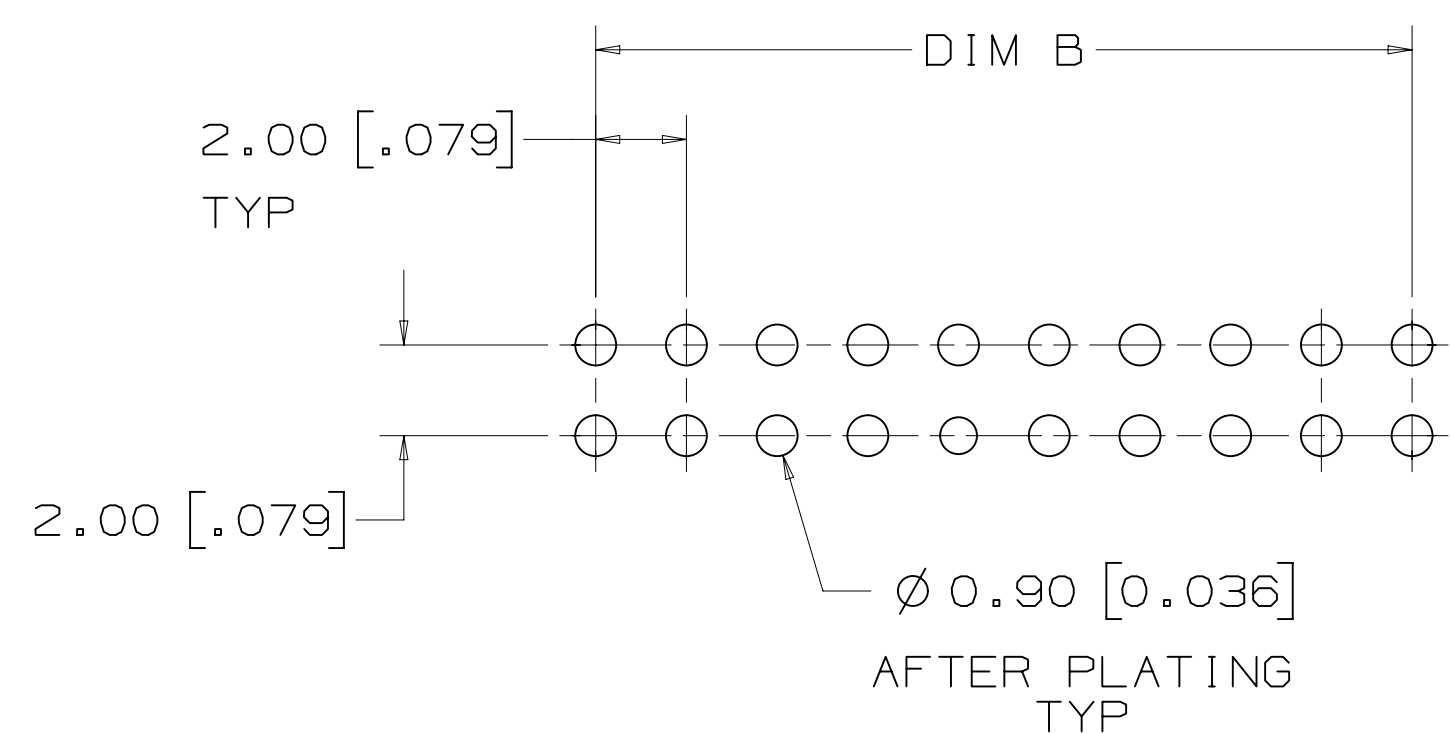
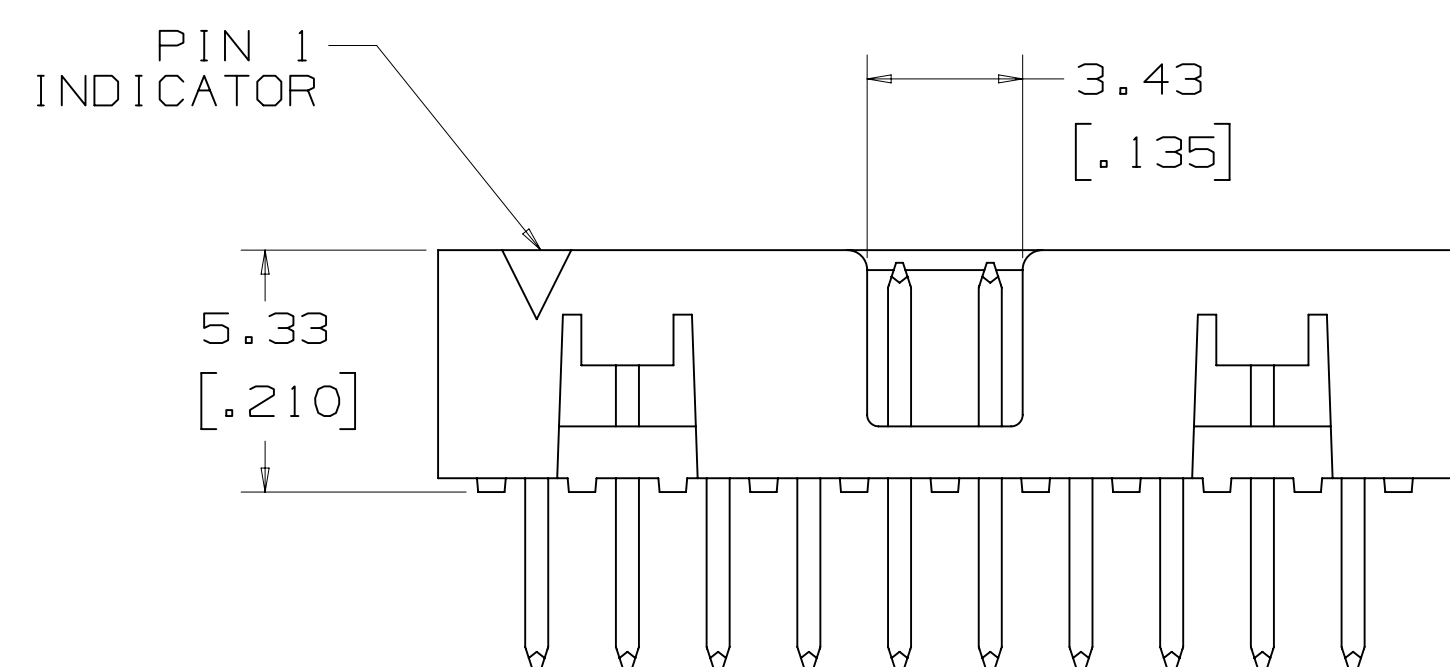
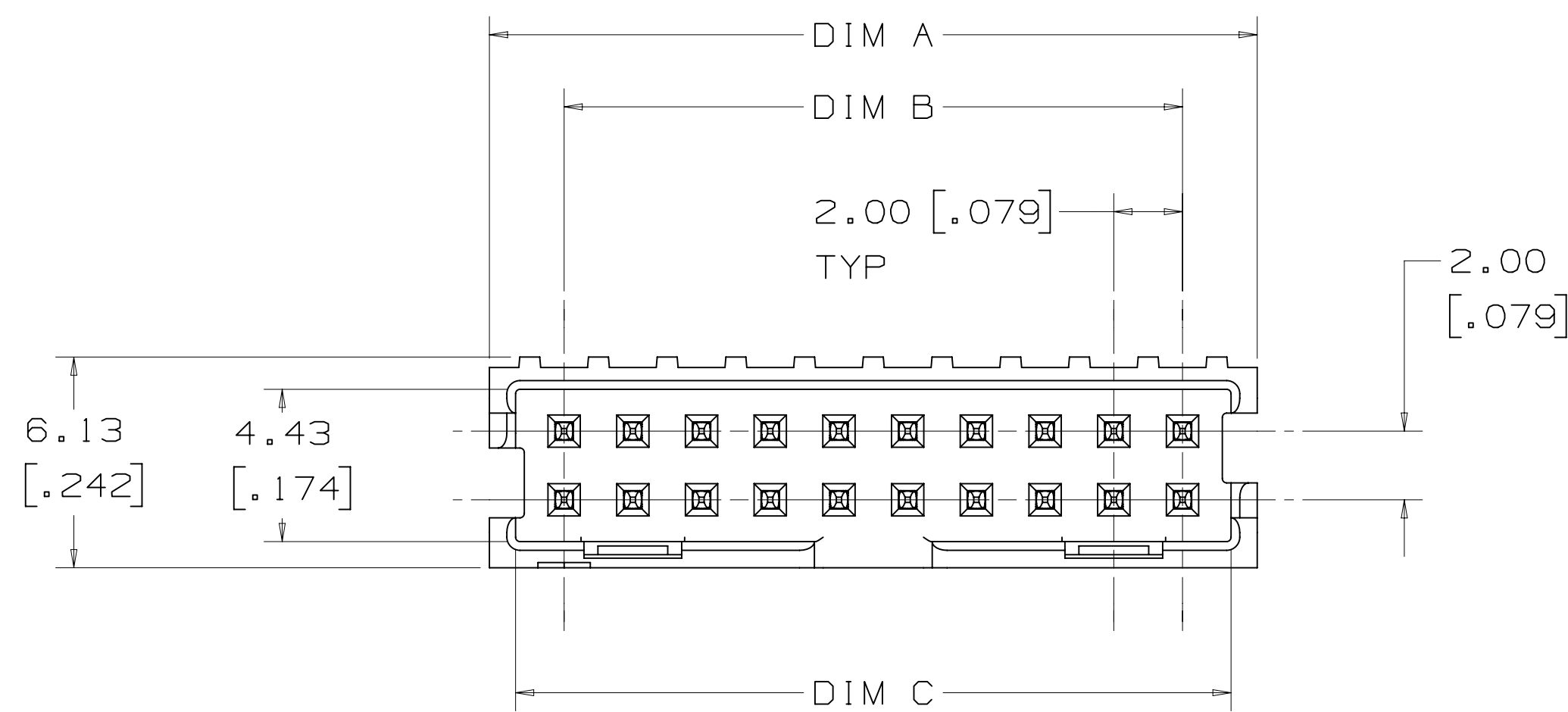
