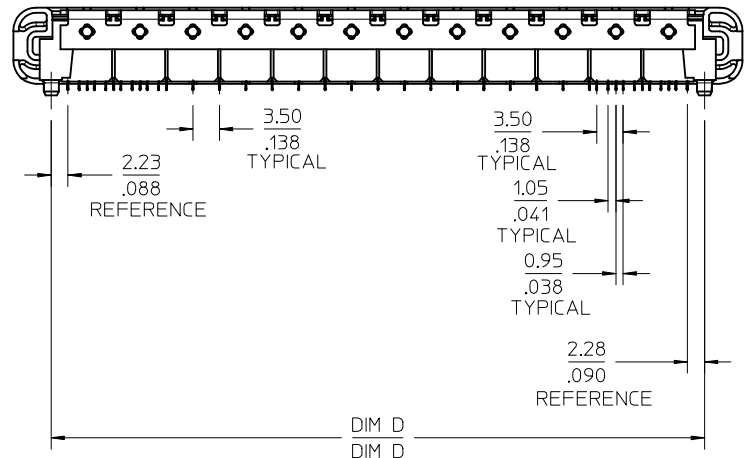
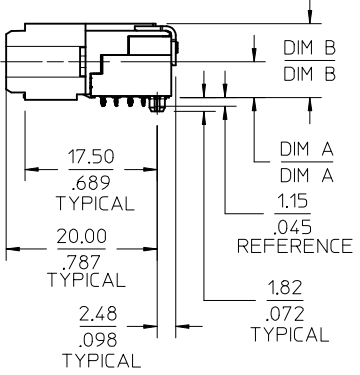
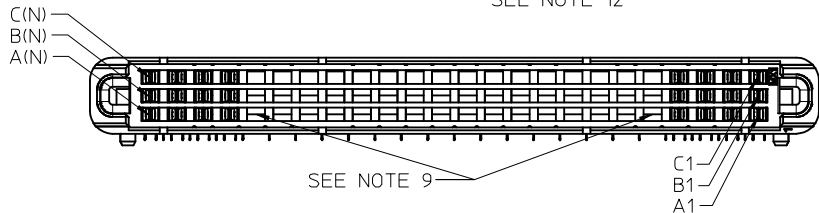


MARKING  
SEE NOTE 12



- 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 CHECKED BY: SDANNELLEY 2011/12/12 APPROVED BY: SMILLER 2012/01/23	DESCRIPTION REV A2	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 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

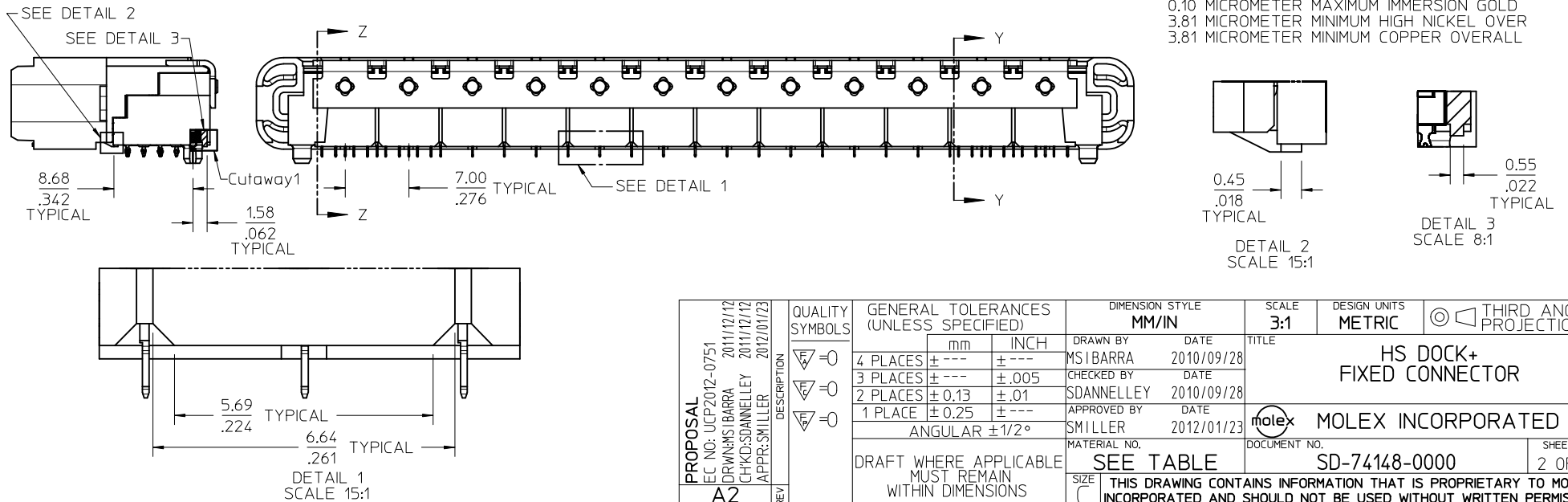
FINISHES:

