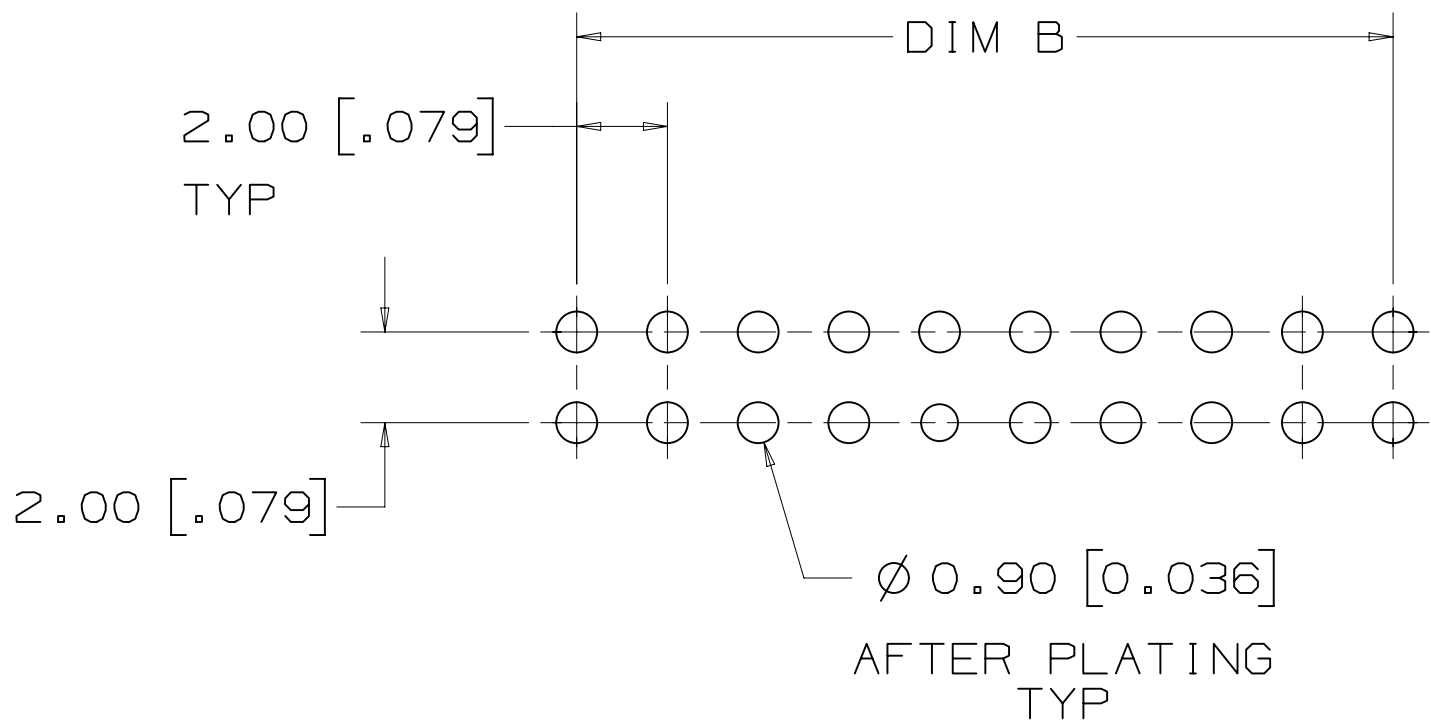
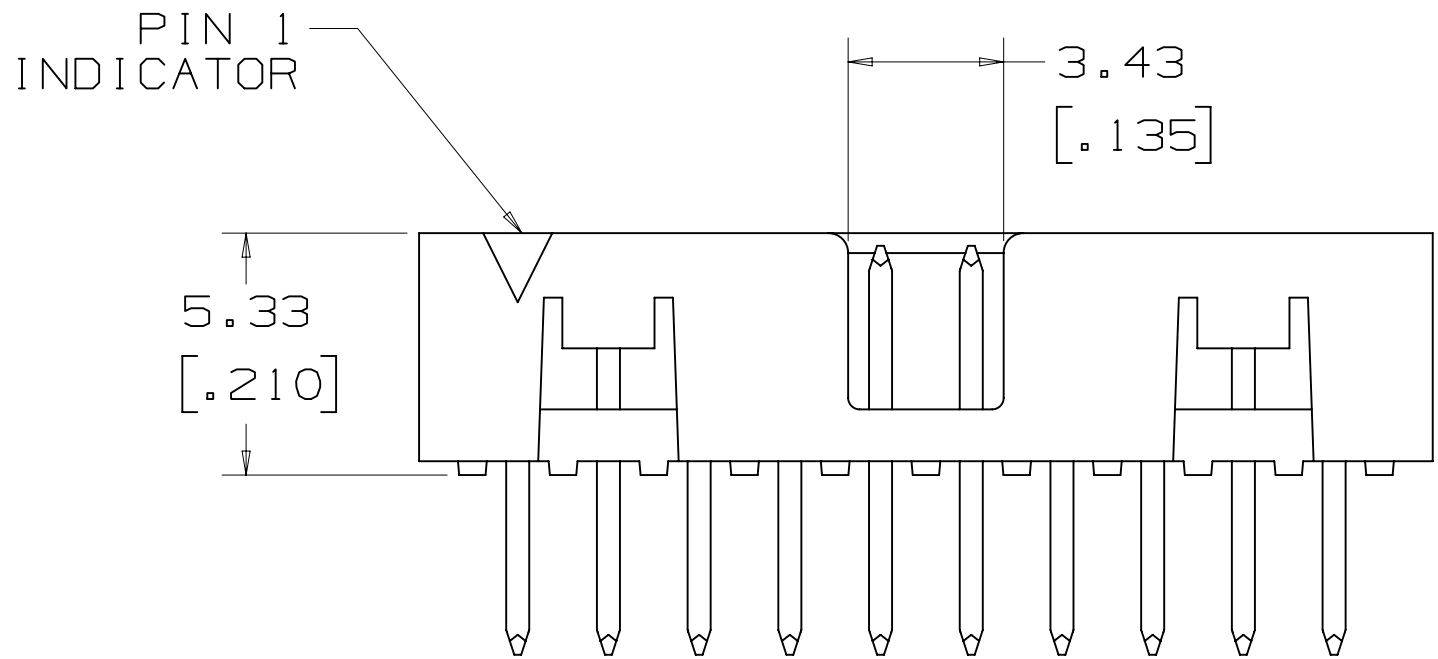
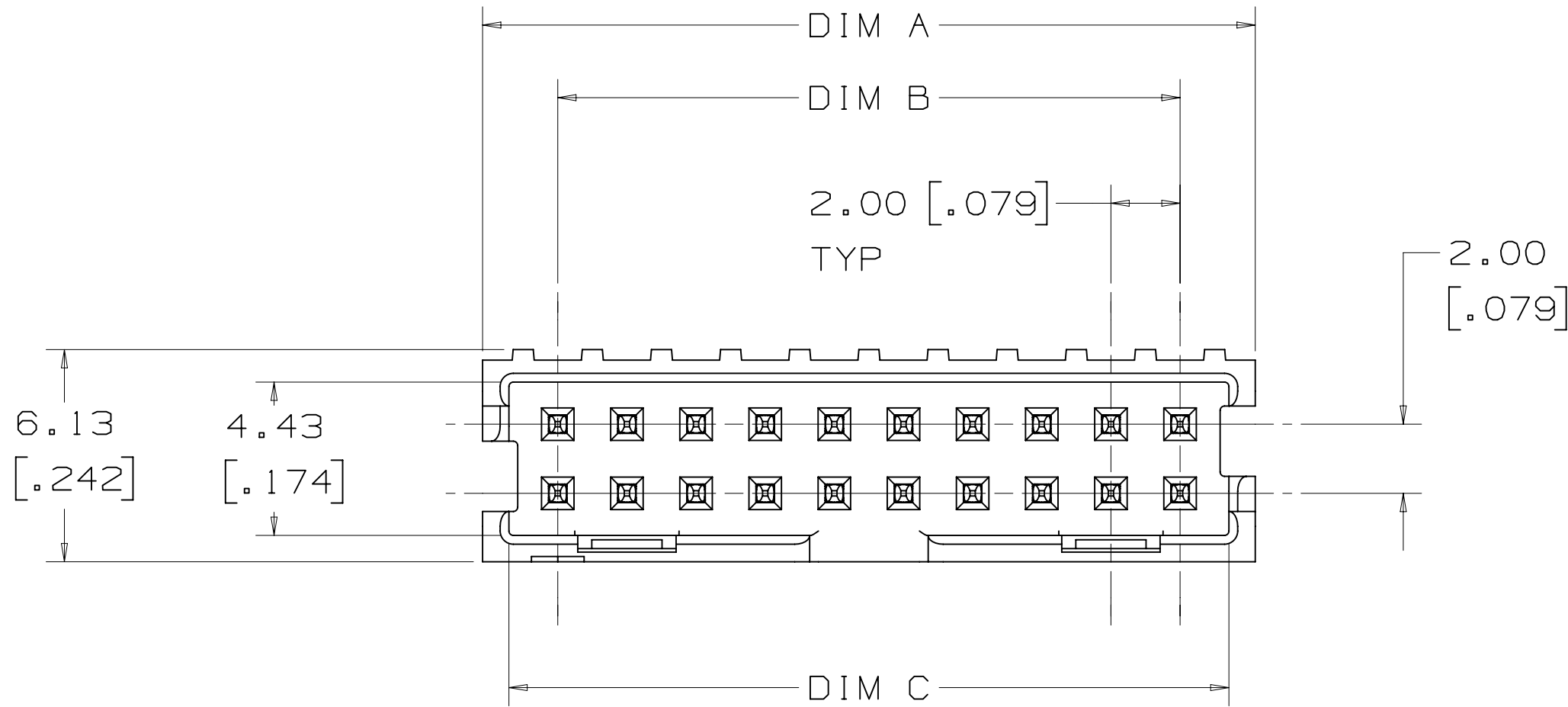
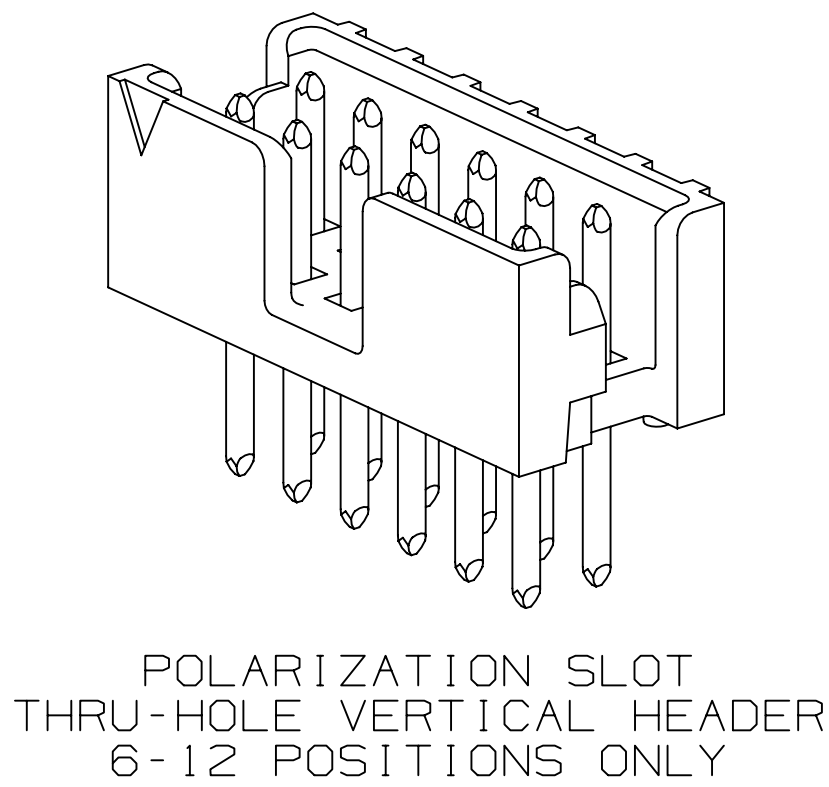


