPDATED PRODUCT VIEWS	CO-000000686
J6	CREATED NEW REVISION TO UPLOAD DRAWING IN MDS SYSTEM	CO-000000910
J5	SHEET 1: ADDED NEW PART NUMBER IN TABLE SHEET 1: ADDED NOTE 4 SHEET 3: ADDED SHEET TO SHOW PIN INSERTION DIRECTION VIEW AND PAP HOLE SHAPE VIEW	CO-000000910
J4	SHEET 3: UPDATED BALLOON NUMBER	668374
J3	1. SHEET 1: UPDATED NOTES INFORMATION 2. SHEET 3: ADDED “BEFORE SOLDERING” NOTE TO DIM 3 3. SHEET 3: ADDED DIM 3A	663659
J2	1. SHEET 1: UPDATED NOTES INFORMATION 2. SHEET 1: UPDATED V0 PRODUCT STATUS 3. SHEET 4: DIM 3: 10.77±0.18 WAS 10.77(+0.13/-0.08) 4. SHEET 5: REMOVED BALLOON NUMBER FOR DIMENSION OF PCB LAYOUT	658910
J1	1. UPDATED BELOW PART NUMBER STATUS TO OBSOLETED: 34961-0380, 34961-7380, 34961-8380 34961-0381, 34961-7381, 34961-8381 34961-0382, 34961-7382, 34961-8382 2. UPDATED BELOW V0 PART NUMBER STATUS TO SALEABLE: 2133550340, 2133557340, 2133558340 3. ADDED V0 VALIDATION SPECIFICATION & V0 PRODUCT SPECAIFICATION INFORMATION IN NOTES	631858
J	1. ADDED V0 NEW PART NUMBER IN SHEET 1: 2133550340, 2133550341, 2133550342, 2133550380, 2133550381, 2133550382 2133557340, 2133557341, 2133557342, 2133557380, 2133557381, 2133557382 2133558340, 2133558341, 2133558342, 2133558380, 2133558381, 2133558382 2. ADDED SHEET 2 TO SHOW 34&38CKT POLARIZATION OPTION & HB / V0 VERSION DIFFERENCE 3. ADDED V0 PLASTIC MATERIAL INFORAMTION IN NOTES	626237
H1	1. UPDATED NEWEST VIEW OF THE POLARIZATION OPTION UPDATED A & B C. 2. ADDED DIM1A, DIM 3A, DIM 6A, DIM 7A. 3. UPDATED PRODUCT STATUS. 4. UPDATED DIM 26: 0.4±0.03 WAS 0.4±0.10	609559
H	ADDED THE FOLLOW ITEMS TO CUSTOMER DRAWING: 1. ADDED DATUM F,DATUM G AND DATUM H,SEE SHEET 2 AND SHEET 3. 2. ADDED NEW UPWARD VIEW FOR 38WAY HEADER ASSEM, SEE SHEET 2. 3. ADDED NEW VIEW SECTION X-X,SECTION Y-Y,SECTION Z-Z AND SECTION W-W,SEE SHEET 3.	10904363
G	ADDED NEW VIEW OF UPDATED POL A & B C, SEE SHEET 1. ADDED NEW P/N: 34961-0383 \ 34961-0384 \ 34961-0385 \34961-7383 \ 34961-7384 \ 34961-7385 \34961-8383 \34961-8384\ 34961-8385 IN THE BOM ON SHEET 1. ADDED PRODUCT STATUS IN BOM.	10885609

INSPECTION BALLOON NUMBER LOG

PER DRAWING REVISION: K3

LAST BALLOON NUMBER USED: 37

ADDED BALLOON NUMBERS:

REMOVED BALLOON NUMBERS: 34A & 34B

DIN 16901	CODE LETTER	NOMINAL DIMENSION RANGE													
		OVER	0	1	3	6	10	15	22	30	40	53	70	90	120
		UP TO	1	3	6	10	15	22	30	40	53	70	90	120	160
PRECISION ENGINEERING	A		±0.10	±0.12	±0.14	±0.16	±0.20	±0.22	±0.24	±0.26	±0.28	±0.31	±0.35	±0.40	±0.50
	B		±0.05	±0.06	±0.07	±0.08	±0.10	±0.12	±0.14	±0.16	±0.18	±0.21	±0.25	±0.30	±0.40
A: FOR NON-MOLD RELATED DIMENSIONS (ACROSS PARTING LINE)															
B: FOR MOLD RELATED DIMENSIONS (WITHIN MOLD COMPONENTS)															

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 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: mm
SCALE: 2:1
GENERAL TOLERANCES (UNLESS SPECIFIED)
ANGULAR TOL ± 0.5°
4 PLACES ±
3 PLACES ±
2 PLACES ±
1 PLACE ±
0 PLACES ±
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REFER TO REVISION COLUMN

STATUS: Production
DRWN: Gang Li 2024-02-29
CHK'D: Ringo Hu 2024-02-29
APPR: Colin Zhang 2024-03-04

THIRD ANGLE PROJECTION | DRAWING: D-SIZE | SERIES: 34961

molex

34 & 38CKT MINI50
RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-34961-030	PSD	001	K3

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	1 OF 6

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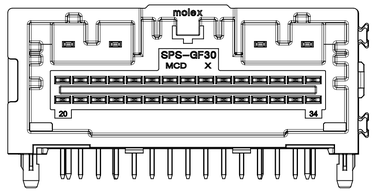
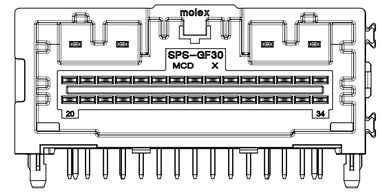
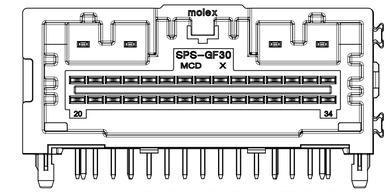
SHEET NO.	SHEET DESCRIPTION
2	34&38CKT POLARIZATION OPTION VIEW HB/V0 HEADER DIFFERENCE VIEW



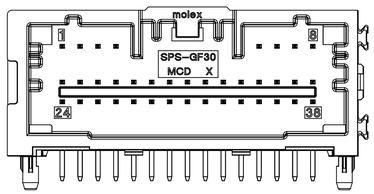
34CKT POLARIZATION OPTION A



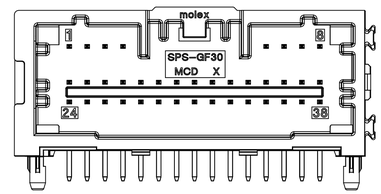
34CKT POLARIZATION OPTION B



34CKT POLARIZATION OPTION C



38CKT POLARIZATION OPTION A
(OBSOLTETED)



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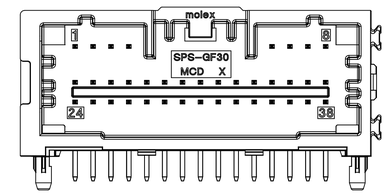
(OBSOLTETED)



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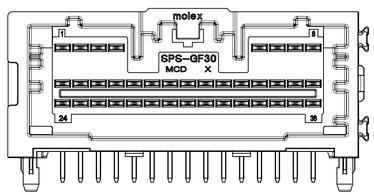
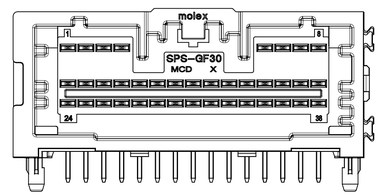
(OBSOLTETED)