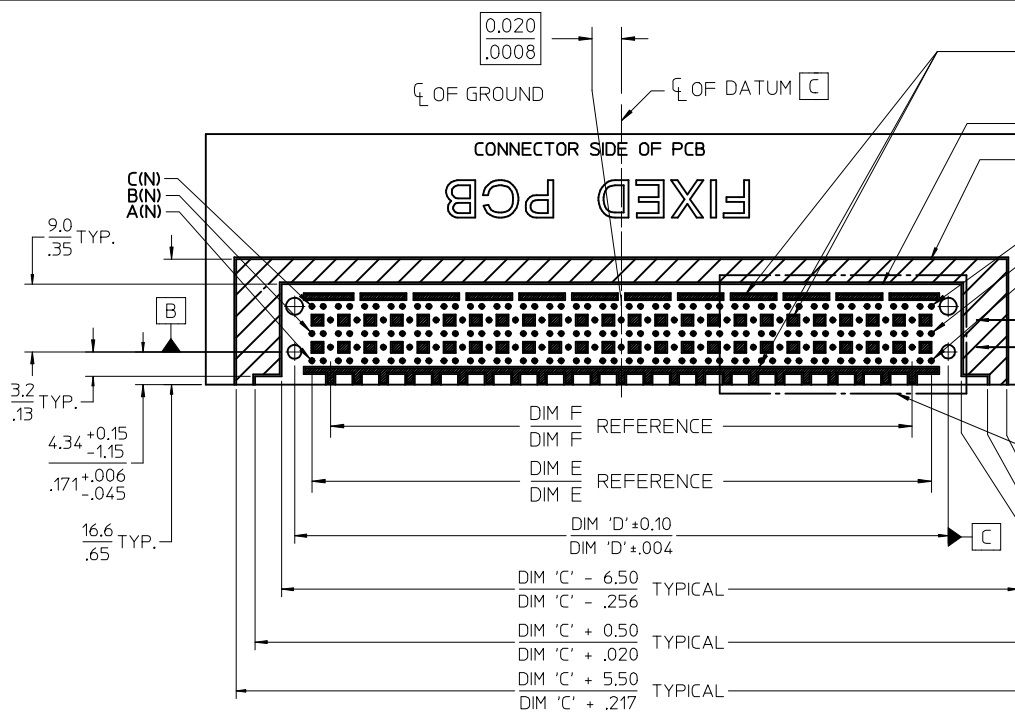
OPTION 1  
 CONTACT INTERFACE  
 0.76 MICROMETER MINIMUM SELECT GOLD  
 1.27 MICROMETER MINIMUM NICKEL OVERALL  
 COMPLIANT INTERFACE  
 0.76 MICROMETER MINIMUM SELECT TIN-LEAD OVER  
 1.27 MICROMETER MINIMUM NICKEL OVERALL  
 HOUSING  
 3.81 MICROMETER MINIMUM HIGH PHOS NICKEL OVER  
 3.81 MICROMETER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

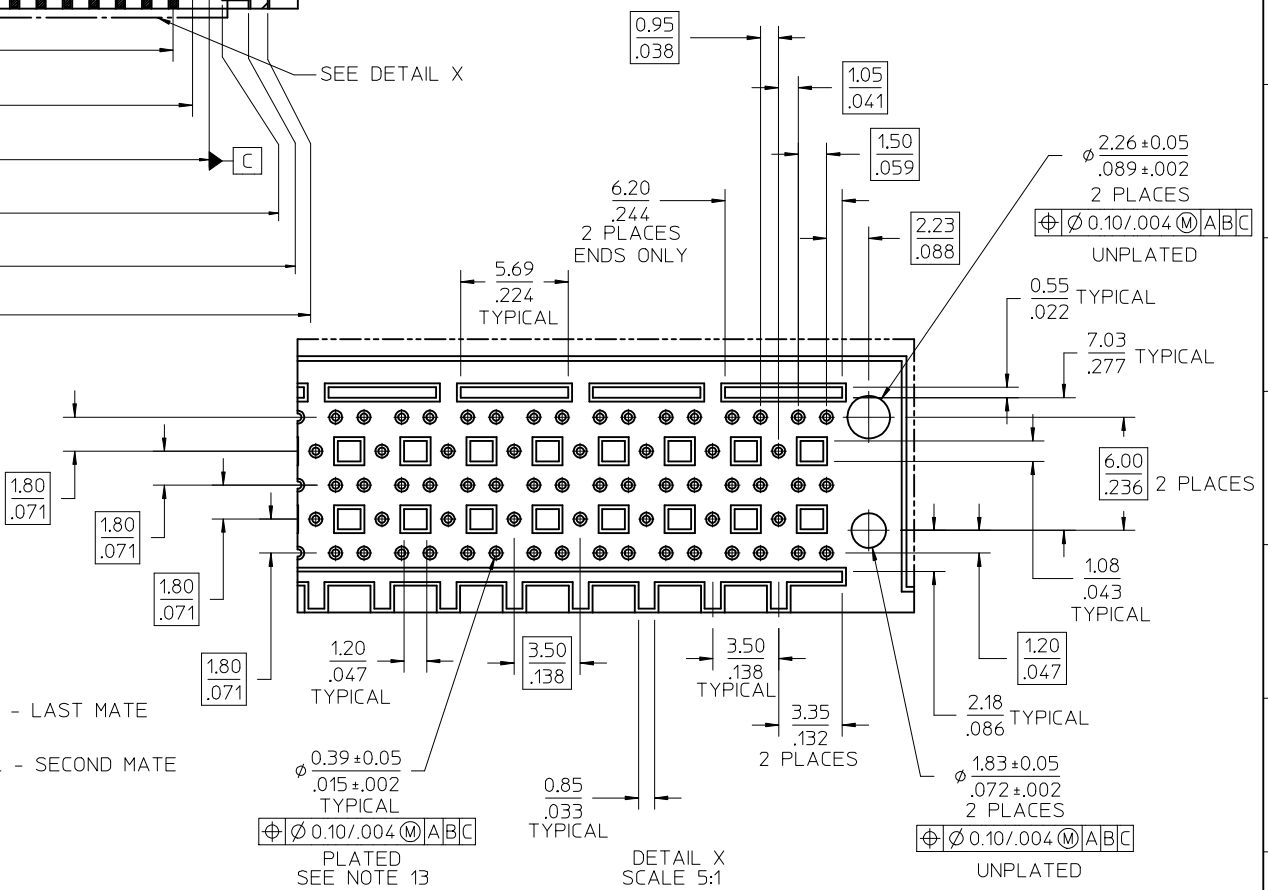
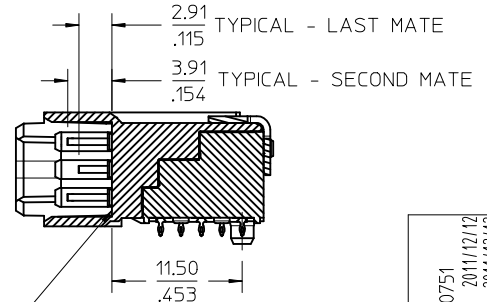
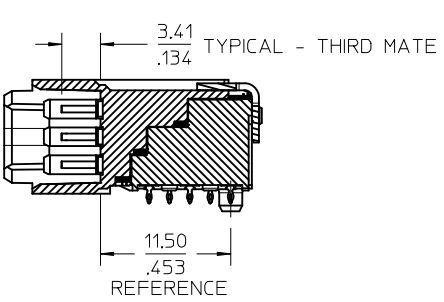
**CIRCUIT DESIGNATION**  
 FIRST MATE: HOUSING - SIGNAL GROUND  
 SECOND MATE: A1, C1, A(N), C(N) (FOR POWER RETURN)  
 THIRD MATE: A2, B2, C2, A(N-1), B(N-1), C(N-1) & ALL OTHERS (A2, C2, A(N-1) & C(N-1) FOR POWER) (ALL OTHERS SIGNAL)  
 LAST MATE: B1, B(N) (FOR CARD DETECT)

