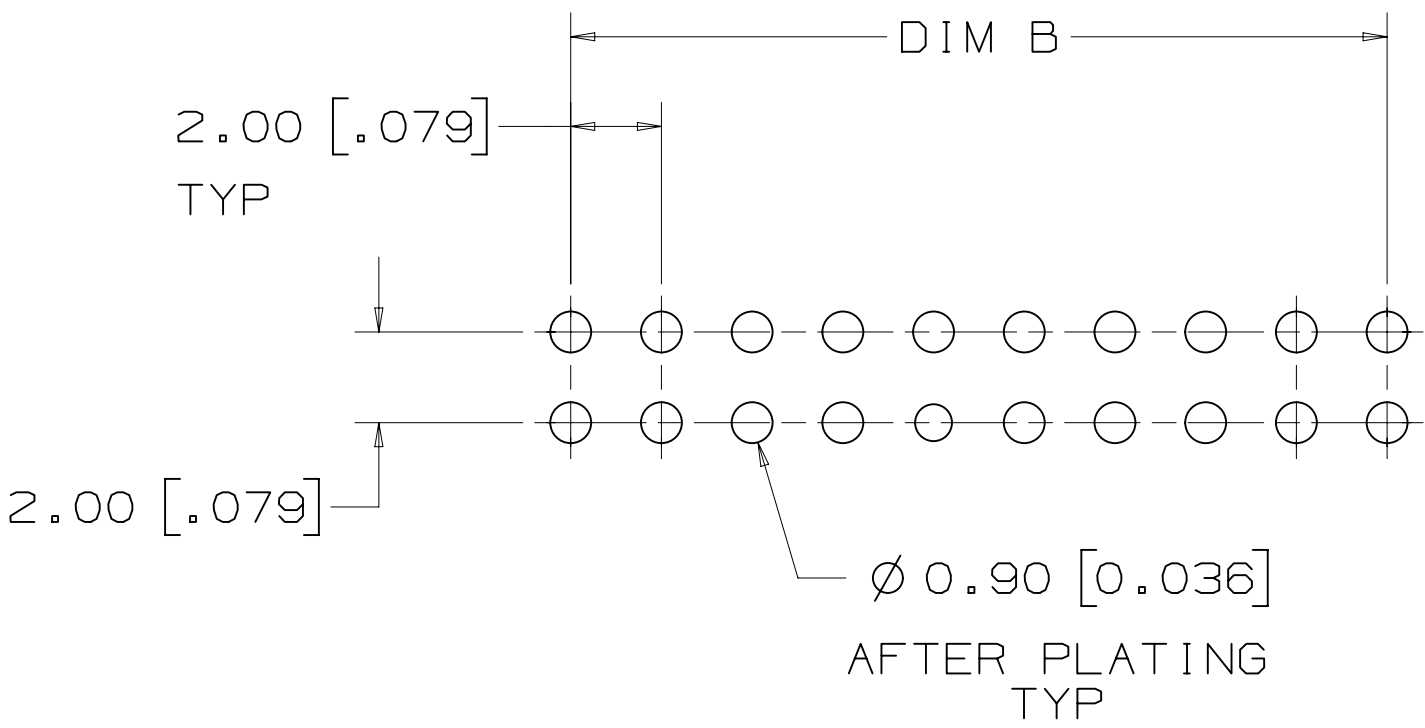
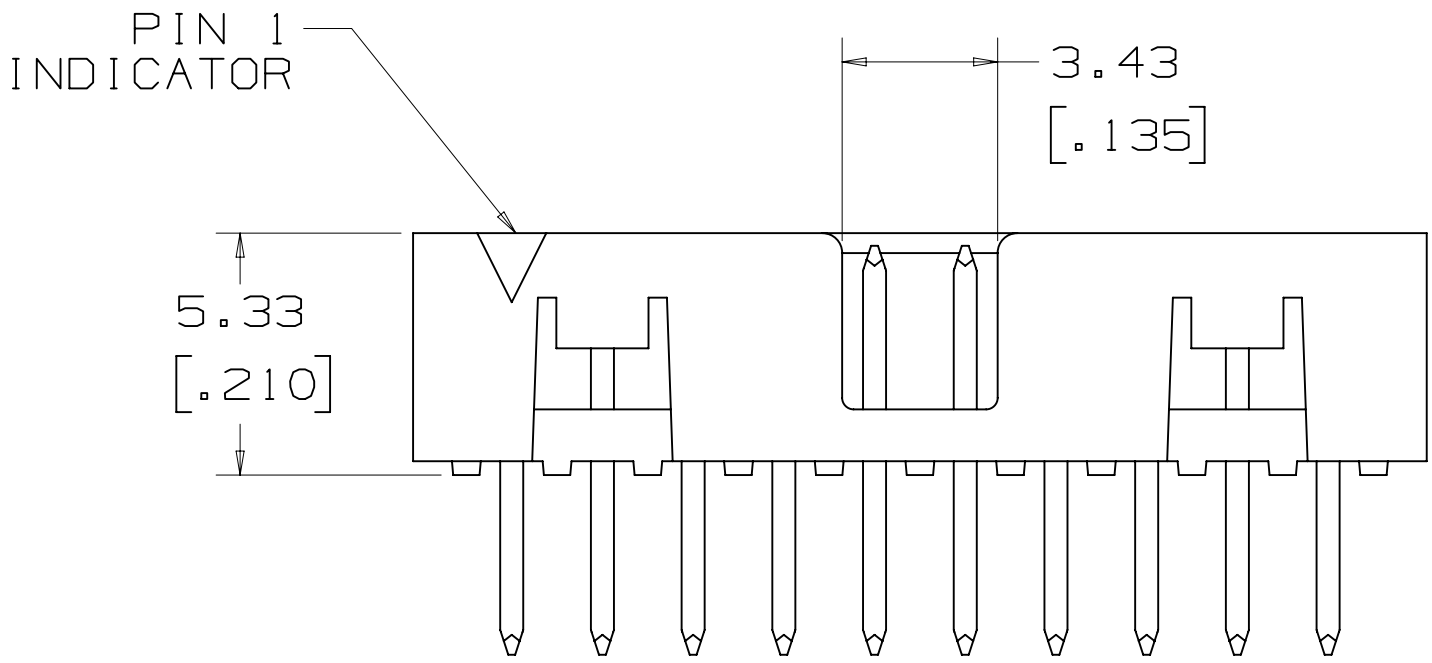
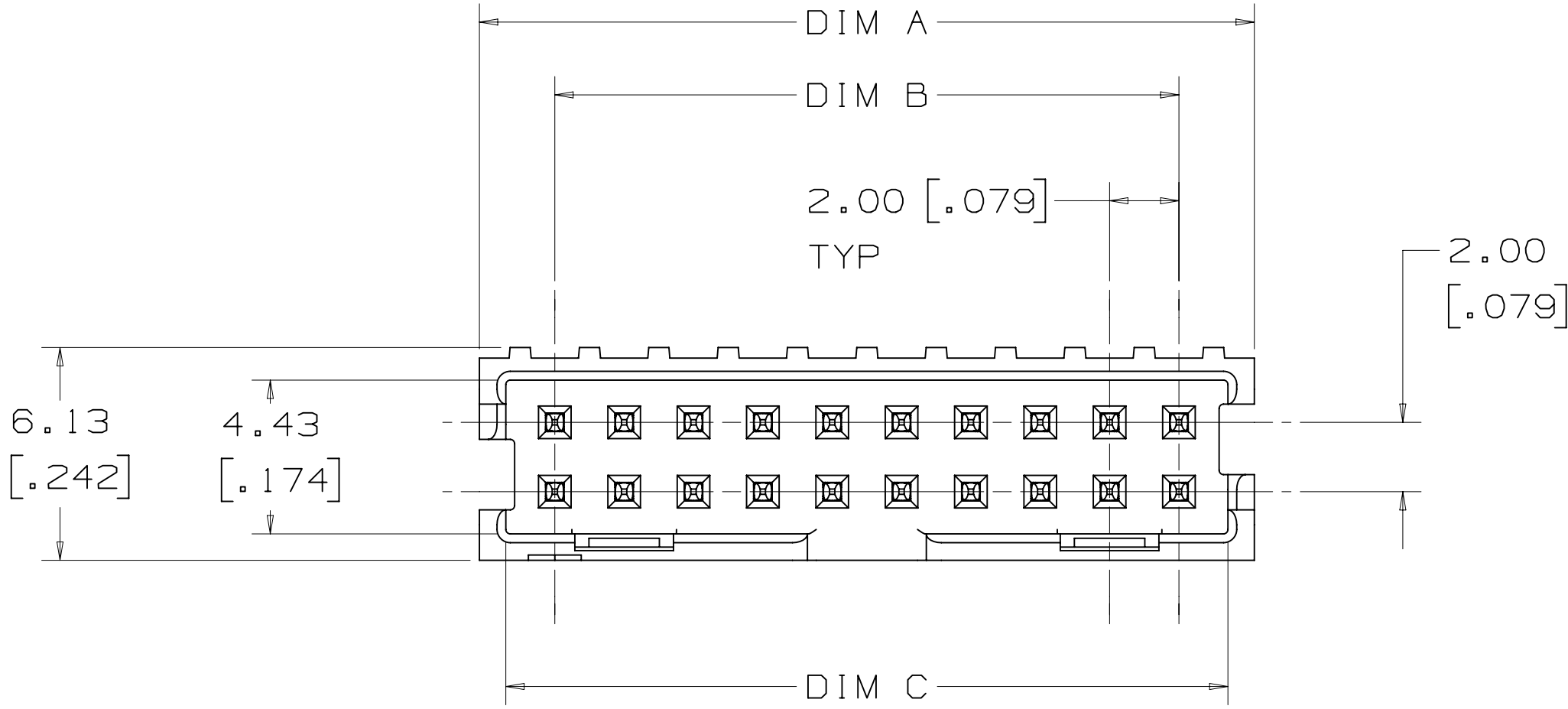
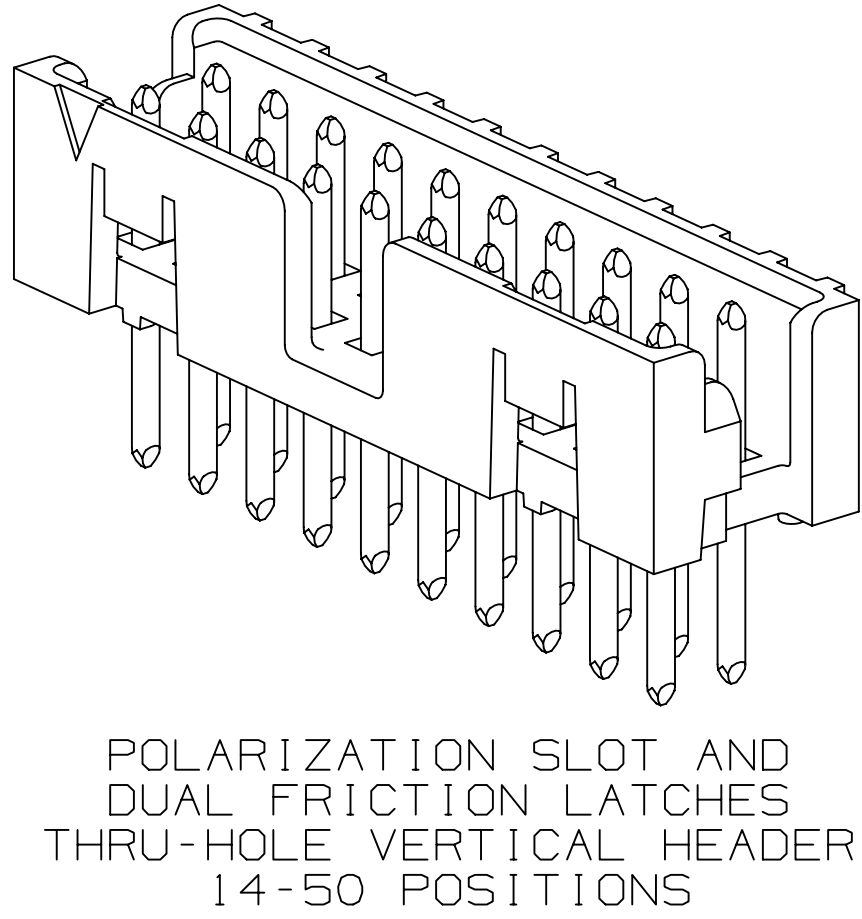
