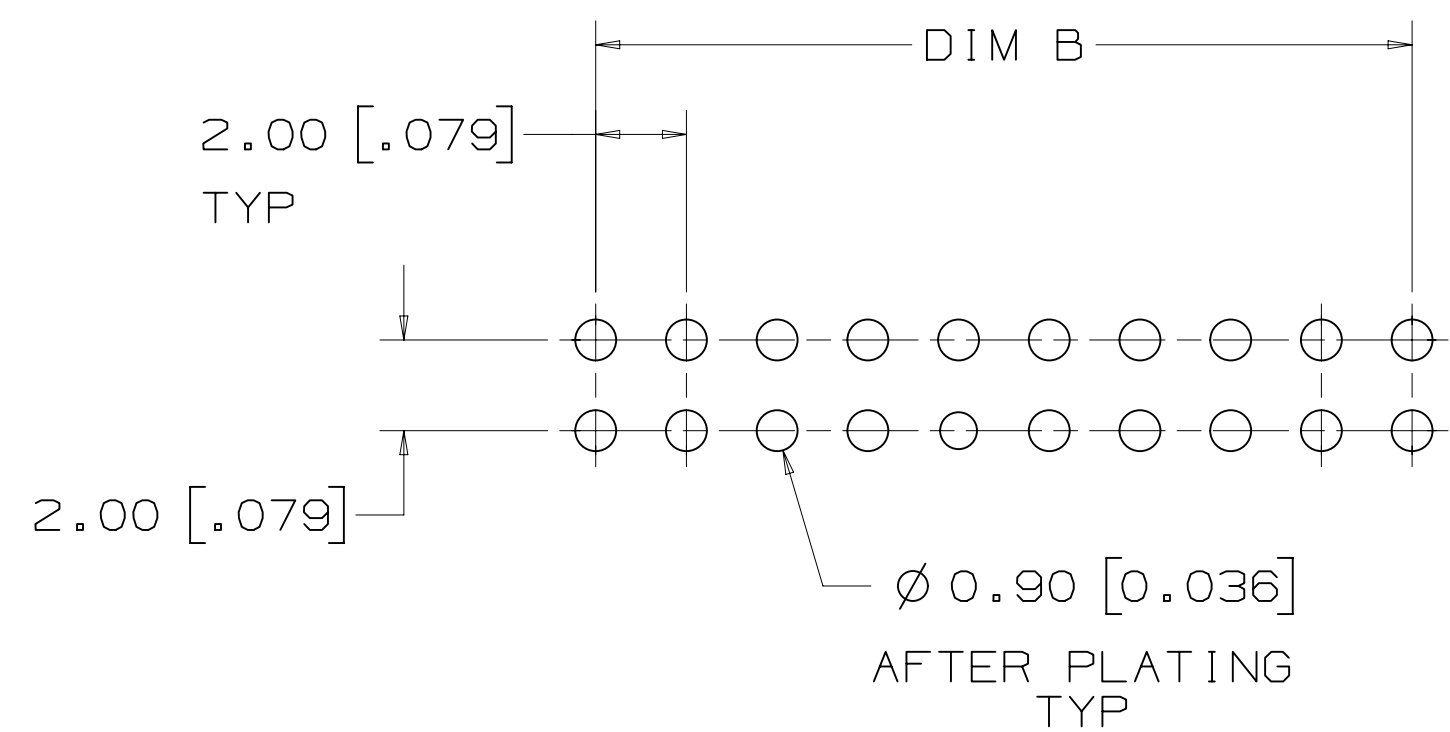
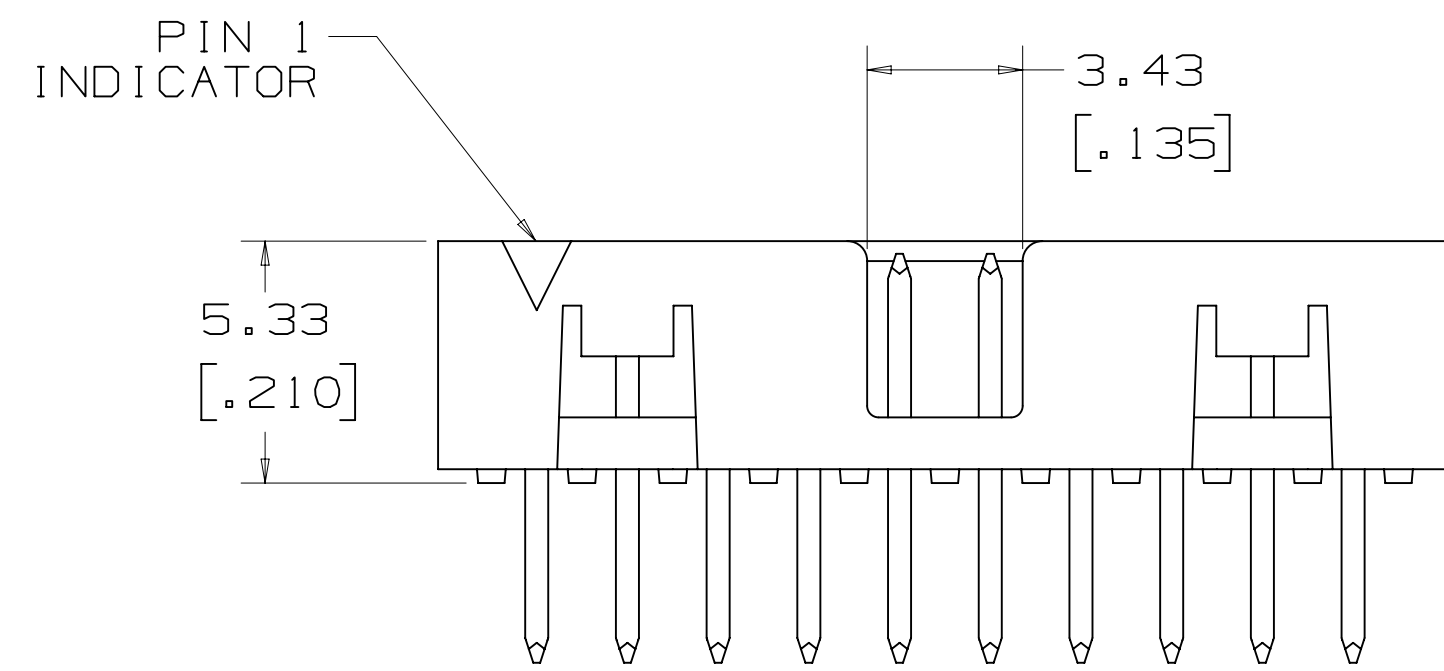
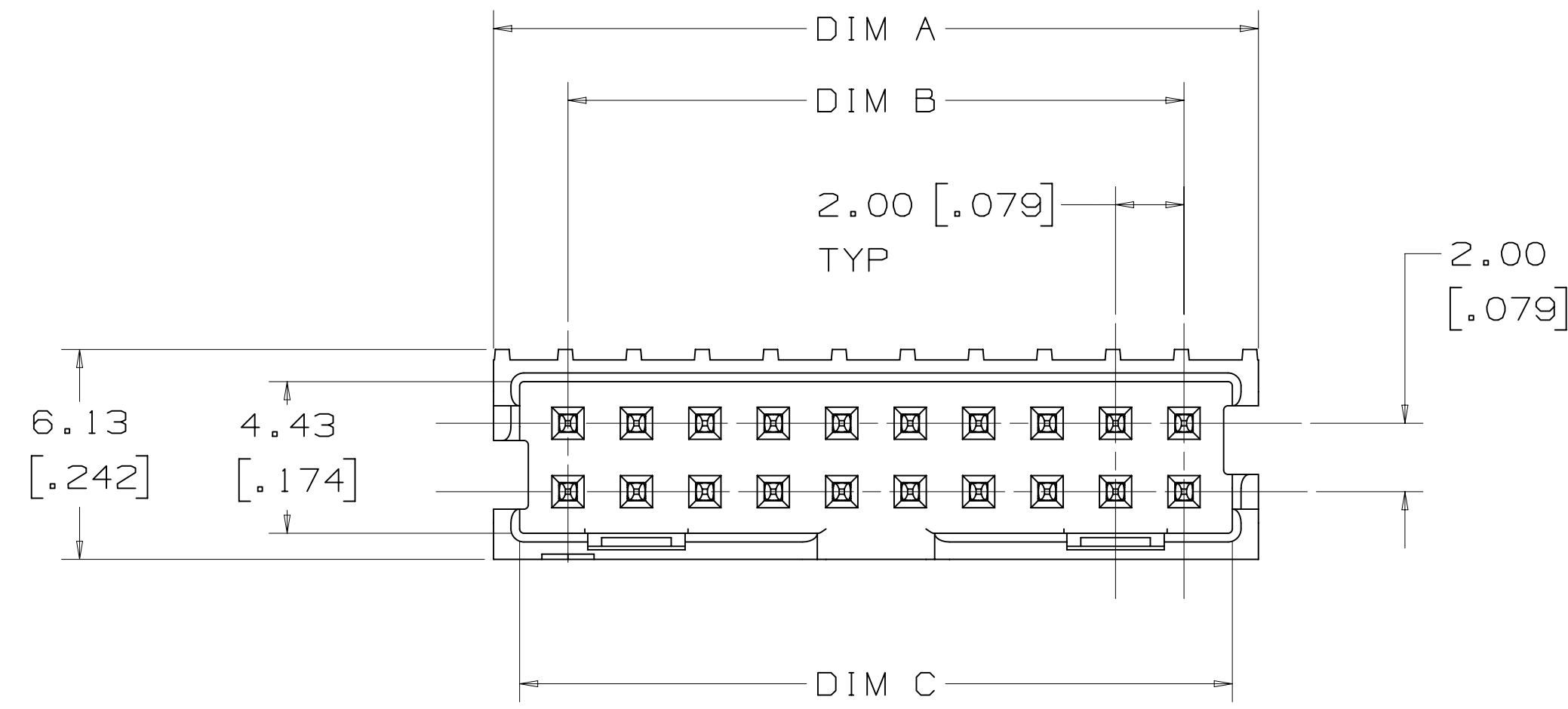
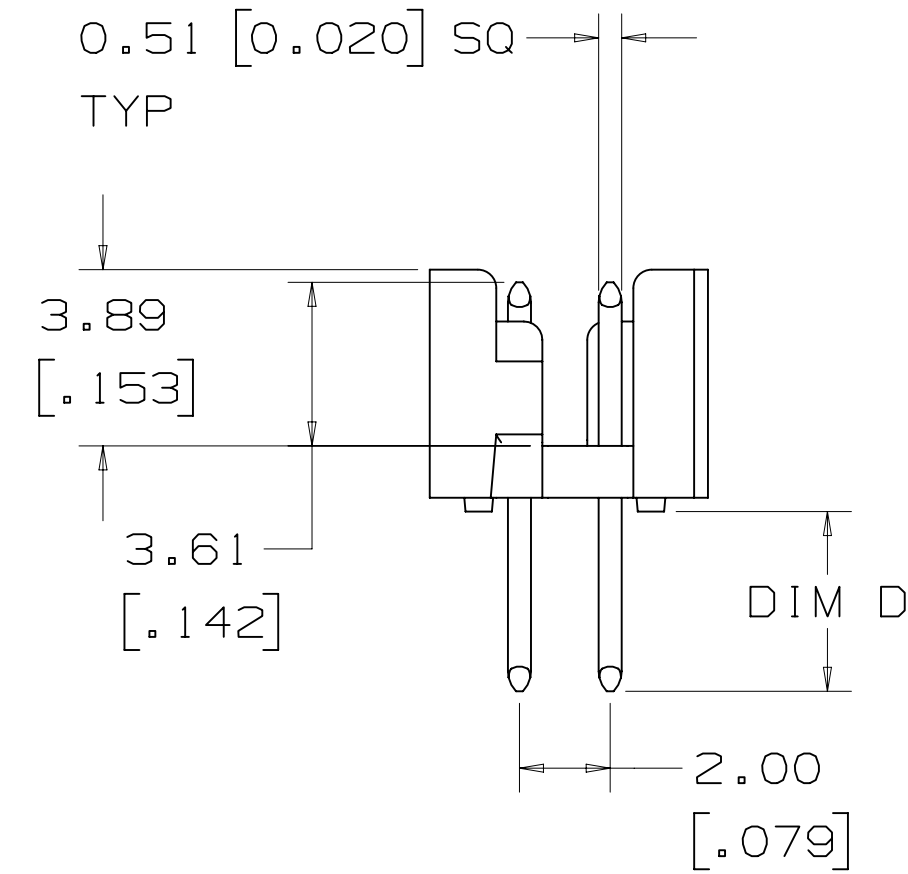
