

- NOTES:
- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER, UL94 V-0
WAFER DIELECTRIC - LIQUID CRYSTAL POLYMER, UL94 V-0
CONTACT - COPPER ALLOY
 - 2) FINISHES: SEE SHEET 2
 - 3) PRODUCT SPECIFICATION: THIS PART CONFORMS TO MOLEX SPECIFICATION PS-7.
 - 4) PACKAGING SPECIFICATION: THIS PART TO BE PACKAGED PER SPECIFICATION PK-75020-030.
 - 5) APPLICATION SPECIFICATION: THIS PART TO BE APPLIED PER SPECIFICATION PS-75018-001. APPLICATION TOOL AND INSTRUCTIONS PER AS-75018-001.
 - 6) MATING INFORMATION
THIS PART MATES WITH 74149-XXXX.
WILL MATE WITH MAXIMUM 1.27mm MIS-ALIGNMENT.
WILL MATE WITH MAXIMUM 0.5° MIS-ALIGNMENT.
 - 7) FOR CIRCUIT DESIGNATION SEE SHEET 3
 - 8) FOR PCB INFORMATION SEE SHEET 3
 - 9) CIRCUITS IN THIS ZONE HAVE BEEN OMITTED TO SIMPLIFY THE MODEL. ACTUAL PRODUCT IS FULLY LOADED WITH TERMINALS.
 - 10) APPLICATION TOOLING KEEP OUT AREA. NO COMPONENTS ALLOWED IN THIS AREA.
 - 11) CONFORMS TO MOLEX COSMETIC SPECIFICATION PS-45499-002 AND PS-45499-003.
 - 12) MARKING: PART NUMBER, MX, DDDY
 - 13) RECOMMENDED DRILL SIZE 0.48±0.03 TO YIELD FINISHED PLATED THROUGH HOLE OF 0.39±0.05

PROPOSAL IEC NO: UCP2012-0751 DRAWN BY: MS IBARRA 2011/12/12 CHKD: SDANNELLEY 2011/12/12 APPR: SMILLER 2012/01/23	DESCRIPTION HS DOCK+ FIXED CONNECTOR	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		$\nabla = 0$ $\nabla = 0$ $\nabla = 0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .01 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	MM/IN	2:1	METRIC	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MS IBARRA 2010/09/28 CHECKED BY: SDANNELLEY 2010/09/28 APPROVED BY: SMILLER 2012/01/23 MATERIAL NO. SEE TABLE SIZE C	TITLE HS DOCK+ FIXED CONNECTOR MOLEX INCORPORATED DOCUMENT NO. SD-74148-0000	SHEET NO. 1 OF 4		
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

LEADED ASSEMBLIES

ITEM NUMBER	CIRCUIT SIZE	NO. OF COLUMNS 'N'	CENTERLINE DIMENSION 'A' mm(in)	O/A HEIGHT DIMENSION 'B' mm(in)	O/A LENGTH DIMENSION 'C' mm(in)	PEG TO PEG DIMENSION 'D' mm(in)	FIRST-LAST SIGNAL DIMENSION 'E' mm(in)	FIRST-LAST GROUND DIMENSION 'F' mm(in)	PLATING FINISH	HOUSING FINISH
74148-0001	144	48	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	OPTION 1	NICKEL
74148-0002	108	36	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	OPTION 1	NICKEL
74148-2001	144	48	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	OPTION 3	GOLD
74148-2002	108	36	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	OPTION 3	GOLD

LEAD FREE ASSEMBLIES

ITEM NUMBER	CIRCUIT SIZE	NO. OF COLUMNS 'N'	CENTERLINE DIMENSION 'A' mm(in)	O/A HEIGHT DIMENSION 'B' mm(in)	O/A LENGTH DIMENSION 'C' mm(in)	PEG TO PEG DIMENSION 'D' mm(in)	FIRST-LAST SIGNAL DIMENSION 'E' mm(in)	FIRST-LAST GROUND DIMENSION 'F' mm(in)	PLATING FINISH	HOUSING FINISH
74148-1001	144	48	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	OPTION 2	NICKEL
74148-1002	108	36	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	OPTION 2	NICKEL
74148-3001	144	48	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	OPTION 4	GOLD
74148-3002	108	36	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	OPTION 4	GOLD

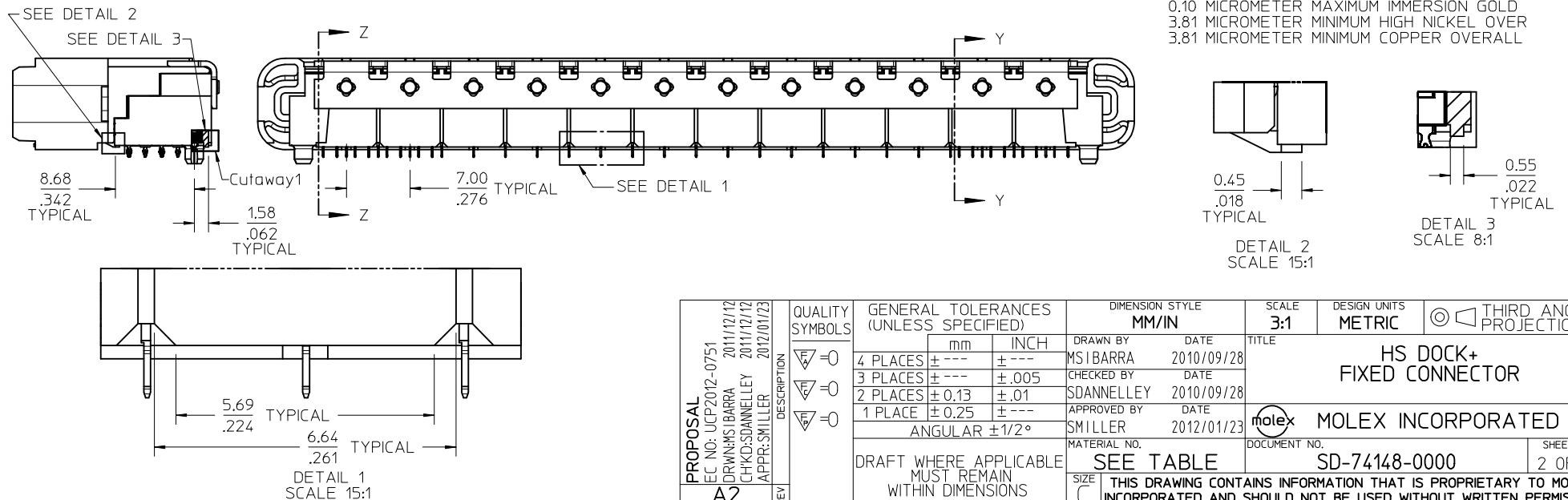
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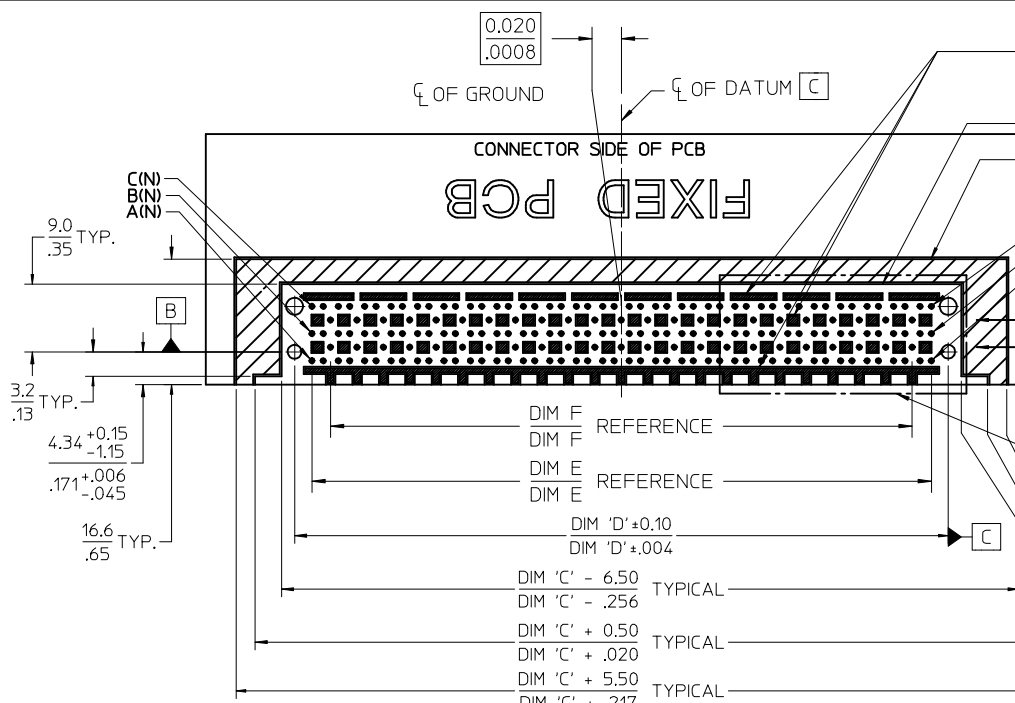
OPTION 1
 CONTACT INTERFACE
 0.76 MICROMETER MINIMUM SELECT GOLD
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 COMPLIANT INTERFACE
 0.76 MICROMETER MINIMUM SELECT TIN-LEAD OVER
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 HOUSING
 3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER
 3.81 MICROMETER MINIMUM COPPER OVERALL

OPTION 2
 CONTACT INTERFACE
 0.76 MICROMETER MINIMUM SELECT GOLD
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 COMPLIANT INTERFACE
 0.76 MICROMETER MINIMUM SELECT TIN OVER
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 HOUSING
 3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER
 3.81 MICROMETER MINIMUM COPPER OVERALL

OPTION 3
 CONTACT INTERFACE
 0.76 MICROMETER MINIMUM SELECT GOLD
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 COMPLIANT INTERFACE
 0.76 MICROMETER MINIMUM SELECT TIN-LEAD OVER
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 HOUSING
 0.10 MICROMETER MAXIMUM IMMERSION GOLD
 3.81 MICROMETER MINIMUM NICKEL OVER
 3.81 MICROMETER MINIMUM COPPER OVERALL