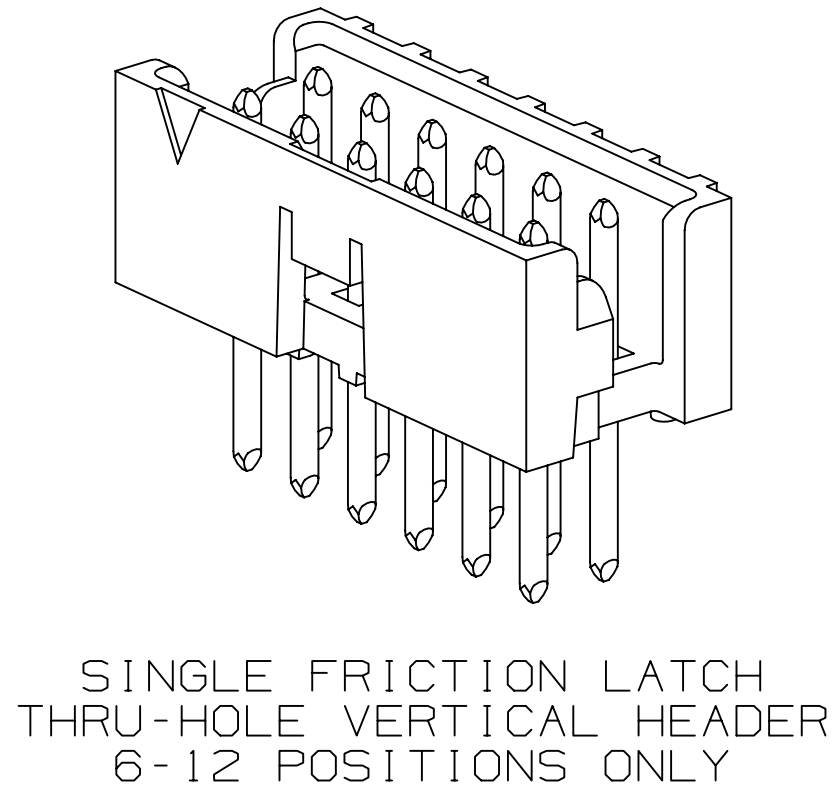
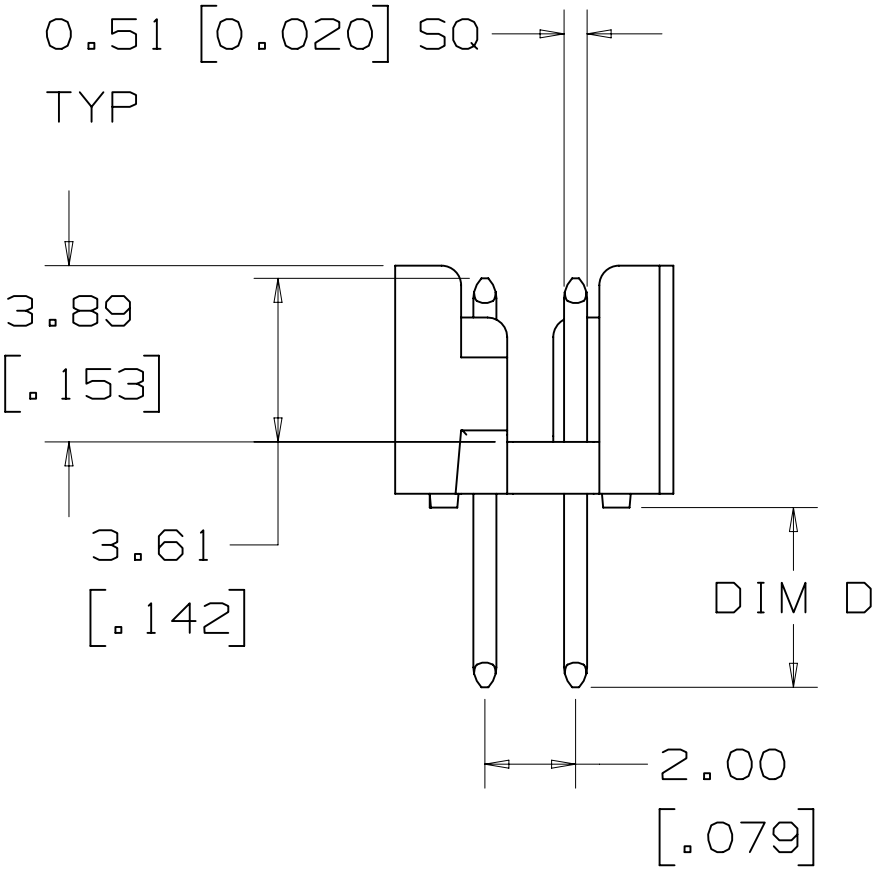
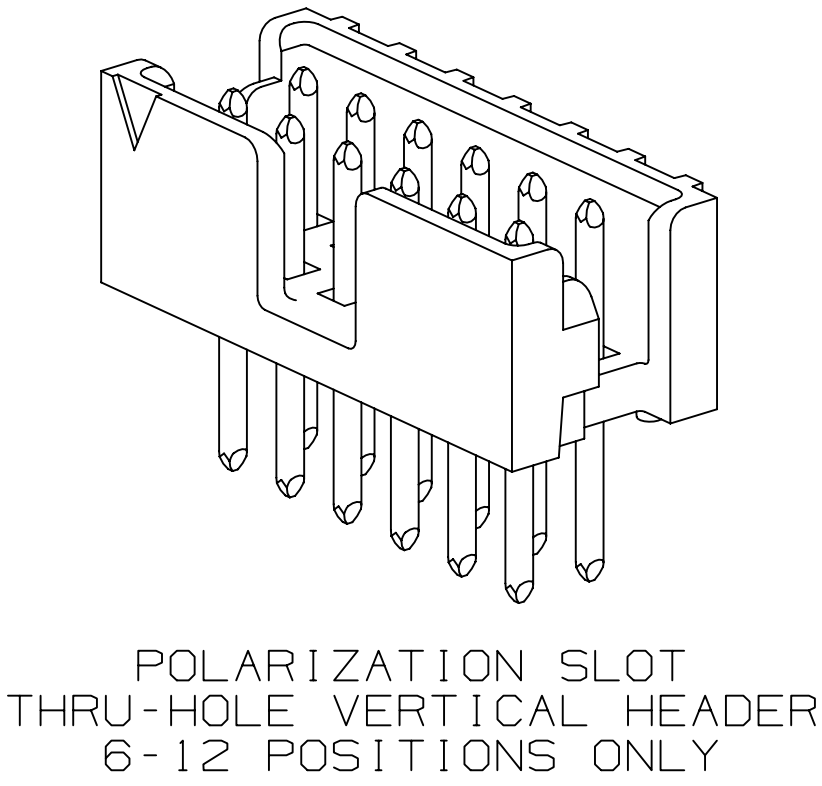