38CKT POLARIZATION OPTION UPDATED A



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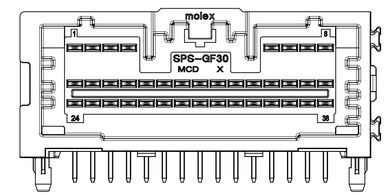
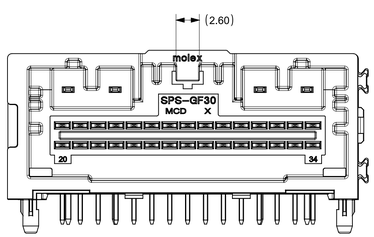
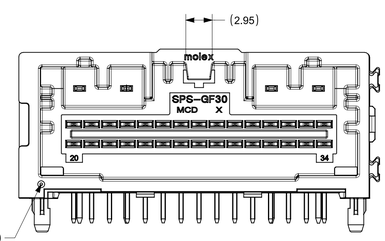


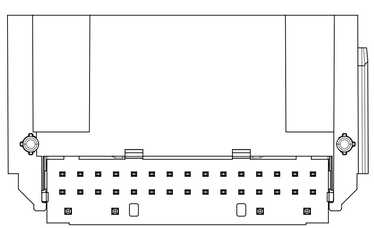
38CKT POLARIZATION OPTION UPDATED C

HB / V0 VERSION DIFFERENCE

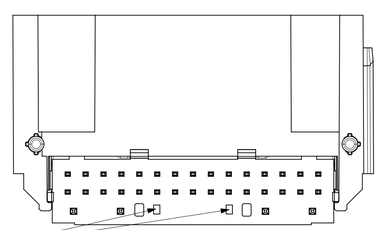




DEPRESSION FEATURE ADDED TO V0
PART TO DISTINGUISH FROM HB PART



HB P/Ns: 34961XXXX
APPLIES TO ALL CKT SIZES, USE 34CKT AS SHOWN



HOLE FEATURE ADDED TO V0
PART TO DISTINGUISH FROM HB PART

V0 P/Ns: 213355XXXX
APPLIES TO ALL CKT SIZES, USE 34CKT AS SHOWN

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
FA = 0	DIMENSION UNITS: mm	SCALE: 3:1	CURRENT REV DESC: REFER TO REVISION COLUMN
FC = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
FP = 0	ANGULAR TOL ± 0.5°		
DIVISIONAL SYMBOLS	4 PLACES ±		
	3 PLACES ±		STATUS: Production
	2 PLACES ±		DRWN: Gang Li 2024-02-29
	1 PLACE ±		CHK'D: Ringo Hu 2024-02-29
	0 PLACES ±		APPR: Colin Zhang 2024-03-04
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING: D-SIZE / SERIES: 34961

molex

34 & 38CKT MINI50
RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-34961-030	PSD	001	K3

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	2 OF 6

FORMAT TYLAPH01
REVISION: B
DATE: 2020-06-01

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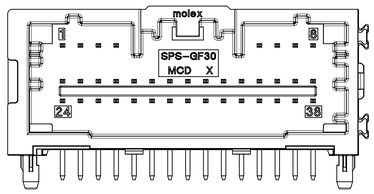
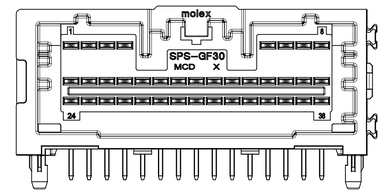
SHEET NO.	SHEET DESCRIPTION
3	PIN INSERTION DIRECTION VIEW PAP HOLE SHAPE VIEW