OPTION 4
 CONTACT INTERFACE
 0.76 MICROMETER MINIMUM SELECT GOLD
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 COMPLIANT INTERFACE
 0.76 MICROMETER MINIMUM SELECT TIN OVER
 1.27 MICROMETER MINIMUM NICKEL OVERALL
 HOUSING
 0.10 MICROMETER MAXIMUM IMMERSION GOLD
 3.81 MICROMETER MINIMUM HIGH NICKEL OVER
 3.81 MICROMETER MINIMUM COPPER OVERALL





NO EXPOSED TRACES ON SURFACE OF PCB IN CONNECTOR STAND OFF LOCATIONS
 CONNECTOR KEEP OUT AREA
 APPLICATION TOOLING KEEP OUT AREA (NOTES 5 & 10)

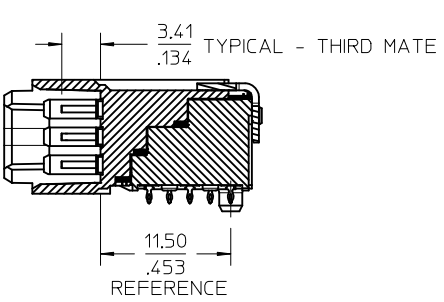
CIRCUIT DESIGNATION
 FIRST MATE: HOUSING - SIGNAL GROUND
 SECOND MATE: A1, C1, A(N), C(N) (FOR POWER RETURN)
 THIRD MATE: A2, B2, C2, A(N-1), B(N-1), C(N-1) & ALL OTHERS (A2, C2, A(N-1) & C(N-1) FOR POWER) (ALL OTHERS SIGNAL)
 LAST MATE: B1, B(N) (FOR CARD DETECT)

ALL COLUMNS FROM 3 THROUGH (N-2) ARE SUITABLE FOR DIFFERENTIAL PAIRS
 EG: A3-A4, B3-B4, C3-C4, A(N-2)-A(N-3), B(N-2)-B(N-3)

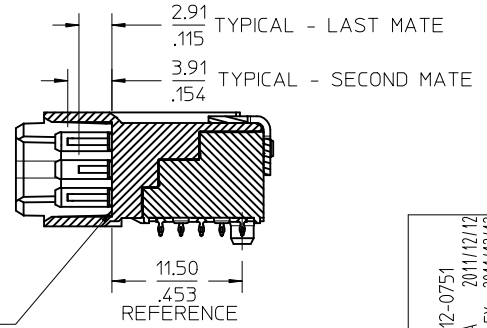
SIGNAL GROUND: ROWS D & E

NOMINAL WIPE - FULL SEATED

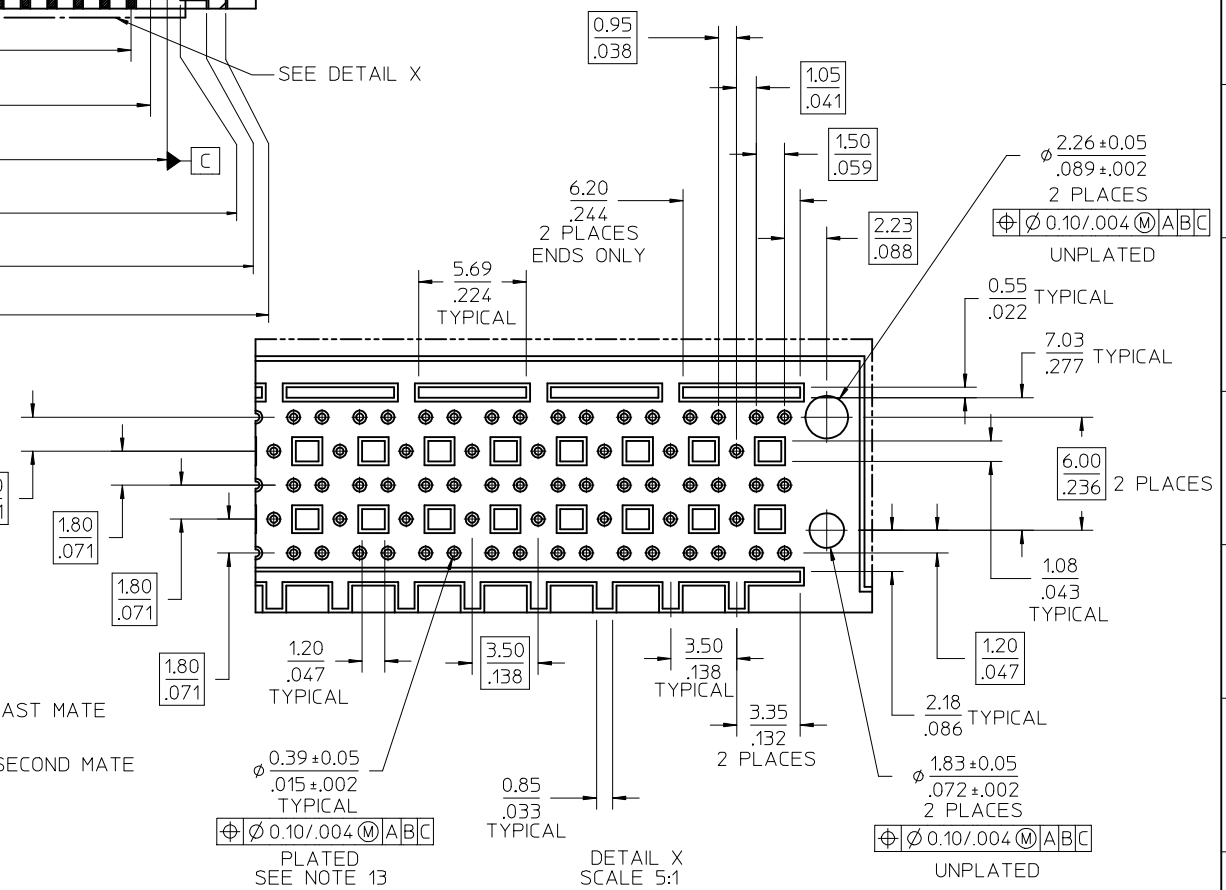
FIRST MATE: 5.2mm
 SECOND MATE: 2.6mm
 THIRD MATE: 2.1mm
 LAST MATE: 1.6mm



SIGNAL
 SECTION Y-Y
 SCALE 3:1



POWER
 SECTION Z-Z
 SCALE 3:1

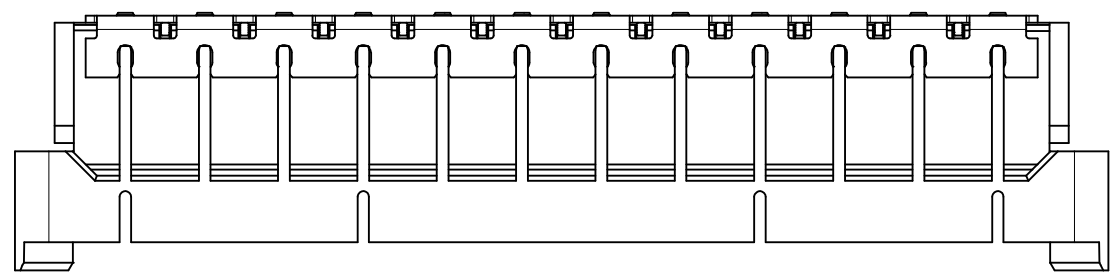


DETAIL X
 SCALE 5:1

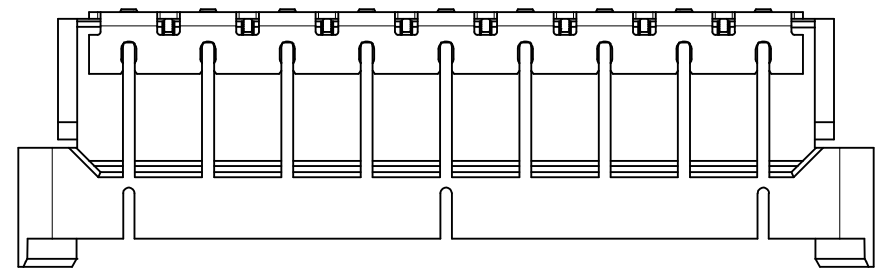
PROPOSAL EC NO: UCP2012-0751 DRW:MSIBARRA 2011/12/12 CHKD:SDANNELLEY 2011/12/12 APPR:SMILLER 2012/01/23	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .01 1 PLACE ± 0.25 ± ---		DRAWN BY DATE MSIBARRA 2010/09/28 CHECKED BY DATE SDANNELLEY 2010/09/28 APPROVED BY DATE SMILLER 2012/01/23		TITLE HS DOCK+ FIXED CONNECTOR	MATERIAL NO. SEE TABLE		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ±1/2°		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-74148-0000		SHEET NO. 3 OF 4	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