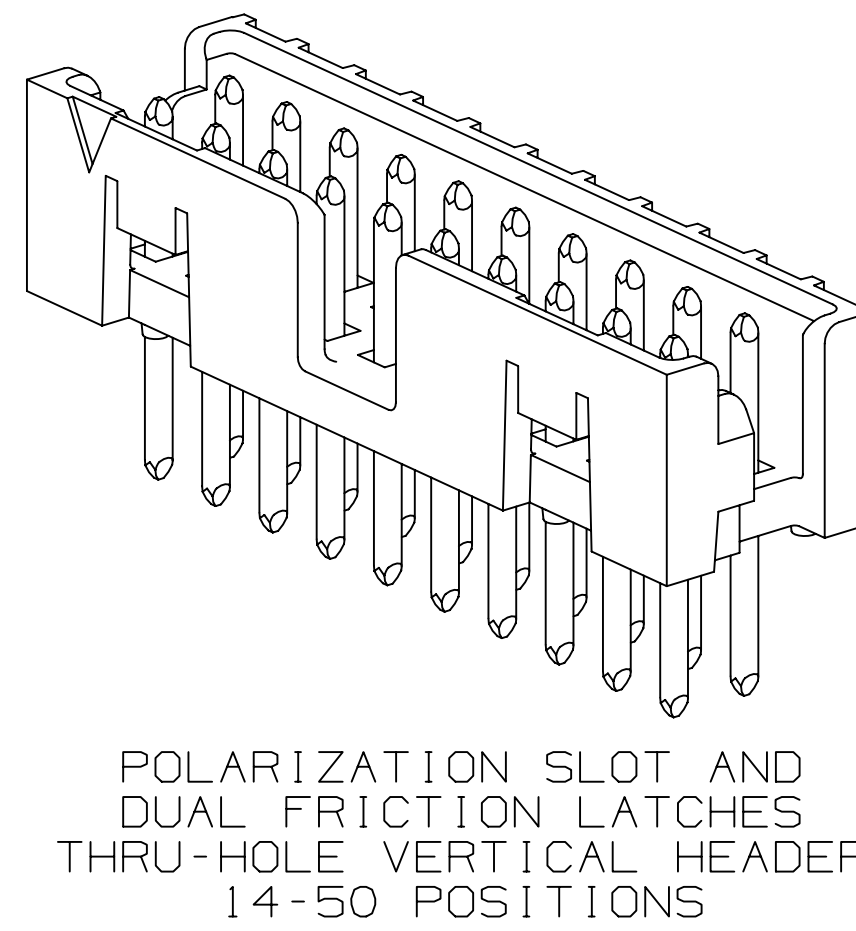
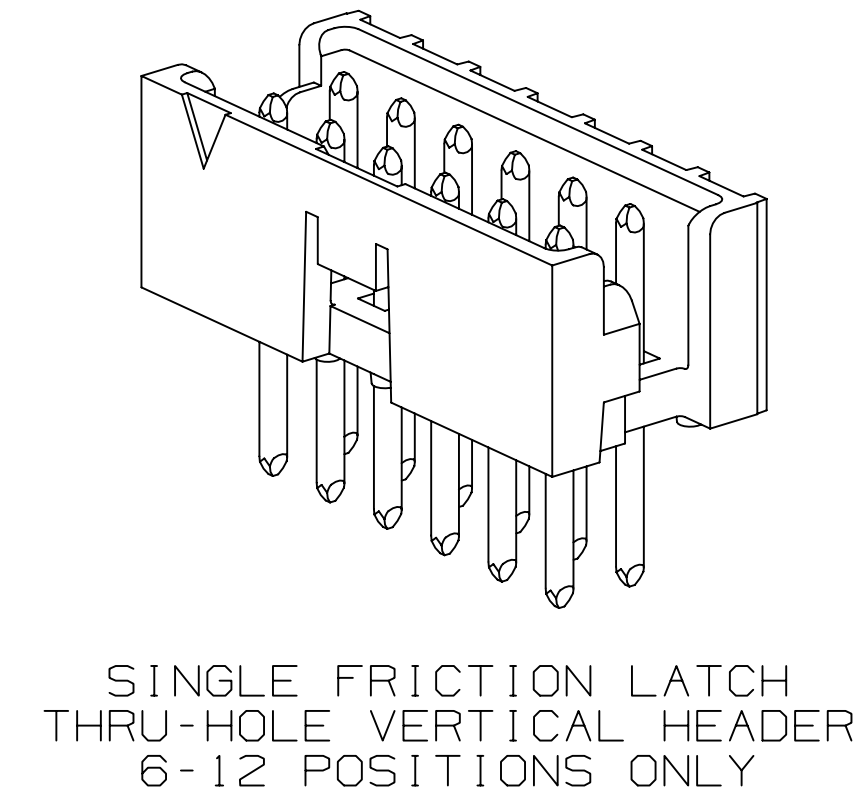
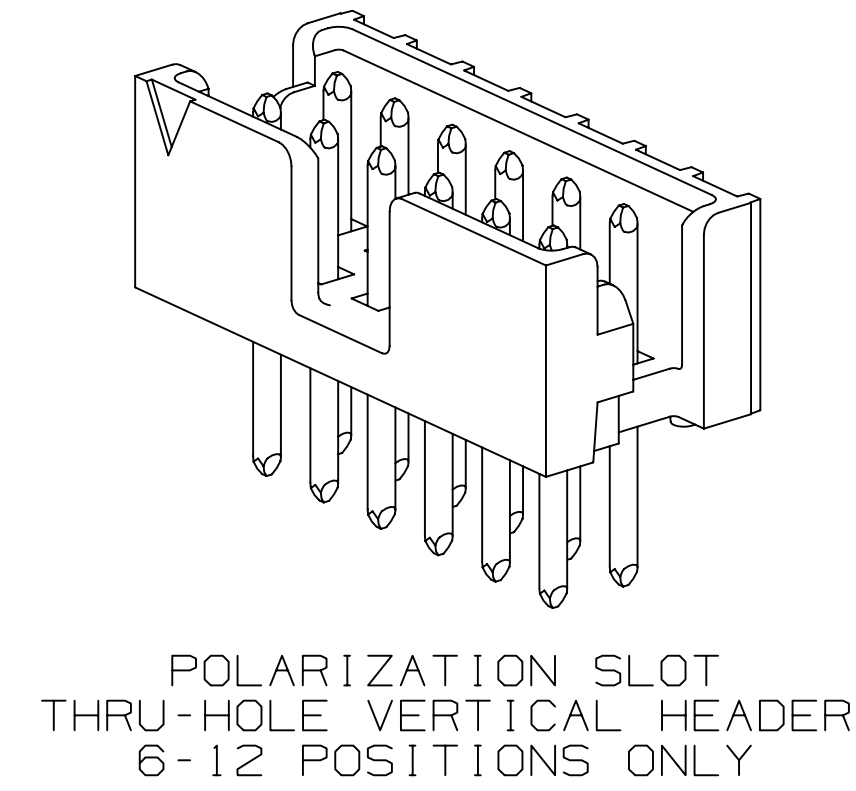