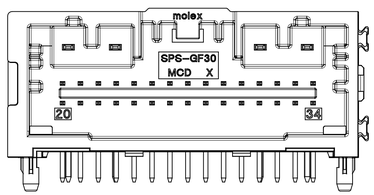
PIN INSERTION DIRECTION VIEW



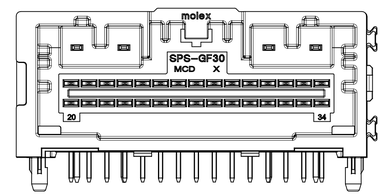
38CKT PIN INSERTION DIRECTION
PCB SIDE TO MATING SIDE



38CKT PIN INSERTION DIRECTION
MATING SIDE TO PCB SIDE

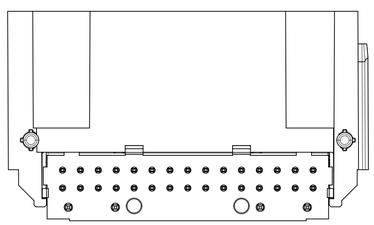


34CKT PIN INSERTION DIRECTION
PCB SIDE TO MATING SIDE

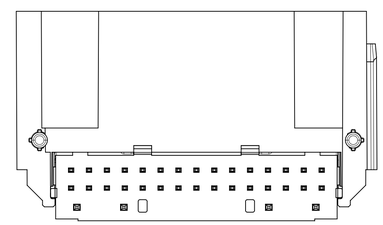


34CKT PIN INSERTION DIRECTION
MATING SIDE TO PCB SIDE

PAP HOLE SHAPE VIEW



PAP HOLE SHAPE
ROUND



PAP HOLE SHAPE
SQUARE

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
FA = 0	DIMENSION UNITS: mm	SCALE: 3:1	CURRENT REV DESC: REFER TO REVISION COLUMN
FC = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
FP = 0	ANGULAR TOL ± 0.5°		
	4 PLACES ±		
DIVISIONAL SYMBOLS	3 PLACES ±		
	2 PLACES ±		
	1 PLACE ±		
	0 PLACES ±		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

STATUS: Production
DRWN: Gang Li 2024-02-29
CHK'D: Ringo Hu 2024-02-29
APPR: Colin Zhang 2024-03-04

THIRD ANGLE PROJECTION | DRAWING: D-SIZE | SERIES: 34961

molex

34 & 38CKT MINI50
RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-34961-030	PSD	001	K3

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	3 OF 6

FORMAT TLCforprint2
REVISION: B
DATE: 2020/08/31

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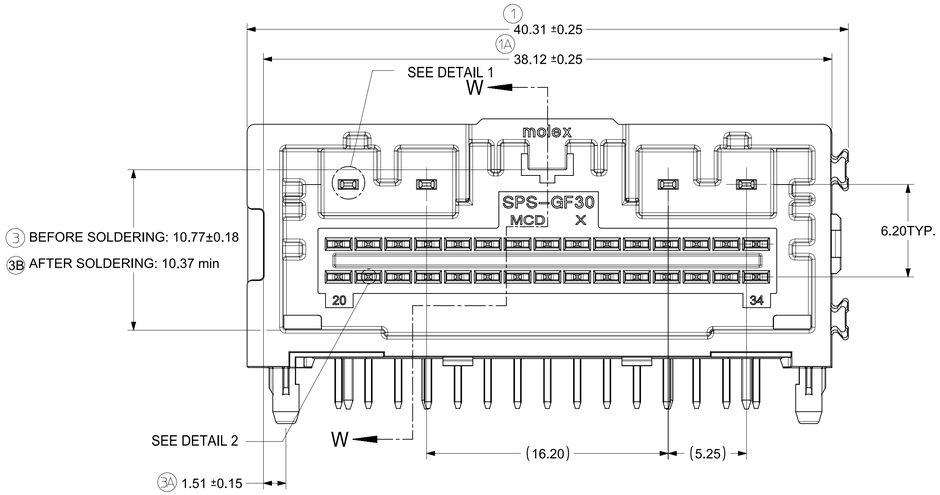
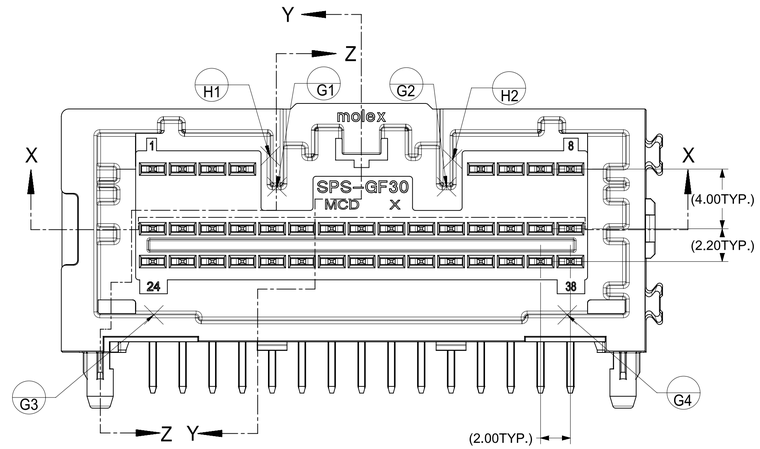
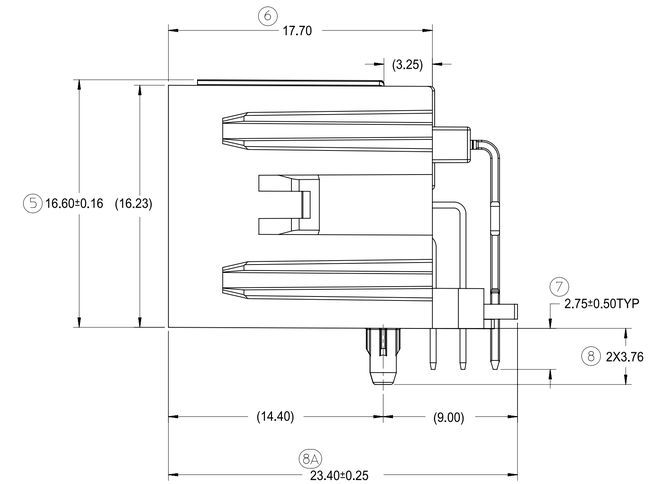
SHEET NO.	SHEET DESCRIPTION
4	DETAIL DIMENSION VIEW