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

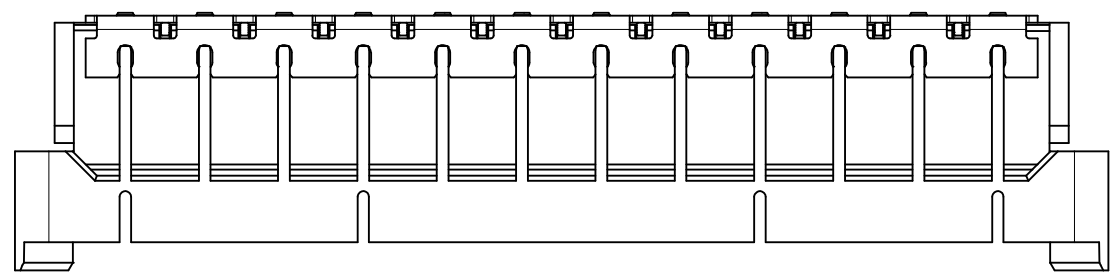
FIRST MATE: 5.2mm  
 SECOND MATE: 2.6mm  
 THIRD MATE: 2.1mm  
 LAST MATE: 1.6mm



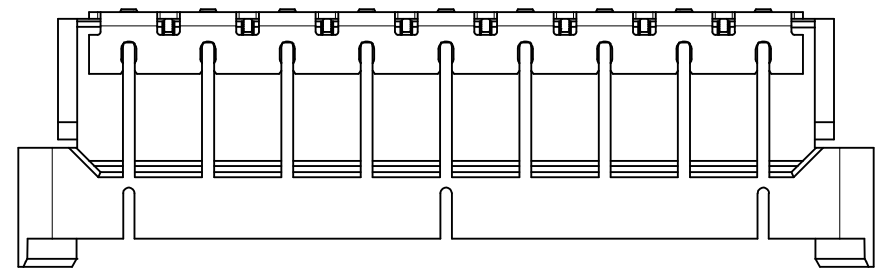
PROPOSAL EC NO: UCP2012-0751 DRAWN BY: DRWINHIS BARRA 2011/12/12 CHECKED BY: CHKD:SDANNELLEY 2011/12/12 APPR:SMILLER 2012/01/23	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .01 1 PLACE ± 0.25 ± ---		DRAWN BY: MSIBARRA 2010/09/28 CHECKED BY: SDANNELLEY 2010/09/28 APPROVED BY: SMILLER 2012/01/23		TITLE HS DOCK+ FIXED CONNECTOR	MATERIAL NO. SD-74148-0000	
REV: A2	DESCRIPTION	ANGULAR ± 1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		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

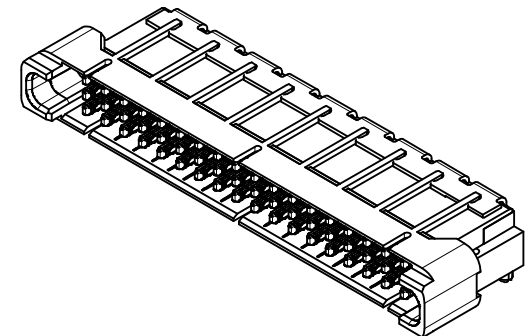
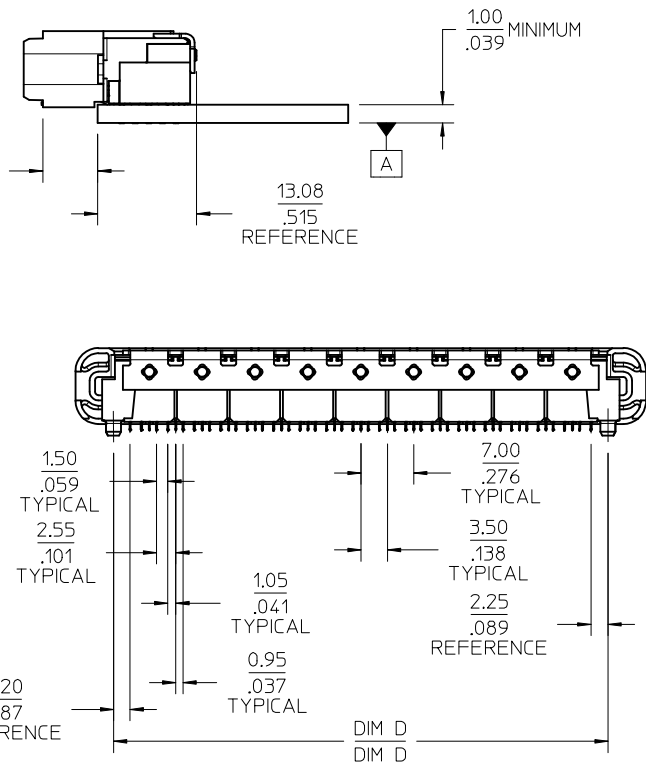
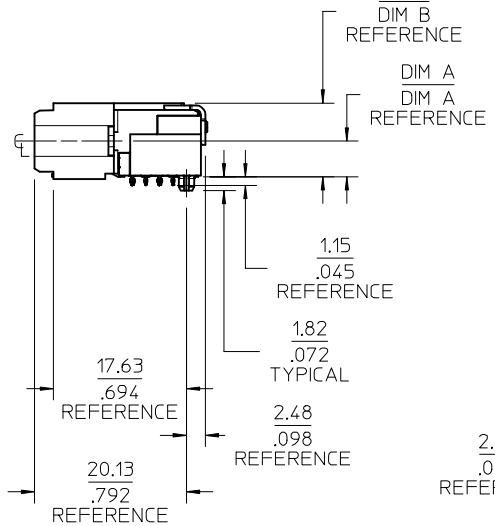
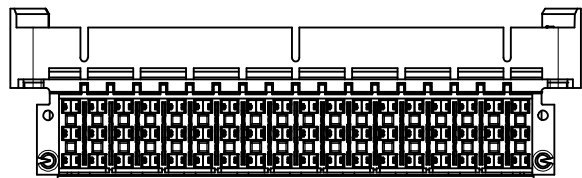
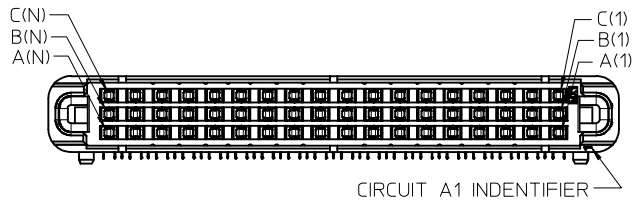
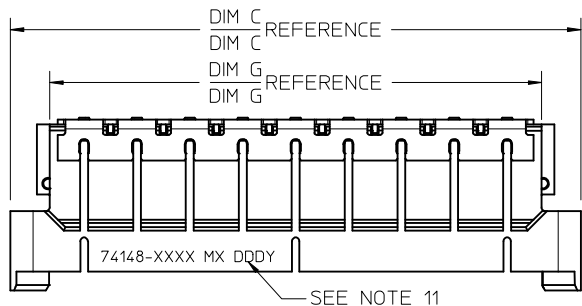
144 CIRCUIT