3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3 and Extended Length 4



RECOMMENDED PCB HOLE PATTERN TOLERANCE = 0.05 [.002]



PERFORMANCE <span style="border: 1px solid black; padding: 0 2px;">5</span> <span style="border: 1px solid black; padding: 0 2px;">7</span>	
CURRENT:	1.25 A, ALL LINES ENERGIZED 2.75 A, 6 LINES ENERGIZED 4.75 A, 1 LINE 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 5 FOR AVAILABLE TAIL POSITIONS AND SOLDER TAIL LENGTHS

METRIC ( ENGLISH )

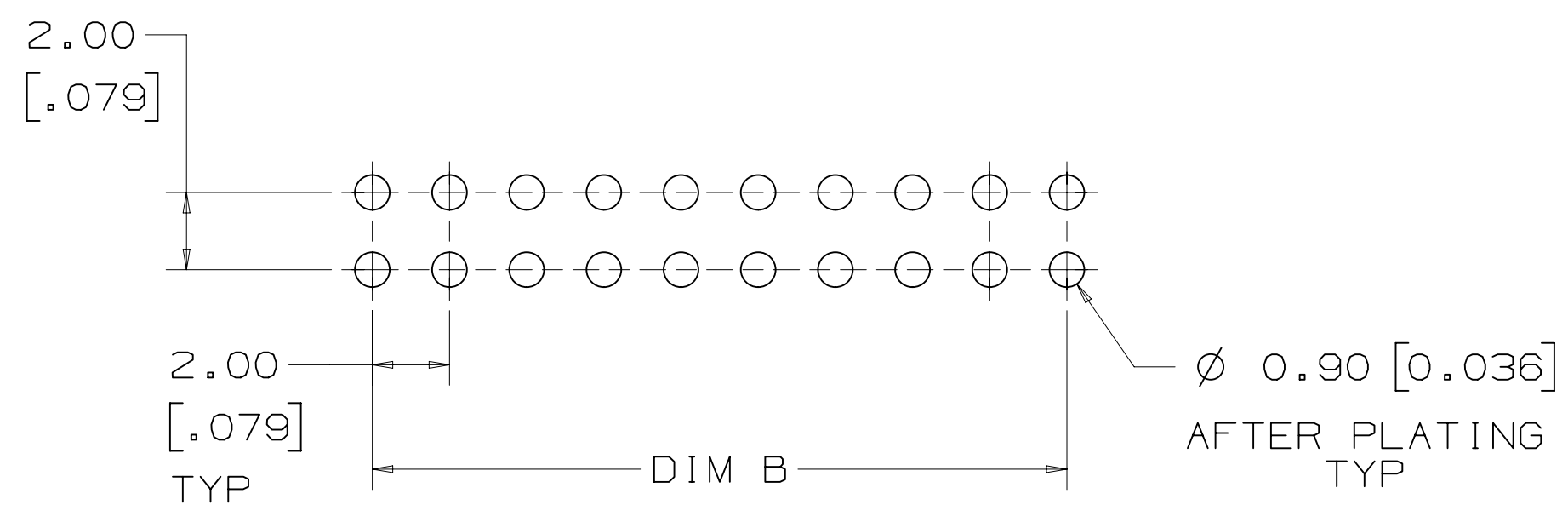
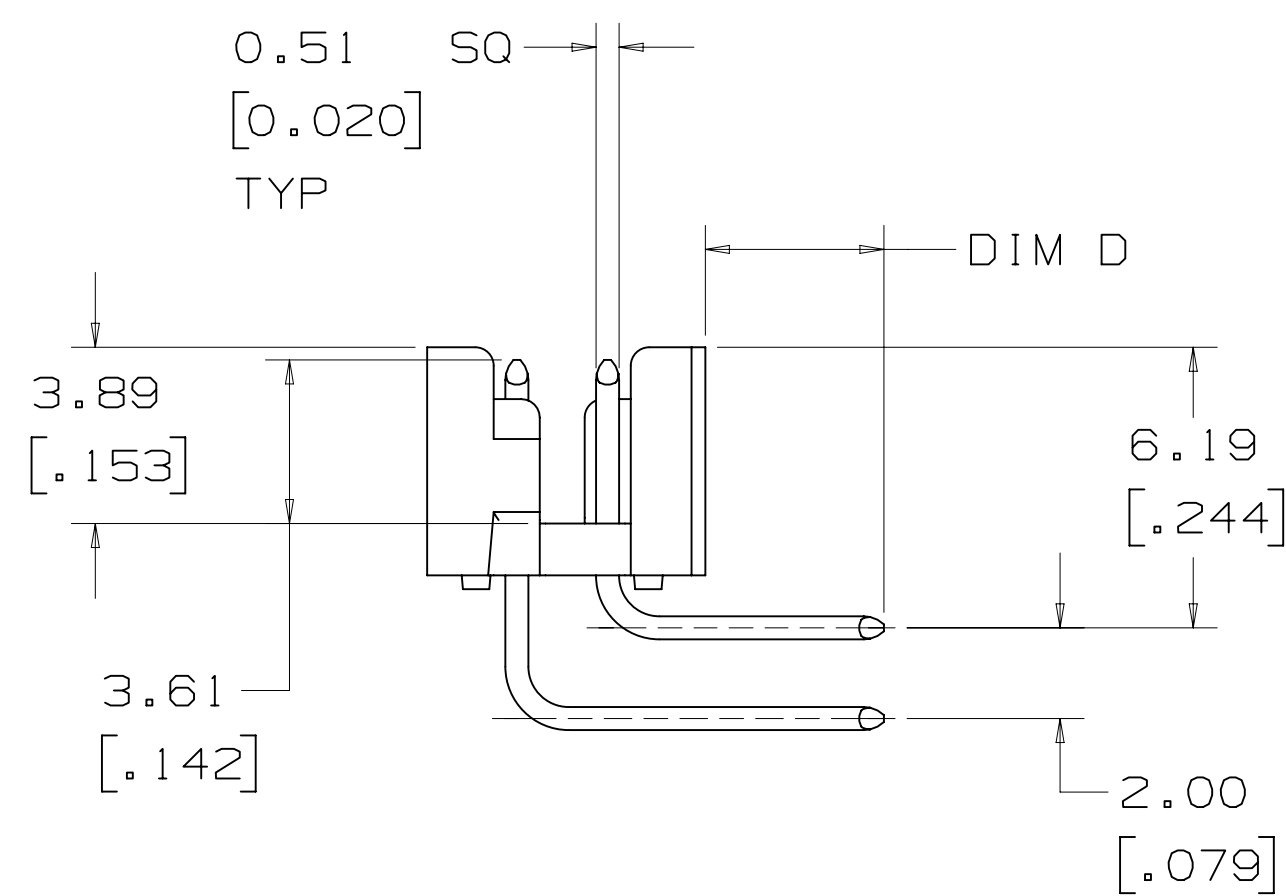
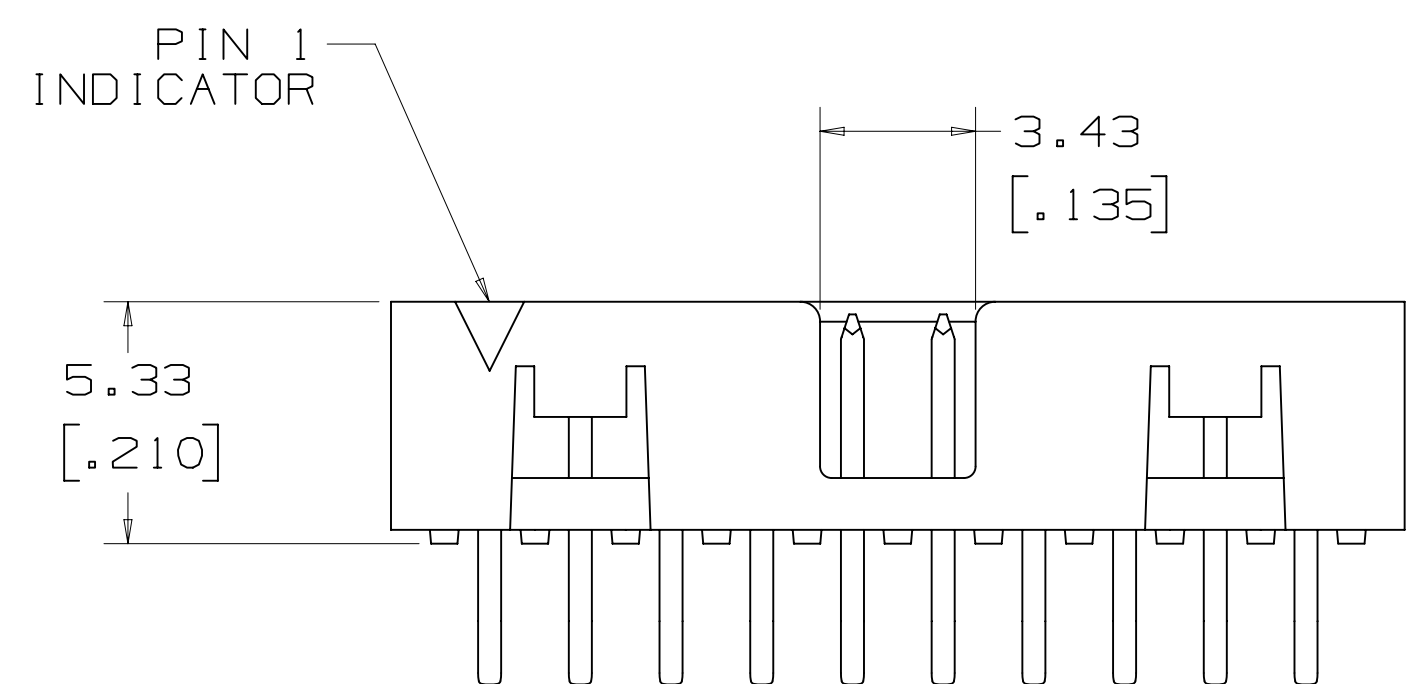
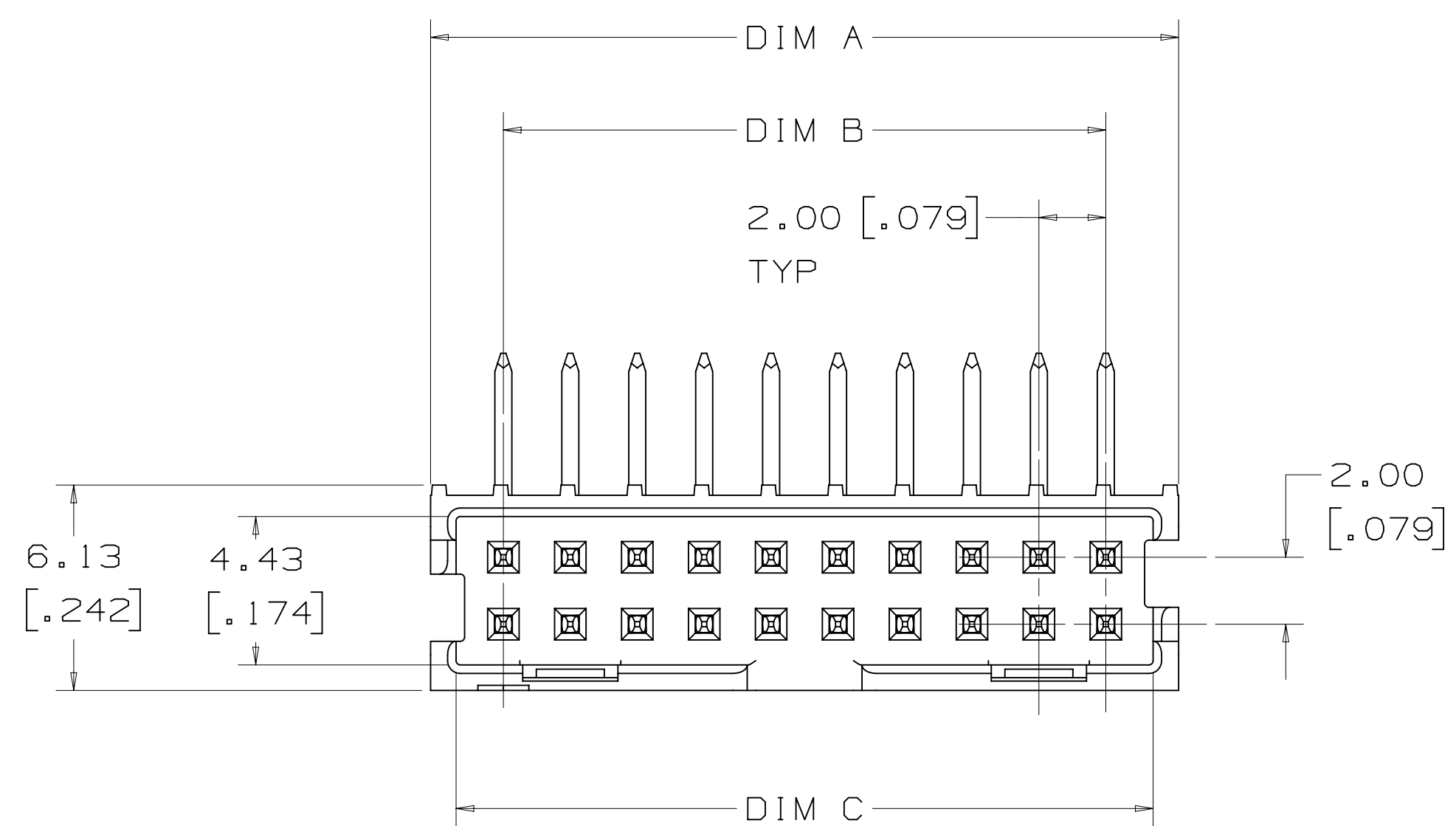
NOTES

