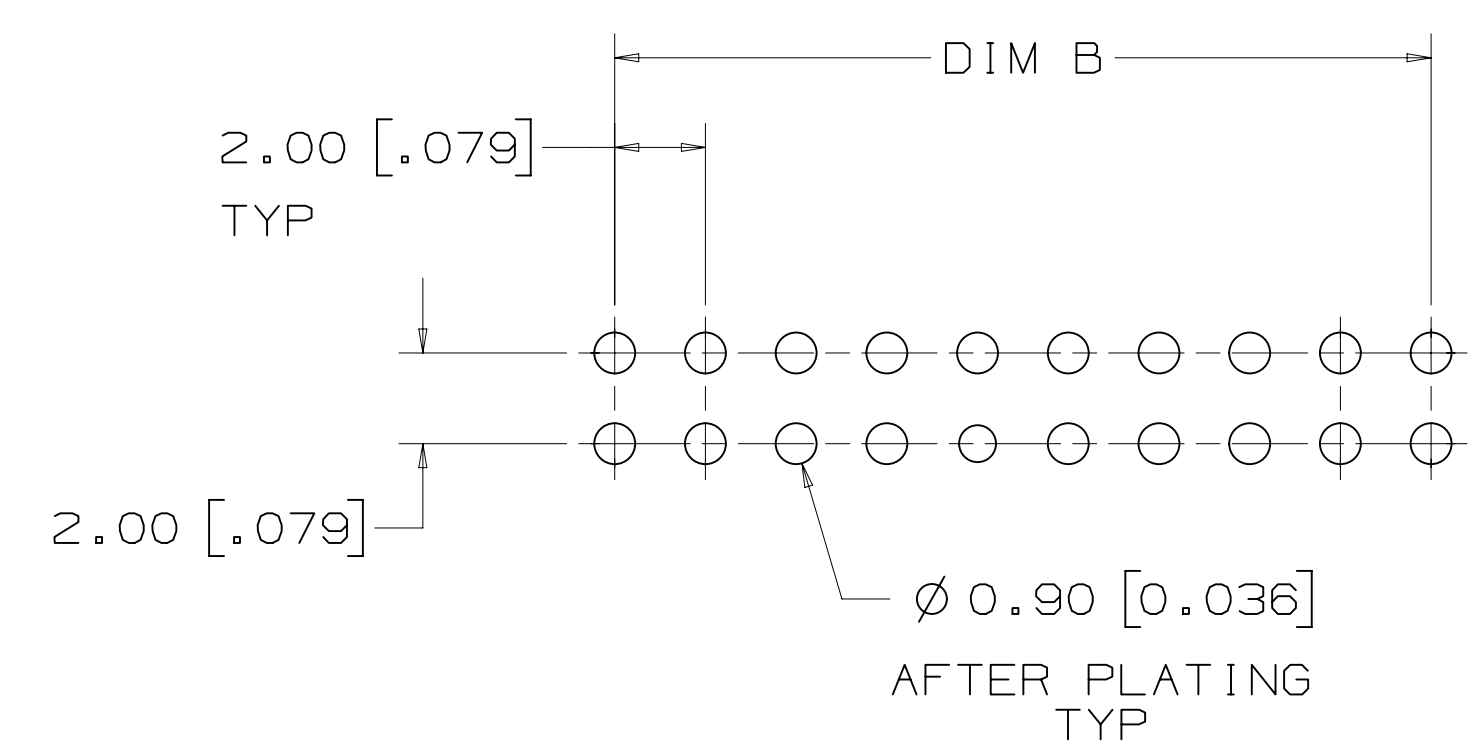
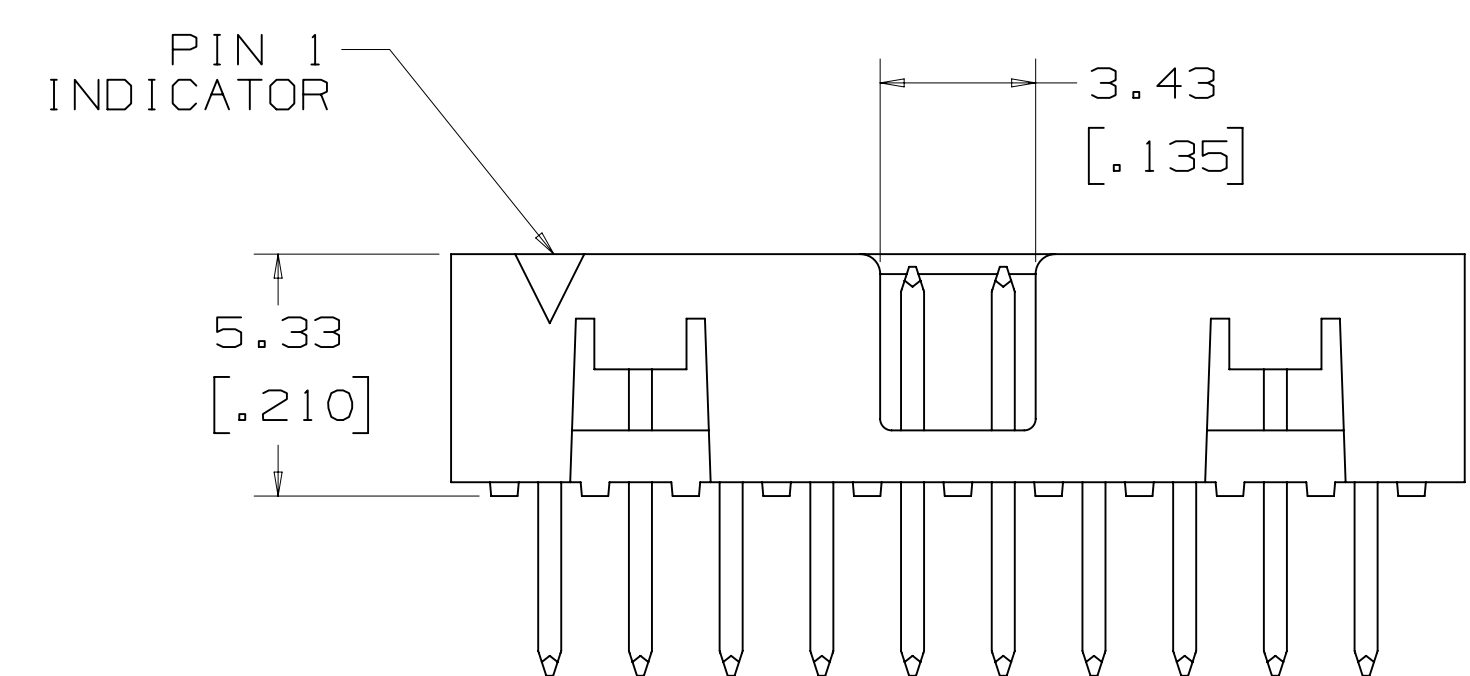