108 CIRCUIT



<b>PROPOSAL</b> 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) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .01</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .01</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .0005	2 PLACES	± 0.13	± .01	1 PLACE	± 0.25	± .01	DIMENSION STYLE MM/IN	SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES	± .005	± .0005																		
	3 PLACES	± .005	± .0005																		
2 PLACES	± 0.13	± .01																			
1 PLACE	± 0.25	± .01																			
DESCRIPTION A2	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY MSIBARRA	DATE 2010/09/28	TITLE HS DOCK+ FIXED CONNECTOR																	
		CHECKED BY SDANNELLEY	DATE 2010/09/28	MOLEX INCORPORATED																	
		APPROVED BY SMILLER	DATE 2012/01/23	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74148-0000	SHEET NO. 4 OF 4															



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

DIM. UPDATE EC NO: UCP2017-1140 DRAWINGS CHKD: APPR:DMCGOWAN G2	DESCRIPTION 2016/11/17 2017/01/09	QUALITY SYMBOLS
		$\nabla=0$ $\nabla=0$ $\nabla=0$

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	
MM/IN	
DRAWN BY	DATE
MPOFF	2012/09/17
CHECKED BY	DATE
TIBARRA	2012/09/17
APPROVED BY	DATE
SMILLER	2012/10/01
MATERIAL NO.	DOCUMENT NO.
SEE TABLE	SD-74148-0001
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	METRIC	
<b>HS DOCK+ FIXED CONNECTOR</b>		
<b>molex</b>		
DOCUMENT NO.		SHEET NO.
SD-74148-0001		1 OF 5

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

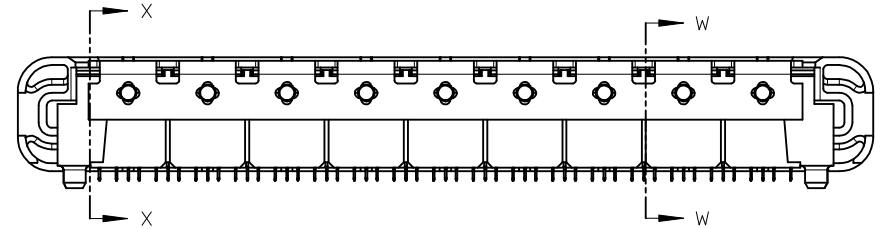
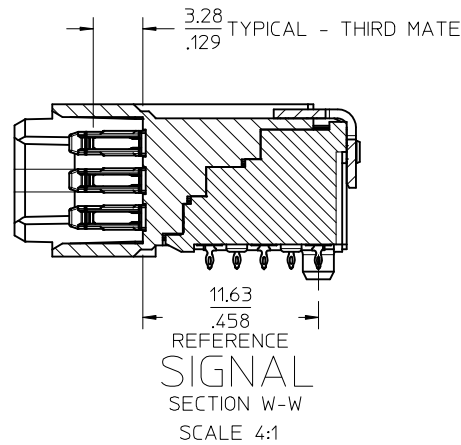
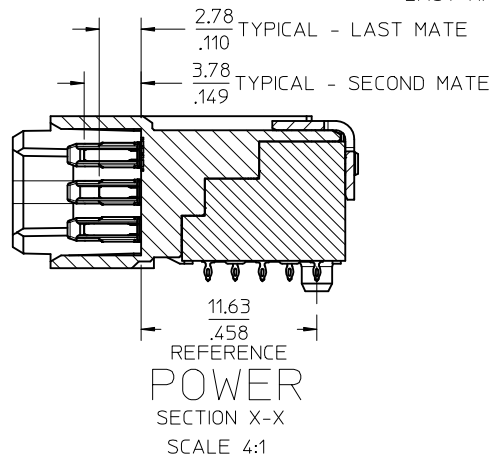
NOMINAL WIPE - FULL SEATED