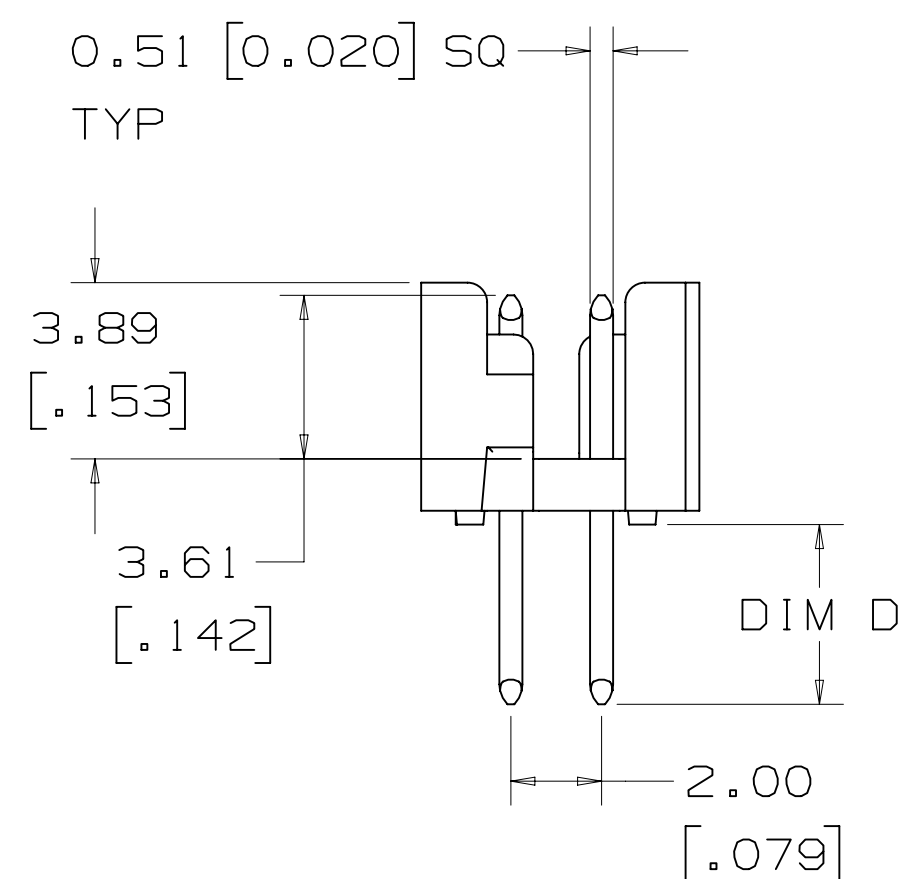
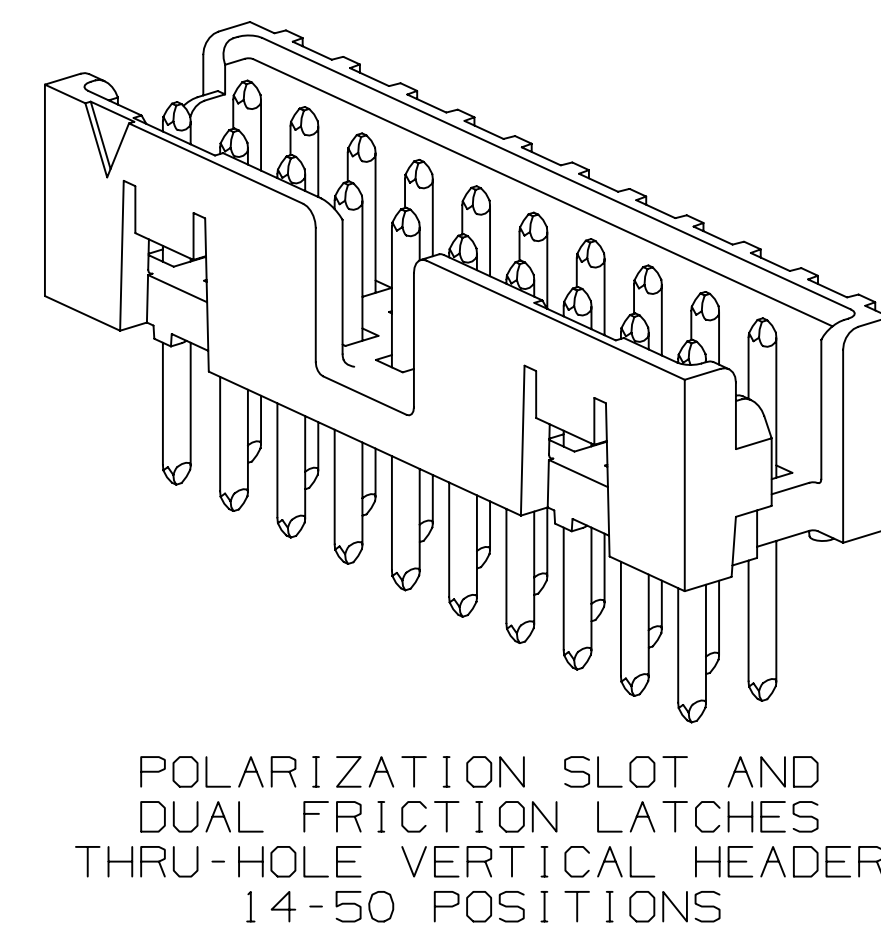
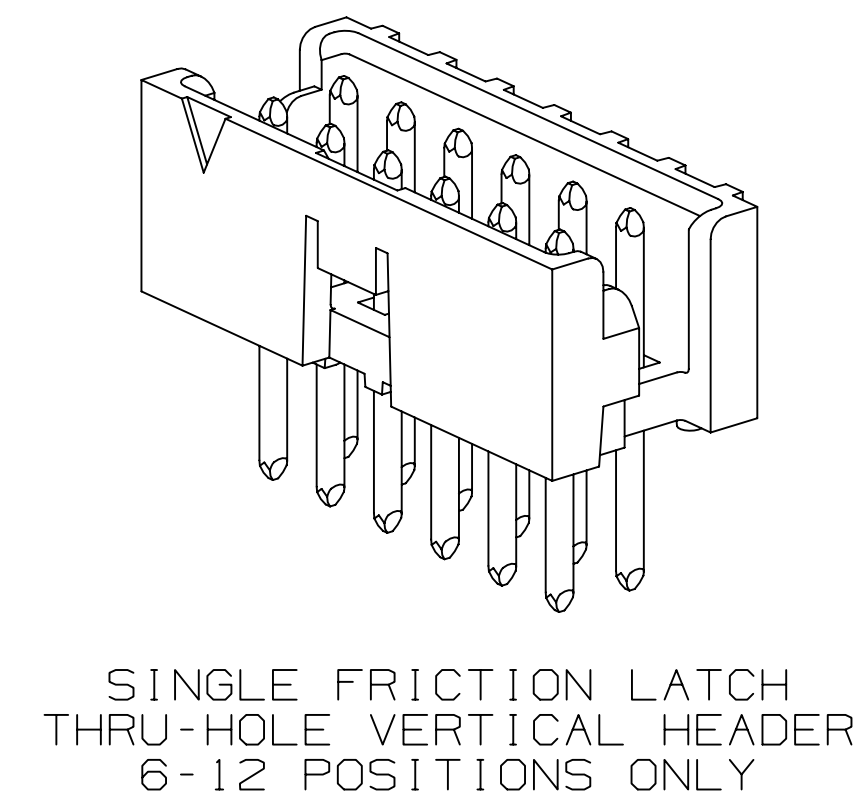