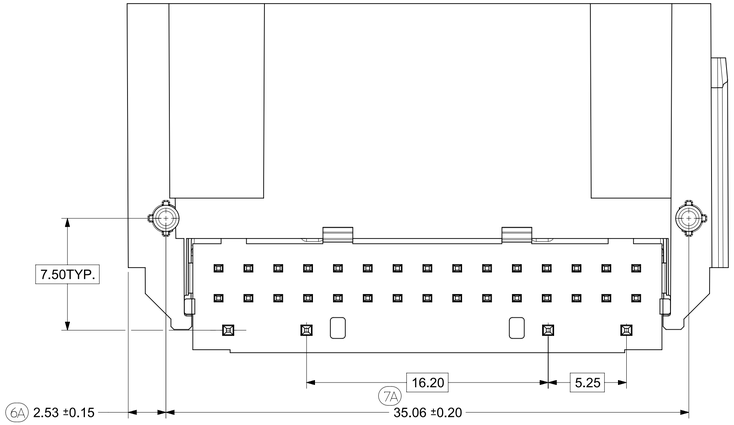


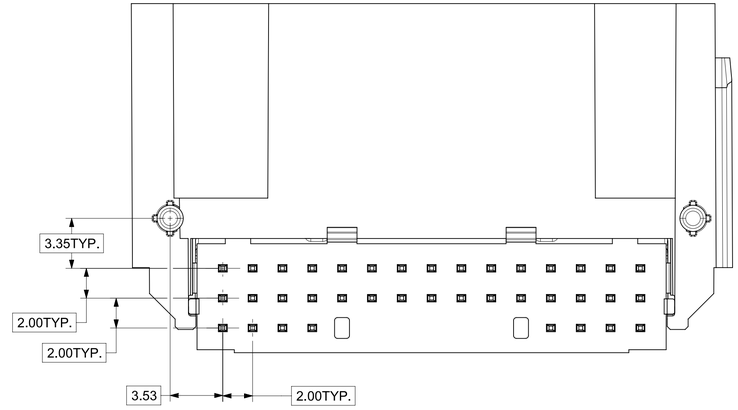
34WAY HEADER ASSEM



38WAY HEADER ASSEM







FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
FA = 0	DIMENSION UNITS: mm	SCALE: 5:1	CURRENT REV DESC: REFER TO REVISION COLUMN	molex
FC = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			34 & 38CKT MINI50 RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING
FP = 0	ANGULAR TOL ± 0.5°			
DIVISIONAL SYMBOLS	4 PLACES ±			
	3 PLACES ±			
	2 PLACES ±		STATUS: Production	PRODUCT SALES DRAWING
	1 PLACE ±		DRWN: Gang Li 2024-02-29	DOCUMENT NUMBER: SD-34961-030 / DOC TYPE: PSD / DOC PART: 001 / REVISION: K3