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

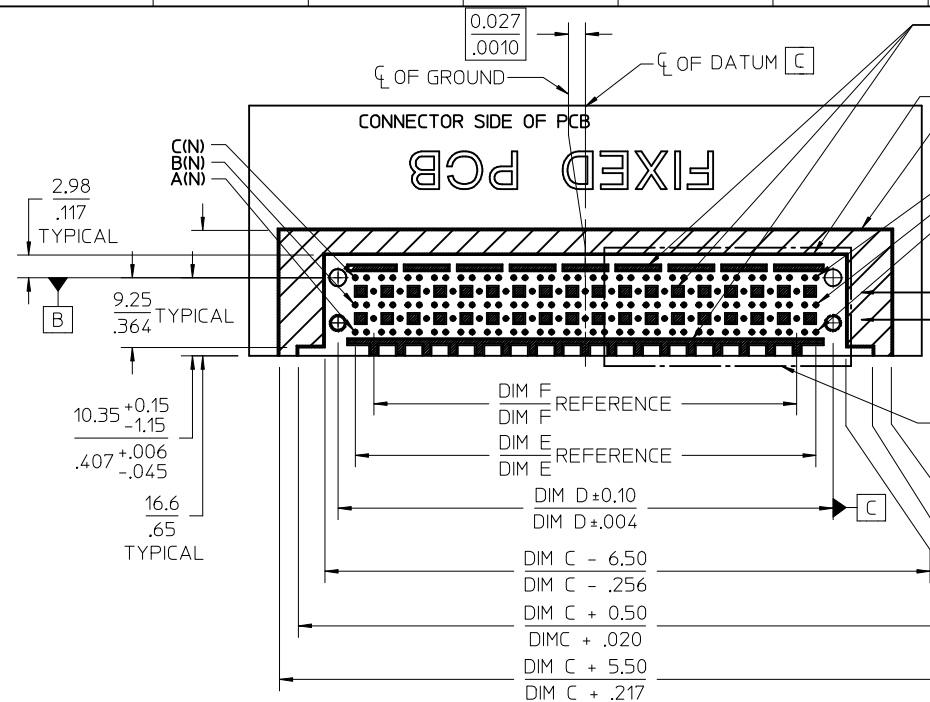
HOUSING

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		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									

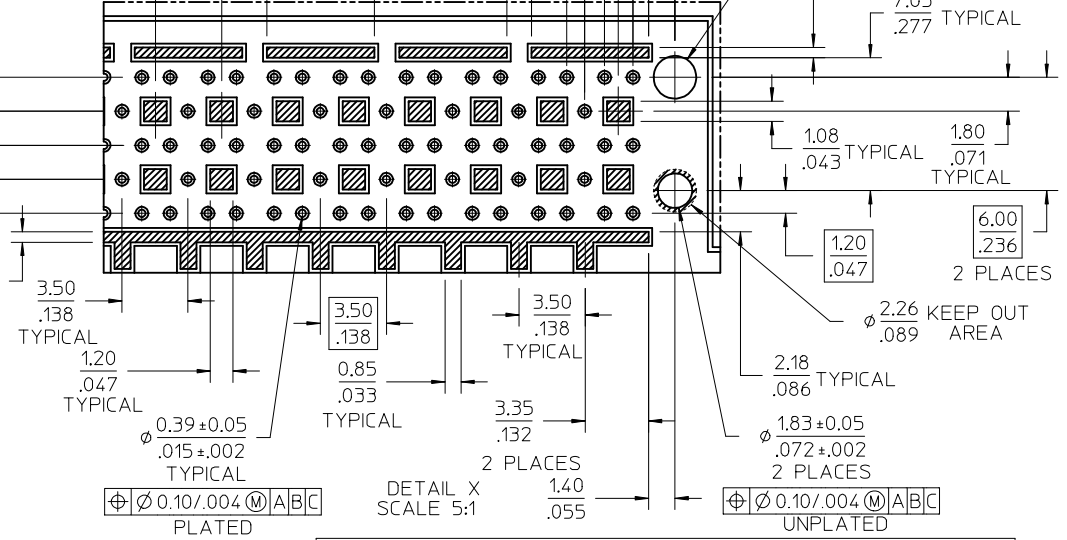
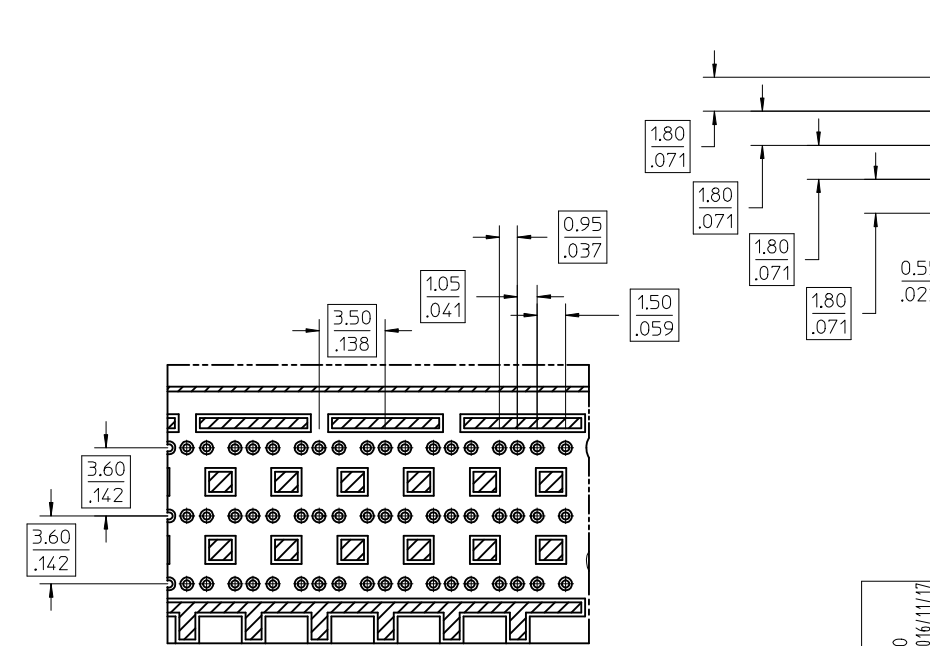


NO EXPOSED TRACES ON SURFACE OF PCB IN CONNECTOR STAND OFF LOCATIONS  
 CONNECTOR KEEP OUT AREA  
 APPLICATION TOOLING KEEP OUT AREA (NOTES 5 & 9)

**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	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 ± .013 ± .01	CHECKED BY DATE			
		1 PLACE ± 0.25 ± ---	TIBARRA 2012/09/17			
		0 PLACE ± ±	APPROVED BY DATE			
			SMILLER 2012/10/01			
		ANGULAR ±1/2°	MATERIAL NO.	DOCUMENT NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SD-74148-0001		
			SIZE C			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

0.020  
.0008  
CL OF GROUND  
CL OF DATUM [C]

NO EXPOSED TRACES ON SURFACE OF PCB IN CONNECTOR STAND OFF LOCATIONS

CONNECTOR KEEP OUT AREA

APPLICATION TOOLING KEEP OUT AREA (NOTES 5 & 9 ON PAGE 1)