HOUSING SHROUD SLOT CONFIGURATION

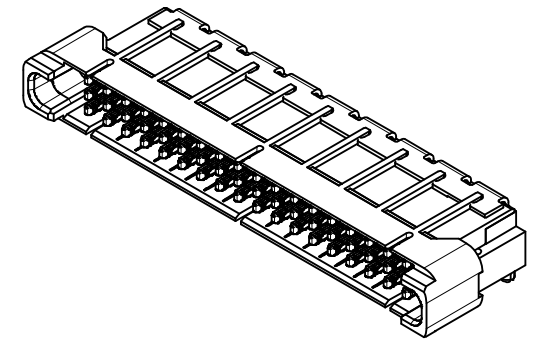
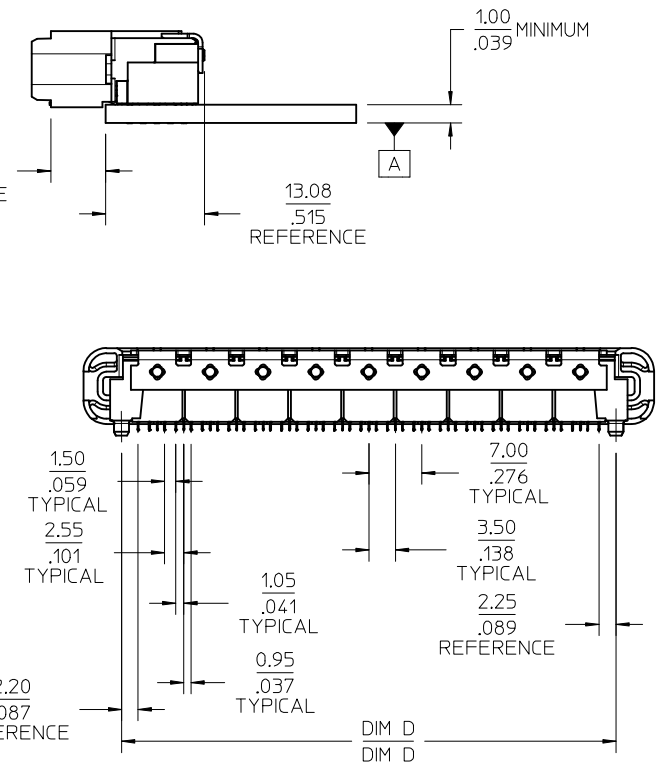
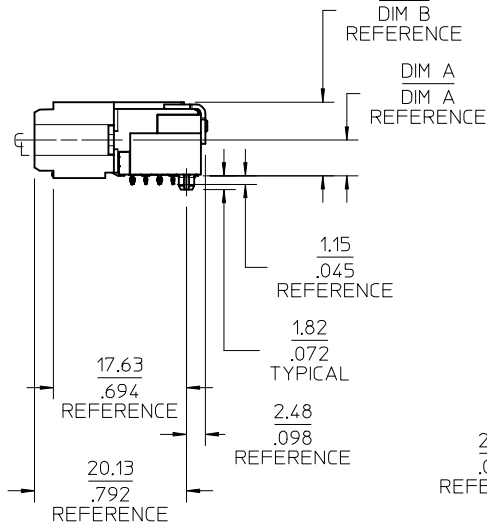
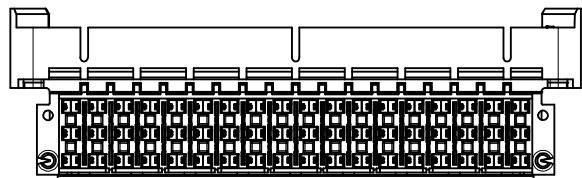
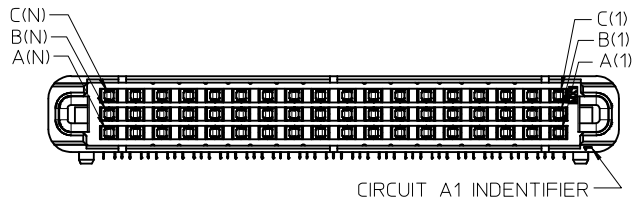
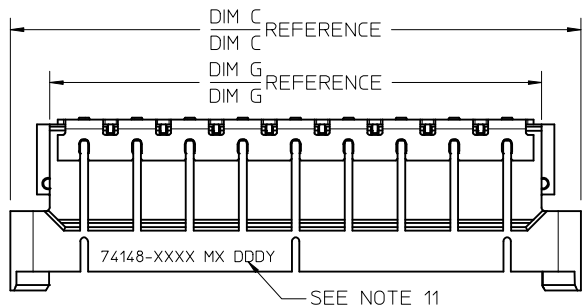
144 CIRCUIT



108 CIRCUIT



PROPOSAL EC NO: UCP2012-0751 DRWN:MSIBARRA 2011/12/12 CHKD:SDANNELLEY 2011/12/12 APPR:SMILLER 2012/01/23	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN	SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	2 PLACES ± 0.13 ± .01	1 PLACE ± 0.25 ± ---	DRAWN BY DATE MSIBARRA 2010/09/28		TITLE HS DOCK+ FIXED CONNECTOR	
		ANGULAR ± 1/2°				CHECKED BY DATE SDANNELLEY 2010/09/28		APPROVED BY DATE SMILLER 2012/01/23	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-74148-0000		SHEET NO. 4 OF 4	
A2	REV	SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



NOTES:

- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER, UL94 V-0
WAFER DIELECTRIC - LIQUID CRYSTAL POLYMER, UL94 V-0
CONTACT - COPPER ALLOY
CLIPS - STAINLESS STEEL
- 2) FINISHES: SEE SHEET 2
- 3) PRODUCT SPECIFICATION: THIS PART CONFORMS TO MOLEX SPECIFICATION PS-74148-0000.
- 4) PACKAGING SPECIFICATION: THIS PART TO BE PACKAGED PER SPECIFICATION PK-75020-030.
- 5) APPLICATION SPECIFICATION: THIS PART TO BE APPLIED PER SPECIFICATION AS-74148-0000. APPLICATION TOOL AND INSTRUCTIONS PER AS-74148-0000.
- 6) MATING INFORMATION
THIS PART MATES WITH 74149-XXXX.
WILL MATE WITH MAXIMUM 1.27mm MIS-ALIGNMENT.
WILL MATE WITH MAXIMUM 0.75° MIS-ALIGNMENT.
- 7) FOR CIRCUIT DESIGNATION SEE SHEET 3
- 8) FOR PCB INFORMATION SEE SHEET 3
- 9) APPLICATION TOOLING KEEP OUT AREA. NO COMPONENTS ALLOWED IN THIS AREA.
- 10) CONFORMS TO MOLEX COSMETIC SPECIFICATION PS-45499-002 AND PS-45499-003.
- 11) MARKING: PART NUMBER, MX, DDDY
- 12) RECOMMENDED DRILL SIZE 0.48±0.03 TO YIELD FINISHED PLATED THROUGH HOLE OF 0.39±0.05
- 13) HOLD DOWN SCREWS ARE RECOMMENDED FOR THIS CONNECTOR. REFERENCE MOLEX DOCUMENT AS-74148-0000 SECTION 4.5.
- 14) GENERAL TOLERANCES DO NOT APPLY TO REFERENCE DIMENSIONS.

SEE NOTE 14 REGARDING REFERENCE DIMENSIONS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES ±	---	---
3 PLACES ±	---	±.005
2 PLACES ±	0.13	±.01
1 PLACE ±	0.25	---
0 PLACE ±	±	±

ANGULAR ±1/2°
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN		2:1	METRIC	
DRAWN BY	DATE	TITLE HS DOCK+ FIXED CONNECTOR		
MPOFF	2012/09/17			
CHECKED BY	DATE			
TIBARRA	2012/09/17			
APPROVED BY	DATE	 SD-74148-0001		
SMILLER	2012/10/01			

MATERIAL NO.
SEE TABLE
DOCUMENT NO.
SD-74148-0001
SHEET NO.
1 OF 5

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

REV	DESCRIPTION	QUALITY SYMBOLS
G2	APP:DMCGOWAN 2017/01/09	
	CHKD: 2016/11/17	
	DRWNGES: 2017/01/09	
	EC NO: UCP2017-1140	
	DM. UPDATE	

ITEM NUMBER	CIRCUT SIZE	NO. OF COLUMNS 'N'	CENTERLINE DIMENSION 'A' mm(in)	O/A HEIGHT DIMENSION 'B' mm(in)	O/A LENGTH DIMENSION 'C' mm(in)	PEG TO PEG DIMENSION 'D' mm(in)	FIRST-LAST SIGNAL DIMENSION 'E' mm(in)	FIRST-LAST GROUND DIMENSION 'F' mm(in)	O/A LENGTH DIMENSION 'G' mm(in)	PLATING FINISH	HOUSING FINISH	GROUND OPTION
74148-1001	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 1	NICKEL	2 TAIL
74148-1101	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 1	NICKEL	3 TAIL
74148-3001	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 2	GOLD	2 TAIL
74148-3101	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 2	GOLD	3 TAIL
74148-4202	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 1	NICKEL	2 TAIL
74148-4102	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 1	NICKEL	3 TAIL
74148-5202	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 2	GOLD	2 TAIL
74148-5102	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 2	GOLD	3 TAIL

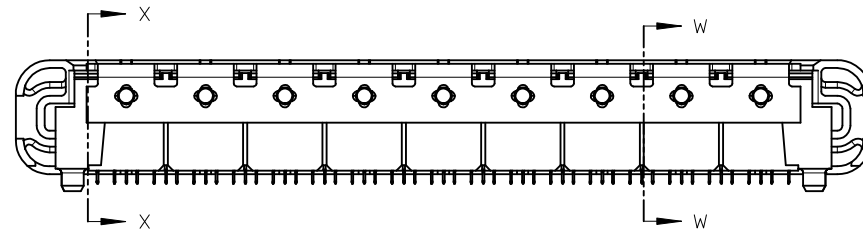
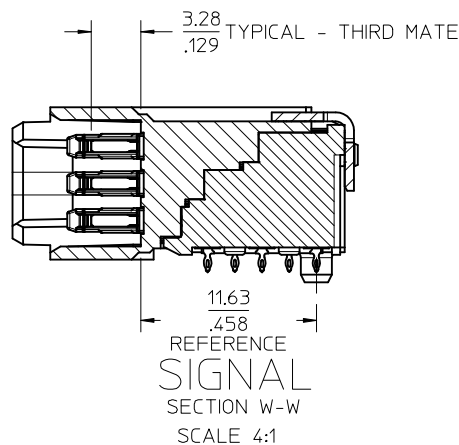
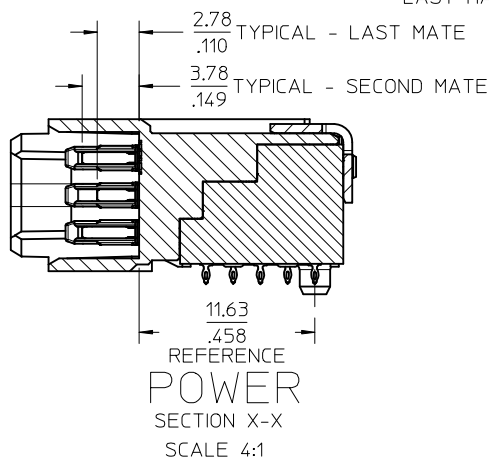
NOMINAL WIPE - FULL SEATED