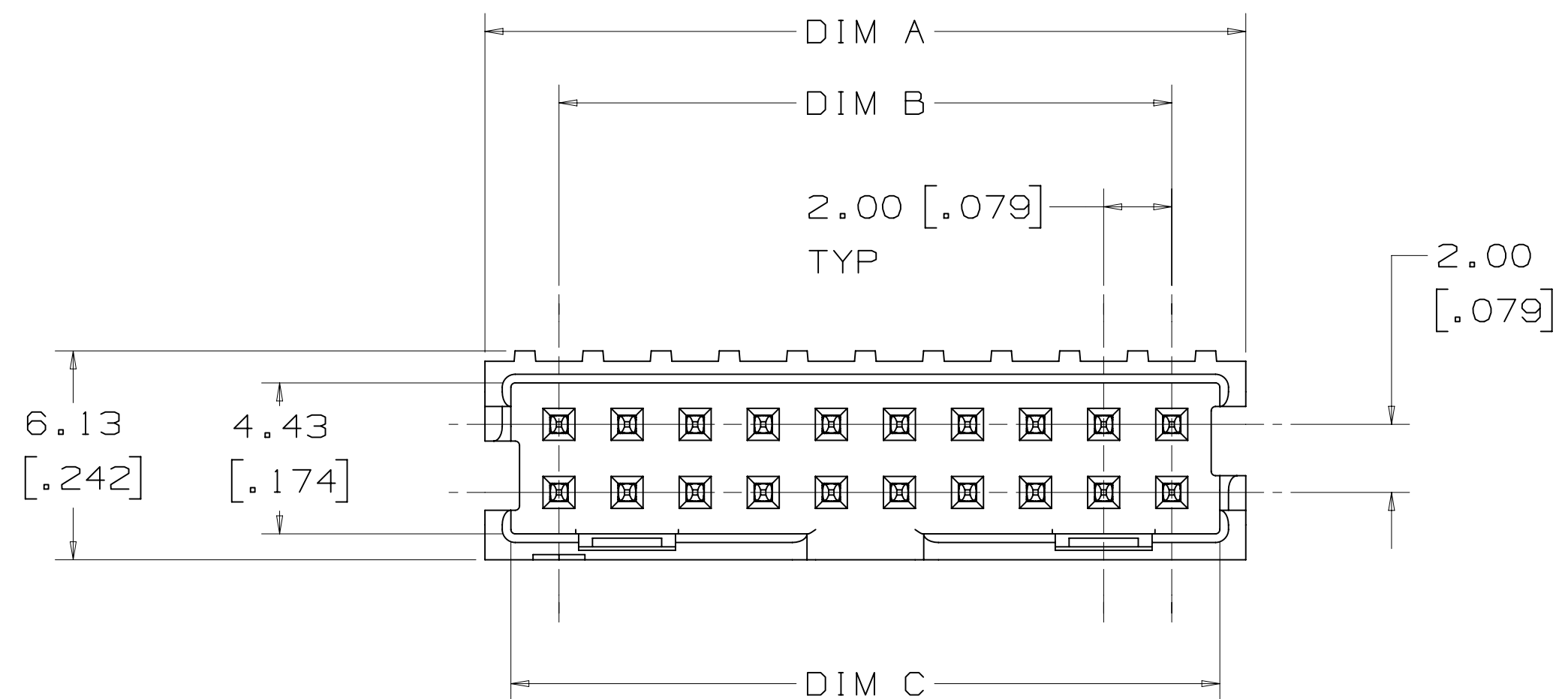
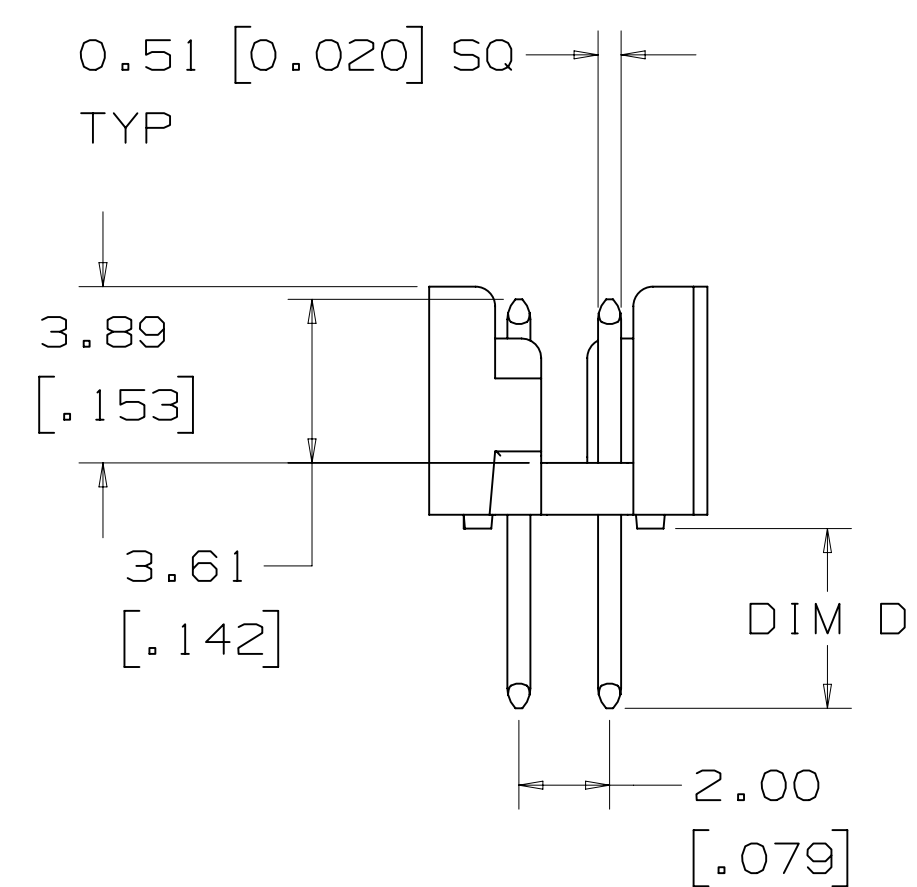