FIXED PCB

2.98  
.117  
TYPICAL

9.25  
.364  
TYPICAL

10.35 +0.15  
-1.15  
4.07 +0.06  
-0.045

16.62  
.654  
TYPICAL

DIM F REFERENCE  
DIM F REFERENCE

DIM E REFERENCE  
DIM E REFERENCE

DIM D ±0.10  
DIM D ±0.04

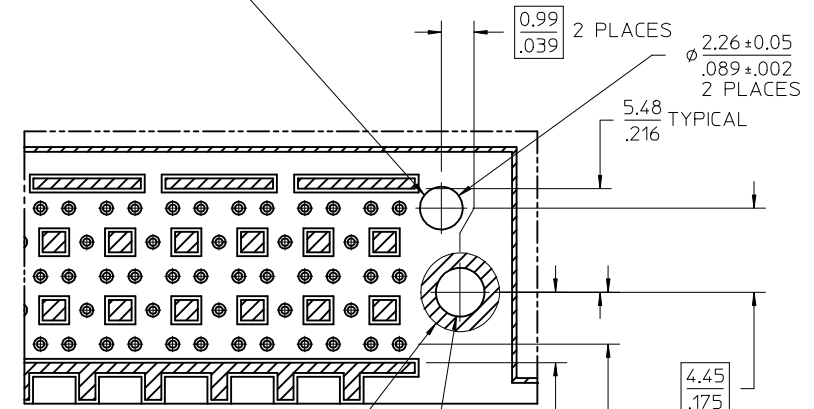
DIM C -2.50  
DIM C -.098

DIM C +0.50  
DIM C +0.020

DIM C +5.50  
DIM C +.217

SEE DETAIL Z

SIGNAL TAIL AND GROUND TAIL DIMENSIONS ARE BASED OFF OF THE HOLE THAT IS FOR THE ASSEMBLY PEG - SEE NOTE 1



DETAIL Z  
SCALE 5:1

Ø 0.10/.004 [ABC]  
UNPLATED

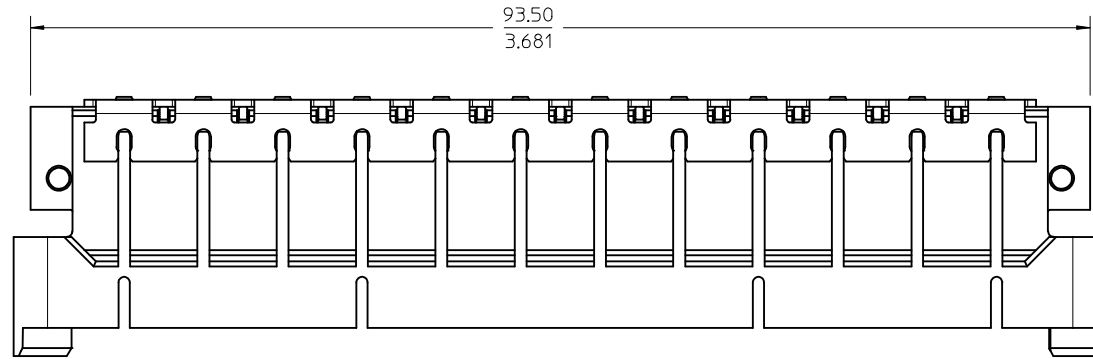
- NOTES
- SEE SHEET 3 FOR CIRCUIT DESIGNATION
  - ALL SIGNAL TAIL AND 2 TAIL / 3 TAIL GROUND DIMENSIONS ARE COMMUNICATED ON PAGE 3

SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOWAN 2017/01/09 G2	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		
		1 PLACE ±0.25 ± ---	TIBARRA 2012/09/17	DOCUMENT NO. SD-74148-0001		
		0 PLACE ± ±	APPROVED BY DATE	SHEET NO. 4 OF 5		
			SMILLER 2012/10/01	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		ANGULAR ±1/2°	MATERIAL NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE [C]			