- 1 MATERIAL:  
BODY: HIGH TEMPERATURE GLASS FILLED LCP, BLACK UL94V-0  
CONTACTS: COPPER ALLOY
- 2 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.
- 3 STANDARD LENGTH HEADERS MATE WITH 3M™ SOCKETS, 158 SERIES (REFERENCE 3M DRAWING 78-5100-2358-9).
- 4 EXTENDED LENGTH HEADERS MATE WITH 3M™ SOCKETS, 870 SERIES.
- 5 FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SEE 3M 78-5102-0078-1.
- 6 SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTOR.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY).
- 7 IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

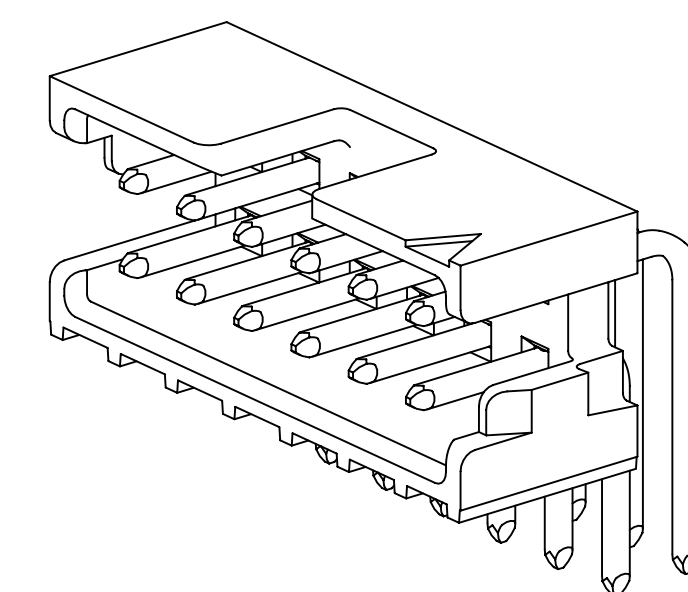
D 41488	JUN 20, 2012	LDS	SAN	
	REVISED CURRENT RATING IN PERFORMANCE TABLE			
C 39876	APR 18, 2012	LDS	SAN	
	REMOVED 32 POS FROM TABLE ON SHT 5			
B 34080	MAY 18, 2011	LDS	SF	
	ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5			
A 30741	OCT 28, 2010	LDS	SF	
	INITIAL RELEASE			
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
APP	DATE	MFG	DATE	
L. SCHMIDT	JUL 29, 2010			
CHKD	DATE	APPY	DATE	
		S FELDMAN	AUG 09, 2010	

DESIGN REFERENCE	NEXT ASSEMBLY	© 3M COPYR [GHT] 2010	
DO NOT SCALE DRAWING		SCALE 6-1	TOLERANCES EXCEPT AS NOTED
THIRD ANGLE PROJECTION		INCHES .00 ± .000 ± .0000 ±	MILLIMETERS 0 ± .0 ± .00 ± 0.13 ± .000 ±
INTERPRET PER ASME Y14.5 - 1994	MAX SURFACE ROUGHNESS 125	ALL SURFACES	MARKED ONLY
ANGLES ±1°			
TITLE 3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES			
CAGE NUMBER	SIZE	DRAWING NO.	REV.
D		78-5100-2359-7	D
MODEL		SHT 1 OF 5	

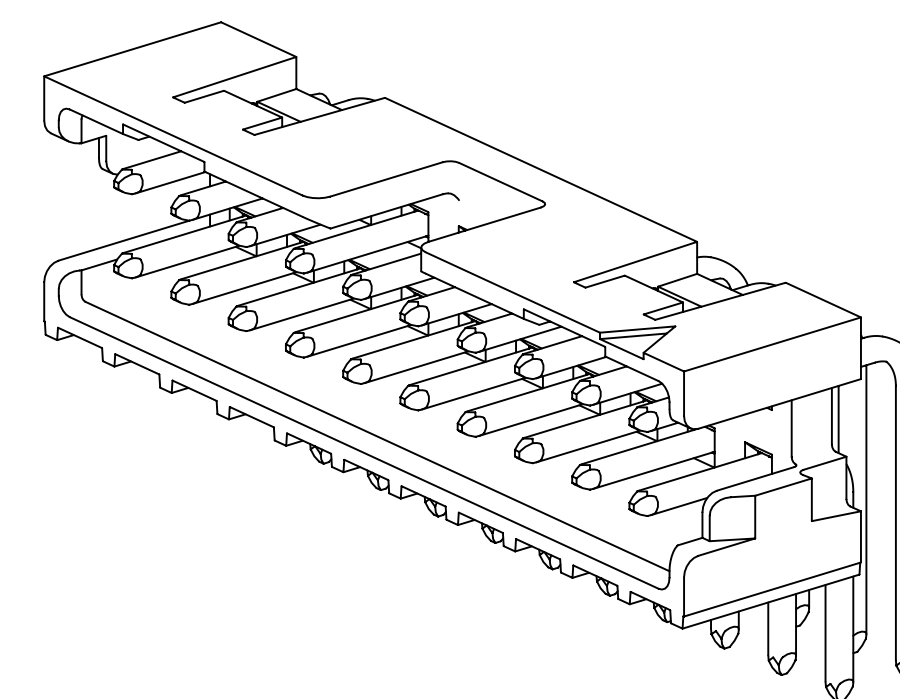
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



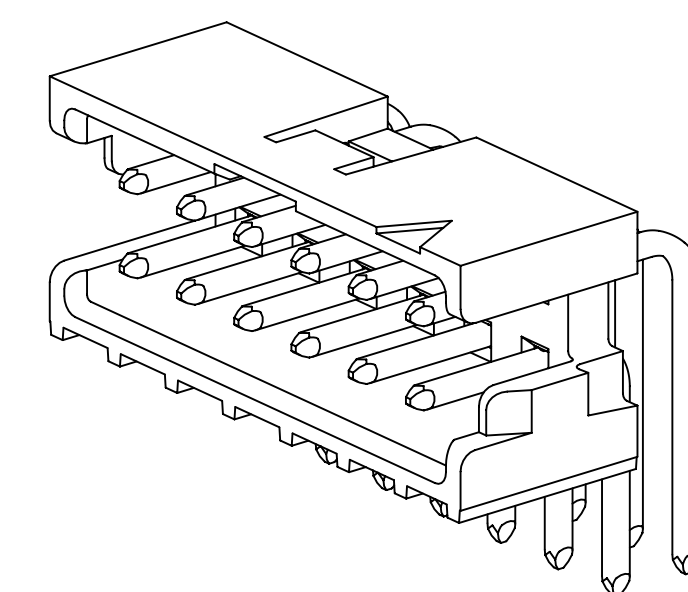
RECOMMENDED PCB HOLE PATTERN  
TOLERANCE = ±0.05 [0.002]