FIRST MATE: 7.2mm

SECOND MATE: 2.4mm

THIRD MATE: 1.9mm

LAST MATE: 1.4mm



FINISHES:

OPTION 1

CONTACT INTERFACE

0.76 MICROMETER MINIMUM SELECT GOLD

1.27 MICROMETER MINIMUM NICKEL OVERALL

COMPLIANT INTERFACE

0.76 MICROMETER MINIMUM SELECT TIN OVER

1.27 MICROMETER MINIMUM NICKEL OVERALL

HOUSING

3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER

3.81 MICROMETER MINIMUM COPPER OVERALL

OPTION 2

CONTACT INTERFACE

0.76 MICROMETER MINIMUM SELECT GOLD

1.27 MICROMETER MINIMUM NICKEL OVERALL

COMPLIANT INTERFACE

0.76 MICROMETER MINIMUM SELECT TIN OVER

1.27 MICROMETER MINIMUM NICKEL OVERALL

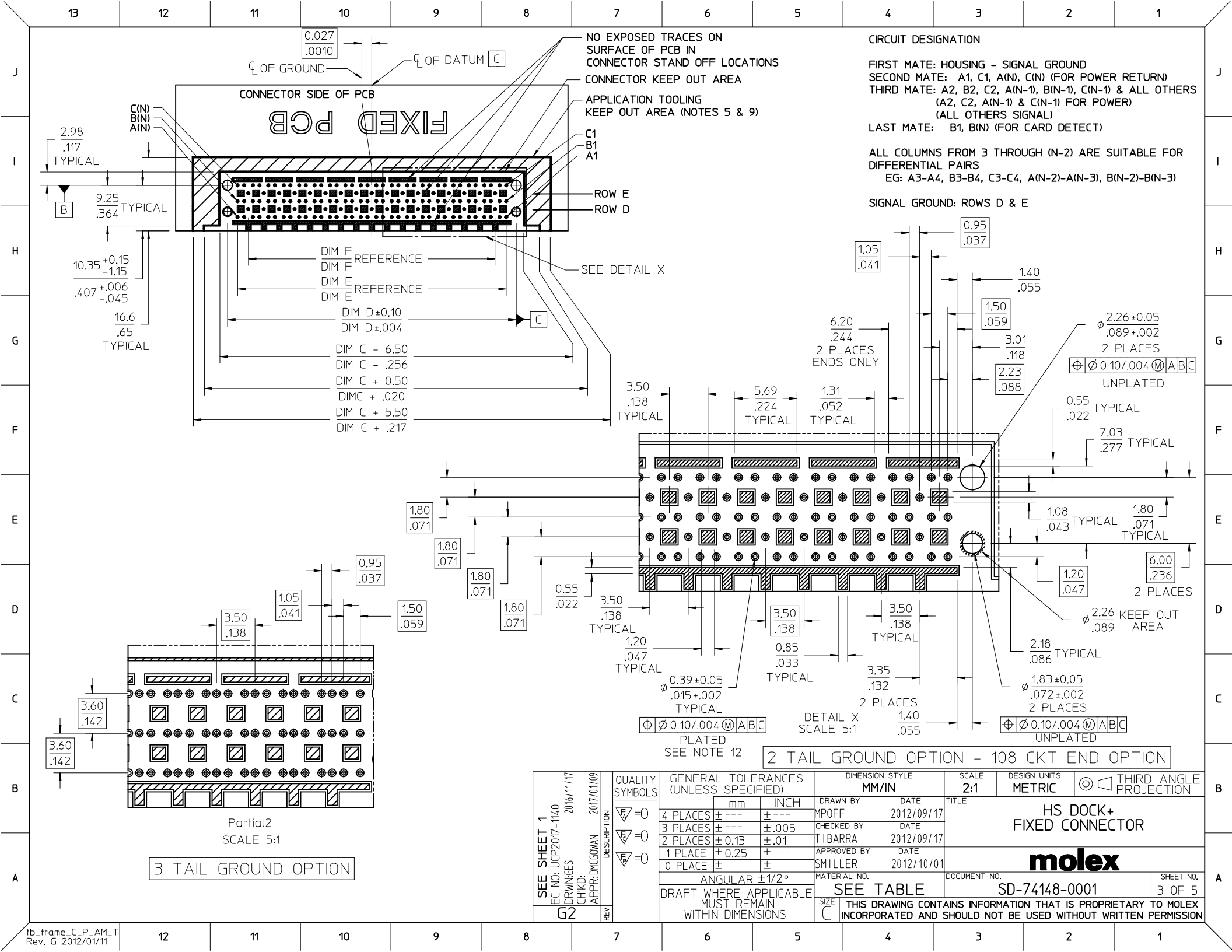
HOUSING

0.10 MICROMETER MAXIMUM IMMERSION GOLD

3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER

3.81 MICROMETER MINIMUM COPPER OVERALL

SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: CHKD: APPR:DMCGOWAN 2017/01/09	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	2 PLACES ± 0.13 ± .01	1 PLACE ± 0.25 ± ---	0 PLACE ± ±	DRAWN BY DATE MPOFF 2012/09/17		CHECKED BY DATE TIBARRA 2012/09/17
G2	DESCRIPTION REV	ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-74148-0001		2 OF 5	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

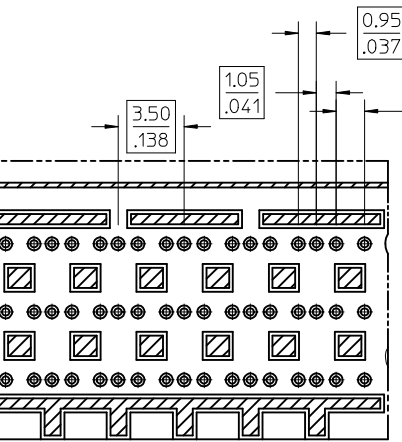
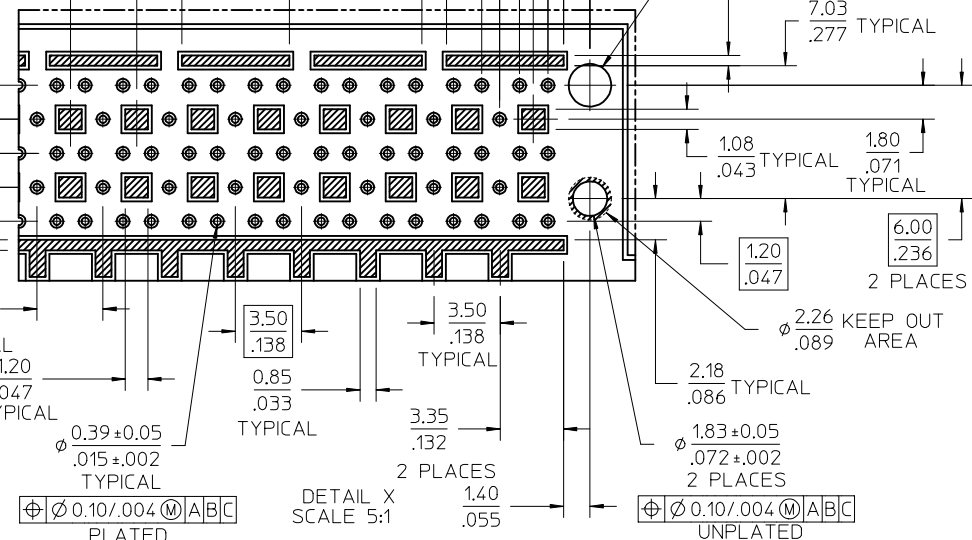


CIRCUIT DESIGNATION

FIRST MATE: HOUSING - SIGNAL GROUND
 SECOND MATE: A1, C1, A(N), C(N) (FOR POWER RETURN)
 THIRD MATE: A2, B2, C2, A(N-1), B(N-1), C(N-1) & ALL OTHERS (A2, C2, A(N-1) & C(N-1) FOR POWER) (ALL OTHERS SIGNAL)
 LAST MATE: B1, B(N) (FOR CARD DETECT)