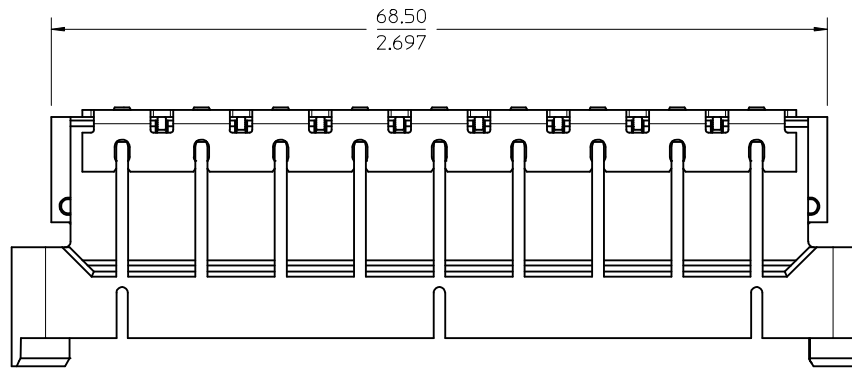


# HOUSING SHROUD SLOT CONFIGURATION

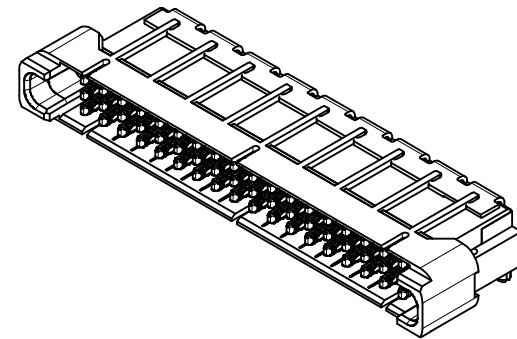
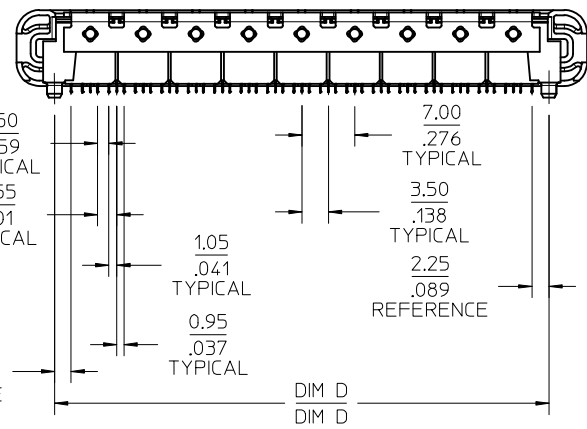
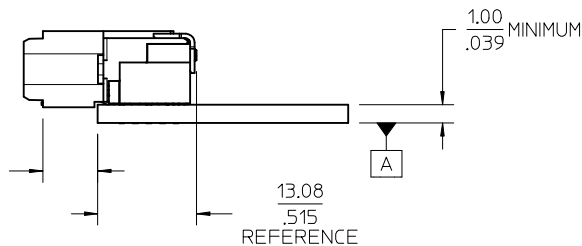
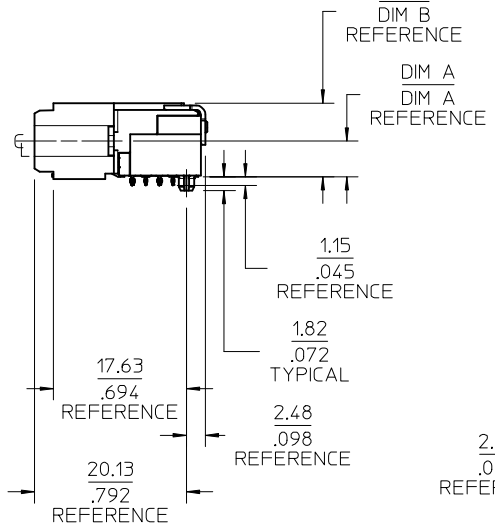
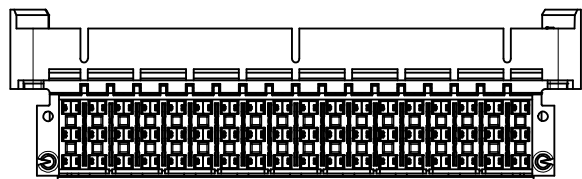
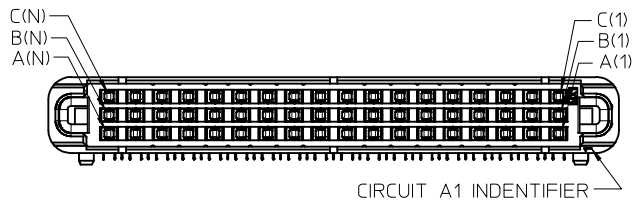
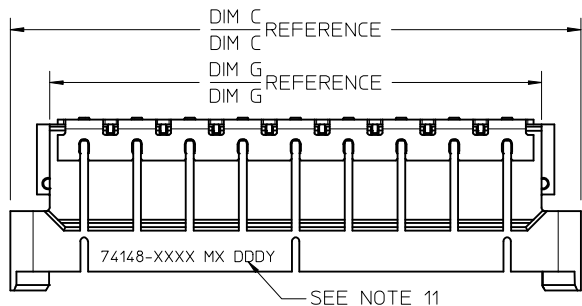
144 CIRCUIT



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 MM/IN		SCALE 3:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0	mm	INCH	DRAWN BY MPOFF	DATE 2012/09/17	TITLE HS DOCK+ FIXED CONNECTOR			
	▽=0	4 PLACES ± ---	± ---	CHECKED BY TIBARRA	DATE 2012/09/17				
	▽=0	3 PLACES ± 0.13	± .01	APPROVED BY SMILLER	DATE 2012/10/01	MATERIAL NO. DOCUMENT NO. SD-74148-0001			
▽=0	2 PLACES ± 0.25	± ---	SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
G2	DESCRIPTION	ANGULAR ±1/2°		SEE TABLE		SD-74148-0001		SHEET NO. 5 OF 5	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									



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 <b>HS DOCK+ FIXED CONNECTOR</b>		
MPOFF	2012/09/17			
CHECKED BY	DATE			
TIBARRA	2012/09/17			
APPROVED BY	DATE	 DOCUMENT NO. <b>SD-74148-0001</b> SHEET NO. <b>1 OF 5</b>		
SMILLER	2012/10/01			

MATERIAL NO. **SEE TABLE**  
SIZE

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

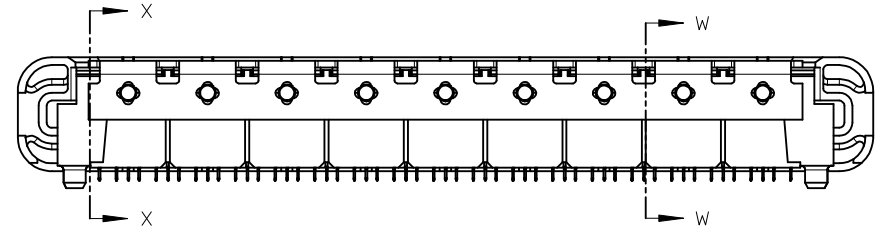
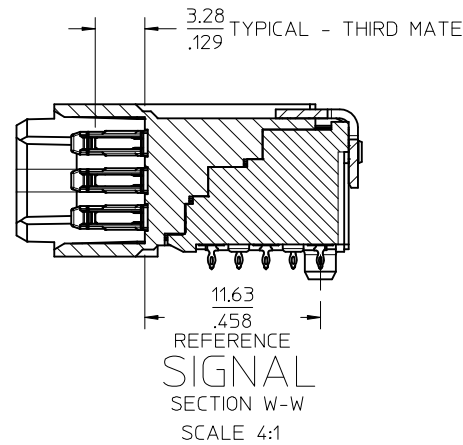
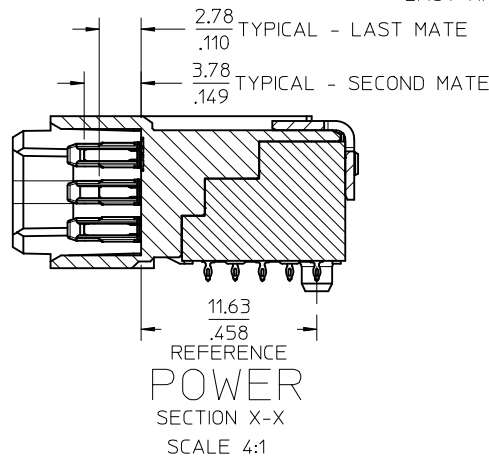
NOMINAL WIPE - FULL SEATED