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 5  
FOR AVAILABLE POSITIONS AND  
SOLDER TAIL LENGTHS

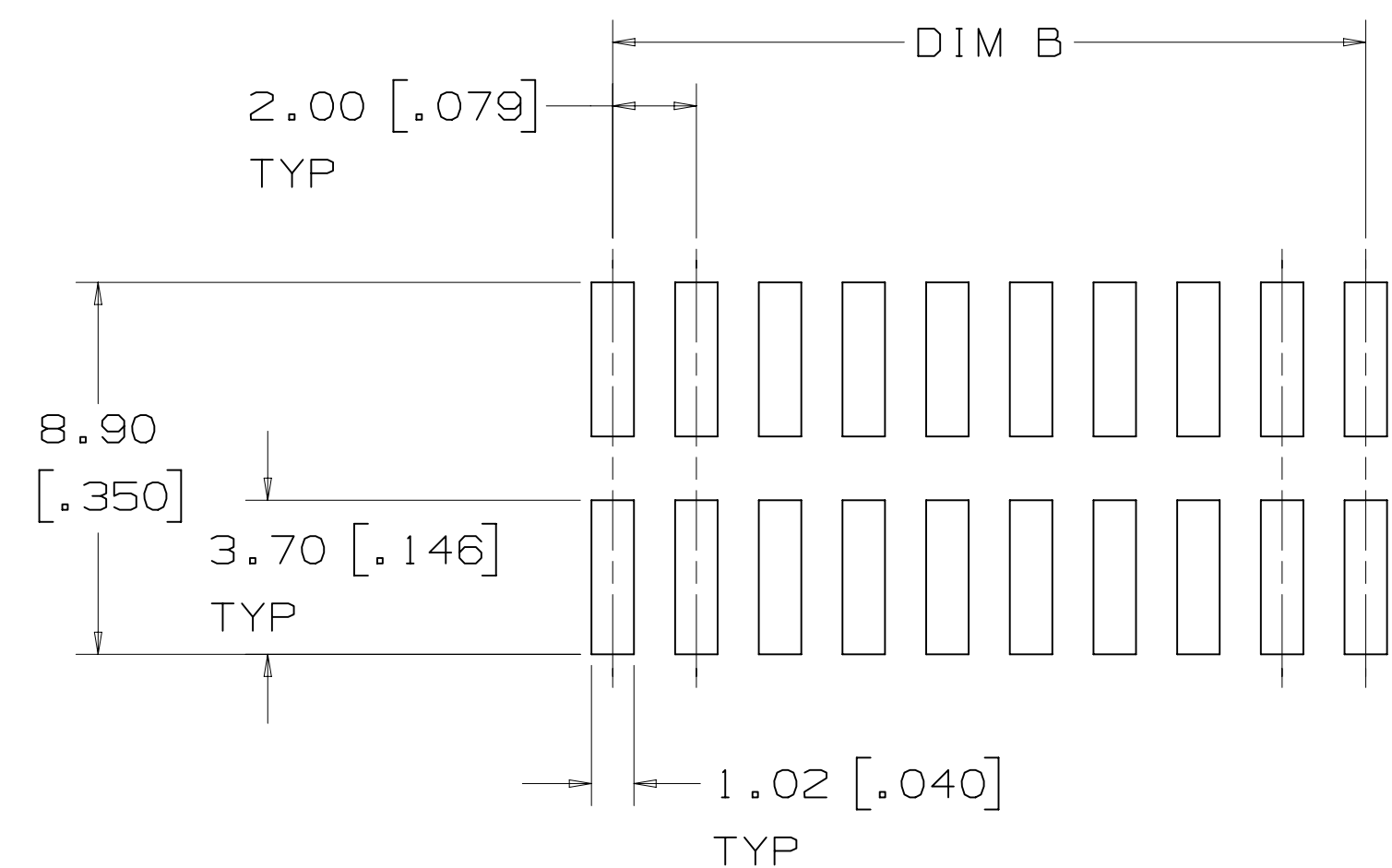