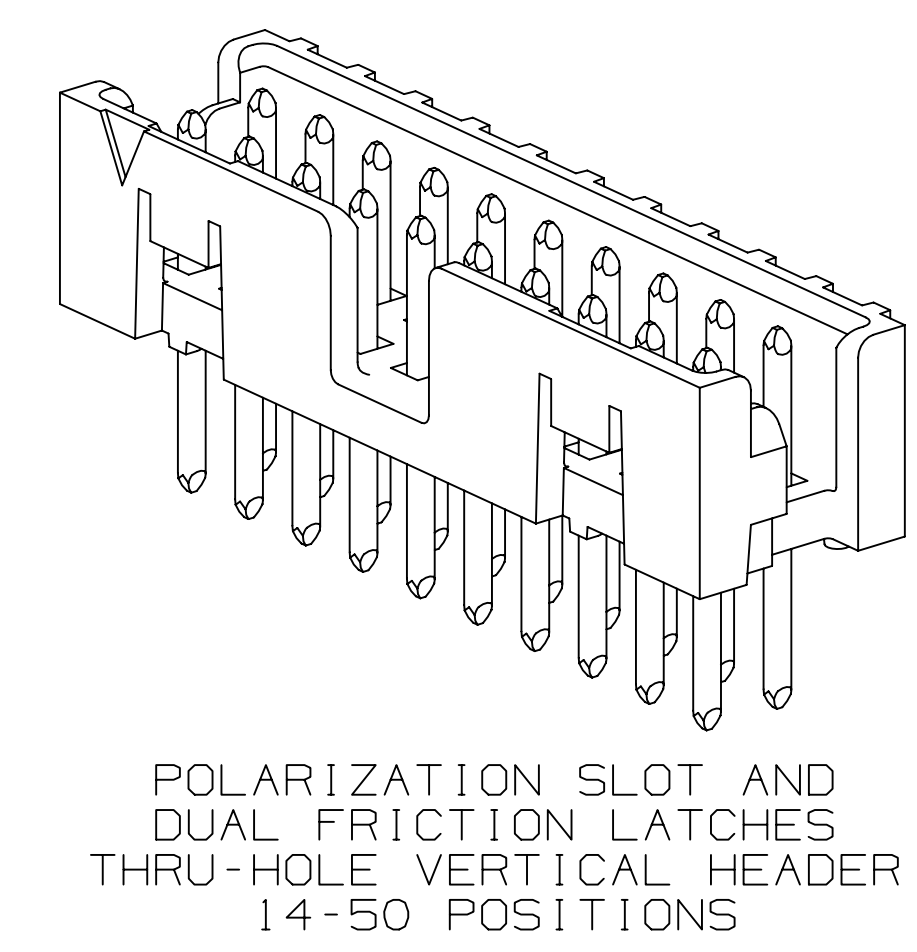