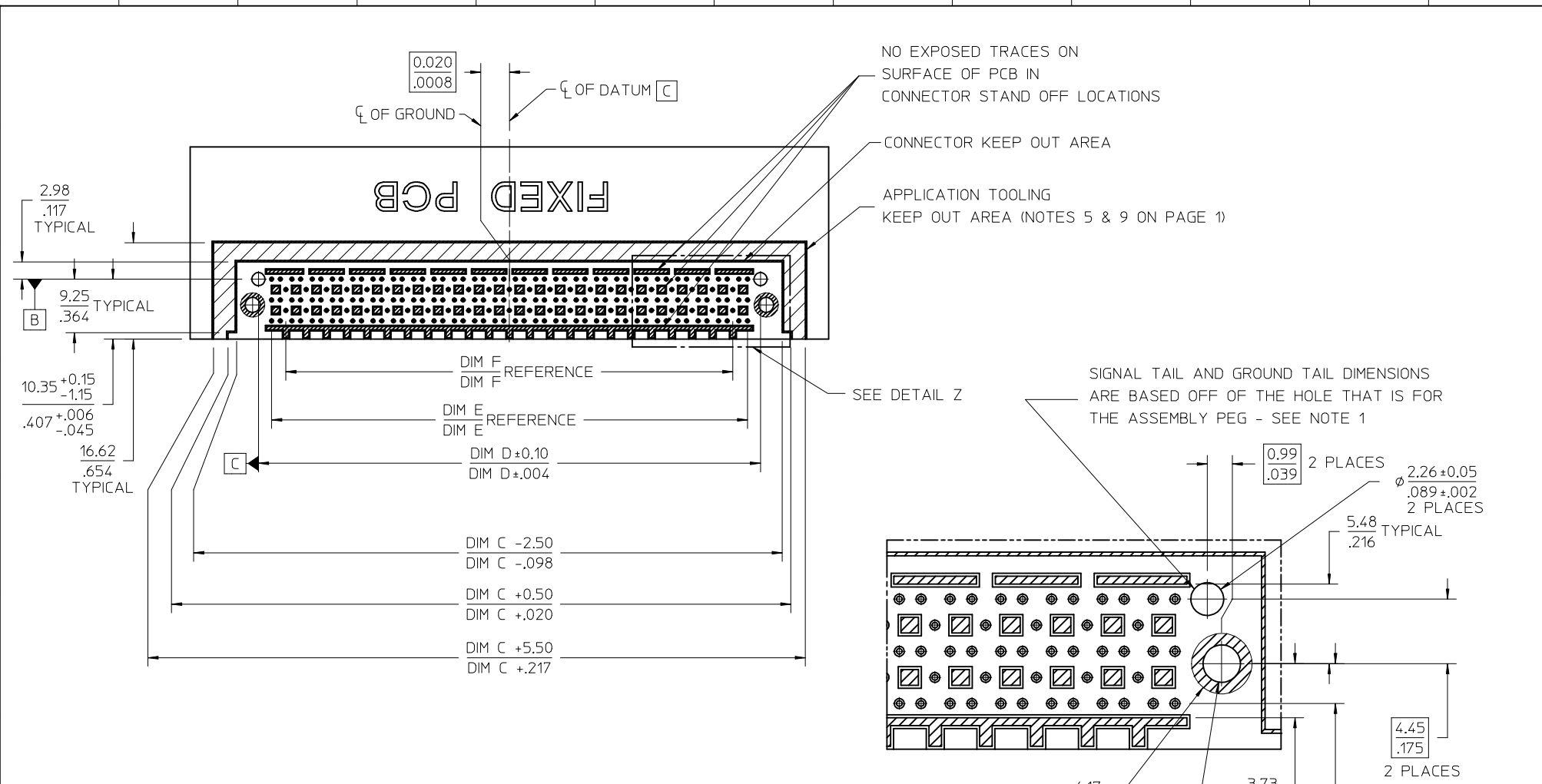
ALL COLUMNS FROM 3 THROUGH (N-2) ARE SUITABLE FOR DIFFERENTIAL PAIRS
 EG: A3-A4, B3-B4, C3-C4, A(N-2)-A(N-3), B(N-2)-B(N-3)

SIGNAL GROUND: ROWS D & E

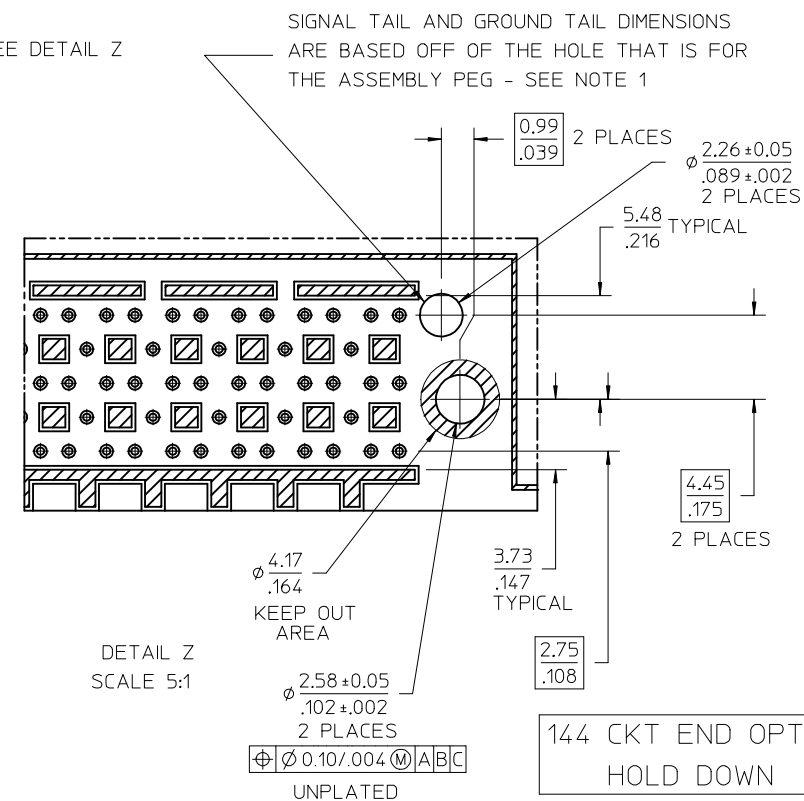


Partial2
SCALE 5:1
3 TAIL GROUND OPTION

SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOMAN 2017/01/09	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± .13 ± .01 1 PLACE ± .25 ± --- 0 PLACE ± ±	DIMENSION STYLE MM/IN DRAWN BY DATE MPOFF 2012/09/17 CHECKED BY DATE TIBARRA 2012/09/17 APPROVED BY DATE SMILLER 2012/10/01	SCALE 2:1 TITLE HS DOCK+ FIXED CONNECTOR	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74148-0001	SHEET NO. 3 OF 5		
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	ANGULAR ±1/2° SIZE C				MATERIAL NO. SEE TABLE	



NOTES
 1. SEE SHEET 3 FOR CIRCUIT DESIGNATION
 2. ALL SIGNAL TAIL AND 2 TAIL / 3 TAIL GROUND DIMENSIONS ARE COMMUNICATED ON PAGE 3

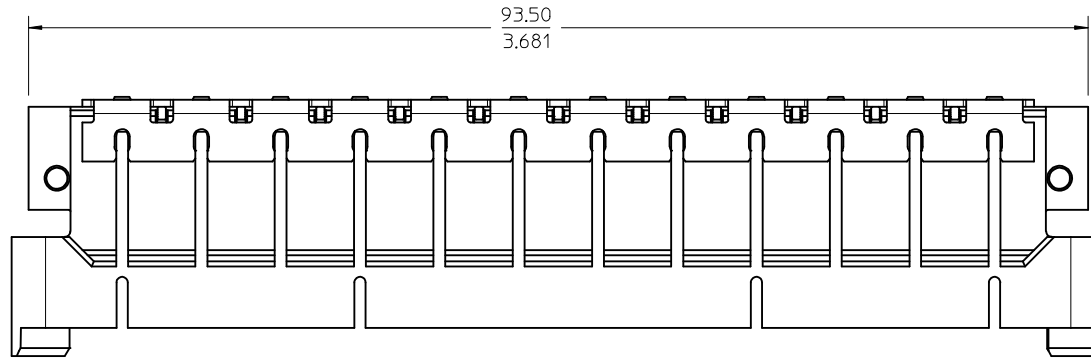


144 CKT END OPTION
HOLD DOWN

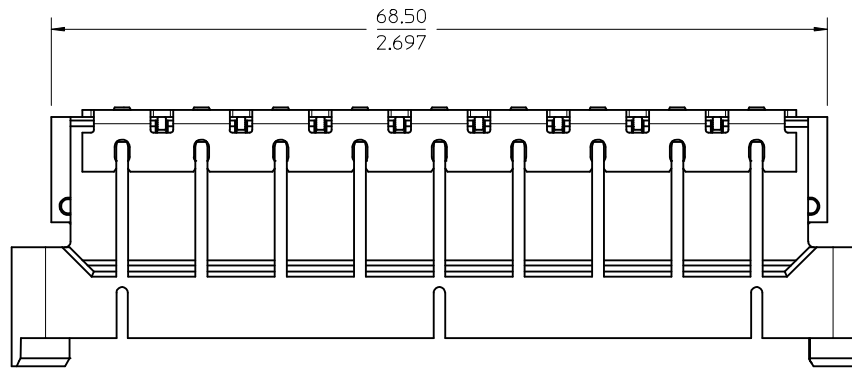
SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOWAN 2017/01/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0 ▽=0	mm INCH	MM/IN	2:1	METRIC	
G2	DESCRIPTION	4 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE	
		3 PLACES ± --- ± .005	MPOFF	2012/09/17	HS DOCK+ FIXED CONNECTOR	
		2 PLACES ± 0.13 ± .01	CHECKED BY	DATE	molex	
		1 PLACE ± 0.25 ± ---	TIBARRA	2012/09/17		
		0 PLACE ± ±	APPROVED BY	DATE	DOCUMENT NO.	
			SMILLER	2012/10/01	SD-74148-0001	
		ANGULAR ±1/2°	MATERIAL NO.		SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE		4 OF 5	
			SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