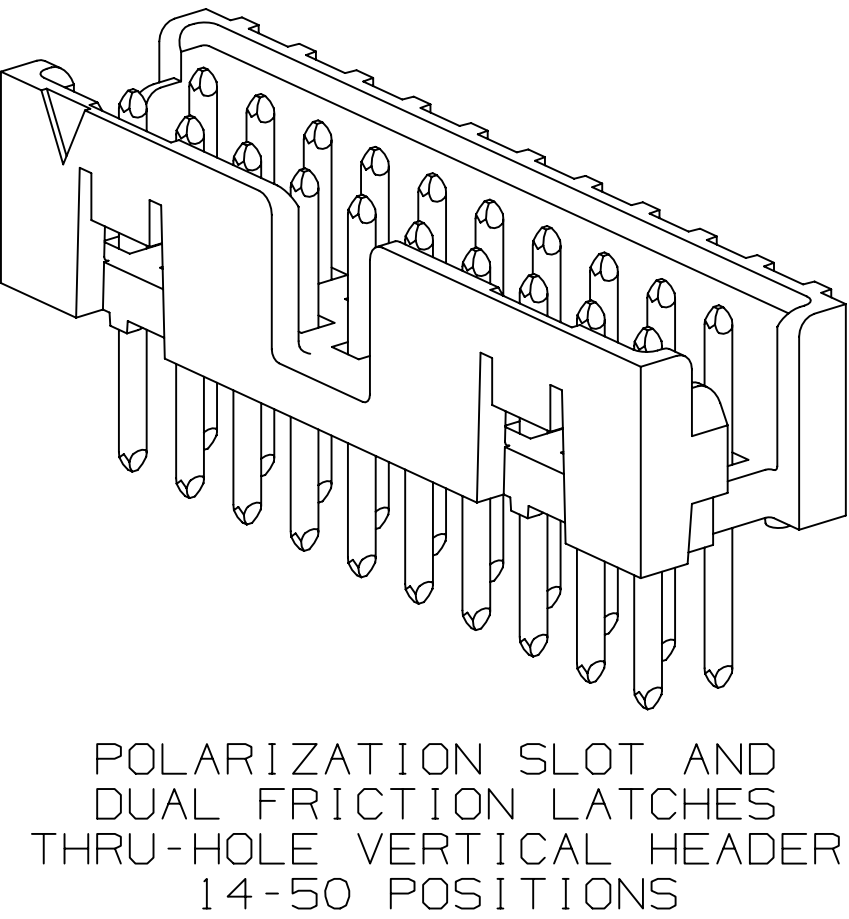
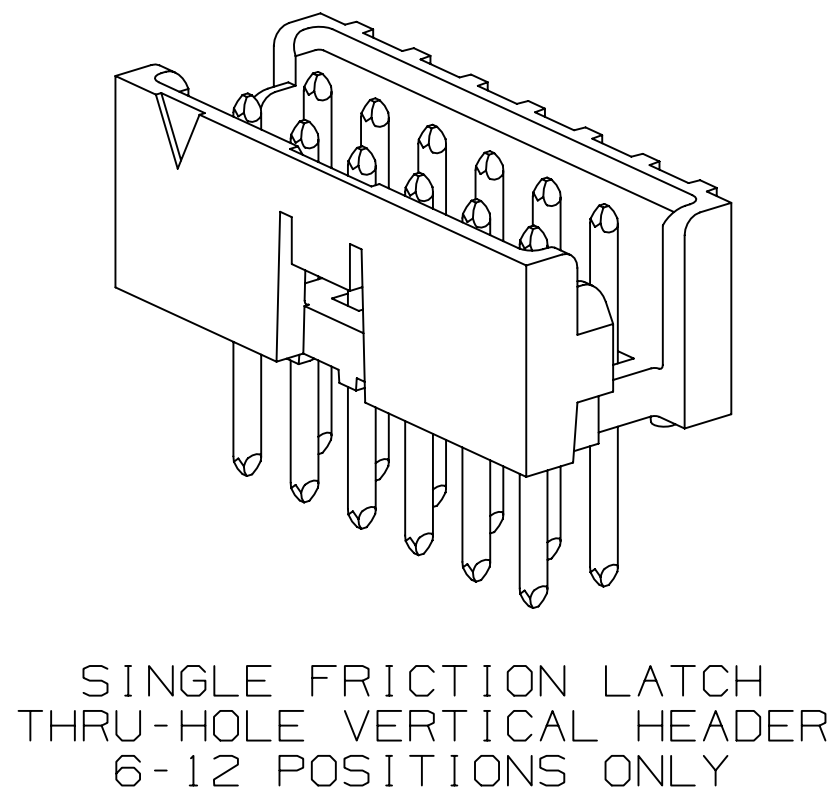
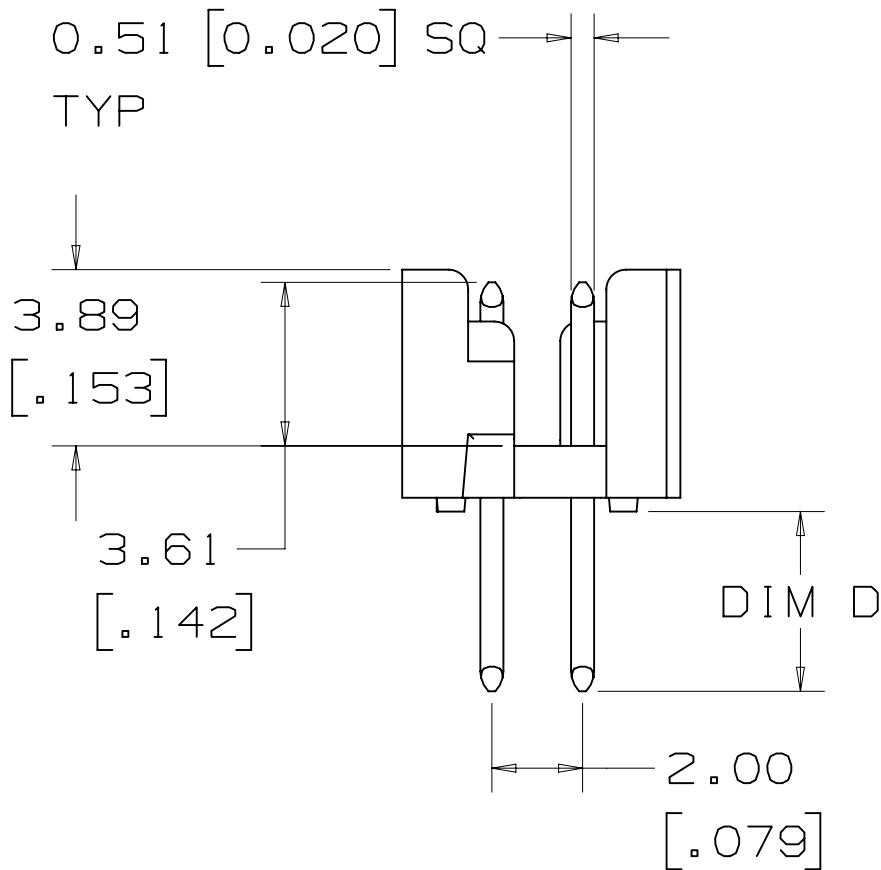
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