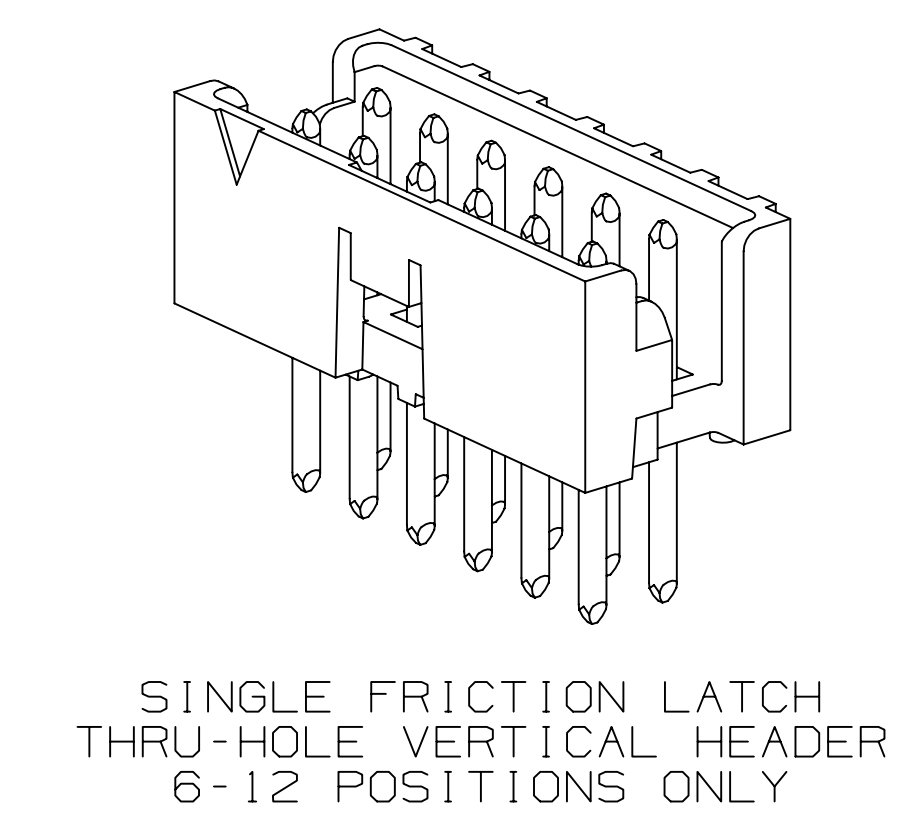
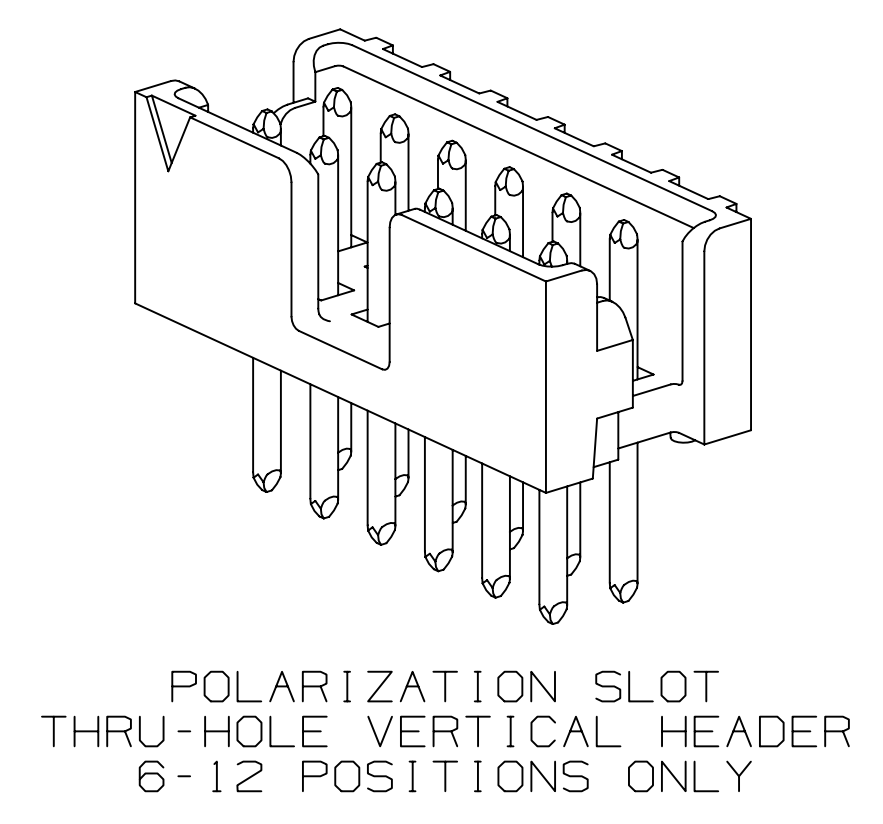