HOUSING SHROUD SLOT CONFIGURATION

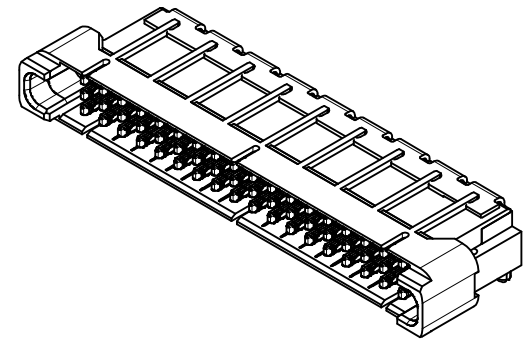
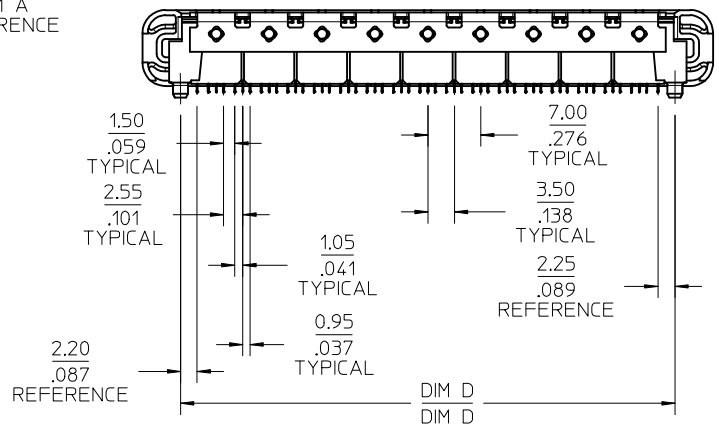
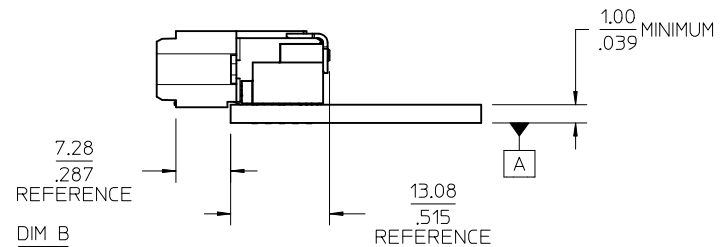
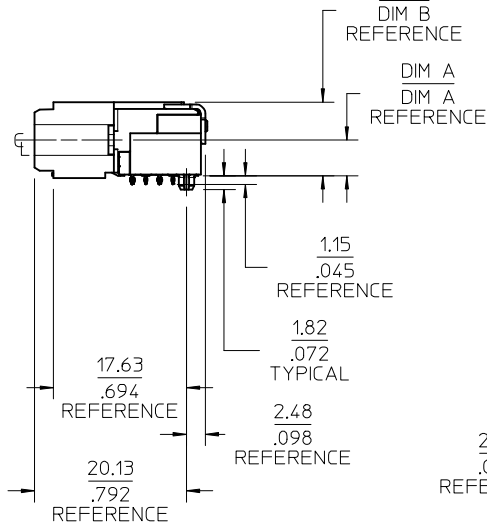
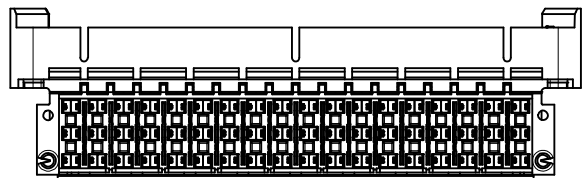
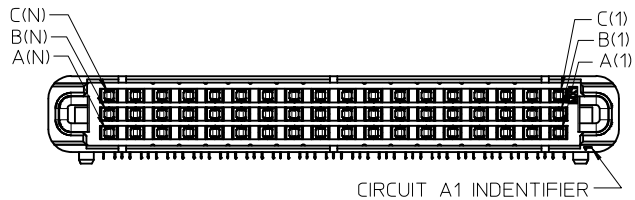
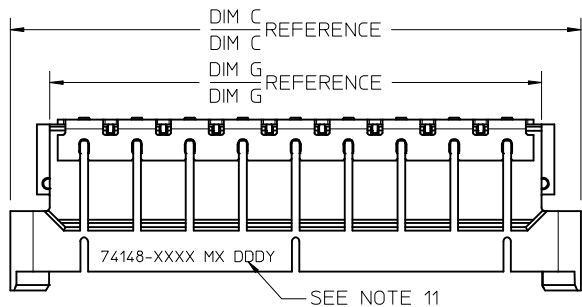
144 CIRCUIT



108 CIRCUIT



SEE SHEET 1 EC NO: UCP2017-1140 2016/11/17 DRWNGES CHKD: APPR:DMCGOWAN 2017/01/09 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0	mm	INCH	MM/IN		3:1	METRIC		
	▽=0	4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE HS DOCK+ FIXED CONNECTOR			
	▽=0	3 PLACES ± ---	± .005	MPOFF	2012/09/17				
	2 PLACES ± 0.13	± .01	CHECKED BY	DATE	DOCUMENT NO. SD-74148-0001				
	1 PLACE ± 0.25	± ---	TIBARRA	2012/09/17					
	0 PLACE ±	±	APPROVED BY	DATE	MATERIAL NO. SEE TABLE				
			SMILLER	2012/10/01					
			ANGULAR ±1/2°		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		C				



NOTES:

- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER, UL94 V-0
WAFER DIELECTRIC - LIQUID CRYSTAL POLYMER, UL94 V-0
CONTACT - COPPER ALLOY
CLIPS - STAINLESS STEEL
- 2) FINISHES: SEE SHEET 2
- 3) PRODUCT SPECIFICATION: THIS PART CONFORMS TO MOLEX SPECIFICATION PS-74148-0000.
- 4) PACKAGING SPECIFICATION: THIS PART TO BE PACKAGED PER SPECIFICATION PK-75020-030.
- 5) APPLICATION SPECIFICATION: THIS PART TO BE APPLIED PER SPECIFICATION AS-74148-0000. APPLICATION TOOL AND INSTRUCTIONS PER AS-74148-0000.
- 6) MATING INFORMATION
THIS PART MATES WITH 74149-XXXX.
WILL MATE WITH MAXIMUM 1.27mm MIS-ALIGNMENT.
WILL MATE WITH MAXIMUM 0.75° MIS-ALIGNMENT.
- 7) FOR CIRCUIT DESIGNATION SEE SHEET 3
- 8) FOR PCB INFORMATION SEE SHEET 3
- 9) APPLICATION TOOLING KEEP OUT AREA. NO COMPONENTS ALLOWED IN THIS AREA.
- 10) CONFORMS TO MOLEX COSMETIC SPECIFICATION PS-45499-002 AND PS-45499-003.
- 11) MARKING: PART NUMBER, MX, DDDY
- 12) RECOMMENDED DRILL SIZE 0.48±0.03 TO YIELD FINISHED PLATED THROUGH HOLE OF 0.39±0.05
- 13) HOLD DOWN SCREWS ARE RECOMMENDED FOR THIS CONNECTOR. REFERENCE MOLEX DOCUMENT AS-74148-0000 SECTION 4.5.
- 14) GENERAL TOLERANCES DO NOT APPLY TO REFERENCE DIMENSIONS.

SEE NOTE 14 REGARDING REFERENCE DIMENSIONS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES ±	---	---
3 PLACES ±	---	±.005
2 PLACES ±	0.13	±.01
1 PLACE ±	0.25	---
0 PLACE ±	±	±

ANGULAR ±1/2°
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS
MM/IN		2:1	METRIC
DRAWN BY	DATE	TITLE	
MPOFF	2012/09/17	HS DOCK+ FIXED CONNECTOR	
CHECKED BY	DATE	molex	
TIBARRA	2012/09/17	SD-74148-0001	
APPROVED BY	DATE	SHEET NO.	
SMILLER	2012/10/01	1 OF 5	

MATERIAL NO. SEE TABLE
DOCUMENT NO. SD-74148-0001

THIRD ANGLE PROJECTION	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

REV	DESCRIPTION	QUALITY SYMBOLS
G2	DM: UPDATE EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMC/GWMAN 2017/01/09	▽=0 ▽=0 ▽=0

ITEM NUMBER	CIRCUT SIZE	NO. OF COLUMNS 'N'	CENTERLINE DIMENSION 'A' mm(in)	O/A HEIGHT DIMENSION 'B' mm(in)	O/A LENGTH DIMENSION 'C' mm(in)	PEG TO PEG DIMENSION 'D' mm(in)	FIRST-LAST SIGNAL DIMENSION 'E' mm(in)	FIRST-LAST GROUND DIMENSION 'F' mm(in)	O/A LENGTH DIMENSION 'G' mm(in)	PLATING FINISH	HOUSING FINISH	GROUND OPTION
74148-1001	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 1	NICKEL	2 TAIL
74148-1101	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 1	NICKEL	3 TAIL
74148-3001	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 2	GOLD	2 TAIL
74148-3101	144	24	4.74 (.187)	9.78 (.385)	96.50 (3.799)	86.51 (3.406)	82.00 (3.228)	77.00 (3.031)	86.10 (3.389)	OPTION 2	GOLD	3 TAIL
74148-4202	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 1	NICKEL	2 TAIL
74148-4102	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 1	NICKEL	3 TAIL
74148-5202	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 2	GOLD	2 TAIL
74148-5102	108	18	4.74 (.187)	9.78 (.385)	75.50 (2.972)	65.51 (2.579)	61.00 (2.402)	56.00 (2.205)	65.10 (2.562)	OPTION 2	GOLD	3 TAIL

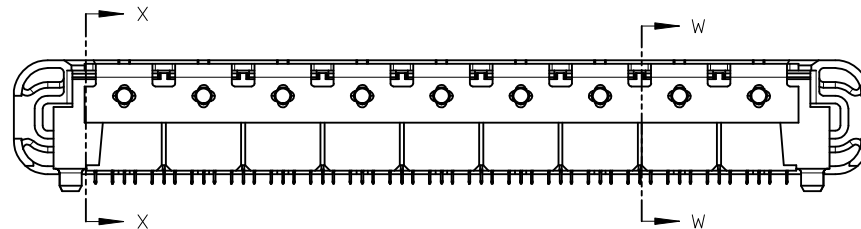
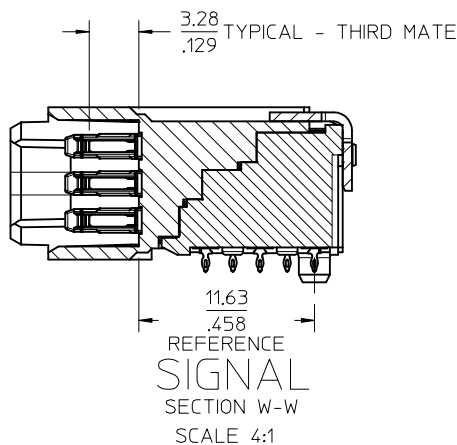
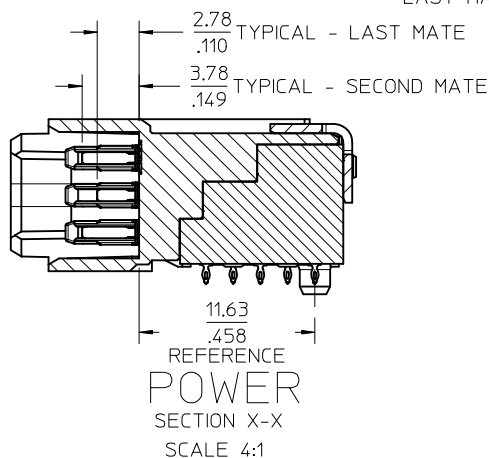
NOMINAL WIPE - FULL SEATED