RECOMMENDED PCB HOLE PATTERN
TOLERANCE = 0.05 [.002]



2.00
[.079]



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

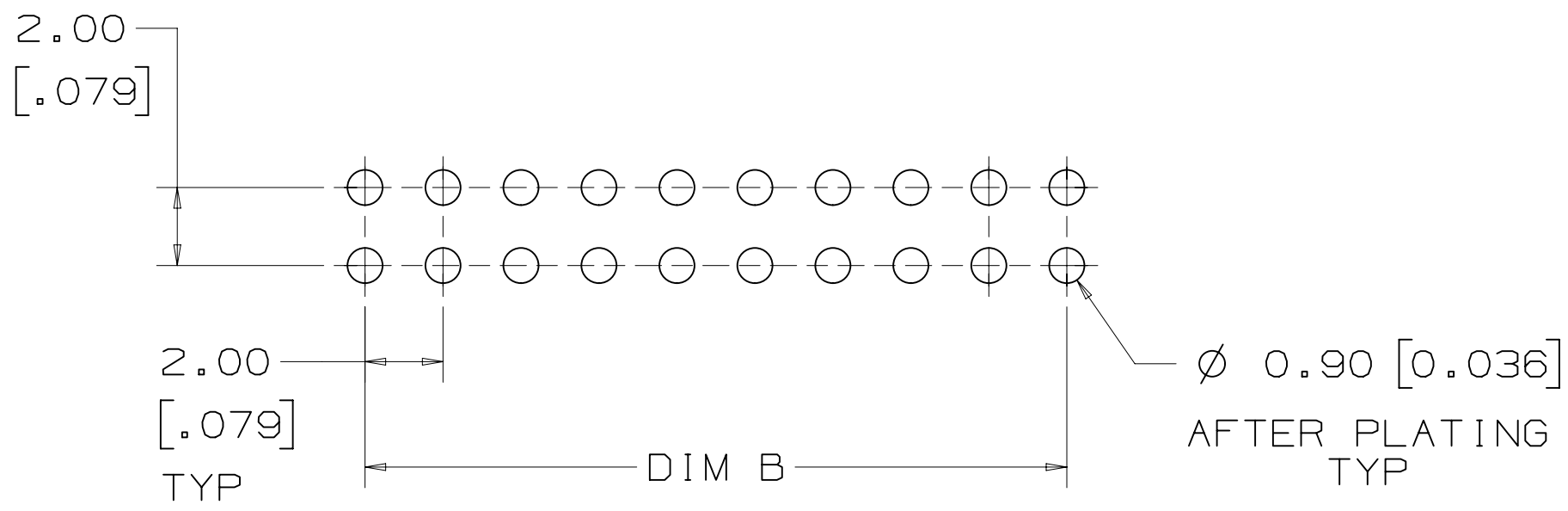
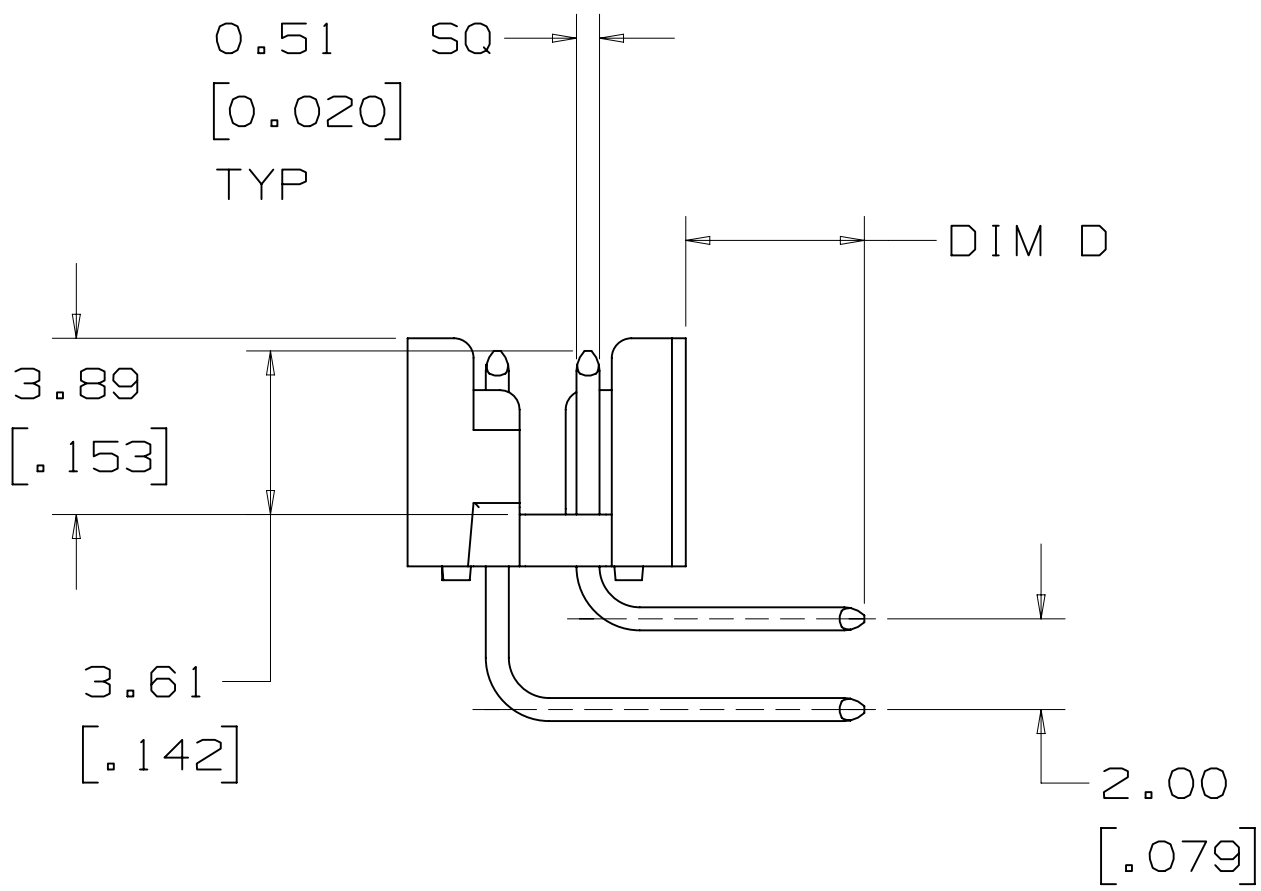
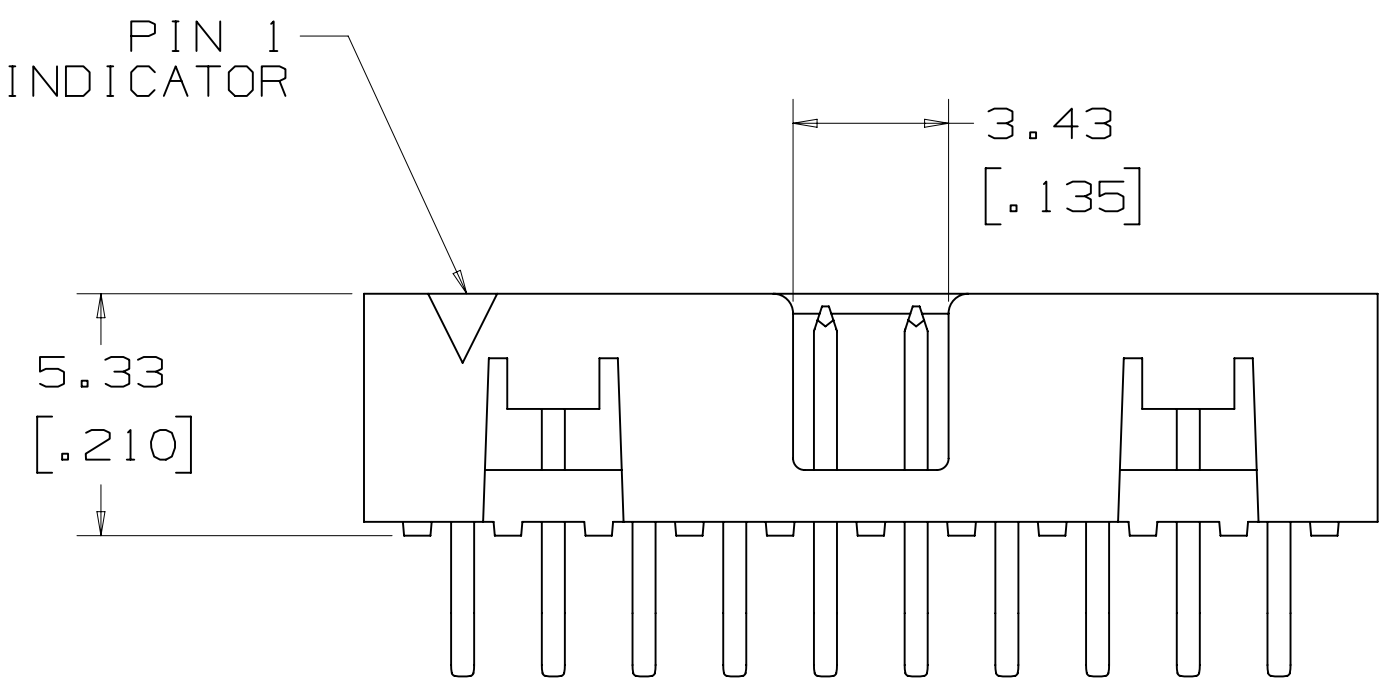
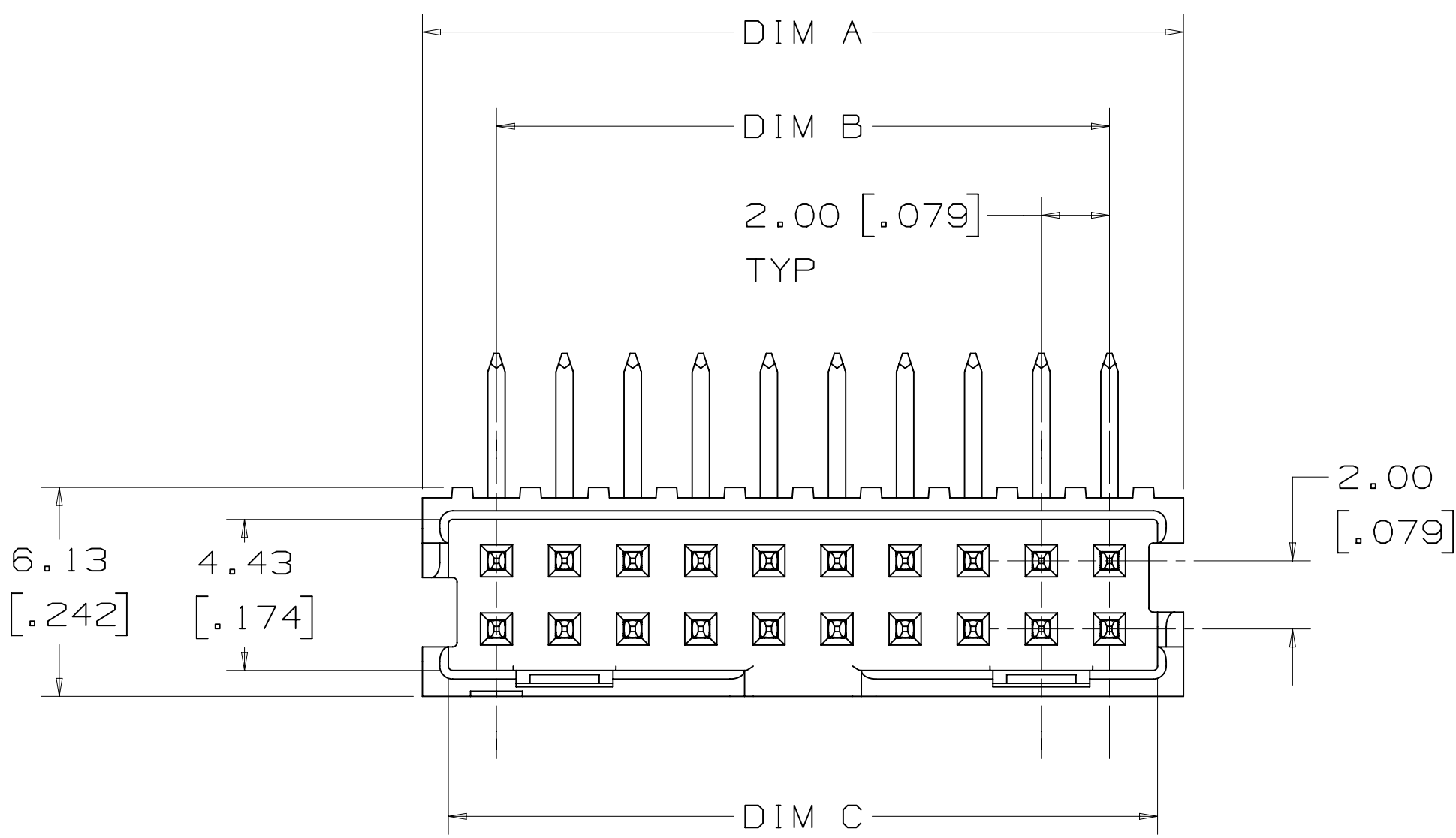
REFERENCE TABLE ON SHEET 4
FOR AVAILABLE POSITIONS AND
SOLDER TAIL LENGTHS