3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



RECOMMENDED PCB HOLE PATTERN
TOLERANCE = 0.05 [.002]



PERFORMANCE [5] [7]

CURRENT:	1A, 6 LINES ENERGIZED
INSULATION RESISTANCE:	>1 X 10 ⁹ OHMS AT 500 VDC
WITHSTANDING VOLTAGE:	500 VACrms AT SEA LEVEL
TEMPERATURE RATING:	-55° C TO +105° C
SOLDER PROCESS TEMPERATURE:	260° C MAX PER IPC/JEDEC J-STD-020D

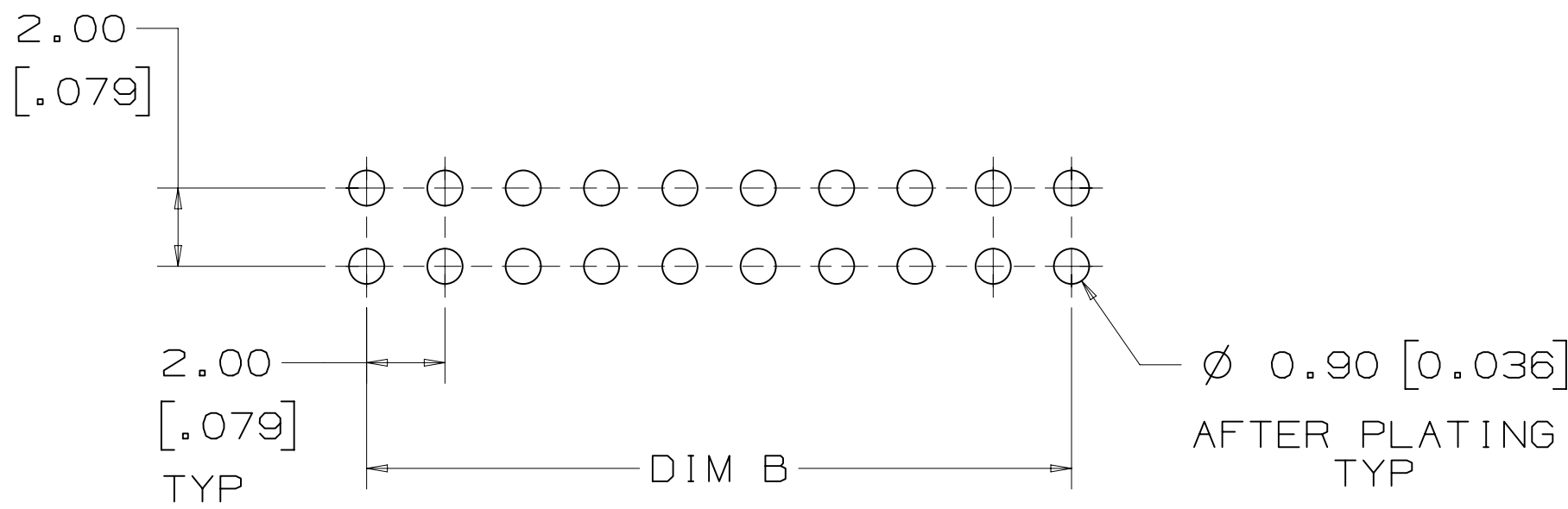
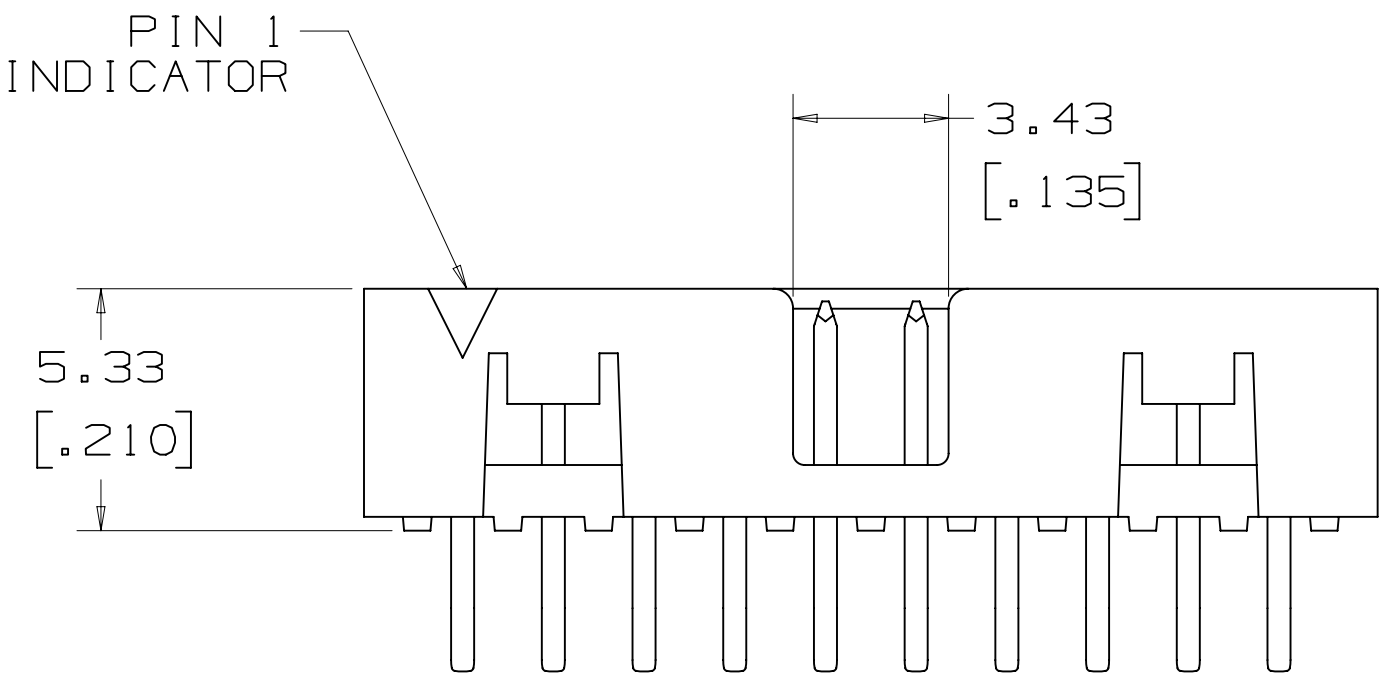
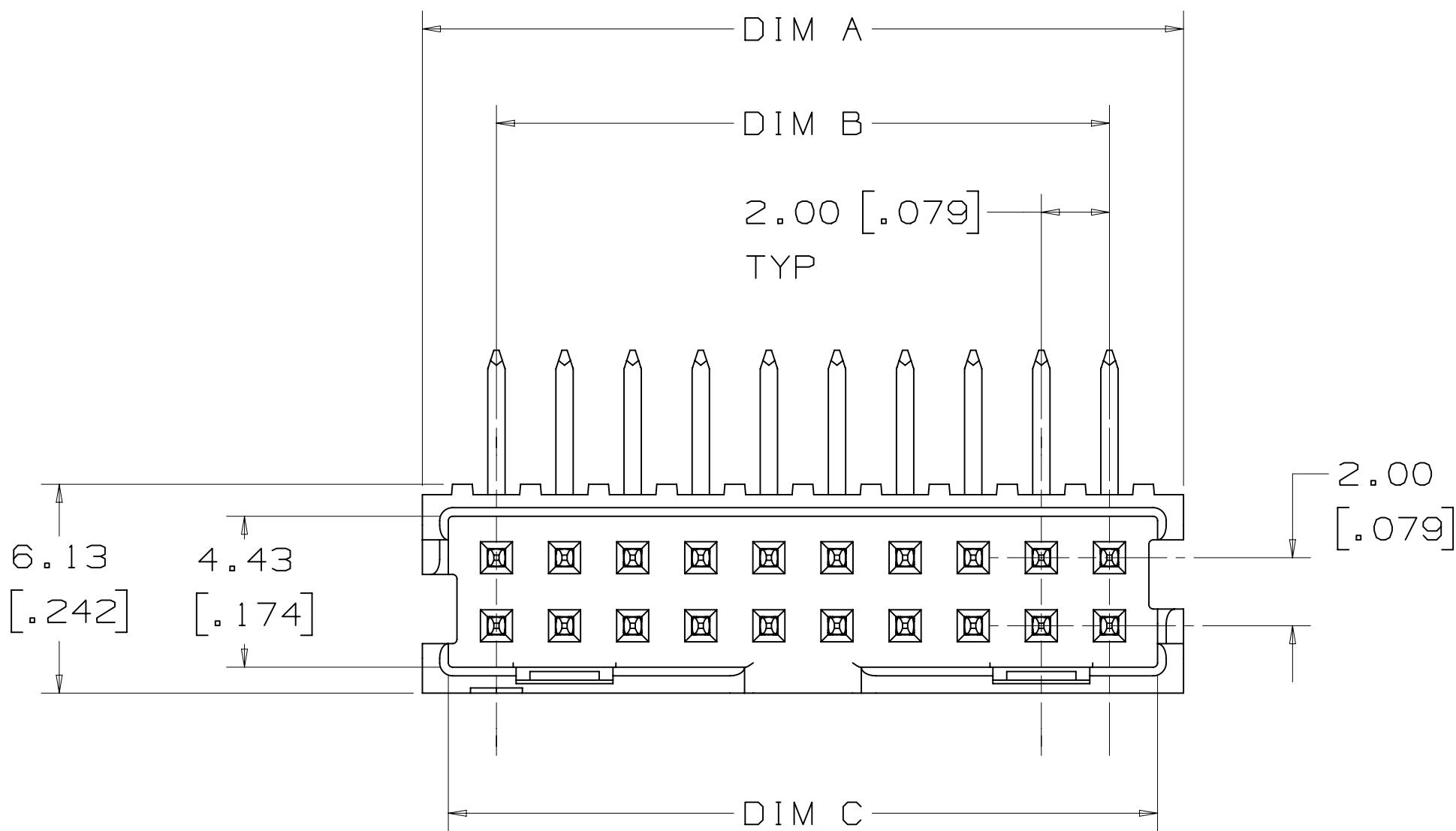
REFERENCE TABLE ON SHEET 4
FOR AVAILABLE POSITIONS AND
SOLDER TAIL LENGTHS