FIRST MATE: 7.2mm

SECOND MATE: 2.4mm

THIRD MATE: 1.9mm

LAST MATE: 1.4mm



FINISHES:

OPTION 1

CONTACT INTERFACE

0.76 MICROMETER MINIMUM SELECT GOLD

1.27 MICROMETER MINIMUM NICKEL OVERALL

COMPLIANT INTERFACE

0.76 MICROMETER MINIMUM SELECT TIN OVER

1.27 MICROMETER MINIMUM NICKEL OVERALL

HOUSING

3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER

3.81 MICROMETER MINIMUM COPPER OVERALL

OPTION 2

CONTACT INTERFACE

0.76 MICROMETER MINIMUM SELECT GOLD

1.27 MICROMETER MINIMUM NICKEL OVERALL

COMPLIANT INTERFACE

0.76 MICROMETER MINIMUM SELECT TIN OVER

1.27 MICROMETER MINIMUM NICKEL OVERALL

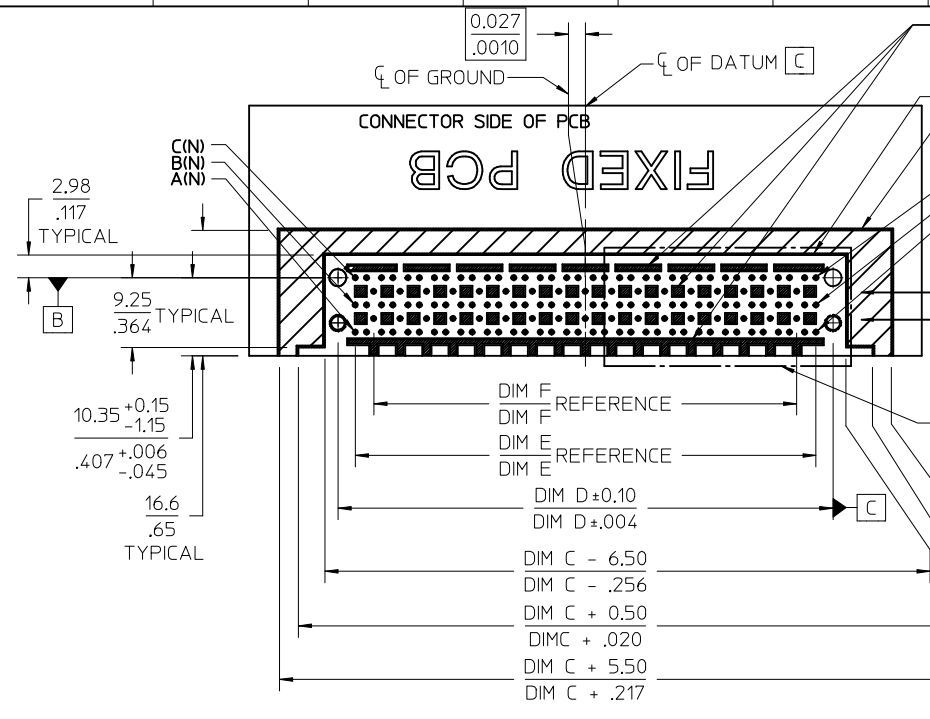
HOUSING

0.10 MICROMETER MAXIMUM IMMERSION GOLD

3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER

3.81 MICROMETER MINIMUM COPPER OVERALL

SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOWAN 2017/01/09	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	2 PLACES ± 0.13 ± .01	1 PLACE ± 0.25 ± ---	0 PLACE ± ±	DRAWN BY DATE MPOFF 2012/09/17		CHECKED BY DATE TIBARRA 2012/09/17
G2	REV	ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-74148-0001		2 OF 5	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

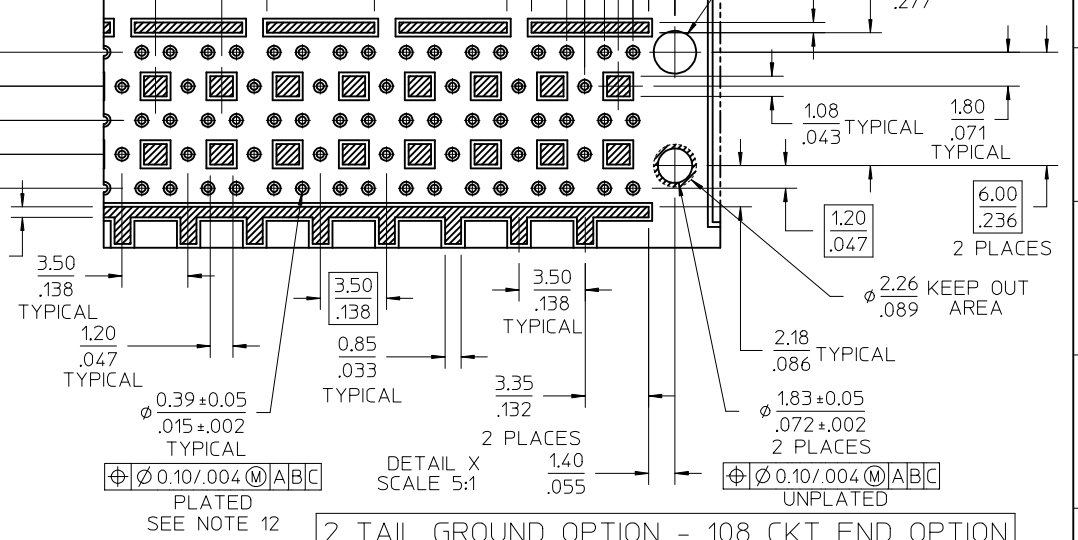
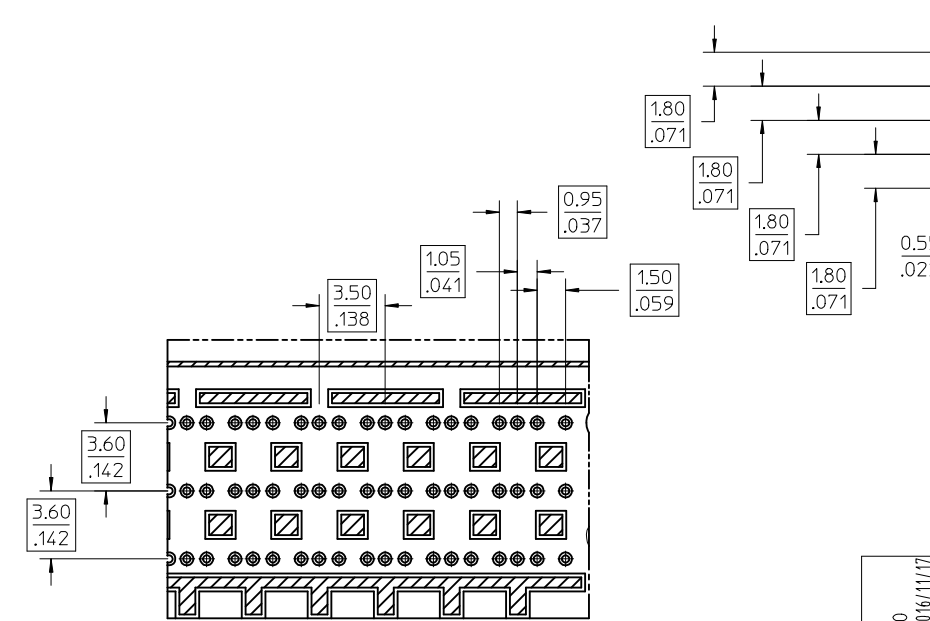


CIRCUIT DESIGNATION

FIRST MATE: HOUSING - SIGNAL GROUND
 SECOND MATE: A1, C1, A(N), C(N) (FOR POWER RETURN)
 THIRD MATE: A2, B2, C2, A(N-1), B(N-1), C(N-1) & ALL OTHERS (A2, C2, A(N-1) & C(N-1) FOR POWER) (ALL OTHERS SIGNAL)
 LAST MATE: B1, B(N) (FOR CARD DETECT)

ALL COLUMNS FROM 3 THROUGH (N-2) ARE SUITABLE FOR DIFFERENTIAL PAIRS
 EG: A3-A4, B3-B4, C3-C4, A(N-2)-A(N-3), B(N-2)-B(N-3)