METRIC [ENGLISH]

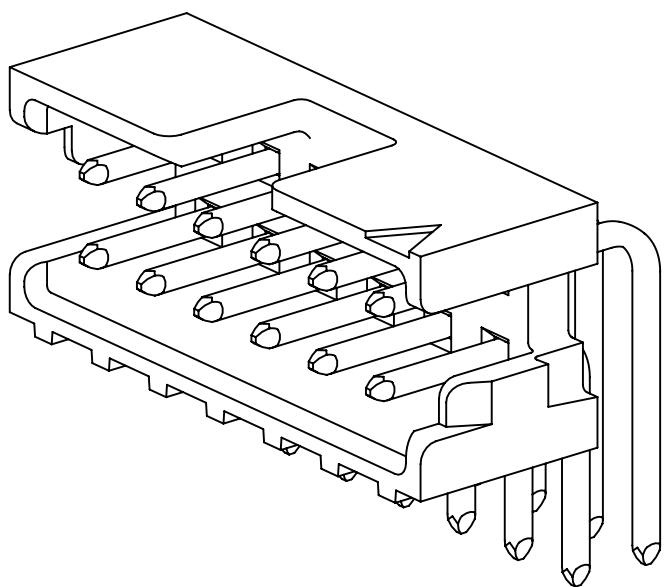
- NOTES
- MATERIAL:
BODY: HIGH TEMPERATURE GLASS FILLED LCP, BLACK UL94V-0
CONTACTS: COPPER ALLOY
 - PLATING:
2.03-3.81 μm [80-150 μin] NICKEL UNDERPLATE.
0.38 μm [15 μin] OR 0.76 μm [30 μin] AVG GOLD ON WIPING AREA.
5.08 μm [200 μin] MIN MATTE TIN ON SOLDER TAILS.
 - STANDARD LENGTH HEADERS MATE WITH 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
DISTRIBUTION CODES		REV		ECO	INITIAL RELEASE				
DIVISION		DATE		DATE		DATE		DATE	DATE
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		© 3M COPYRIGHT 2010			
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		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.			
INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		CAGE NUMBER		DRAWING NO.		REV.	
MAX SURFACE ROUGHNESS		ALL SURFACES		SIZE		DRAWING NO.		REV.	
125		MARKED ONLY		D		78-5100-2359-7		A	
ANGLES ±1°		3M		MODEL		DET.		SHT 1 OF 4	
						LISTS		YES X NO	

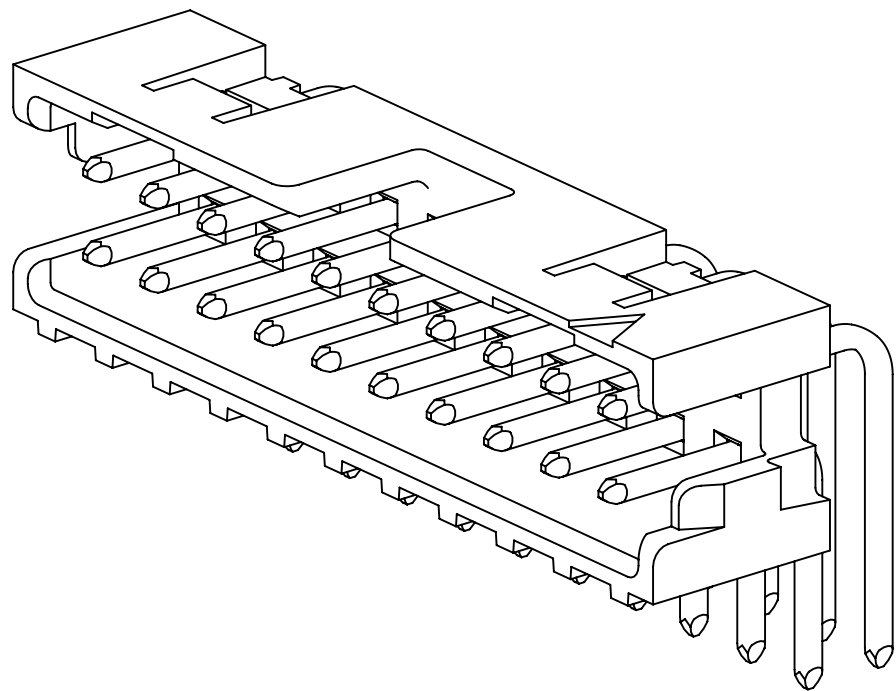
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