METRIC [ENGLISH]

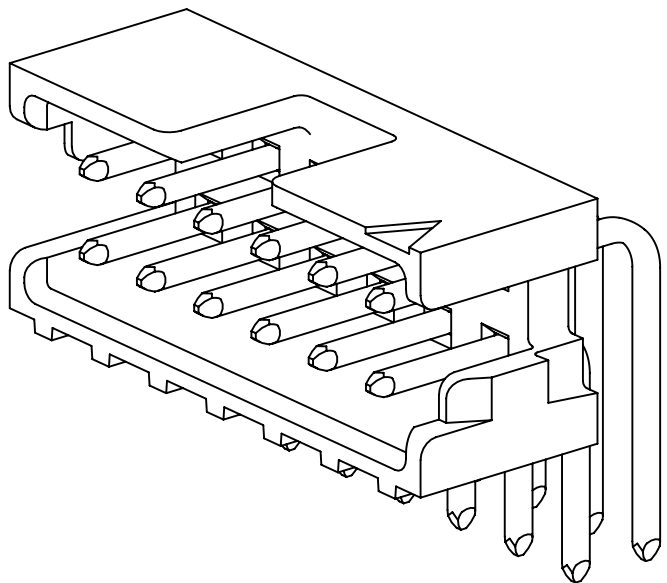
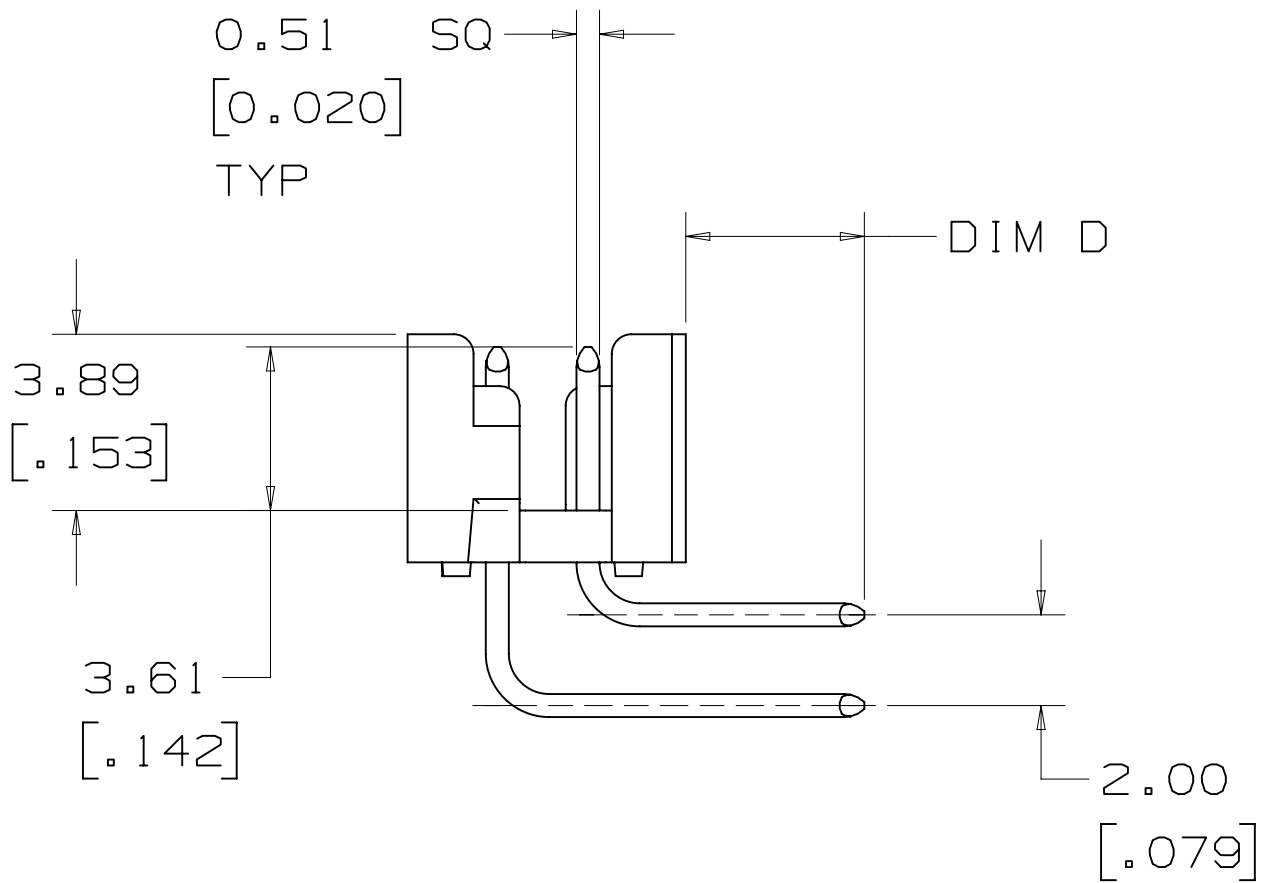
- NOTES
- MATERIAL:
BODY: HIGH TEMPERATURE GLASS FILLED LCP, BLACK UL94V-0
CONTACTS: COPPER ALLOY
 - PLATING:
2.03-3.81 μ m [80-150 μ in]
NICKEL UNDERPLATE.
0.38 μ m [15 μ in] OR
0.76 μ m [30 μ in] AVG GOLD
ON WIPING AREA.
5.08 μ m [200 μ in] MIN
MATTE TIN ON SOLDER TAILS.
 - STANDARD LENGTH HEADERS
MATE WITH 3M™ SOCKETS,
158 SERIES (REFERENCE 3M
DRAWING 78-5100-2358-9).
 - EXTENDED LENGTH HEADERS
MATE WITH 3M™ SOCKETS,
870 SERIES.
 - FOR PRODUCT
SPECIFICATIONS AND
WARRANTY INFORMATION SEE
3M 78-5102-0078-1.
 - SEE THE REGULATORY
INFORMATION APPENDIX (RIA)
IN THE "RoHS COMPLIANCE"
SECTION OF
WWW.3MCONNECTOR.COM FOR
COMPLIANCE INFORMATION
(RIA E1 & C1 APPLY).
 - IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND
THAT CONTAINED IN THE
PRODUCT SPECIFICATION,
THE PRODUCT SPECIFICATION
TAKES PRECEDENT.