3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



RECOMMENDED PCB HOLE PATTERN  
TOLERANCE = 0.05 [ .002 ]



PERFORMANCE [5] [7]	
CURRENT:	1A, 6 LINES ENERGIZED
INSULATION RESISTANCE:	>1 X 10 <sup>9</sup> 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 TAIL 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.

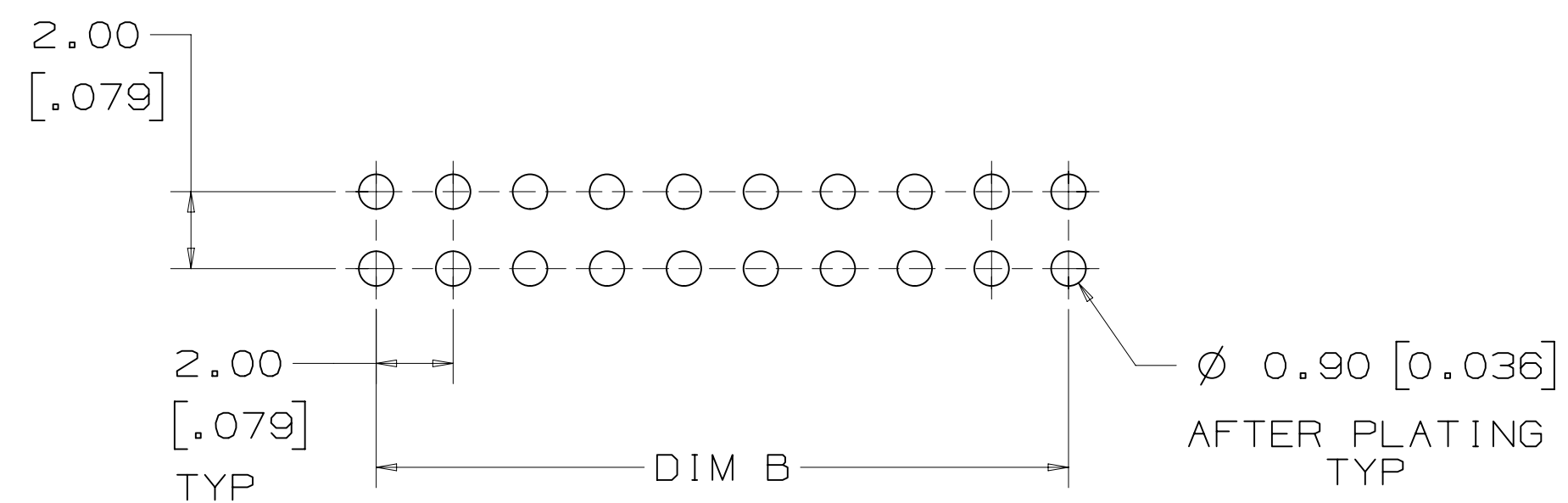
DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DIVISION		DIVISION CODE		DATE		
DO NOT SCALE DRAWING		SCALE 6/1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		
INTERPRET PER ASME Y14.5 - 1994		0 ± .00		0 ± .00		
MAX SURFACE ROUGHNESS 125		0 ± .00		0 ± .00		
ALL SURFACES MARKED ONLY		0 ± .00		0 ± .00		
ANGLES ±1°		0 ± .00		0 ± .00		
CAGE NUMBER		DRAWING NO.		REV.		
125		D 78-5100-2359-7		A		
MODEL		SHT		1 OF 4		
		YES		NO		

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.

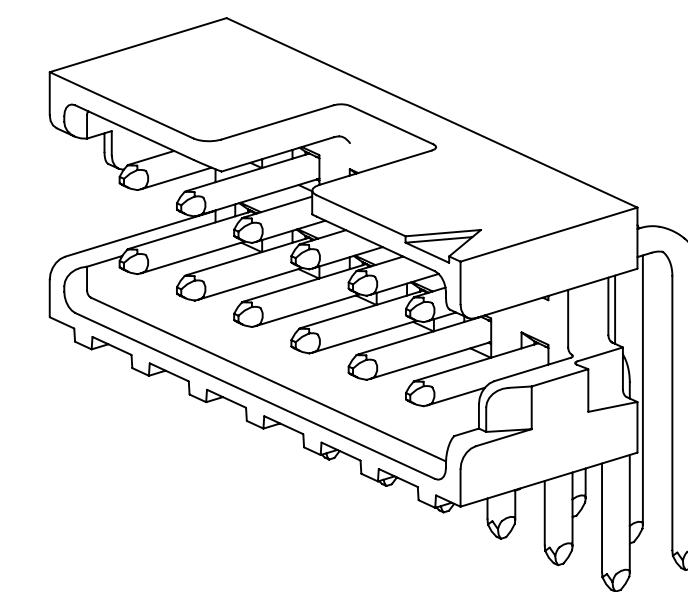
TITLE  
3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES

78-5100-2359-7 DRAWING NUMBER

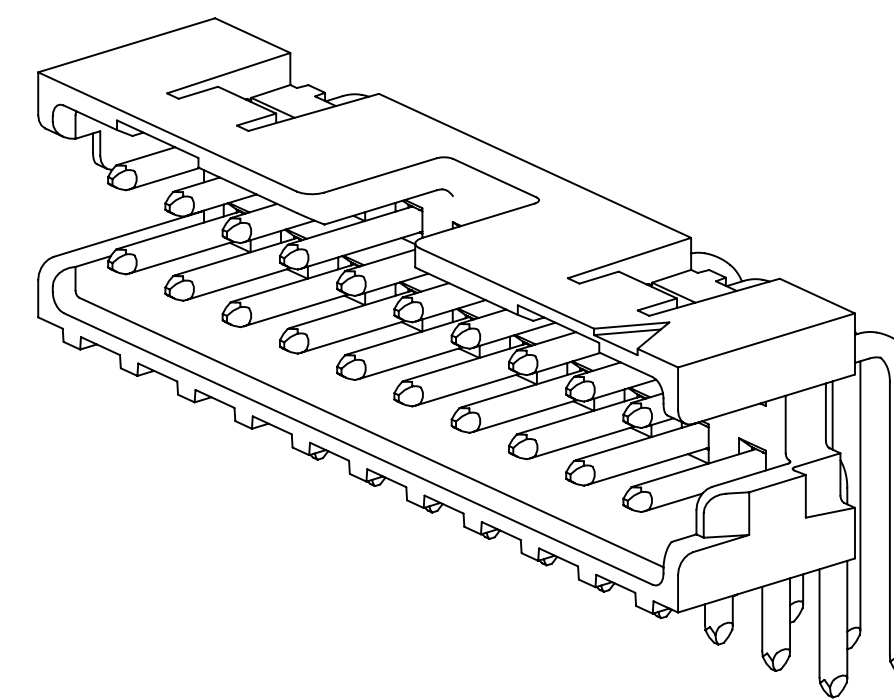
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