	0 PLACES ±		CHK'D: Ringo Hu 2024-02-29	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: Colin Zhang 2024-03-04	
	THIRD ANGLE PROJECTION	DRAWING: D-SIZE	SERIES: 34961	MATERIAL NUMBER: SEE TABLE / CUSTOMER: GENERAL MARKET / SHEET NUMBER: 4 OF 6

FORMAT TC-Ultra-HD
REVISION: B
DATE: 2022/08/01

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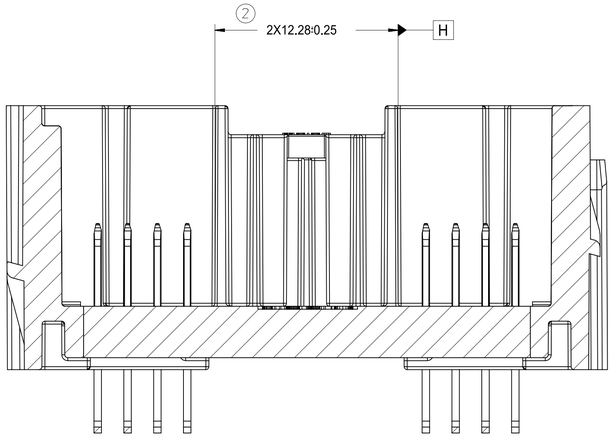
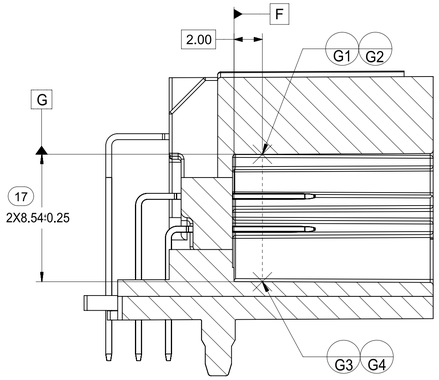
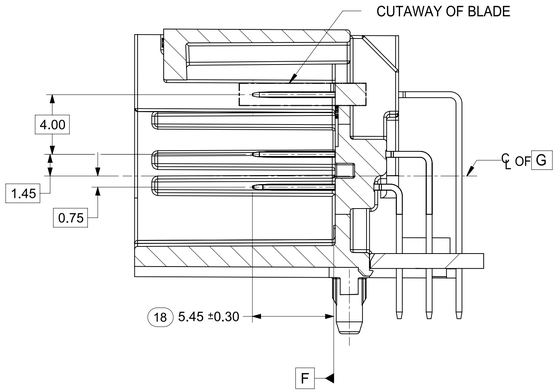
SHEET NO.	SHEET DESCRIPTION
5	DETAIL DIMENSION VIEW



SECTION X-X

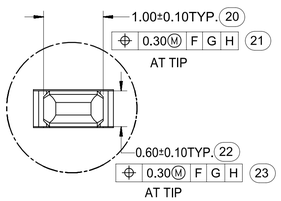


SECTION Z-Z

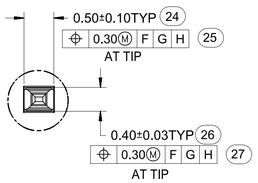


SECTION Y-Y

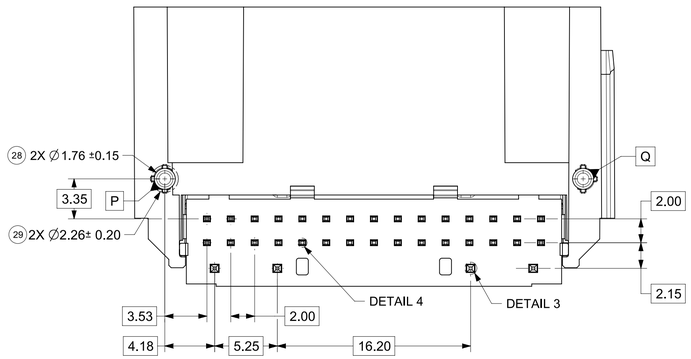
MATING SIDE TP:

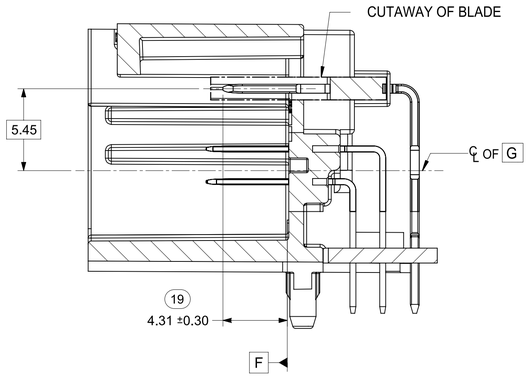


DETAIL 1
SCALE 20:1



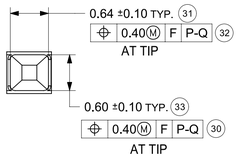
DETAIL 2
SCALE 20:1



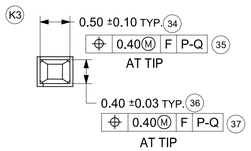


SECTION W-W

PCB SIDE TP:



DETAIL 3
SCALE 20:1



DETAIL 4
SCALE 20:1

FUNCTIONAL SYMBOLS		
FA = 0	DIMENSION UNITS: mm	SCALE: 5:1
FC = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
FE = 0	ANGULAR TOL ± 0.5°	
DIVISIONAL SYMBOLS	4 PLACES ±	
	3 PLACES ±	
	2 PLACES ±	
	1 PLACE ±	
	0 PLACES ±	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

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

CURRENT REV DESC: REFER TO REVISION COLUMN

STATUS: Production
DRWN: Gang Li 2024-02-29
CHK'D: Ringo Hu 2024-02-29
APPR: Colin Zhang 2024-03-04

molex

34 & 38CKT MINI50
RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING

PRODUCT SALES DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-34961-030	PSD	001	K3

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	D-SIZE	34961	SEE TABLE	GENERAL MARKET	5 OF 6