SIGNAL GROUND: ROWS D & E



Partial2
 SCALE 5:1

3 TAIL GROUND OPTION

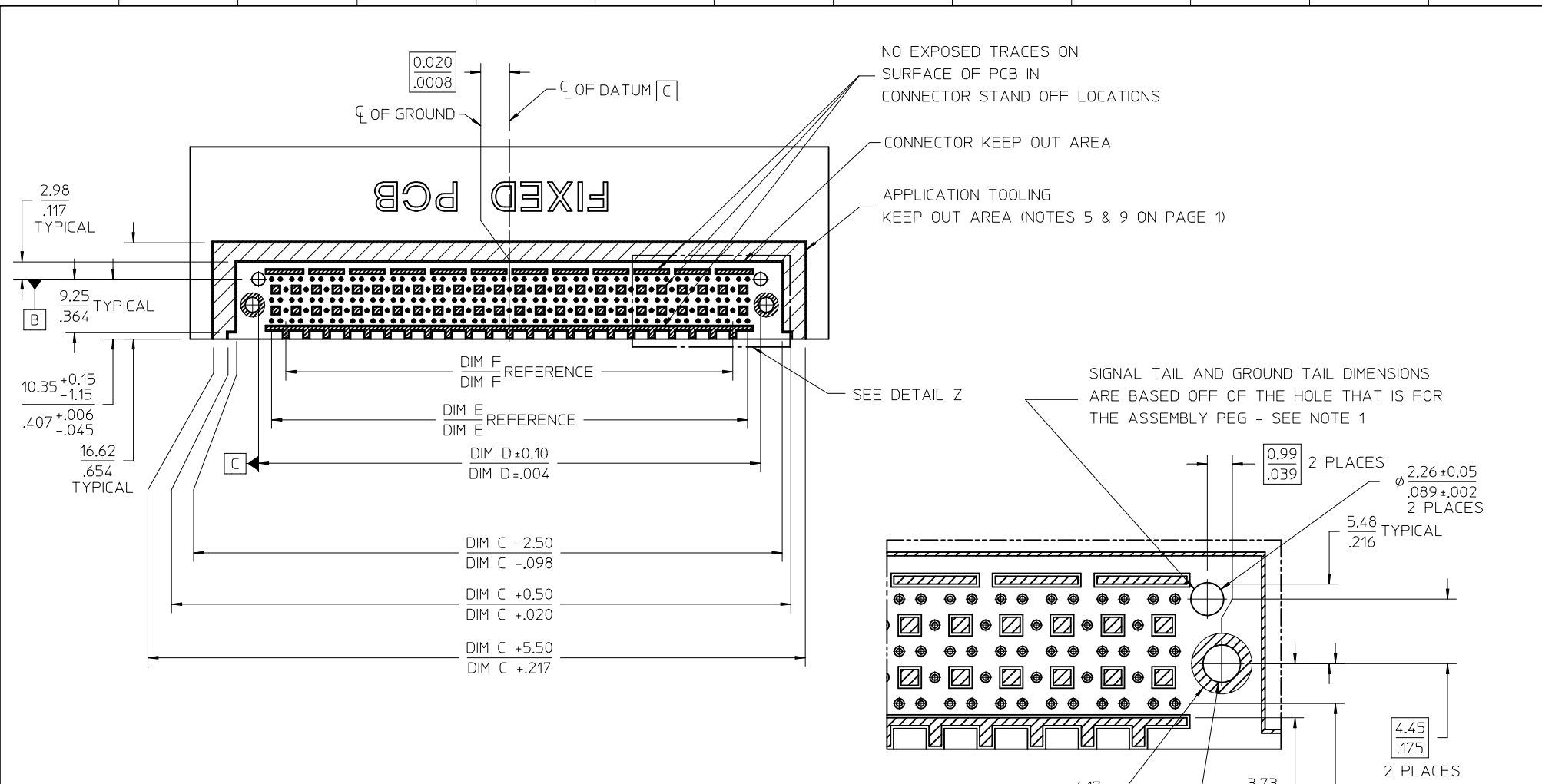
2 TAIL GROUND OPTION - 108 CKT END OPTION

SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOMAN 2017/01/09 G2	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM/IN	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± --- ± ---	mm INCH	DRAWN BY DATE MPOFF 2012/09/17		
	▽=0	3 PLACES ± --- ± .005		CHECKED BY DATE TIBARRA 2012/09/17		
	▽=0	2 PLACES ± .013 ± .01		APPROVED BY DATE SMILLER 2012/10/01		
		1 PLACE ± 0.25 ± ---				
		0 PLACE ± ±				
		ANGULAR ±1/2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE			
			MATERIAL NO.	DOCUMENT NO.		
			SIZE C	SD-74148-0001		
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

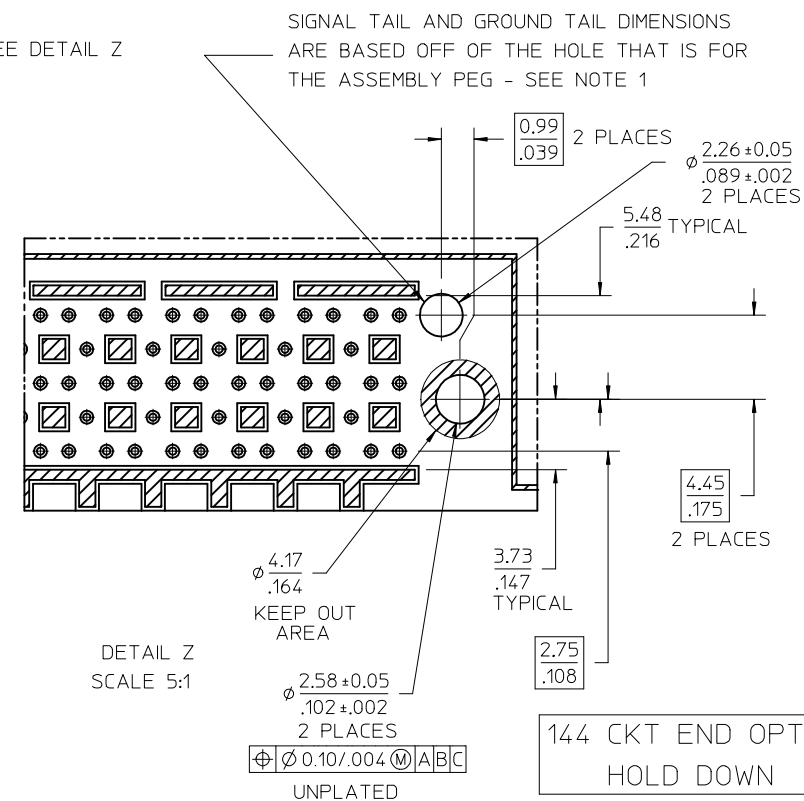
HS DOCK+
 FIXED CONNECTOR

molex

SHEET NO.
 3 OF 5



NOTES
 1. SEE SHEET 3 FOR CIRCUIT DESIGNATION
 2. ALL SIGNAL TAIL AND 2 TAIL / 3 TAIL GROUND DIMENSIONS ARE COMMUNICATED ON PAGE 3

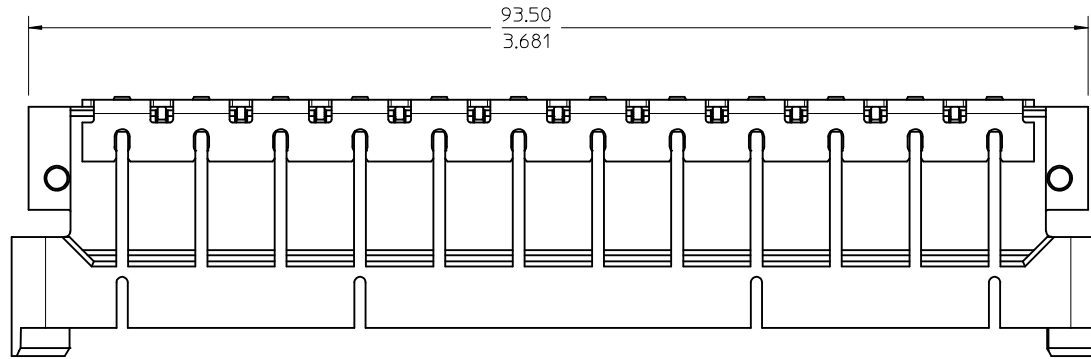


144 CKT END OPTION
HOLD DOWN

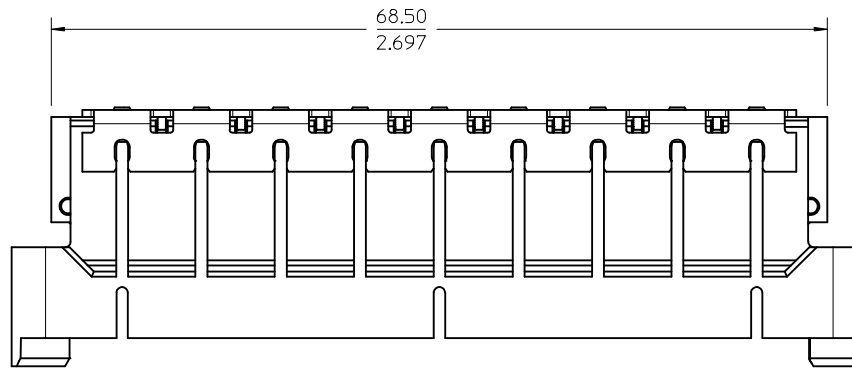
SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: [blank] APPR: DMC/GOWAN 2017/01/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	2:1	METRIC	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	▽=0	3 PLACES ± --- ± .005	MPOFF 2012/09/17	HS DOCK+ FIXED CONNECTOR		
	2 PLACES ± 0.13 ± .01	CHECKED BY DATE	molex DOCUMENT NO. SD-74148-0001 SHEET NO. 4 OF 5			
	1 PLACE ± 0.25 ± ---	TIBARRA 2012/09/17				
	0 PLACE ± ±	APPROVED BY DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		SMILLER 2012/10/01				
		MATERIAL NO.				
		ANGULAR ±1/2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

HOUSING SHROUD SLOT CONFIGURATION

144 CIRCUIT



108 CIRCUIT



SEE SHEET 1 EC NO: UCP2017-1140 2016/11/17 DRWNGES CHKD: APPR:DMCGOWAN 2017/01/09 REV: G2	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	3:1	METRIC	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	HS DOCK+ FIXED CONNECTOR molex		
	▽=0	3 PLACES ± --- ± .005	MPOFF 2012/09/17			
	2 PLACES ± 0.13 ± .01	CHECKED BY DATE	DOCUMENT NO. SD-74148-0001 SHEET NO. 5 OF 5			
	1 PLACE ± 0.25 ± ---	TIBARRA 2012/09/17				
	0 PLACE ± ±	APPROVED BY DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	ANGULAR ±1/2°	SMILLER 2012/10/01				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	SIZE C			