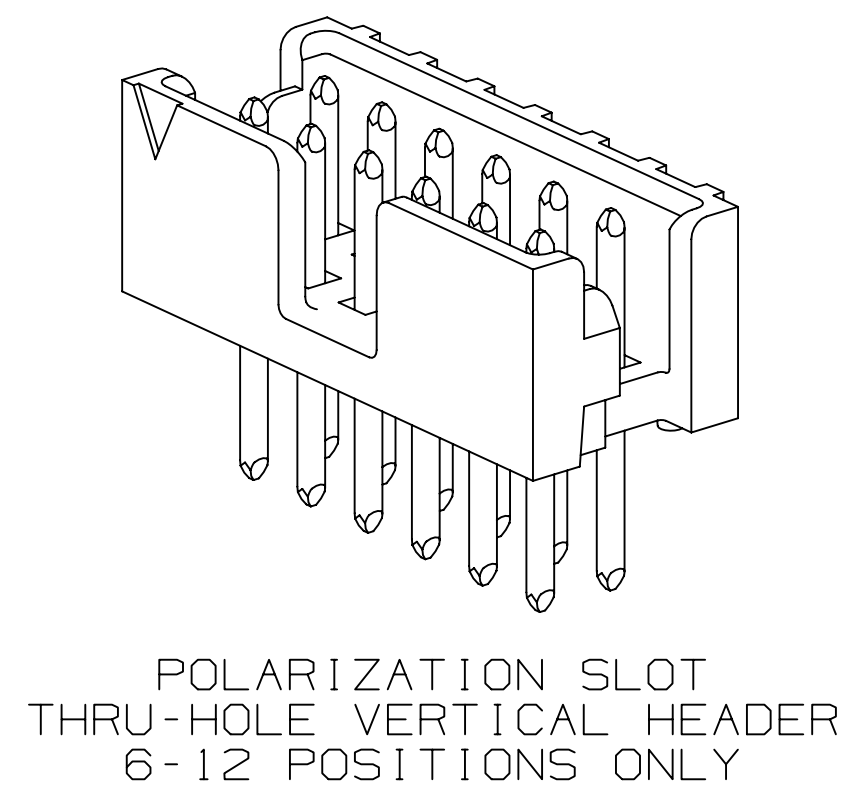


3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



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