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



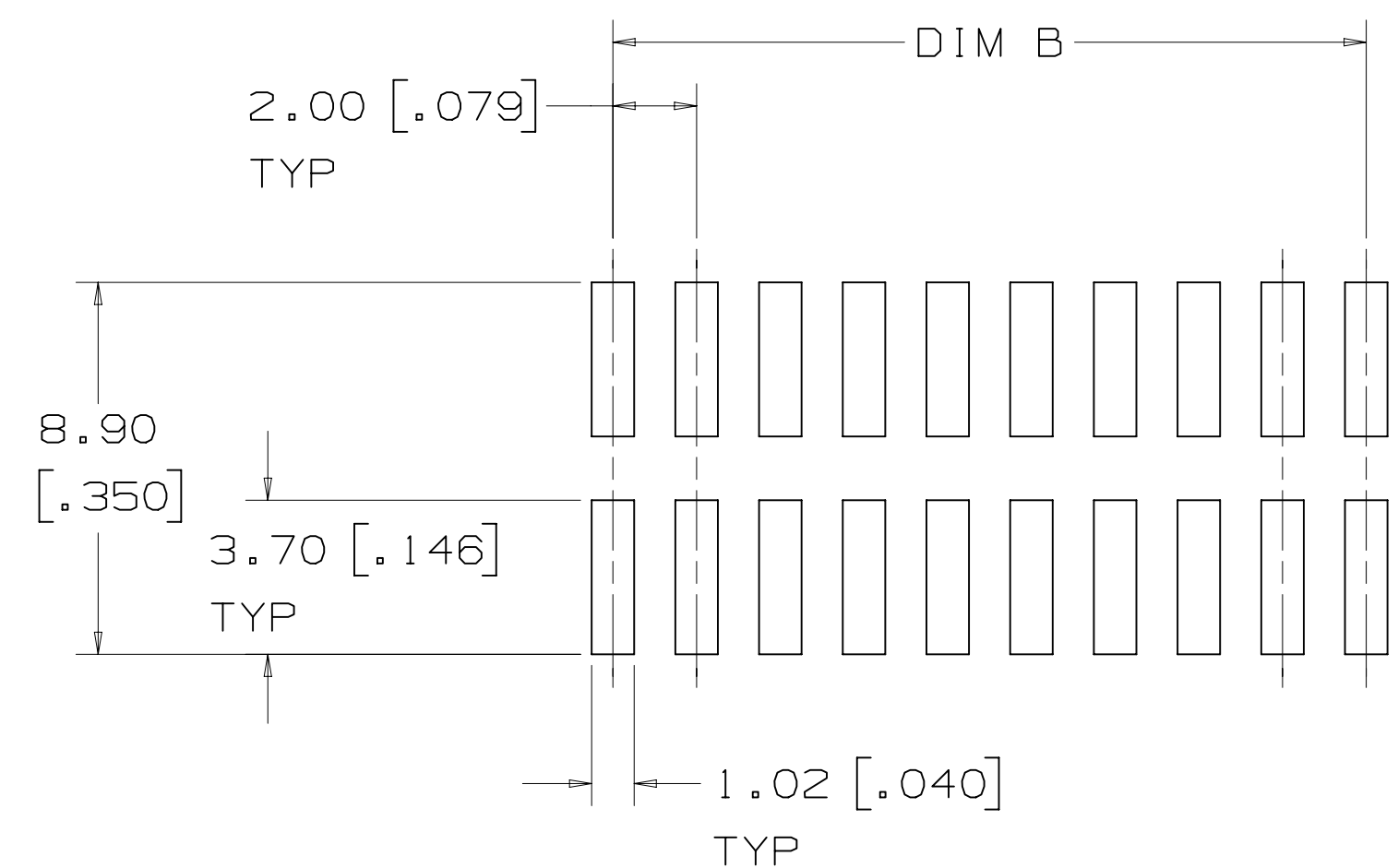
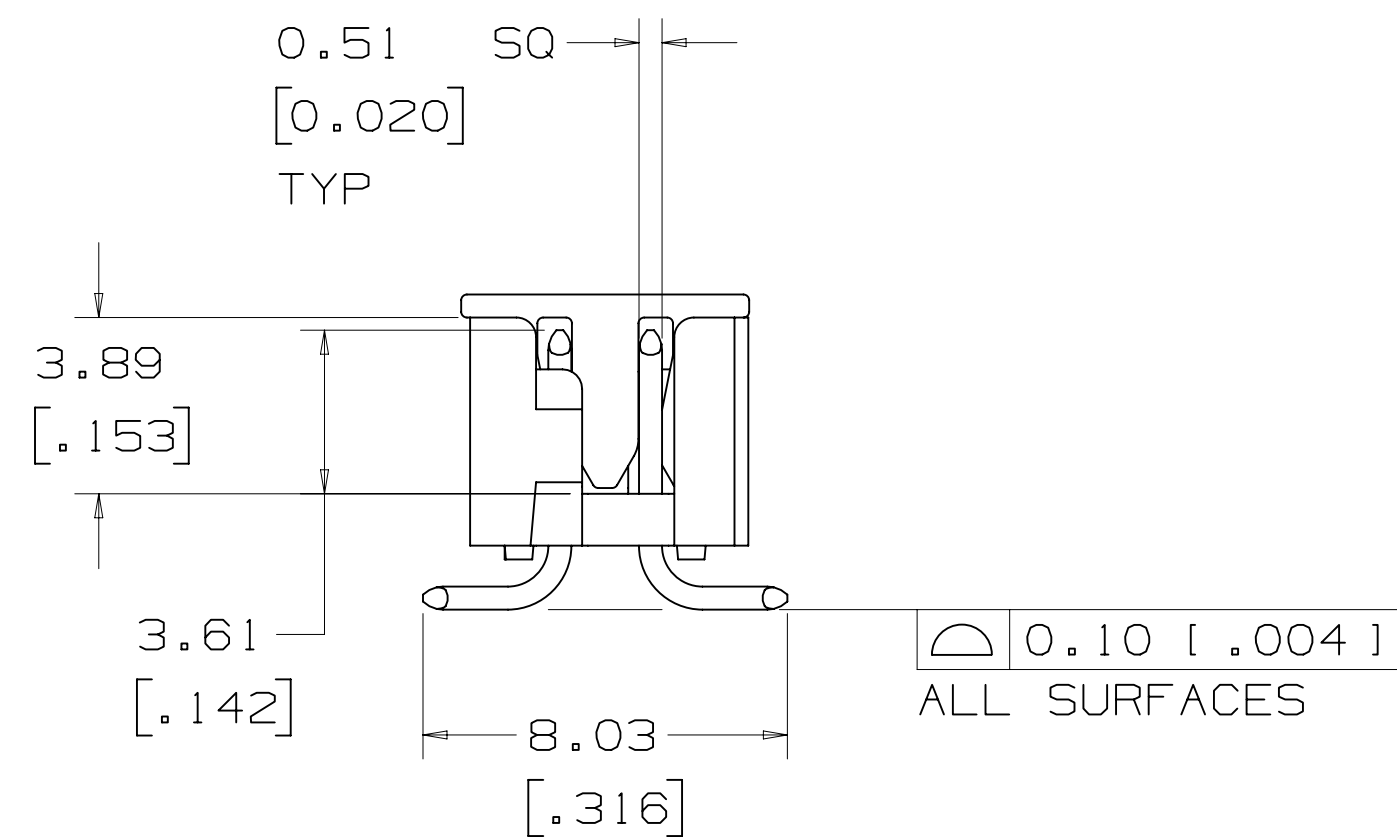