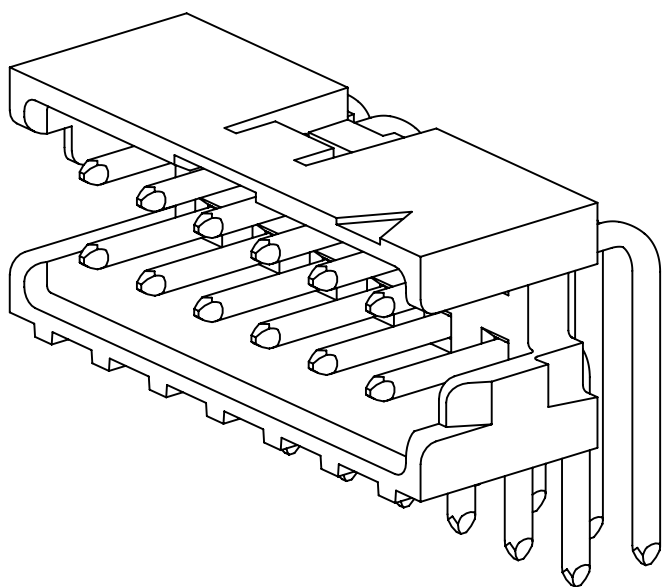
RECOMMENDED PCB HOLE PATTERN
TOLERANCE = ±0.05 [.002]



POLARIZATION SLOT
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY



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



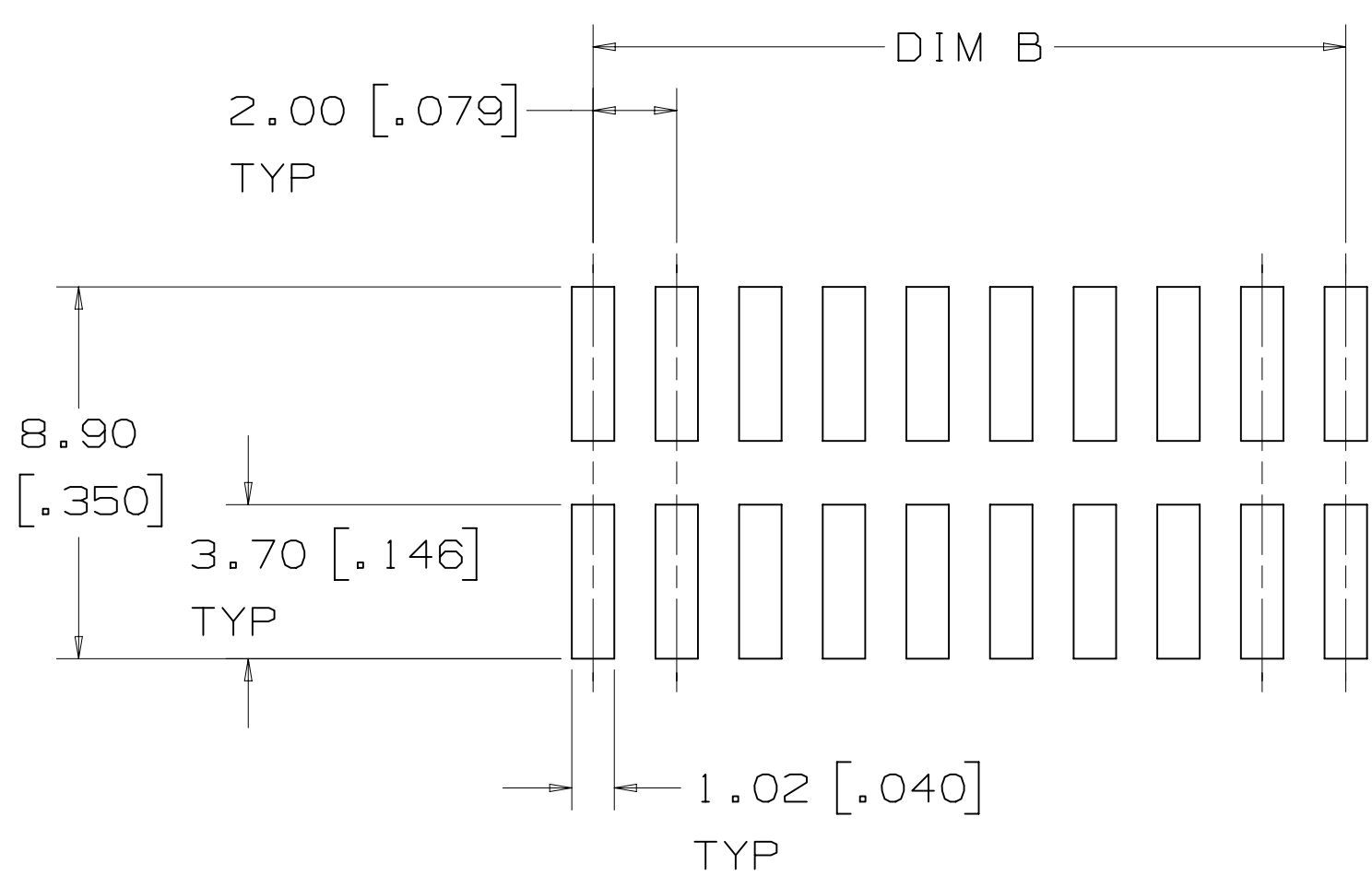
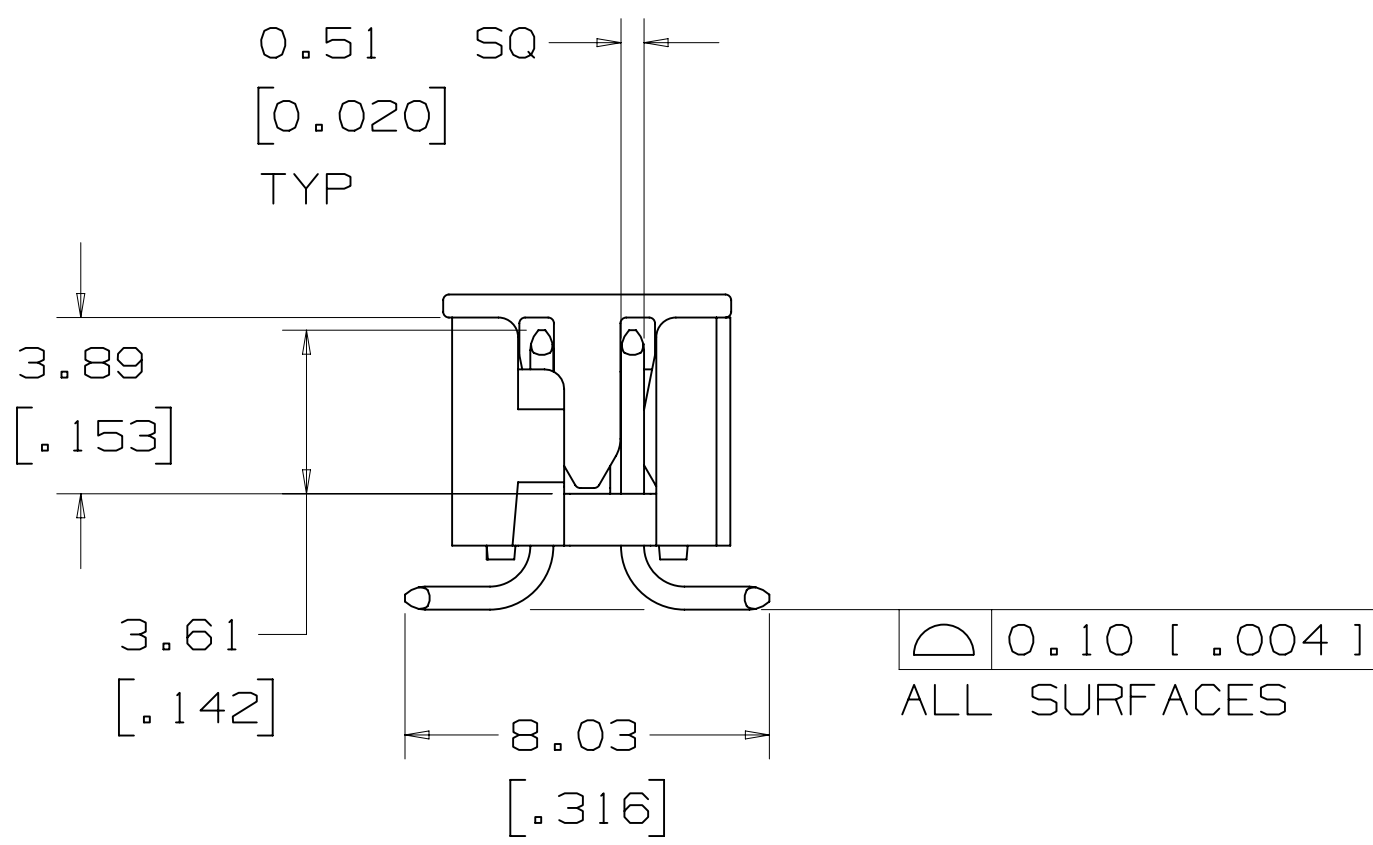
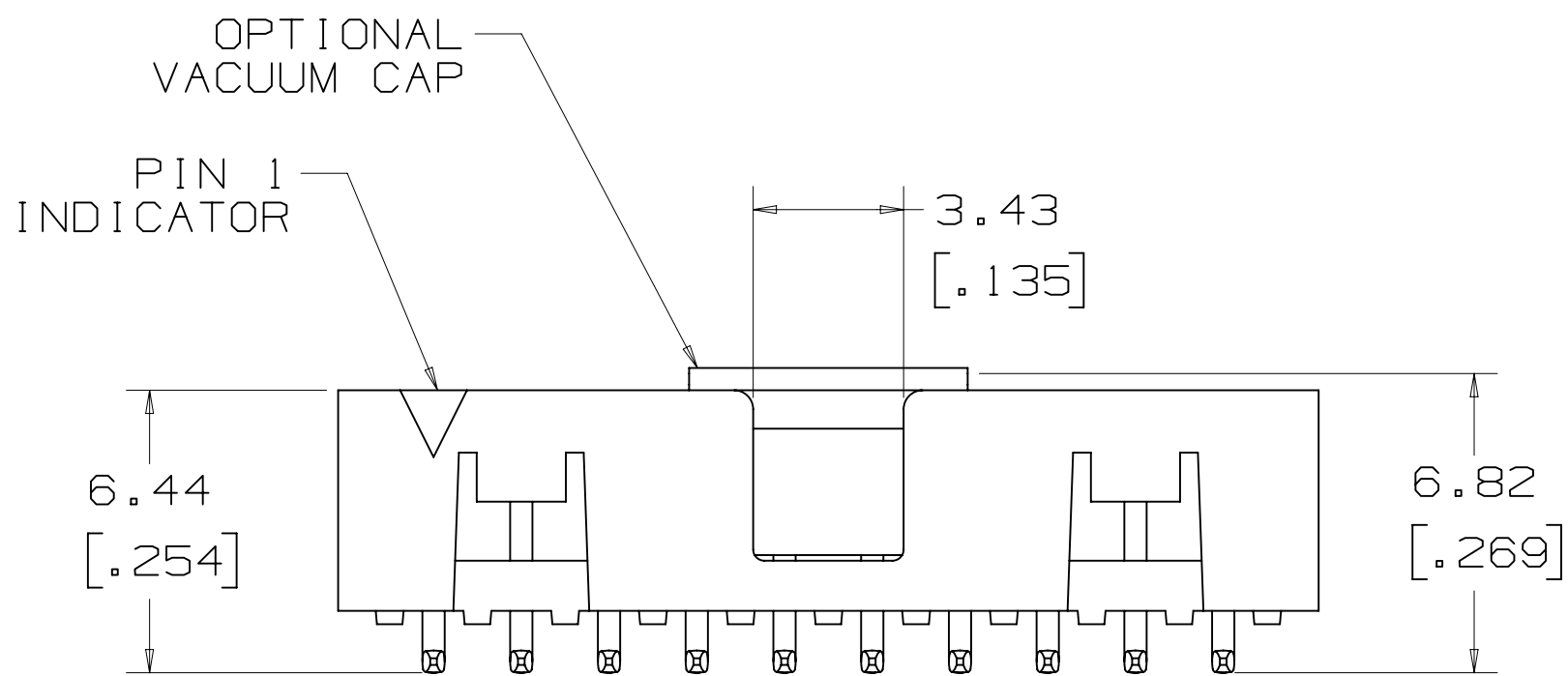
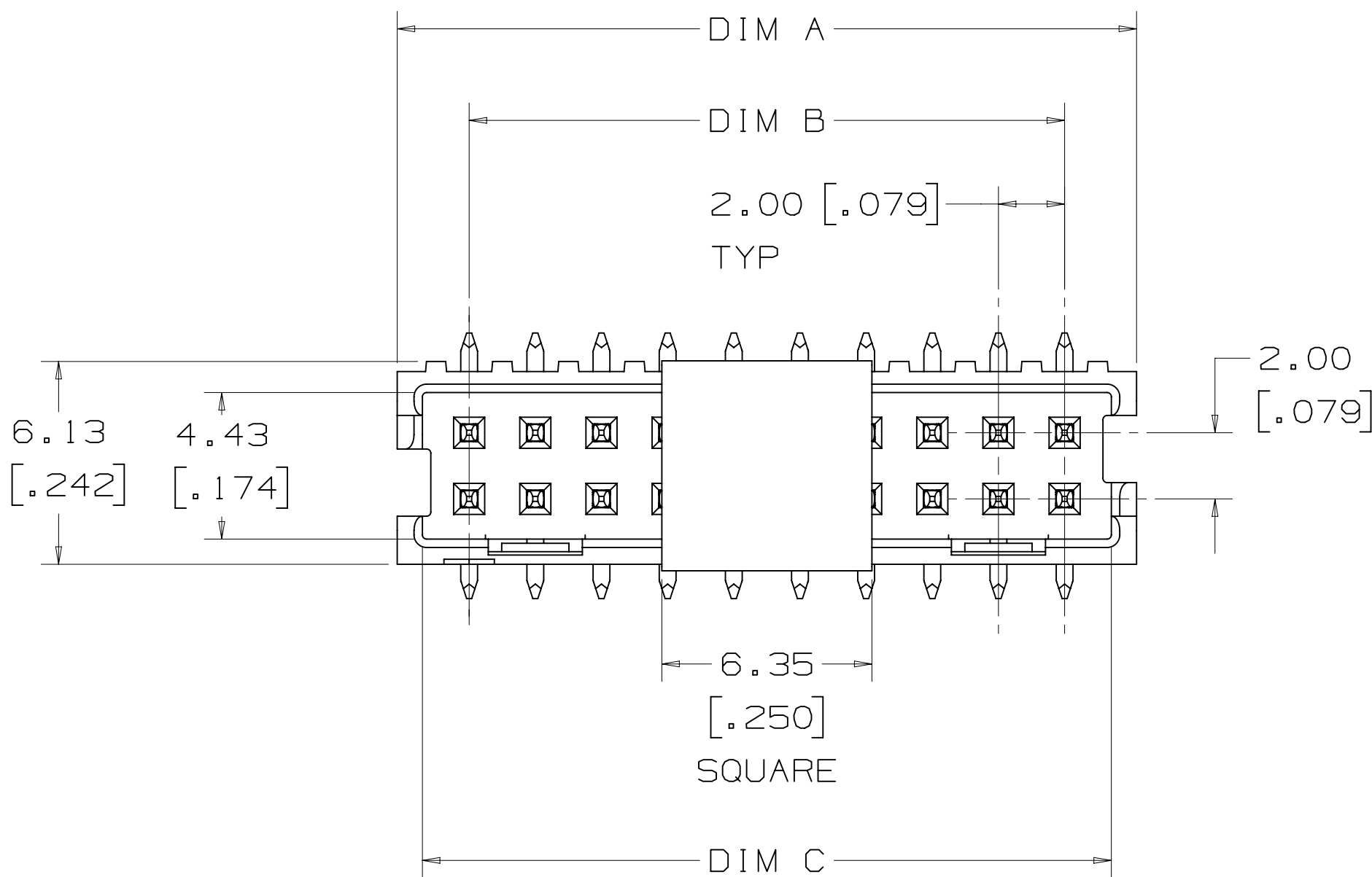
SINGLE FRICTION LATCH
RIGHT ANGLE HEADER
6-12 POSITIONS ONLY