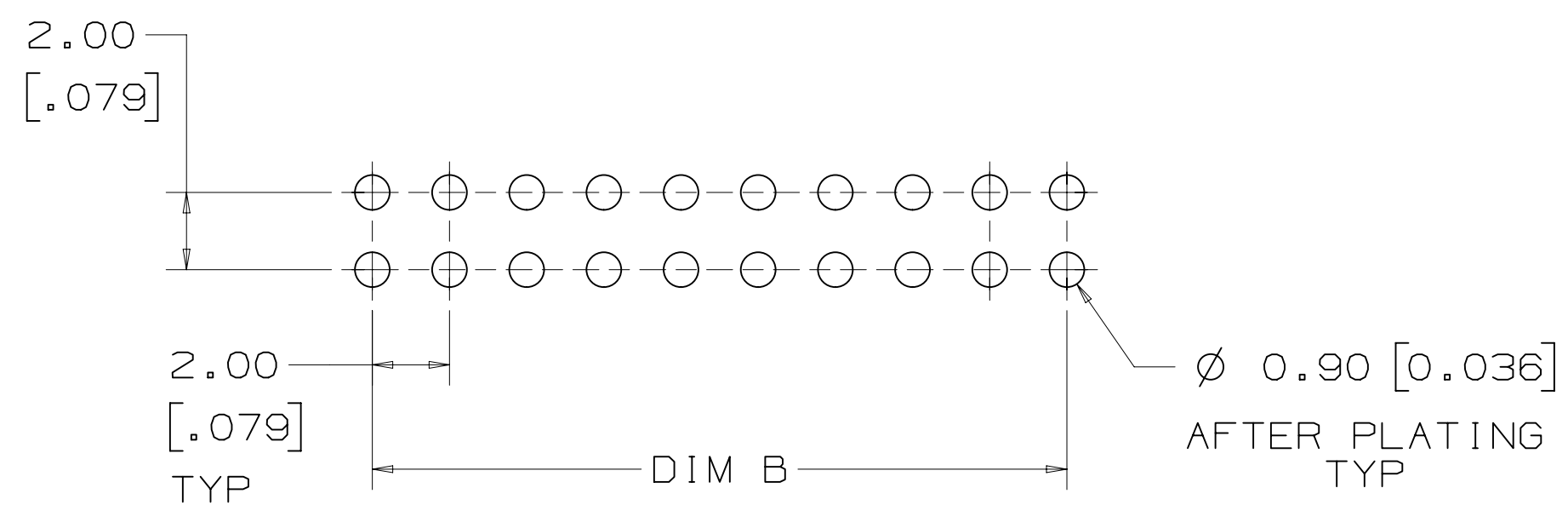
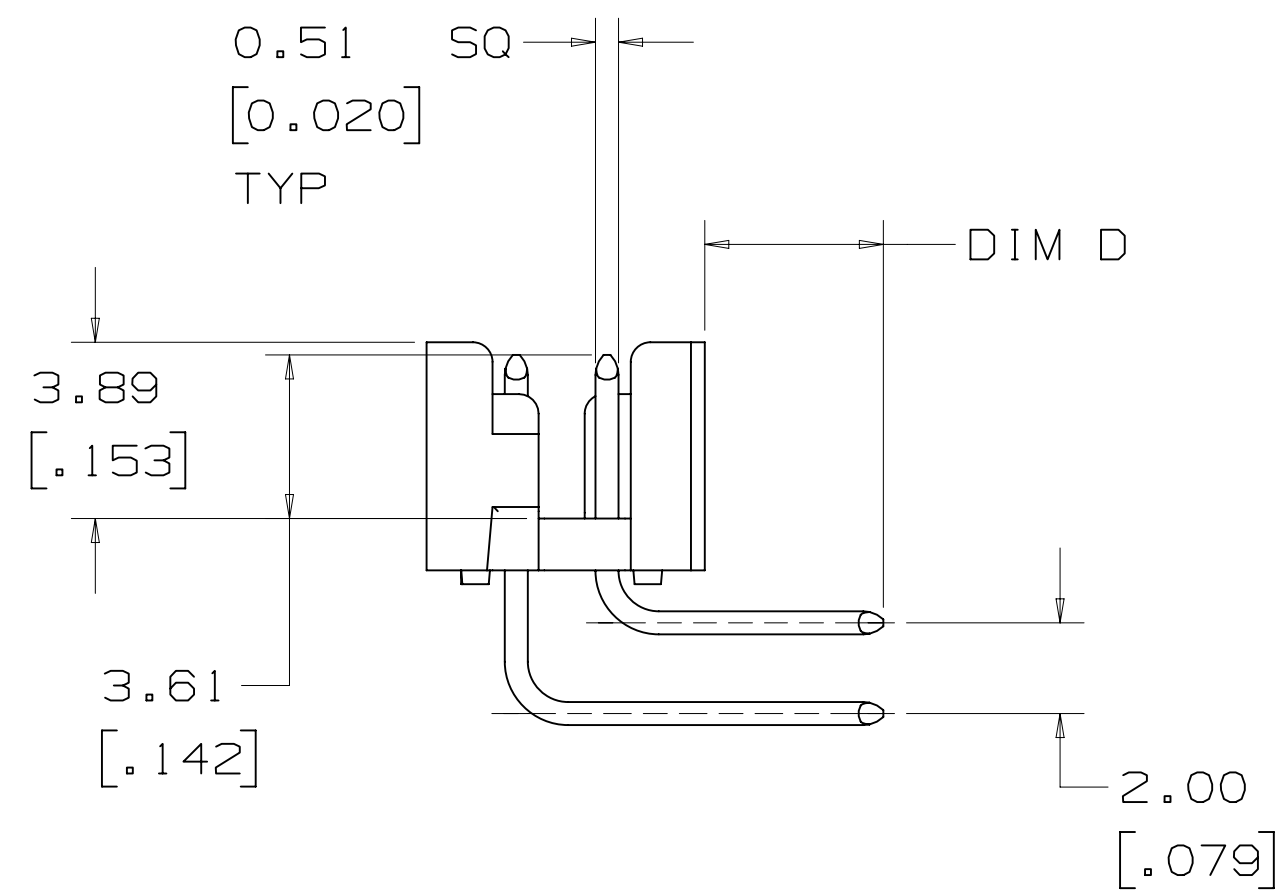
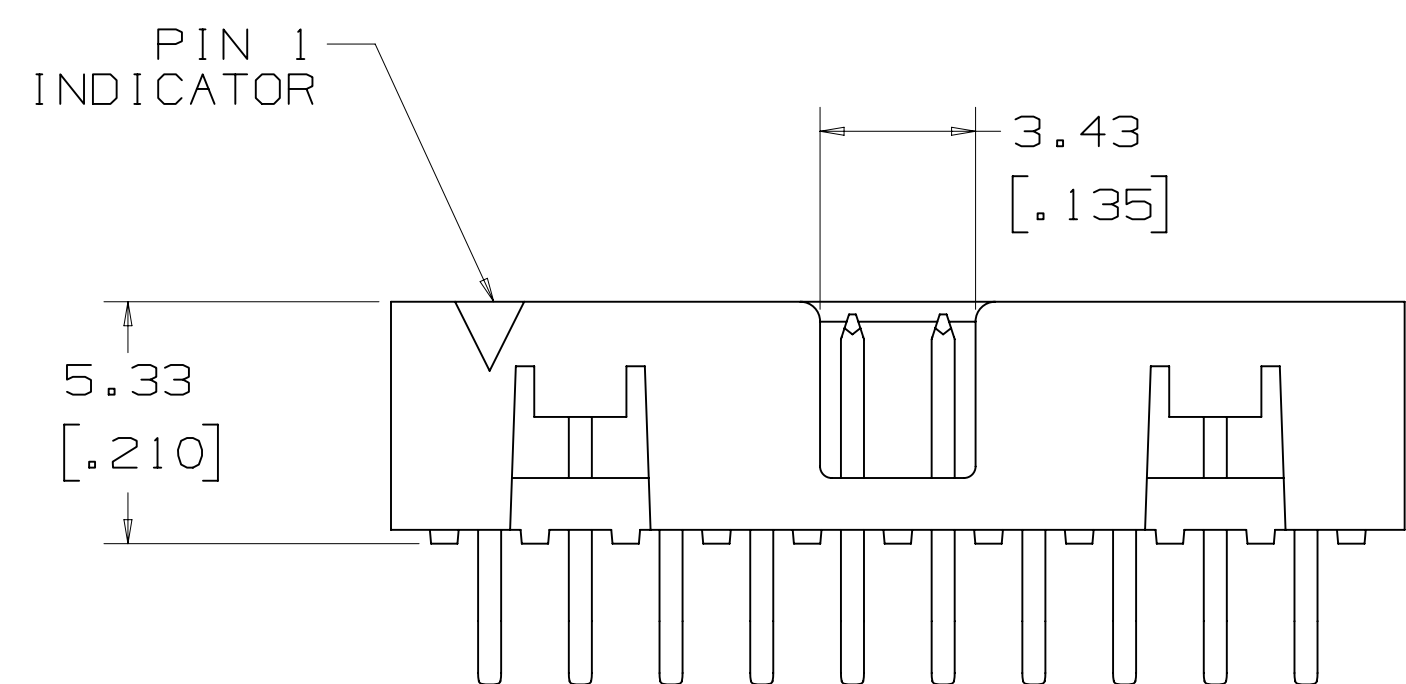