DESIGN REFERENCE		NEXT ASSEMBLY		A 30741		OCT 28, 2010		LDS	SF
REV		ECO		L. SCHMIDT		JUL 29, 2010		AUG 09, 2010	
DIVISION		DIVISION CODE		3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2010 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.	
DO NOT SCALE DRAWING		SCALE 6-1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		125 /		ALL SURFACES	
CAGE NUMBER		SIZE		DRAWING NO.		REV.		MODEL	
125 /		D		78-5100-2359-7		A		SHT 1 OF 4	
YES		NO		SHT 1 OF 4					

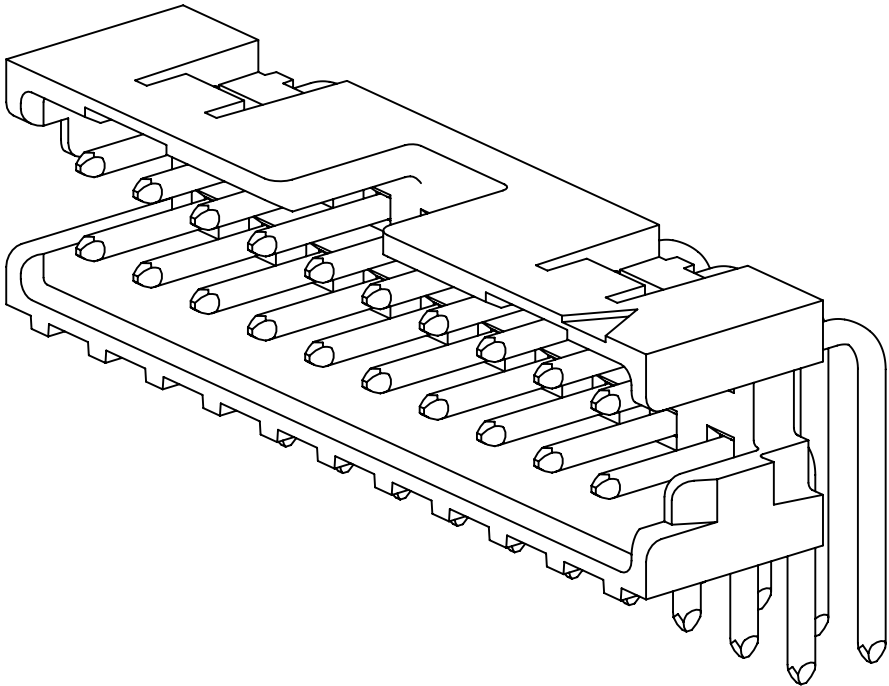
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



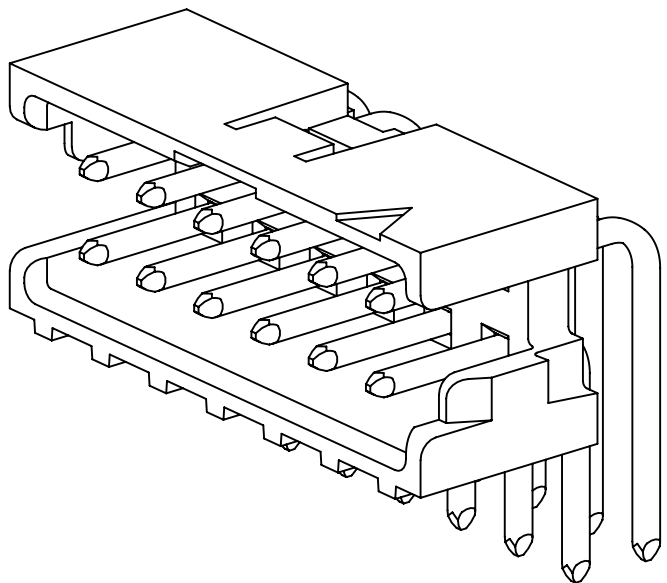
RECOMMENDED PCB HOLE PATTERN
TOLERANCE = ±0.05 [0.002]