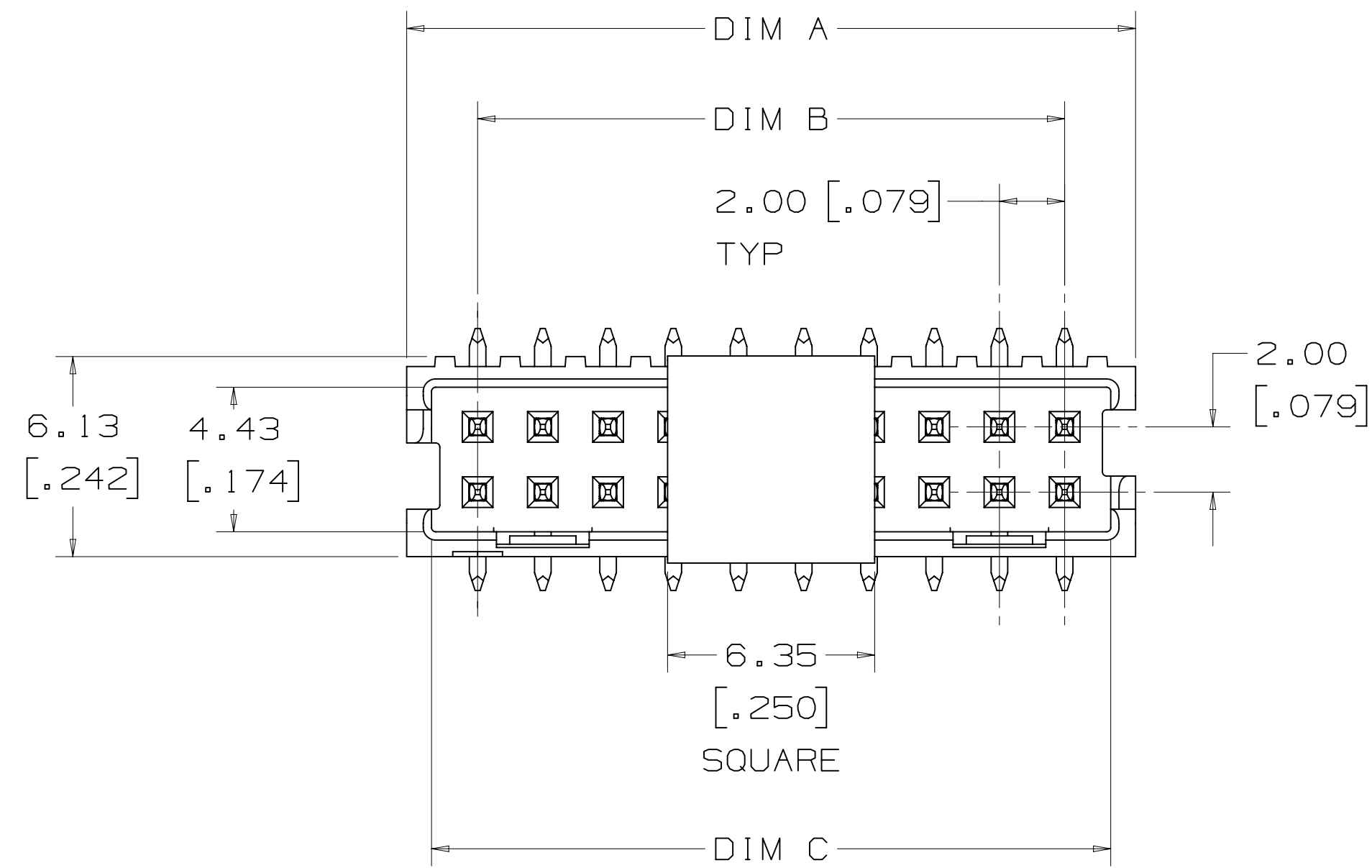
SINGLE FRICTION LATCH  
RIGHT ANGLE HEADER  
6-12 POSITIONS ONLY