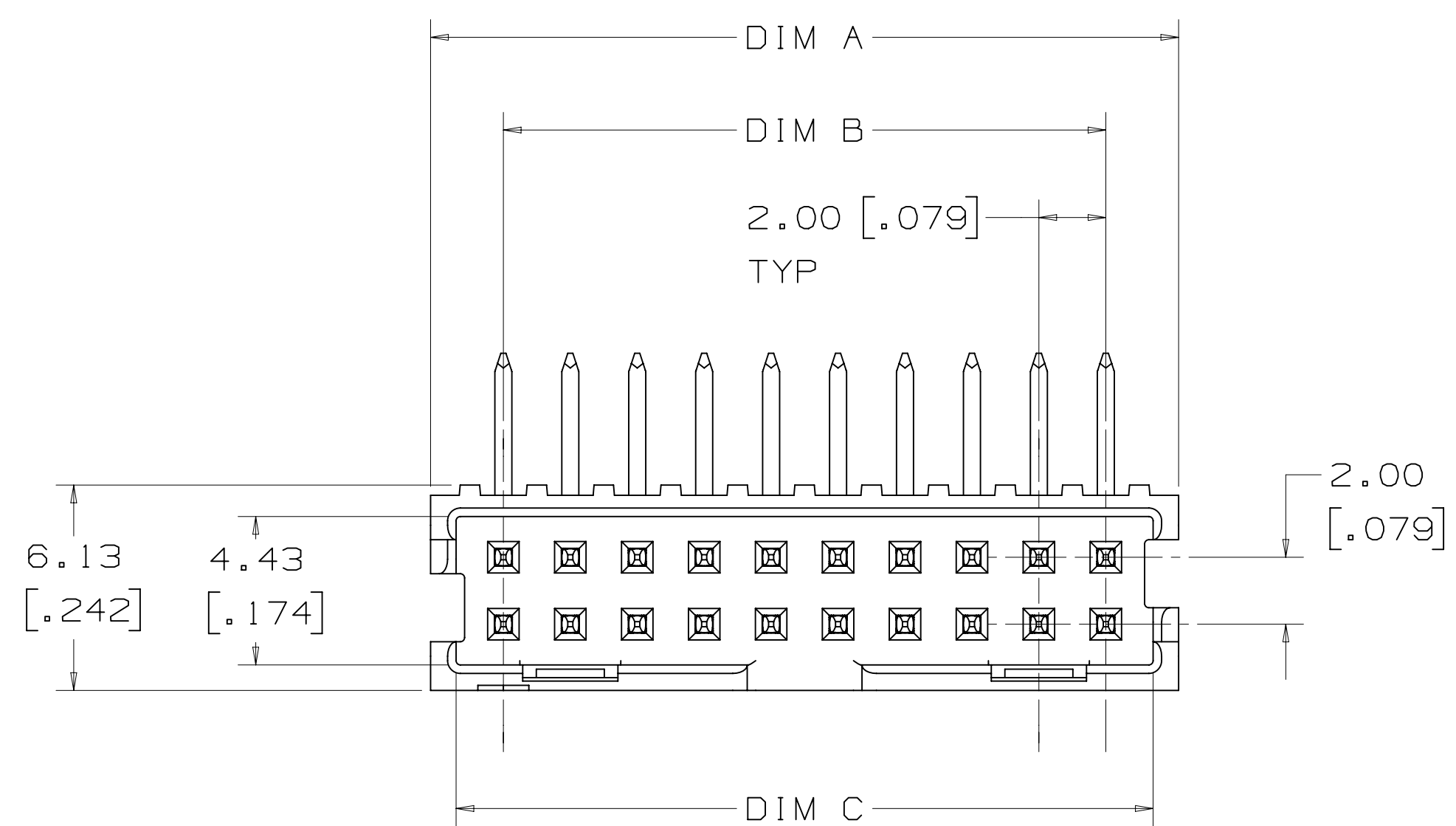
METRIC [ ENGLISH ]

NOTES

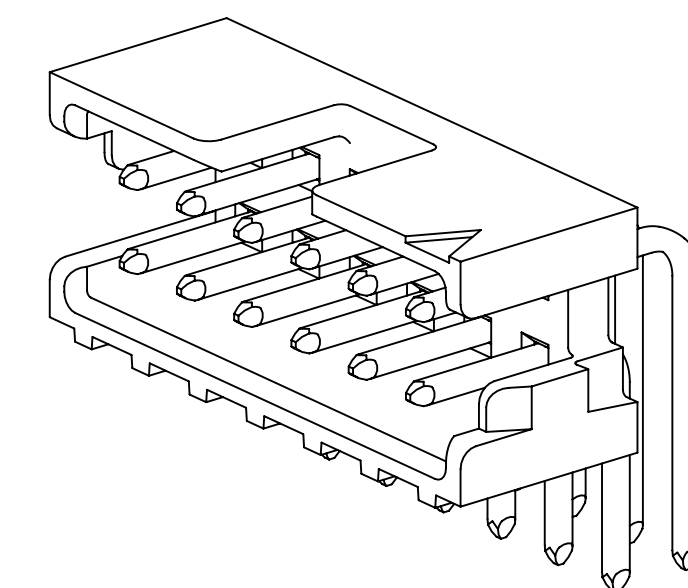
- 1 MATERIAL:  
BODY: HIGH TEMPERATURE  
GLASS FILLED LCP, BLACK  
UL94V-0  
CONTACTS: COPPER ALLOY
- 2 PLATING:  
2.03-3.81 μm [80-150 μin]  
NICKEL UNDERPLATE,  
0.38 μm [15 μin] OR  
0.76 μm [30 μin] AVG GOLD  
ON WIPING AREA,  
5.08 μm [200 μin] MIN  
MATTE TIN ON SOLDER TAILS.