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

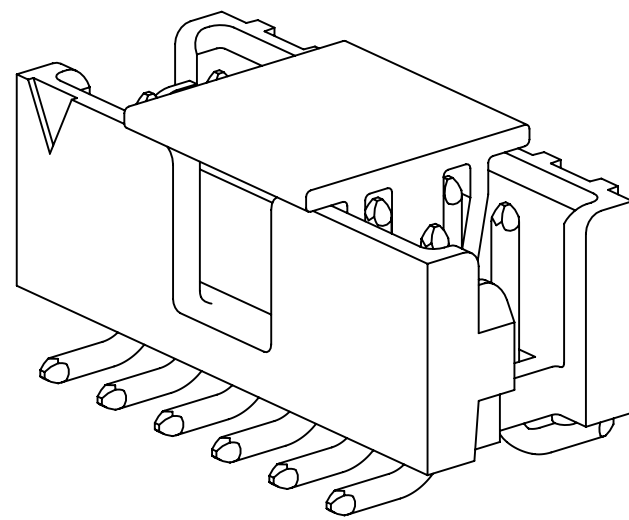
METRIC [ENGLISH]

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.	
125 / ALL SURFACES		125 / ALL SURFACES		D		78-5100-2359-7		A	
MODEL		MODEL		DET		YES		NO	
SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4	

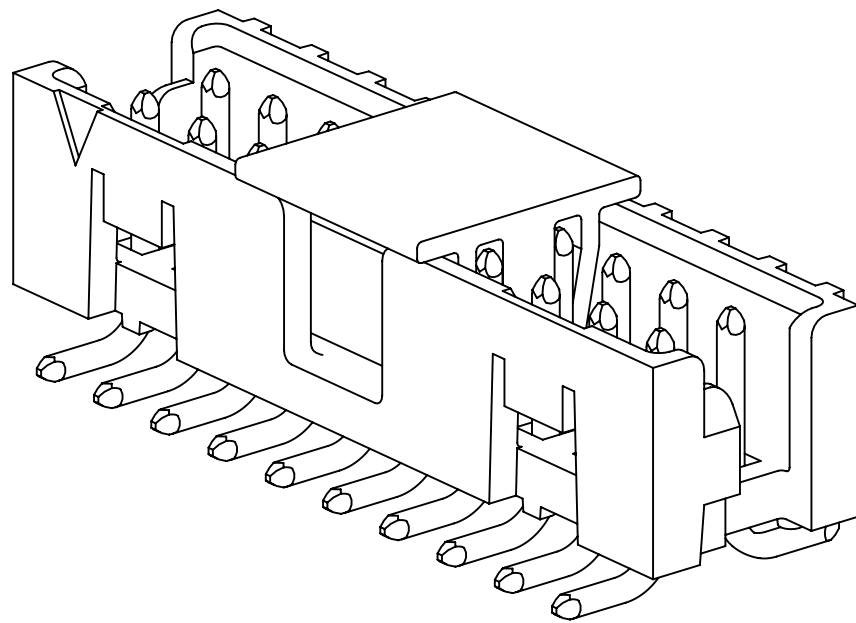
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