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

<b>SEE SHEET 1</b> EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: CHKD: APPR:DMCGOWAN 2017/01/09 <b>G2</b>	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	<b>HS DOCK+ FIXED CONNECTOR</b>		
	▽=0	3 PLACES ± --- ± .005	MPOFF 2012/09/17			
▽=0	2 PLACES ± 0.13 ± .01	CHECKED BY DATE	<b>molex</b>			
	1 PLACE ± 0.25 ± ---	TIBARRA 2012/09/17				
	0 PLACE ± ±	APPROVED BY DATE	DOCUMENT NO. <b>SD-74148-0001</b> SHEET NO. <b>2 OF 5</b>			
		SMILLER 2012/10/01				
		ANGULAR ±1/2°	MATERIAL NO. <b>SEE TABLE</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



0.020  
.0008  
CL OF GROUND  
CL OF DATUM [C]

NO EXPOSED TRACES ON SURFACE OF PCB IN CONNECTOR STAND OFF LOCATIONS

CONNECTOR KEEP OUT AREA

APPLICATION TOOLING KEEP OUT AREA (NOTES 5 & 9 ON PAGE 1)

FIXED PCB

2.98  
.117  
TYPICAL

9.25  
.364  
TYPICAL

10.35 +0.15  
-1.15  
4.07 +0.06  
-0.045

16.62  
.654  
TYPICAL

DIM F REFERENCE  
DIM F REFERENCE

DIM E REFERENCE  
DIM E REFERENCE

DIM D ±0.10  
DIM D ±0.04

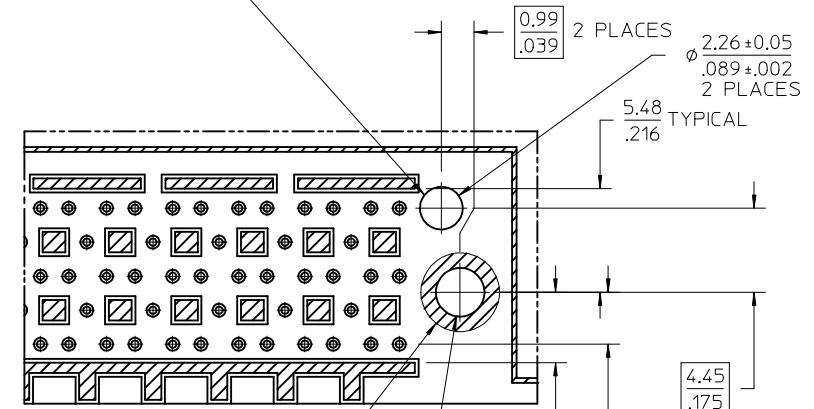
DIM C -2.50  
DIM C -.098

DIM C +0.50  
DIM C +0.020

DIM C +5.50  
DIM C +.217

SEE DETAIL Z

SIGNAL TAIL AND GROUND TAIL DIMENSIONS ARE BASED OFF OF THE HOLE THAT IS FOR THE ASSEMBLY PEG - SEE NOTE 1



DETAIL Z  
SCALE 5:1

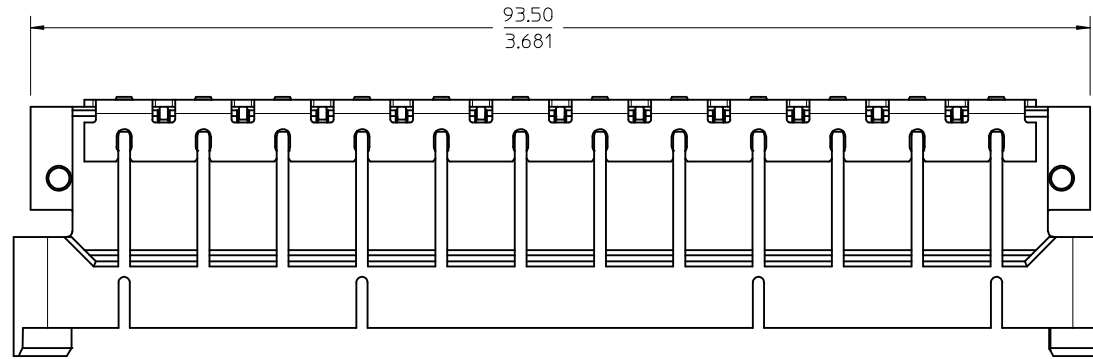
- NOTES
- SEE SHEET 3 FOR CIRCUIT DESIGNATION
  - ALL SIGNAL TAIL AND 2 TAIL / 3 TAIL GROUND DIMENSIONS ARE COMMUNICATED ON PAGE 3

144 CKT END OPTION  
HOLD DOWN

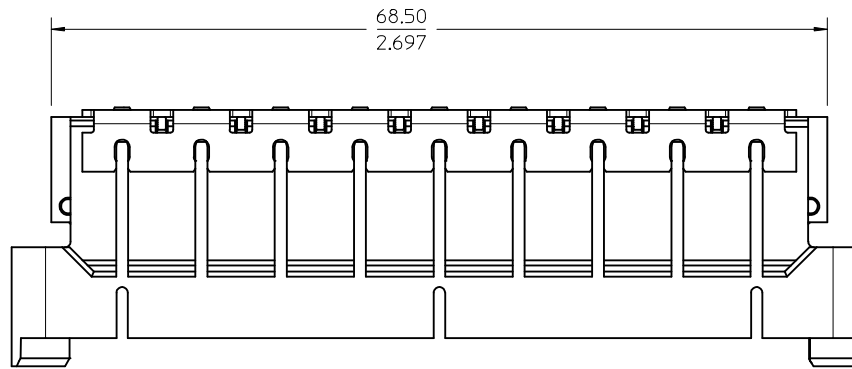
SEE SHEET 1 EC NO: UCP2017-1140 DRAWINGS 2016/11/17 CHKD: APPR:DMCGOWAN 2017/01/09	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	2:1	METRIC	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
	▽=0	3 PLACES ± --- ± .005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