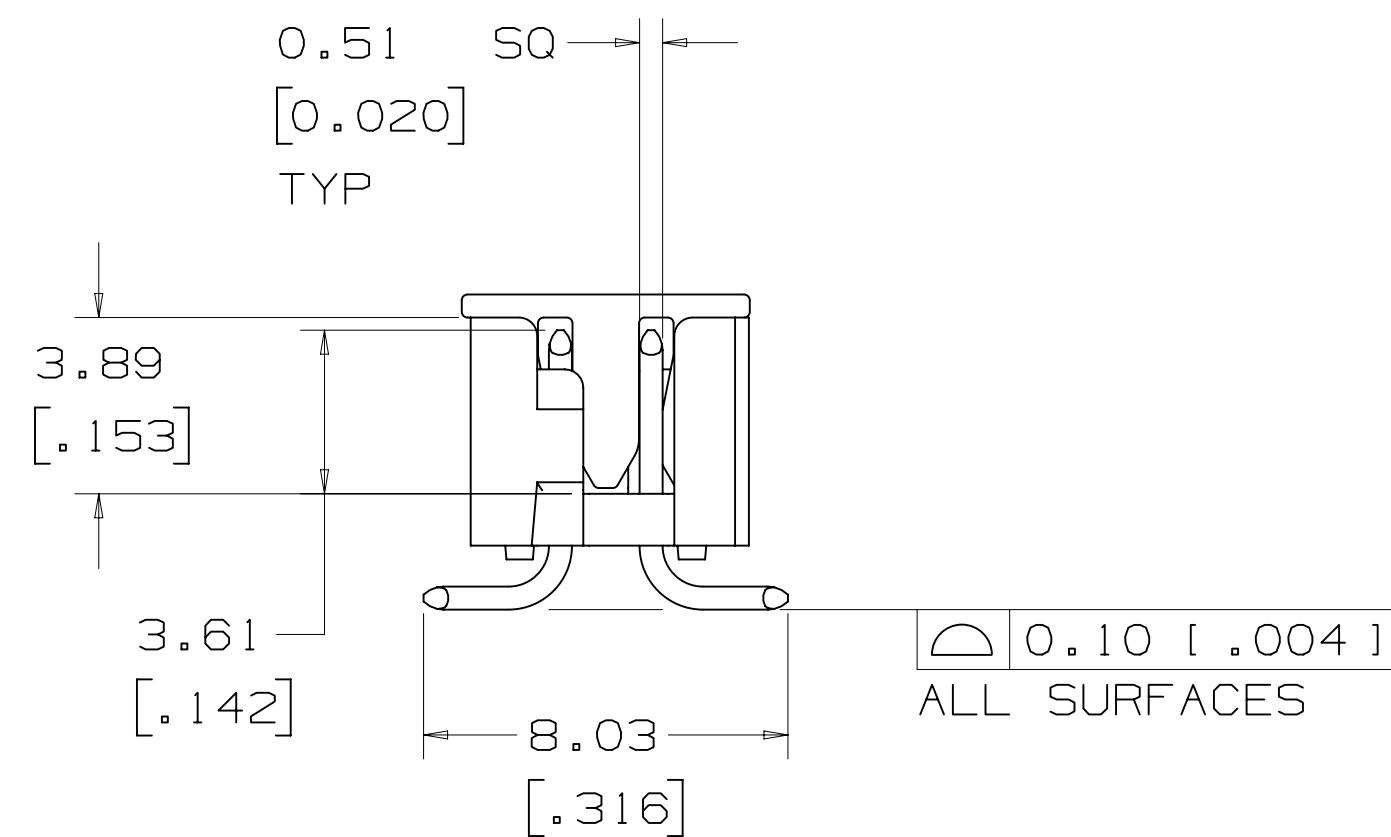
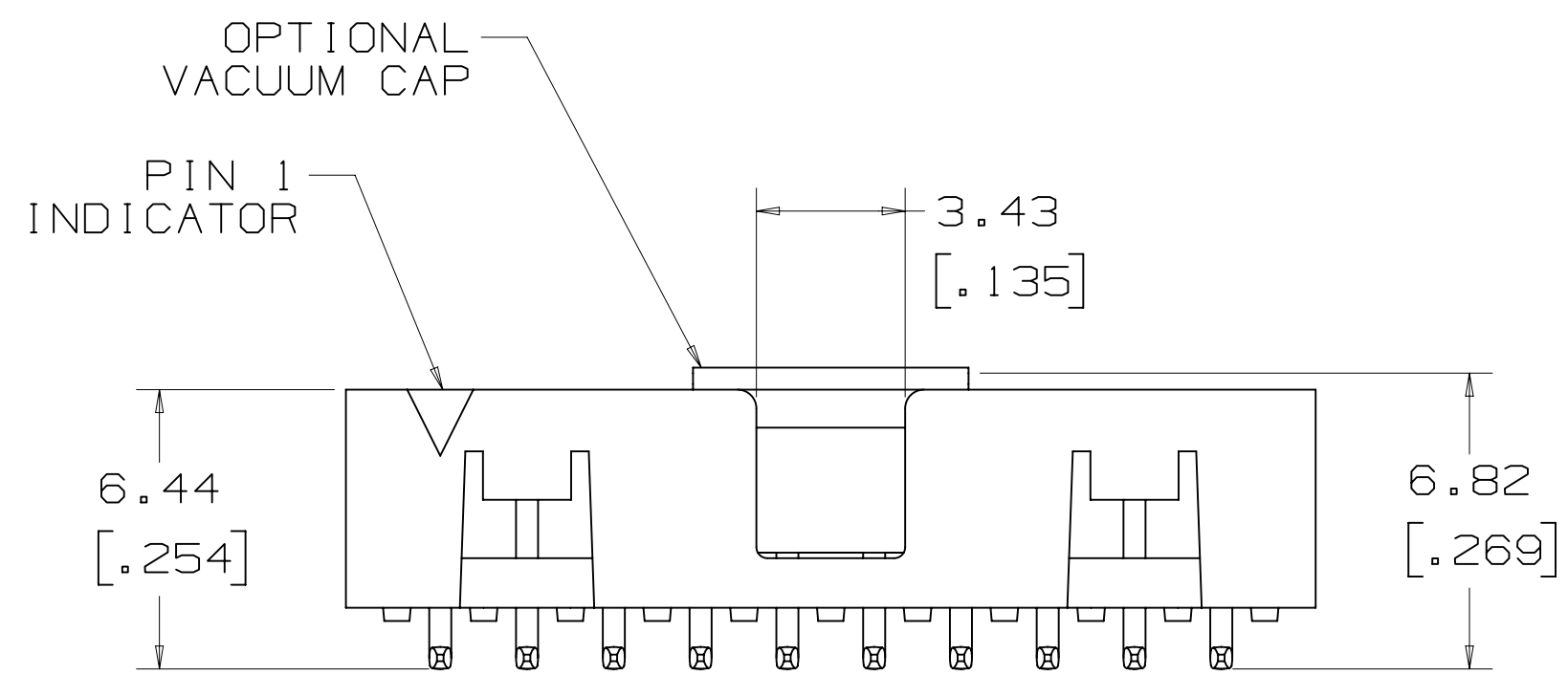
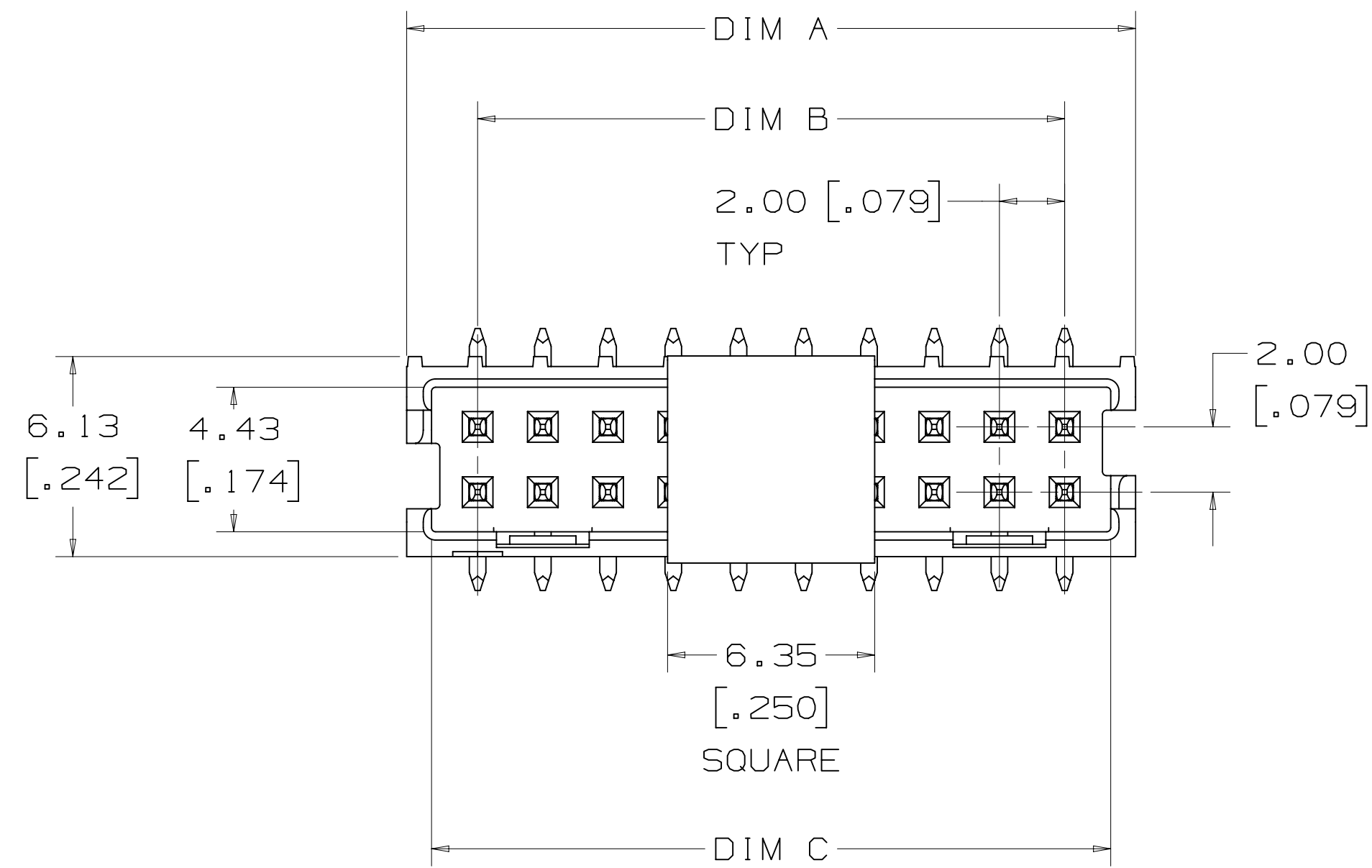
METRIC [ ENGLISH ]