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SHEET NO.	SHEET DESCRIPTION
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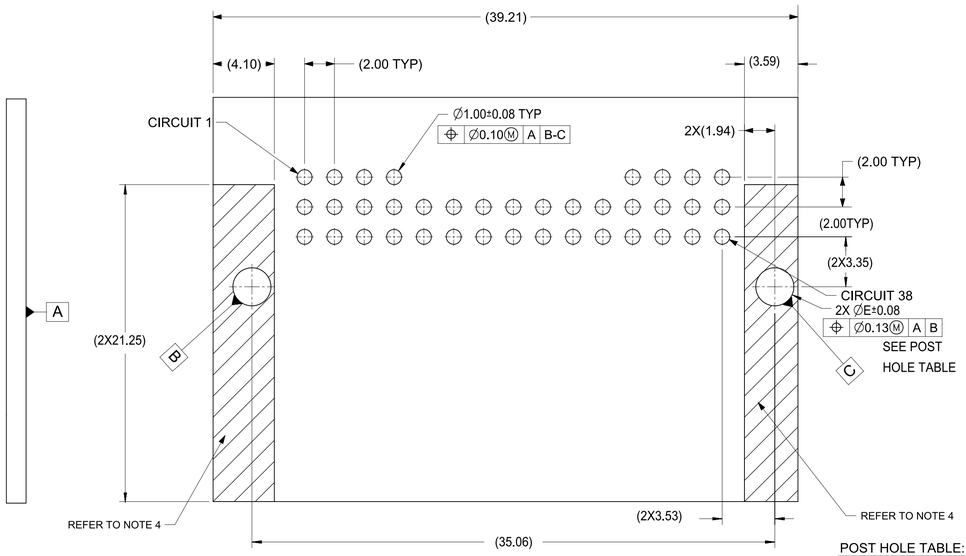
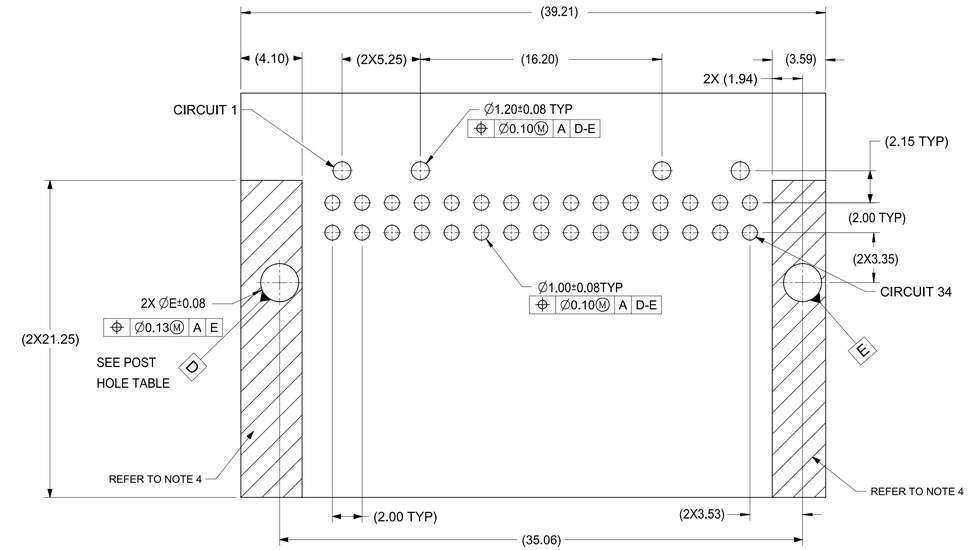


REFERENCE 38WAY PCB LAYOUT

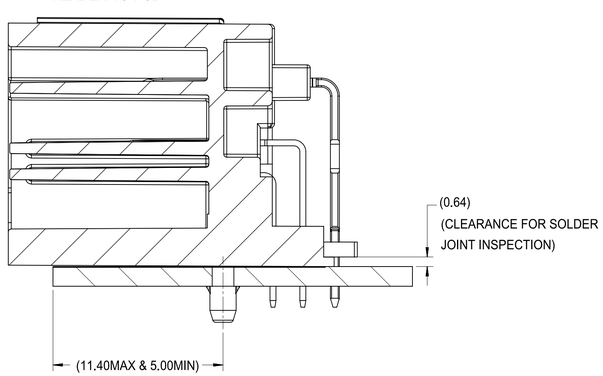
POST HOLE TABLE:

FOR DIM E:	
PRESS FIT:	2.15
DROP IN:	2.55



REFERENCE 34WAY PCB LAYOUT

FLUSH MOUNTING
HEADER-TO-PCB



FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
= 0	DIMENSION UNITS: mm	SCALE: 5:1	CURRENT REV DESC: REFER TO REVISION COLUMN	molex
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			34 & 38CKT MINI50 RIGHT ANGLE HEADER ASSEMBLY SALES DRAWING
= 0	ANGULAR TOL ± 0.5°			
	4 PLACES ±			
DIVISIONAL SYMBOLS	3 PLACES ±			PRODUCT SALES DRAWING
	2 PLACES ±		STATUS: Production	
	1 PLACE ±		DRWN: Gang Li 2024-02-29	DOCUMENT NUMBER: SD-34961-030
	0 PLACES ±		CHK'D: Ringo Hu 2024-02-29	DOC TYPE: PSD; DOC PART: 001; REVISION: K3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	APPR: Colin Zhang 2024-03-04	MATERIAL NUMBER: SEE TABLE
			DRAWING: D-SIZE	CUSTOMER: GENERAL MARKET
			SERIES: 34961	SHEET NUMBER: 6 OF 6