POLARIZATION SLOT
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY



POLARIZATION SLOT AND
DUAL FRICTION LATCHES
RIGHT ANGLE HEADER
14-50 POSITIONS



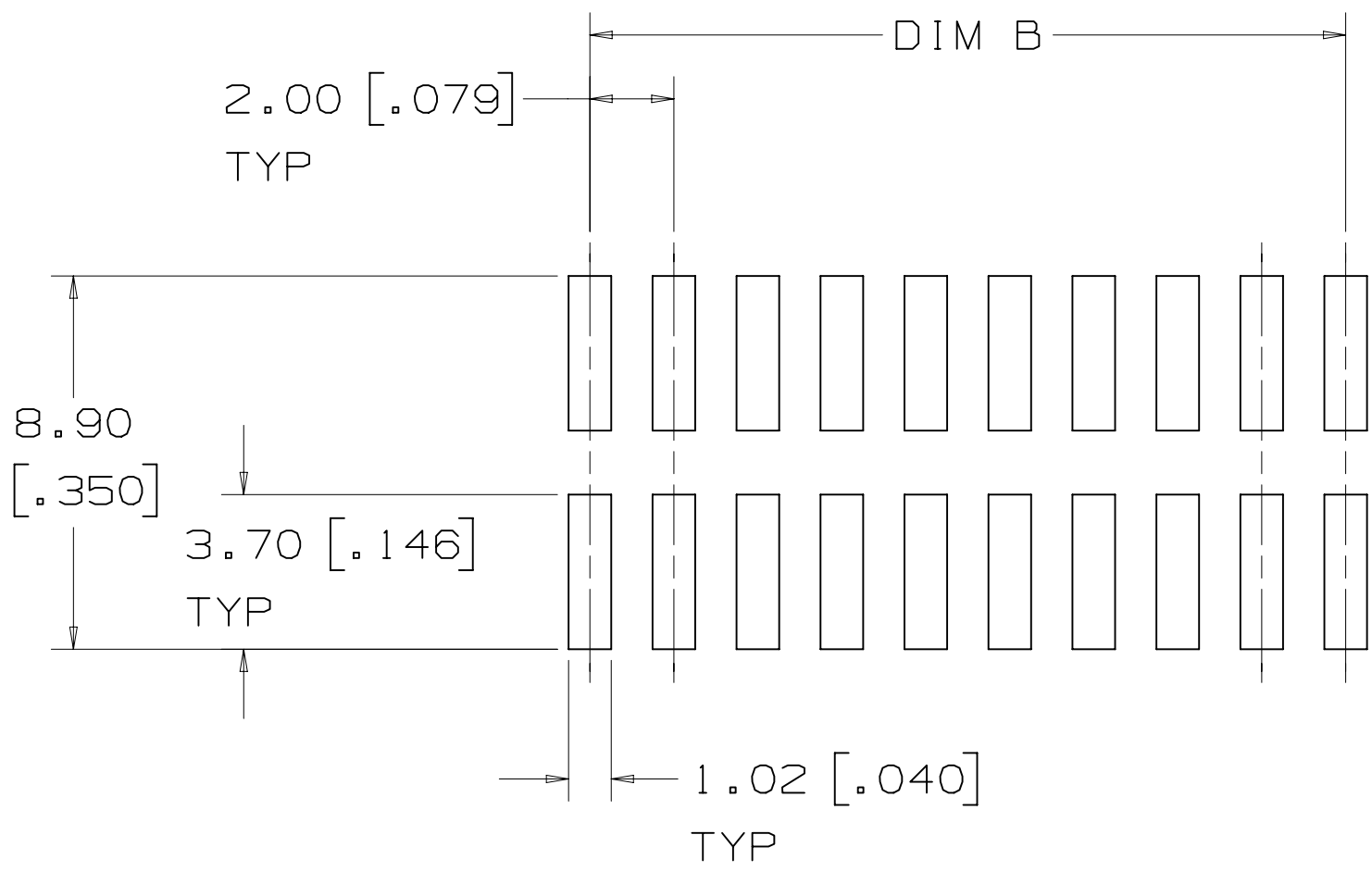
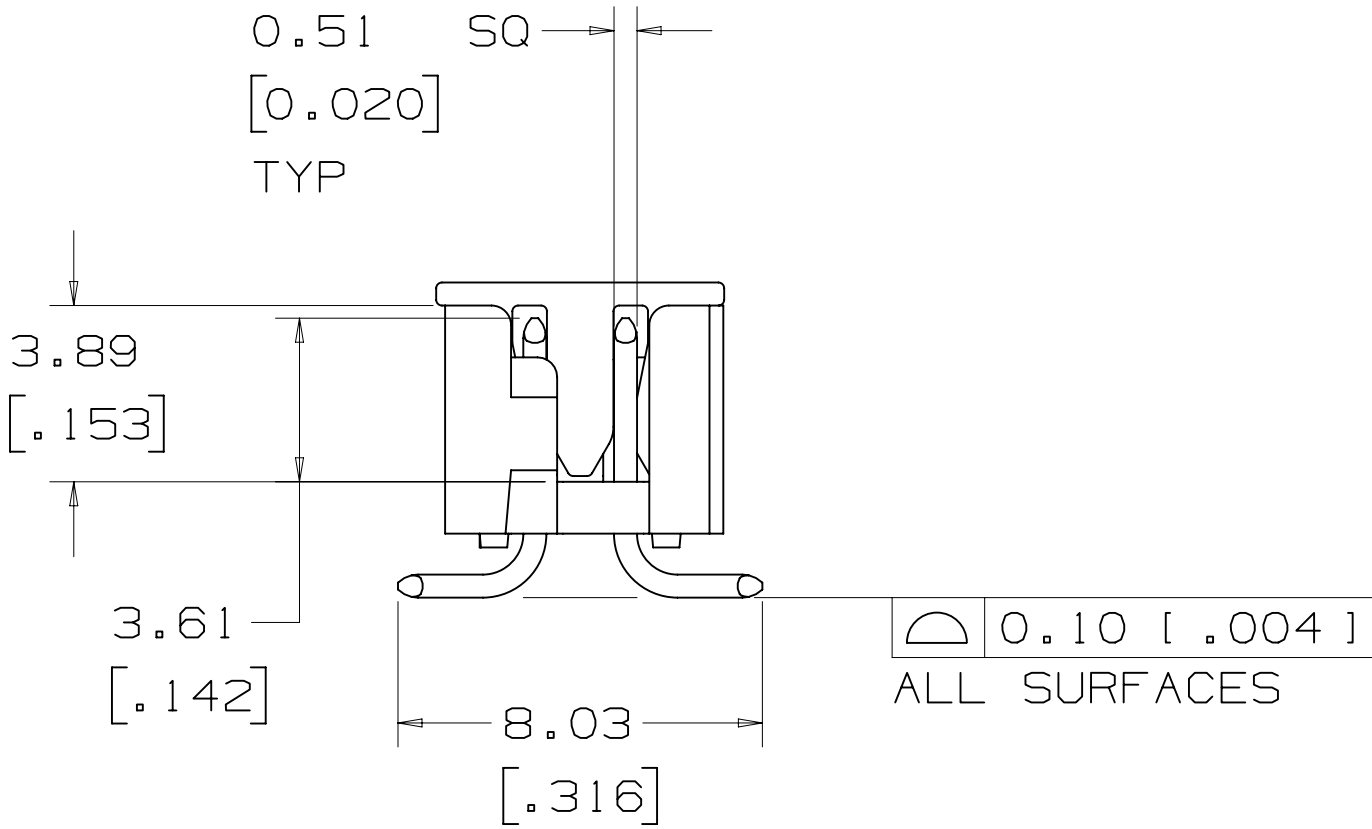
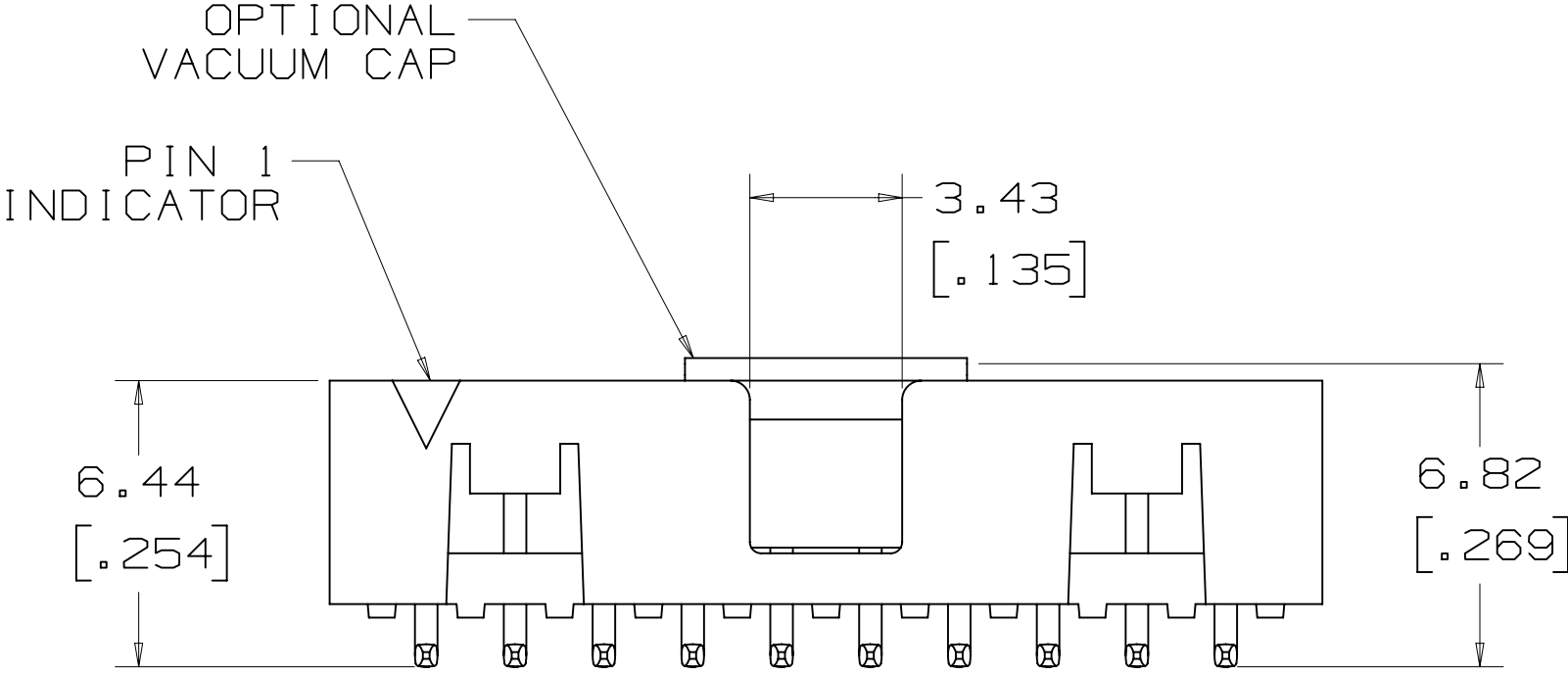
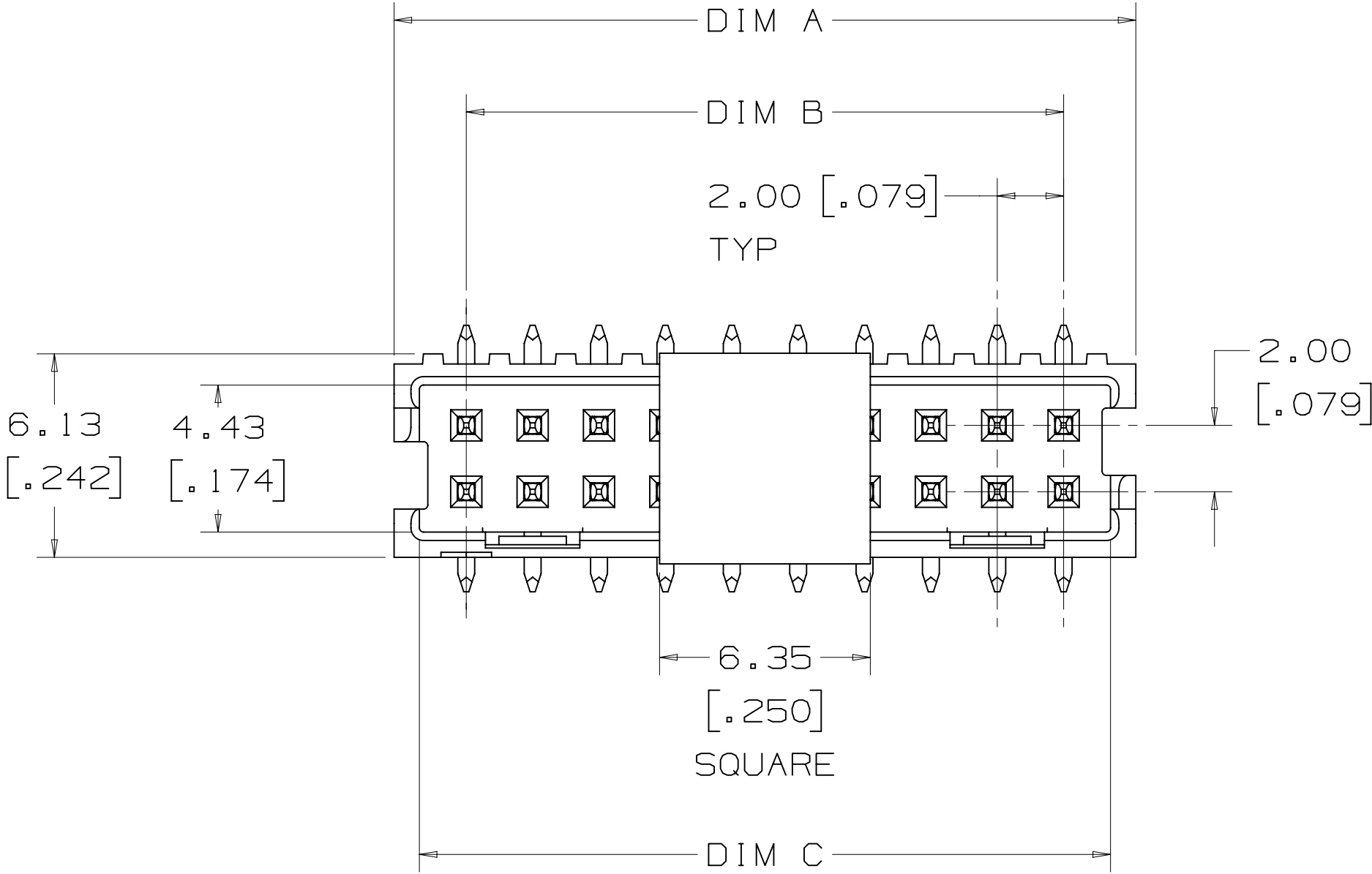
SINGLE FRICTION LATCH
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY

REFERENCE TABLE ON SHEET 4
FOR AVAILABLE POSITIONS AND
SOLDER TAIL LENGTHS

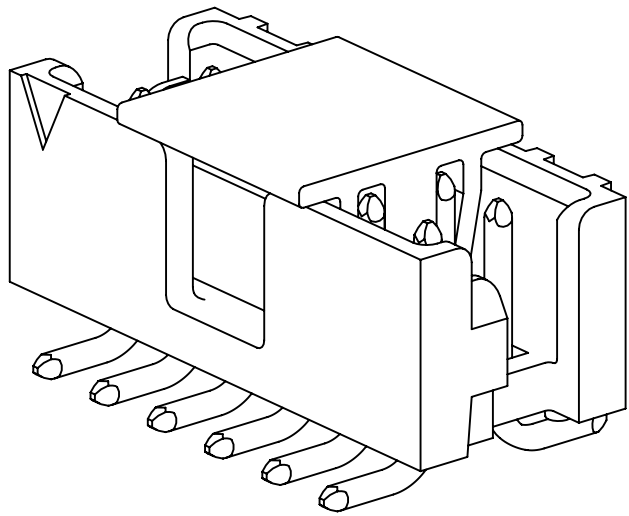
METRIC [ENGLISH]

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DISTANCE		DISTANCE		DRFT	ECO	DATE		DATE	DATE
L. SCHMIDT		JUL 29, 2010		DRFT	ECO	JUL 29, 2010		DATE	DATE
DIVISION		DIVISION CODE		CHKD	ECO	APPROVAL		DATE	DATE
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		125 / ALL SURFACES		MARKED ONLY	
ANGLES ±1°		ANGLES ±1°		CAGE NUMBER		DRAWING NO.		REV.	
A 30741		OCT 28, 2010		INITIAL RELEASE		LDS		SF	
3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2010		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.		TITLE	
3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES		CAGE NUMBER		DRAWING NO.		REV.		MODEL	
D 78-5100-2359-7		A		SHT 2 OF 4		DET		YES NO	

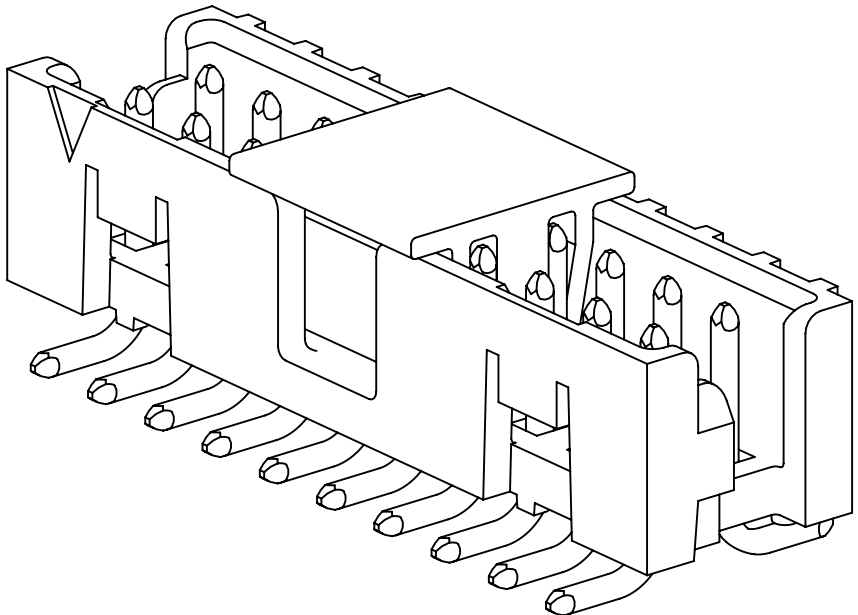
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



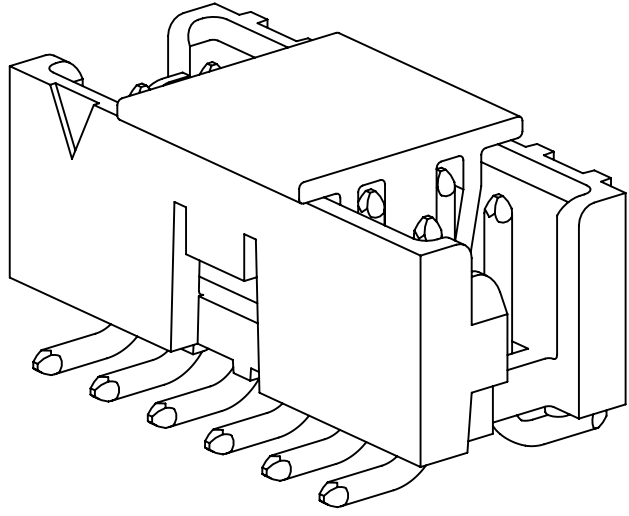
RECOMMENDED PCB PAD PATTERN
TOLERANCE = ±0.08 [0.003]



POLARIZATION SLOT
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY



POLARIZATION SLOT AND
DUAL FRICTION LATCHES
SURFACE MOUNT HEADER
14-50 POSITIONS



SINGLE FRICTION LATCH
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY

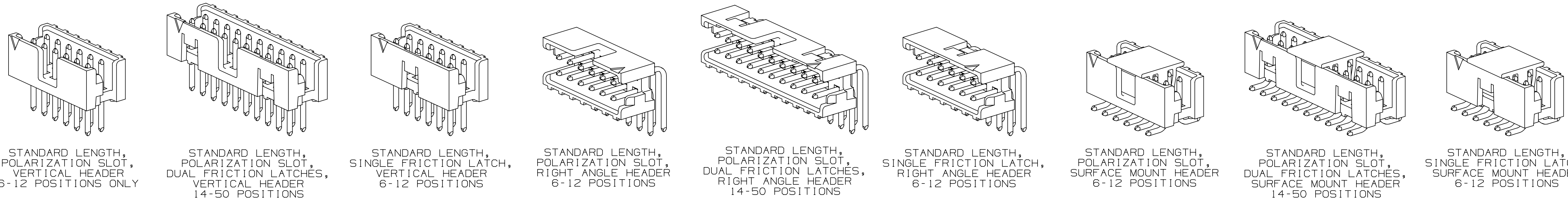
REFERENCE TABLE ON SHEET 4
FOR AVAILABLE POSITIONS

METRIC [ENGLISH]

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DISTANCE		SCALE		DATE		MFG		DATE	
L. SCHMIDT		JUL 29, 2010		S. FELDMAN		AUG 09, 2010			
DIVISION		DIVISION CODE		3M Center		St. Paul, MN 55144		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		125/0.000 ±0.13		ALL SURFACES MARKED ONLY	
ANGLES ±1°		CAGE NUMBER		DRAWING NO.		REV.		MODEL	
125/0.000 ±0.13		D78-5100-2359-7		A		SHT 3 OF 4			

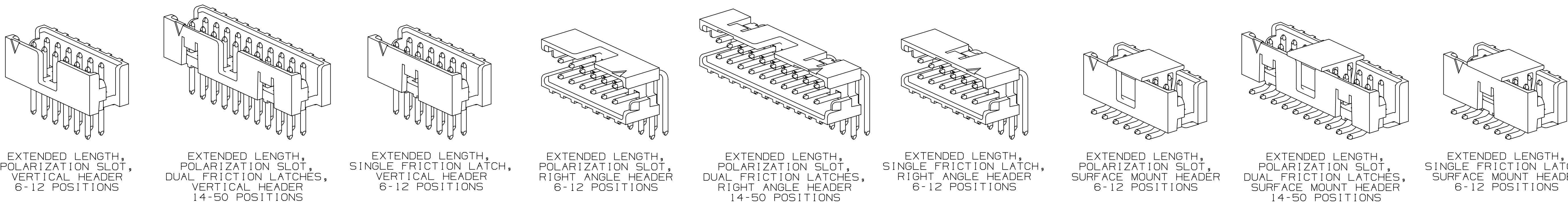
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3