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	41488	JUN 20, 2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
C	39876	APR 18, 2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
B	34080	MAY 18, 2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
A	30741	OCT 28, 2010 INITIAL RELEASE	LDS	SF

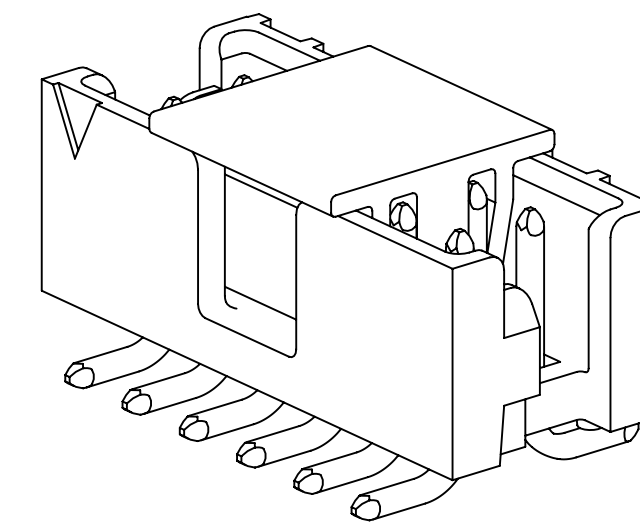
DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DIVISION		DIVISION CODE		DATE		
DO NOT SCALE DRAWING		SCALE	TOLERANCES EXCEPT AS NOTED		INCHES	
THIRD ANGLE PROJECTION		4	NOTED		MILLIMETERS	
INTERPRET PER ASME Y14.5 - 1994		1	.00		0 ±	
MAX SURFACE ROUGHNESS			.000 ±		.00 ±	
125			.000 ±		.00 ± 0.13	
ALL SURFACES			.000 ±		.000 ±	
MARKED ONLY			.000 ±		.000 ±	
ANGLES ±1°			.000 ±		.000 ±	

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TITLE <b>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES</b>			
CAGE NUMBER	SIZE	DRAWING NO.	REV.
D		78-5100-2359-7	D
MODEL		SHT 2 OF 5	