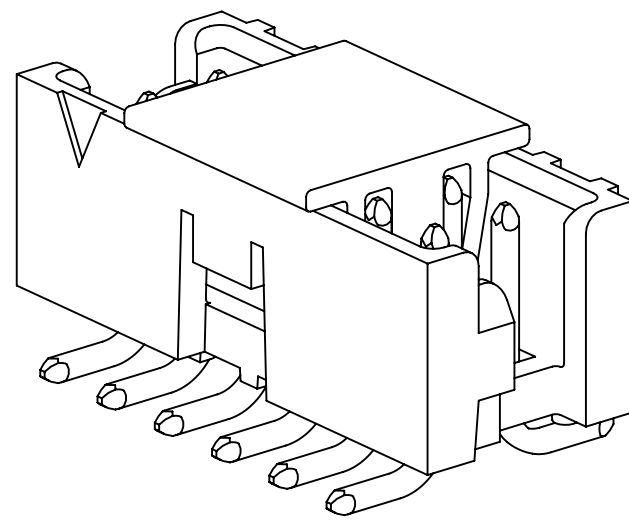
RECOMMENDED PCB PAD PATTERN
TOLERANCE = ±0.08 [0.003]



POLARIZATION SLOT
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY



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



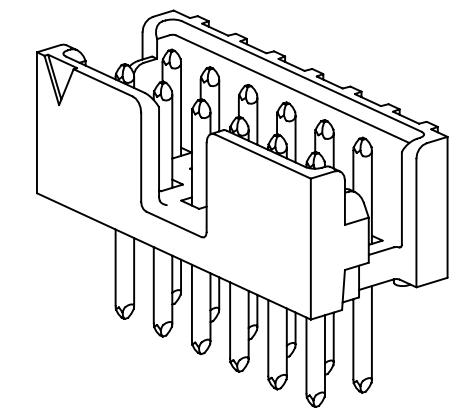
SINGLE FRICTION LATCH
SURFACE MOUNT HEADER
6-12 POSITIONS ONLY

REFERENCE TABLE ON SHEET 4
FOR AVAILABLE POSITIONS

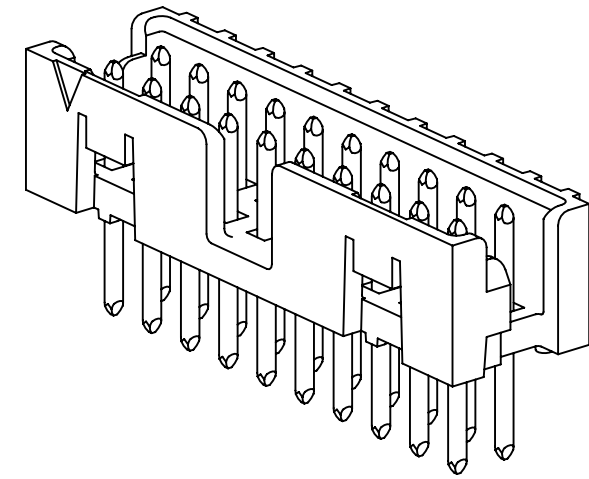
METRIC [ENGLISH]

DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTANCE		SCALE		DATE		DATE		DATE		DATE		DATE	
L. SCHMIDT		JUL 29, 2010		MFG		JUL 29, 2010		APPR		S. FELDMAN		AUG 09, 2010	
DIVISION		DIVISION CODE		3M Center		St. Paul,		This document and the information it contains are		3M property and may not be reproduced or further		distributed without 3M permission, or used or	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS		TITLE		3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		CAGE NUMBER		DRAWING NO.		REV.		MODEL	
125/		ALL SURFACES		0.00 ± 0.13		D		78-5100-2359-7		A		DET	
X MARKED ONLY		ANGLES ±1°		SHT 3 OF 4		YES		NO		SHT 3 OF 4		SHT 3 OF 4	

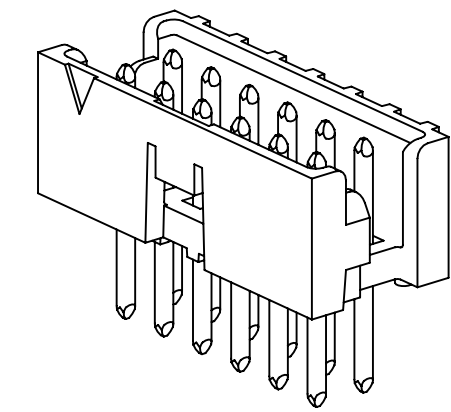
STANDARD LENGTH HEADERS
ARE AVAILABLE



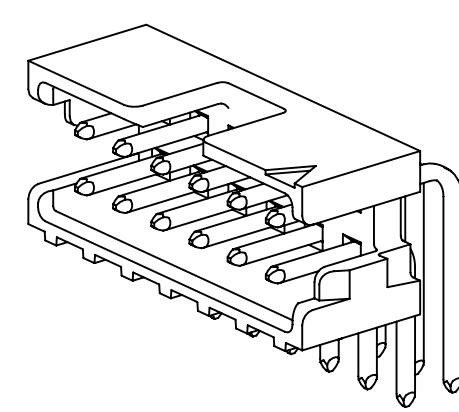
STANDARD LENGTH,
POLARIZATION SLOT,
VERTICAL HEADER
6-12 POSITIONS ONLY



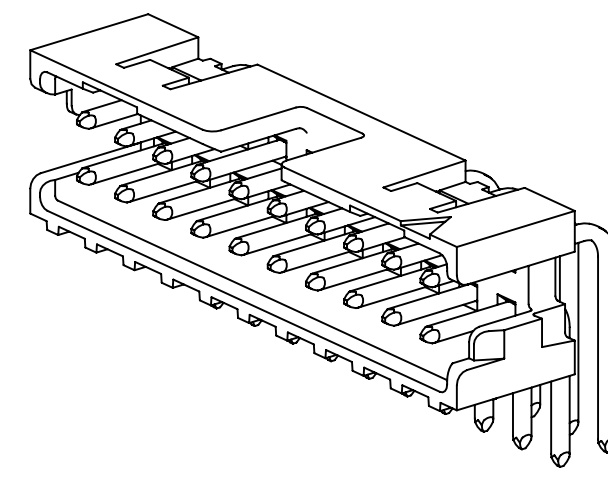
STANDARD LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
VERTICAL HEADER
14-50 POSITIONS



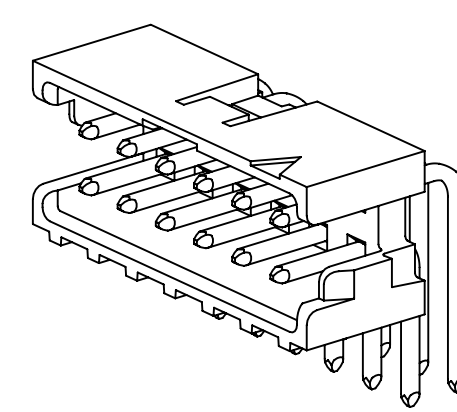
STANDARD LENGTH,
SINGLE FRICTION LATCH,
VERTICAL HEADER
6-12 POSITIONS



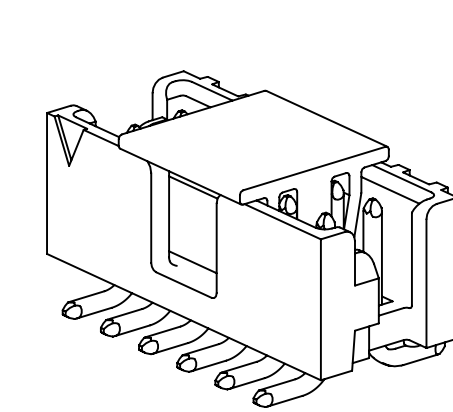
STANDARD LENGTH,
POLARIZATION SLOT,
RIGHT ANGLE HEADER
6-12 POSITIONS



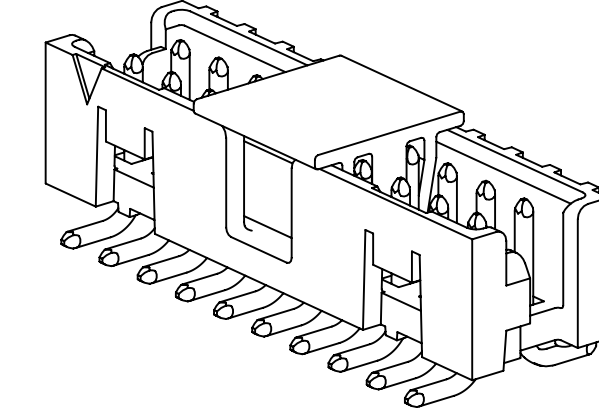
STANDARD LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
RIGHT ANGLE HEADER
14-50 POSITIONS