STANDARD LENGTH HEADERS
ARE AVAILABLE



3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Extended Length 4

CALL 3M INTERCONNECT SOLUTIONS
AT 800-225-5373 FOR AVAILABILITY
OF EXTENDED LENGTH HEADERS



ORDERING INFORMATION

TIER 1 - BEST
1591XX-XXXX

TIER 1 = BEST 0.76 μ m
[30 μ in] GOLD

POSITION COUNT (SEE TABLE)

PART CONFIGURATION
2 = VERTICAL SMT
5 = RIGHT ANGLE THRU HOLE
6 = VERTICAL THRU HOLE

BODY LENGTH
0 = STANDARD LENGTH
(MATES TO 158 SERIES)
1 = EXTENDED LENGTH
(MATES TO 870 SERIES)

CONTACT TAIL LENGTH
2 = 2.84 mm [.112]
3 = 3.94 mm [.155]

POLARIZATION/LATCHING
0 = POLARIZATION SLOT AND
DUAL FRICTION LATCHES
(14-50 POSITIONS ONLY)
1 = POLARIZATION SLOT
(6-12 POSITIONS ONLY)
2 = SINGLE FRICTION LATCH
(6-12 POSITIONS ONLY)

TIER 2 - BETTER
1592XX-XXXX

TIER 2 = BETTER 0.38 μ m
[15 μ in] GOLD

POSITION COUNT (SEE TABLE)

PART CONFIGURATION
2 = VERTICAL SMT
5 = RIGHT ANGLE THRU HOLE
6 = VERTICAL THRU HOLE

BODY LENGTH
0 = STANDARD LENGTH
(MATES TO 158 SERIES)
1 = EXTENDED LENGTH
(MATES TO 870 SERIES)

CONTACT TAIL LENGTH
2 = 2.84 mm [.112]
3 = 3.94 mm [.155]

POLARIZATION/LATCHING
0 = POLARIZATION SLOT AND
DUAL FRICTION LATCHES
(14-50 POSITIONS ONLY)
1 = POLARIZATION SLOT
(6-12 POSITIONS ONLY)
2 = SINGLE FRICTION LATCH
(6-12 POSITIONS ONLY)

NUMBER OF POSITIONS	SHROUDED BOX HEADER						
	DIM A		DIM B	DIM C		DIM D	
	STANDARD	EXTENDED		STANDARD	EXTENDED		
6	8.35 [.329]	9.52 [.375]	4.00 [.157]	6.83 [.269]	7.99 [.315]	2.84 [.112]	3.94 [.155]
8	10.35 [.407]	11.52 [.453]	6.00 [.236]	8.83 [.347]	9.99 [.393]	2.84 [.112]	3.94 [.155]
10	12.35 [.486]	13.52 [.532]	8.00 [.315]	10.83 [.426]	11.99 [.472]	2.84 [.112]	3.94 [.155]
12	14.35 [.565]	15.52 [.611]	10.00 [.394]	12.83 [.505]	13.99 [.551]	2.84 [.112]	3.94 [.155]
14	16.36 [.644]	17.52 [.690]	12.00 [.472]	14.83 [.584]	15.99 [.630]	2.84 [.112]	3.94 [.155]
16	18.35 [.722]	19.52 [.768]	14.00 [.551]	16.83 [.662]	17.99 [.708]	2.84 [.112]	3.94 [.155]
20	22.35 [.880]	23.52 [.926]	18.00 [.709]	20.83 [.820]	21.99 [.866]	2.84 [.112]	3.94 [.155]
22	24.35 [.959]	25.52 [1.005]	20.00 [.787]	22.83 [.899]	23.99 [.945]	2.84 [.112]	3.94 [.155]
24	26.35 [1.037]	27.52 [1.083]	22.00 [.866]	24.83 [.977]	25.99 [1.023]	2.84 [.112]	3.94 [.155]
26	28.35 [1.116]	29.52 [1.162]	24.00 [.945]	26.83 [1.056]	27.99 [1.102]	2.84 [.112]	3.94 [.155]
30	32.35 [1.274]	33.52 [1.320]	28.00 [1.102]	30.83 [1.214]	31.99 [1.260]	2.84 [.112]	3.94 [.155]
34	36.35 [1.431]	37.52 [1.477]	32.00 [1.260]	34.83 [1.371]	35.99 [1.417]	2.84 [.112]	3.94 [.155]
40	42.35 [1.667]	43.52 [1.713]	38.00 [1.496]	40.83 [1.607]	41.99 [1.653]	2.84 [.112]	3.94 [.155]
44	46.35 [1.825]	47.52 [1.871]	42.00 [1.654]	44.83 [1.765]	45.99 [1.811]	2.84 [.112]	3.94 [.155]
50	52.35 [2.061]	53.52 [2.107]	48.00 [1.890]	50.83 [2.001]	51.99 [2.047]	2.84 [.112]	3.94 [.155]

METRIC [ENGLISH]

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
101		102		L. SCHMIDT		DATE JUL 29, 2010		DATE	
DIVISION		DIVISION CODE		CHKD		DATE		DATE	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES			
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		MILLIMETERS			
MAX SURFACE ROUGHNESS 125		ALL SURFACES		MARKED ONLY		ANGLES $\pm$ 1°			
A 30741		OCT 28, 2010		LDS		SF			
INITIAL RELEASE		DATE		DATE		DATE			
3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2010		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.			
TITLE		3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES		CAGE NUMBER		DRAWING NO.		REV.	
125		D 78-5100-2359-7		A		MODEL		SHT 4 OF 4	

Mouser Electronics

Authorized Distributor

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

3M:

<u>159108-2022</u>	<u>159120-5102</u>	<u>159110-2022</u>	<u>159106-2012</u>	<u>159106-5012</u>	<u>159106-6012</u>	<u>159108-2012</u>	<u>159108-5012</u>
<u>159108-6012</u>	<u>159110-2012</u>	<u>159110-5012</u>	<u>159110-6012</u>	<u>159112-2012</u>	<u>159112-5012</u>	<u>159112-6012</u>	<u>159114-2002</u>
<u>159114-5002</u>	<u>159114-6002</u>	<u>159116-2002</u>	<u>159116-5002</u>	<u>159116-6002</u>	<u>159120-2002</u>	<u>159120-5002</u>	<u>159120-6002</u>
<u>159122-2002</u>	<u>159122-5002</u>	<u>159122-6002</u>	<u>159124-2002</u>	<u>159124-5002</u>	<u>159124-6002</u>	<u>159126-2002</u>	<u>159126-5002</u>
<u>159126-6002</u>	<u>159130-2002</u>	<u>159130-5002</u>	<u>159130-6002</u>	<u>159134-2002</u>	<u>159134-5002</u>	<u>159134-6002</u>	<u>159140-2002</u>
<u>159140-5002</u>	<u>159140-6002</u>	<u>159144-2002</u>	<u>159144-5002</u>	<u>159144-6002</u>	<u>159150-2002</u>	<u>159150-5002</u>	<u>159150-6002</u>
<u>159206-2012</u>	<u>159206-5012</u>	<u>159206-6012</u>	<u>159208-2012</u>	<u>159208-5012</u>	<u>159208-6012</u>	<u>159210-2012</u>	<u>159210-5012</u>
<u>159210-6012</u>	<u>159212-2012</u>	<u>159212-5012</u>	<u>159212-6012</u>	<u>159214-2002</u>	<u>159214-5002</u>	<u>159214-6002</u>	<u>159216-2002</u>
<u>159216-5002</u>	<u>159216-6002</u>	<u>159220-2002</u>	<u>159220-5002</u>	<u>159220-6002</u>	<u>159222-2002</u>	<u>159222-5002</u>	<u>159222-6002</u>
<u>159224-2002</u>	<u>159224-5002</u>	<u>159224-6002</u>	<u>159226-2002</u>	<u>159226-5002</u>	<u>159226-6002</u>	<u>159230-2002</u>	<u>159230-5002</u>
<u>159230-6002</u>	<u>159234-2002</u>	<u>159234-5002</u>	<u>159234-6002</u>	<u>159240-2002</u>	<u>159240-5002</u>	<u>159240-6002</u>	<u>159244-2002</u>
<u>159244-5002</u>	<u>159244-6002</u>	<u>159250-2002</u>	<u>159250-5002</u>	<u>159250-6002</u>	<u>159120-6102</u>	<u>159210-2112</u>	<u>159212-2022</u>
<u>159212-6022</u>	<u>159216-2102</u>	<u>159206-2022</u>	<u>159206-5022</u>				