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
				OCT 28, 2010 INITIAL RELEASE	LDS	SF
DIVISION		DATE		MFG		DATE
L. SCHMIDT		JUL 29, 2010		S FELDMAN		AUG 09, 2010
DIVISION CODE		SCALE		TOLERANCES EXCEPT AS NOTED		<p>© 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.</p>
DO NOT SCALE DRAWING		SCALE 4/1		INCHES		
THIRD ANGLE PROJECTION		MILLIMETERS		.00 ±		
INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		.00 ± 0.13		TITLE <b>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES</b>
125		ALL SURFACES		.000 ±		
MARKED ONLY		ANGLES ±1°		CAGE NUMBER		DRAWING NO. <b>D 78-5100-2359-7</b>
				REV. A		
				MODEL		SHEET 2 OF 4

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



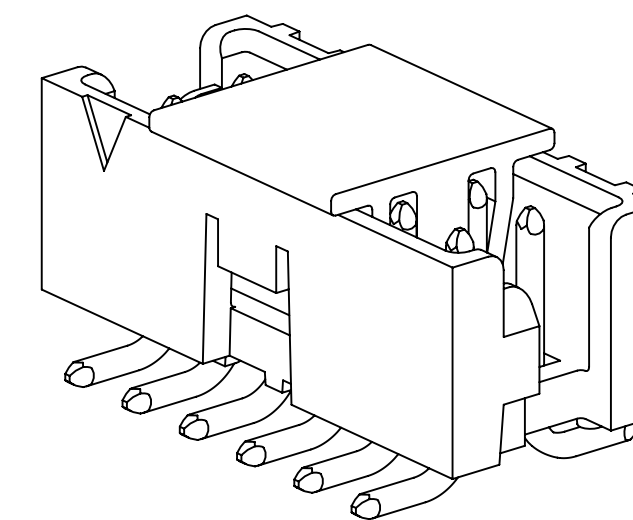
RECOMMENDED PCB PAD PATTERN  
TOLERANCE = ±0.08 [0.003]



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
DIVISION		DIVISION CODE		DATE		
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		MILLIMETERS		INCHES		
INTERPRET PER ASME Y14.5 - 1994		0 ±		.00 ±		
MAX SURFACE ROUGHNESS		.00 ± 0.13		.000 ±		
125 ALL SURFACES		.000 ±		.0000 ±		
MARKED ONLY		ANGLES ±1°		TITLE		
				3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES		
		CAGE NUMBER		DRAWING NO.		REV.
		D78-5100-2359-7		D78-5100-2359-7		A
		MODEL		SHT 3 OF 4		

DRAWING NUMBER 78-5100-2359-7

REVISION A

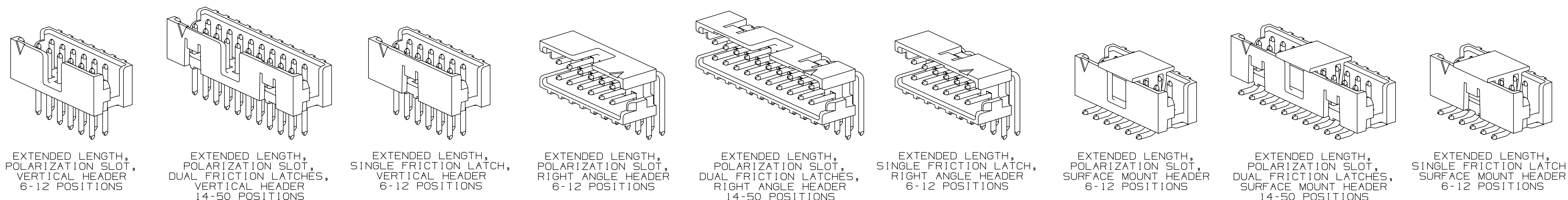
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3

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 μm [30 μin] GOLD

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

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)

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 μm [15 μin] GOLD

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

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)

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 D	
	DIM A		DIM B	DIM C				
	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
				INITIAL RELEASE	LDS	SF
DISTRICT CODES		DRP	DATE	MFG	DATE	
		L. SCHMIDT	JUL 29, 2010			
DIVISION	DIVISION CODE	CHKD	DATE	APPV	DATE	
		S FELDMAN	AUG 09, 2010			
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED				
		INCHES .00 ± .000 ± 2000 ±				
THIRD ANGLE PROJECTION		MILLIMETERS 0 ± .00 ± .000 ±				
INTERPRET PER ASME Y14.5 - 1994		ANGLES ±1°				
MAX SURFACE ROUGHNESS 125		CAGE NUMBER D78-5100-2359-7				
<input type="checkbox"/> ALL SURFACES		DRAWING NO. 78-5100-2359-7				
<input checked="" type="checkbox"/> MARKED ONLY		REV. A				
		MODEL				
		SHT 4 OF 4				

78-5100-2359-7 DRAWING NUMBER

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А