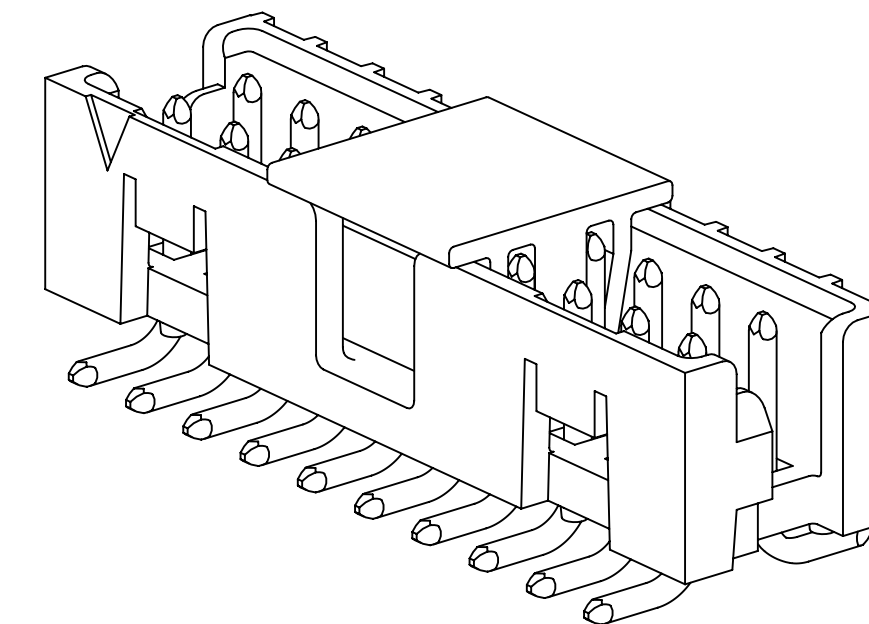
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3 and Extended Length 4



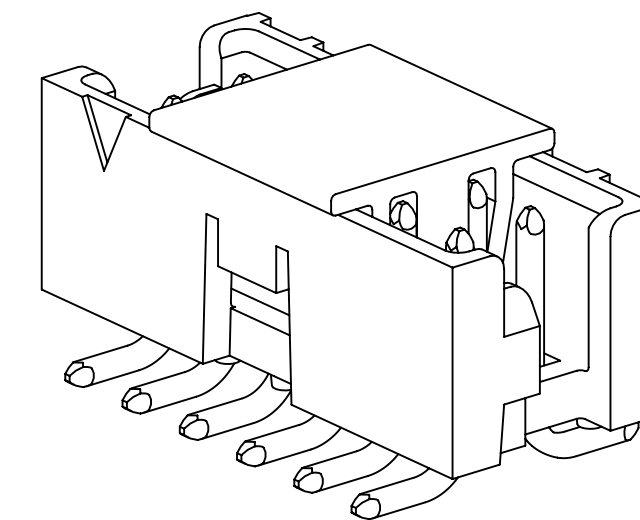
RECOMMENDED PCB PAD PATTERN  
TOLERANCE = ±0.08 [ .003 ]



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 5  
FOR AVAILABLE POSITIONS

METRIC ( ENGLISH )

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		D	41488	JUN 20, 2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
		C	39876	APR 18, 2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
		B	34080	MAY 18, 2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
		A	30741	OCT 28, 2010 INITIAL RELEASE	LDS	SF

DESIGNER	DATE	APPV	DATE
L. SCHMIDT	JUL 29, 2010	S FELDMAN	AUG 09, 2010

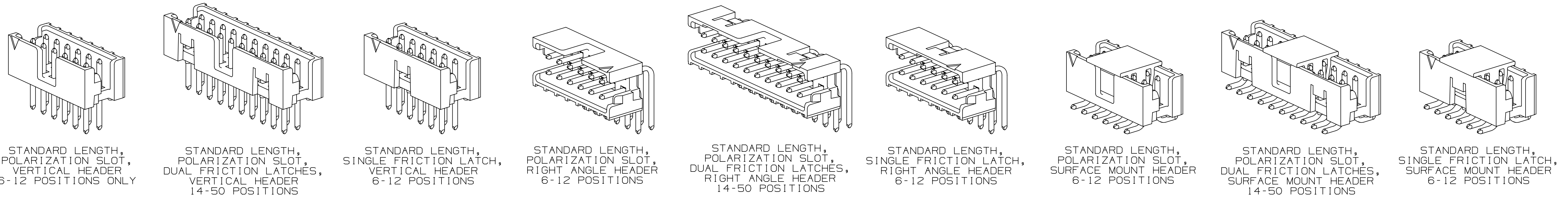
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED
THIRD ANGLE PROJECTION	INCHES	MILLIMETERS
INTERPRET PER ASME Y14.5 - 1994	0 ±	0 ±
MAX SURFACE ROUGHNESS	0.00 ± 0.13	0.00 ±
125 / ALL SURFACES		
✓ MARKED ONLY	ANGLES ±1°	

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TITLE <b>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES</b>		
CAGE NUMBER	SIZE	DRAWING NO.
D		78-5100-2359-7
REV.		D
MODEL DET. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		SHT 3 OF 5

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

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

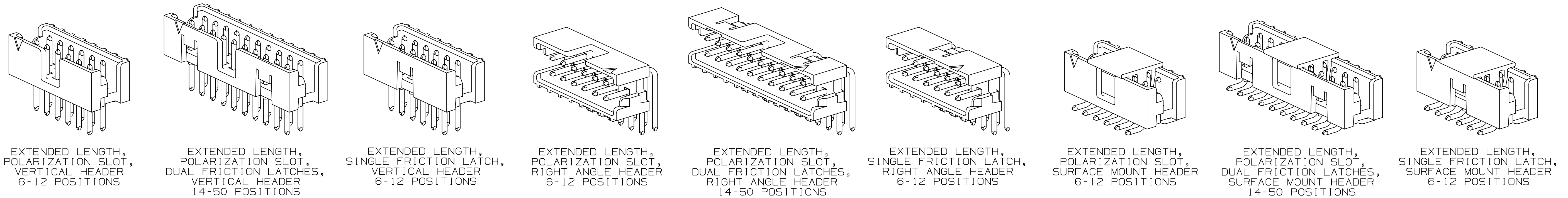
STANDARD LENGTH, POLARIZATION SLOT, SURFACE MOUNT HEADER 6-12 POSITIONS

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

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

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



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

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]

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)

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)

**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]

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)

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)

METRIC (ENGLISH)


DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		D	41488	JUN 20, 2012 REVISED CURRENT RATING IN PERFORMANCE TABLE	LDS	SAN
		C	39876	APR 18, 2012 REMOVED 32 POS FROM TABLE ON SHT 5	LDS	SAN
		B	34080	MAY 18, 2011 ADDED 6.19 DIM ON SHT 2; REVISED & MOVED TABLE TO SHT 5	LDS	SF
		A	30741	OCT 28, 2010 INITIAL RELEASE	LDS	SF
DRY CODES		DRFT	L. SCHMIDT	DATE JUL 29, 2010	MFG	DATE
DIVISION	DIVISION CODE	CHKD		DATE	APPV	DATE
					S FELDMAN	AUG 09, 2010
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 1994	MILLIMETERS	.00 ± .000 ± .0000 ±			
MAX SURFACE ROUGHNESS	125	INCHES	.0 ± .00 ± 0.13 .000 ±			
	<input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY	ANGLES ±1°				
TITLE <b>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES</b>		CAGE NUMBER <b>D 78-5100-2359-7</b>		DRAWING NO. <b>78-5100-2359-7</b>		REV. <b>D</b>
MODEL DET		SHT 4 OF 5		YES <input type="checkbox"/> NO <input type="checkbox"/>		

78-5100-2359-7

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

SHROUDED BOX HEADER							
NUMBER OF POSITIONS	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	16.35 [ .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
DRY CODES		DRP	DATE	MFG	DATE	
		L. SCHMIDT	JUL 29, 2010			
DIVISION	DIVISION CODE	CHKD	DATE	APPR	DATE	
		S FELDMAN			AUG 09, 2010	
DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		 © 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	MILLIMETERS		TITLE		
		0 ±		3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES		
MAX SURFACE ROUGHNESS	125	.00 ± 0.13		CAGE NUMBER	SIZE	DRAWING NO.
<input checked="" type="checkbox"/> ALL SURFACES	<input checked="" type="checkbox"/> MARKED ONLY	ANGLES ±1°		D	78-5100-2359-7	D
				MODEL	DET	REV.
					ISTS	SHT 5 OF 5

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.);

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## 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