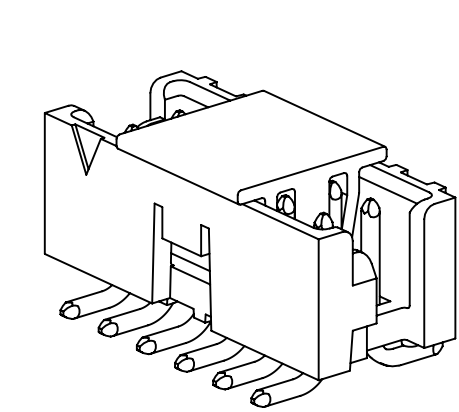
STANDARD LENGTH,
SINGLE FRICTION LATCH,
RIGHT ANGLE HEADER
6-12 POSITIONS



STANDARD LENGTH,
POLARIZATION SLOT,
SURFACE MOUNT HEADER
6-12 POSITIONS

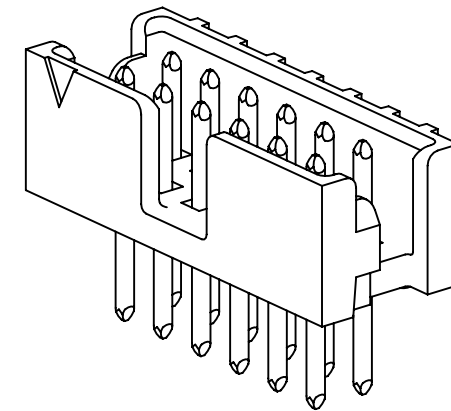


STANDARD LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
SURFACE MOUNT HEADER
14-50 POSITIONS

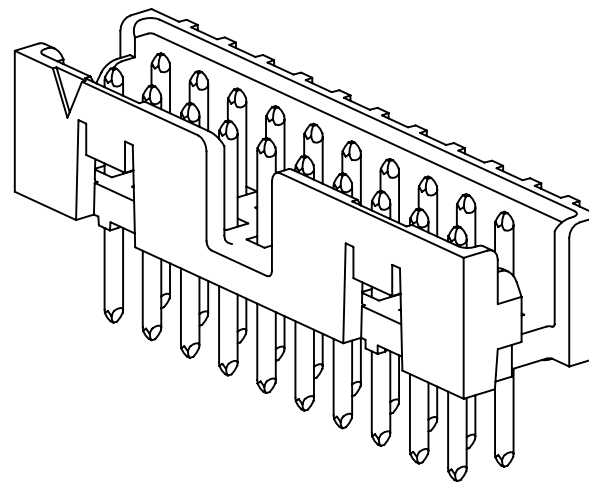


STANDARD LENGTH,
SINGLE FRICTION LATCH,
SURFACE MOUNT HEADER
6-12 POSITIONS

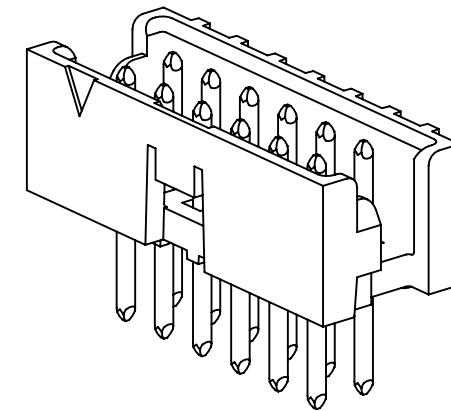
CALL 3M INTERCONNECT SOLUTIONS
AT 800-225-5373 FOR AVAILABILITY
OF EXTENDED LENGTH HEADERS



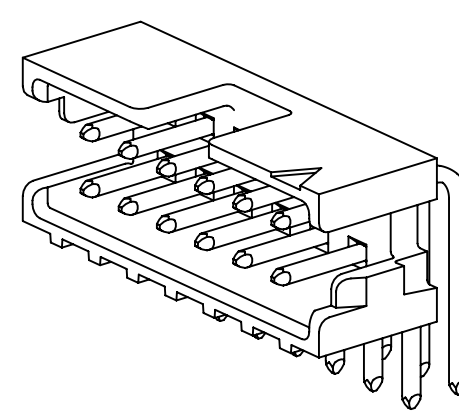
EXTENDED LENGTH,
POLARIZATION SLOT,
VERTICAL HEADER
6-12 POSITIONS



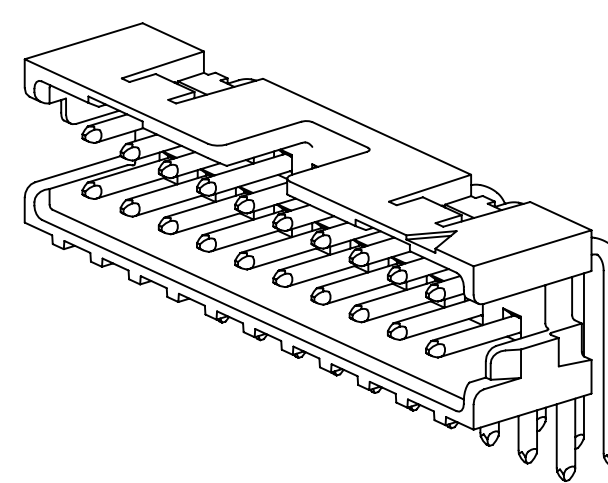
EXTENDED LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
VERTICAL HEADER
14-50 POSITIONS



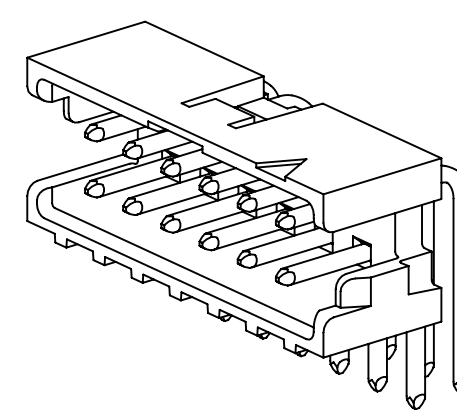
EXTENDED LENGTH,
SINGLE FRICTION LATCH,
VERTICAL HEADER
6-12 POSITIONS



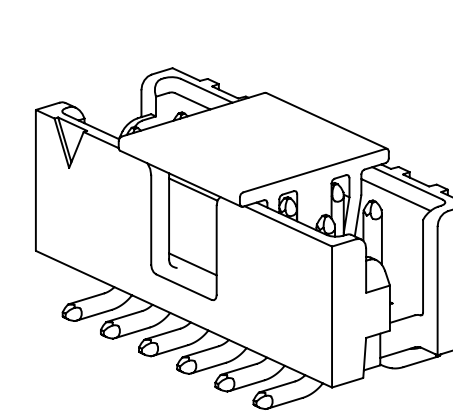
EXTENDED LENGTH,
POLARIZATION SLOT,
RIGHT ANGLE HEADER
6-12 POSITIONS



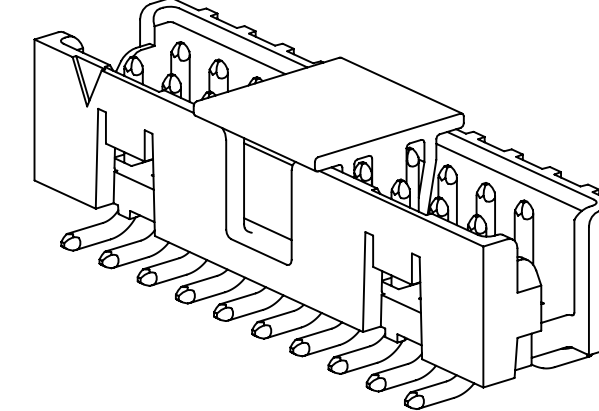
EXTENDED LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
RIGHT ANGLE HEADER
14-50 POSITIONS



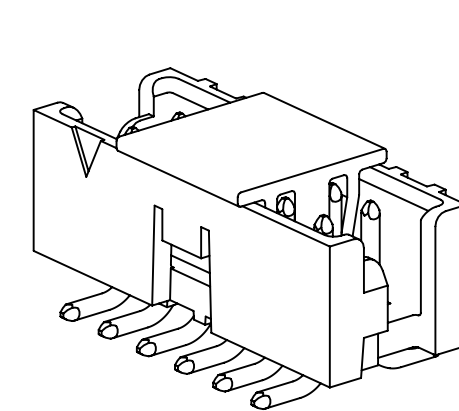
EXTENDED LENGTH,
SINGLE FRICTION LATCH,
RIGHT ANGLE HEADER
6-12 POSITIONS



EXTENDED LENGTH,
POLARIZATION SLOT,
SURFACE MOUNT HEADER
6-12 POSITIONS



EXTENDED LENGTH,
POLARIZATION SLOT,
DUAL FRICTION LATCHES,
SURFACE MOUNT HEADER,
14-50 POSITIONS



EXTENDED LENGTH,
SINGLE FRICTION LATCH,
SURFACE MOUNT HEADER
6-12 POSITIONS

TIER 2 - BETTER

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

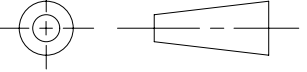
0 = POLARIZATION SLOT AND DUAL FRICTION LATCHES (14-50 POSITIONS ONLY)

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		A 30741		OCT 28, 2010		LDS		SF	
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD			
DISTRIBUTION CODES		ENGR L. SCHMIDT		DATE JUL 29, 2010		MFG		DATE			
		CHKD		DATE		APPROV S FELDMAN		DATE AUG 09, 2010			
DIVISION				DIVISION CODE							
DO NOT SCALE DRAWING				 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.			
 THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 1994				TOLERANCES EXCEPT AS NOTED INCHES .0 ± .00 ± .000 ± .0000 ±				TITLE 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES			
MAX SURFACE ROUGHNESS 125 ✓ □ ALL SURFACES ☒ MARKED ONLY				MILLIMETERS 0 ± .0 ± .00 ± .03 .000 ±				CASE NUMBER SIZE DRAWING NO. D 78-5100-2359-7			
ANGLES ± 1°				MODEL				DET. LJS YES ☐ NO ☒ 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>				