- 3 STANDARD LENGTH 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.

|                                 |               |                            |   |                            |      |      |
|---------------------------------|---------------|----------------------------|---|----------------------------|------|------|
| DESIGN REFERENCE                | NEXT ASSEMBLY | REV                        | ECO   | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|                                 |               |                            |   |                            |      |      |
| DIVISION                        | DIVISION CODE | DATE                       | DATE  | DATE                       | DATE | DATE |
|                                 |               | JUL 29, 2010               |   |                            |      |      |
| DO NOT SCALE DRAWING            | SCALE 6/1     | TOLERANCES EXCEPT AS NOTED |   |                            |      |      |
| THIRD ANGLE PROJECTION          |               | TOLERANCES EXCEPT AS NOTED | TITLE<br><b>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES</b> |                            |      |      |
| INTERPRET PER ASME Y14.5 - 1994 |               | MILLIMETERS                | CAGE NUMBER<br><b>D 78-5100-2359-7</b>                                      |                            |      |      |
| MAX SURFACE ROUGHNESS           |               | INCHES                     | DRAWING NO.<br><b>78-5100-2359-7</b>  |                            |      |      |
| 125                             |               |                            | REV.<br><b>A</b>  |                            |      |      |
|                                 |               |                            | MODEL<br>DET [ ] SHT 1 OF 4   |                            |      |      |

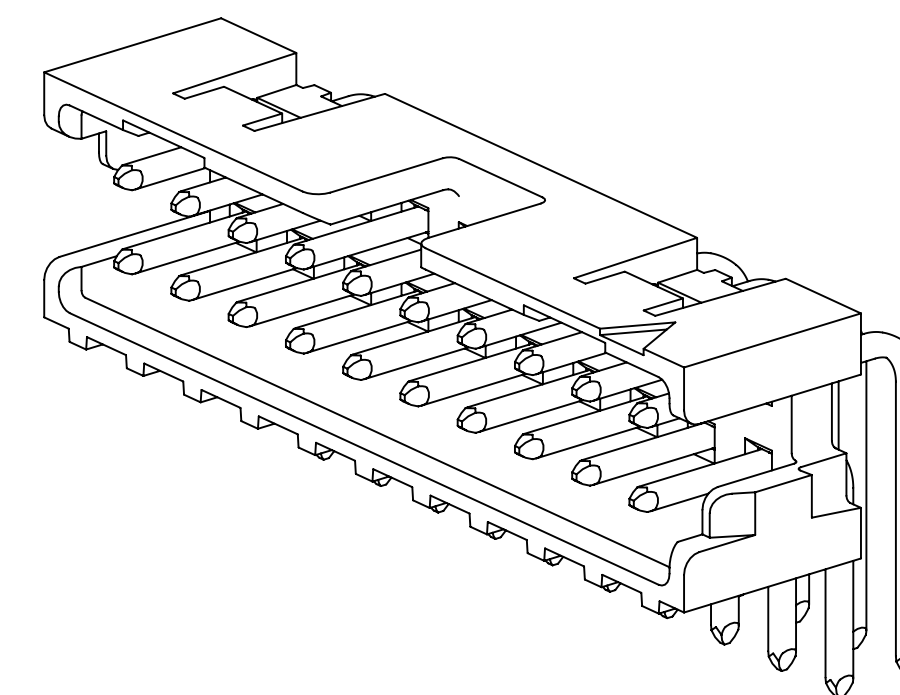
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3 and Extended Length 4



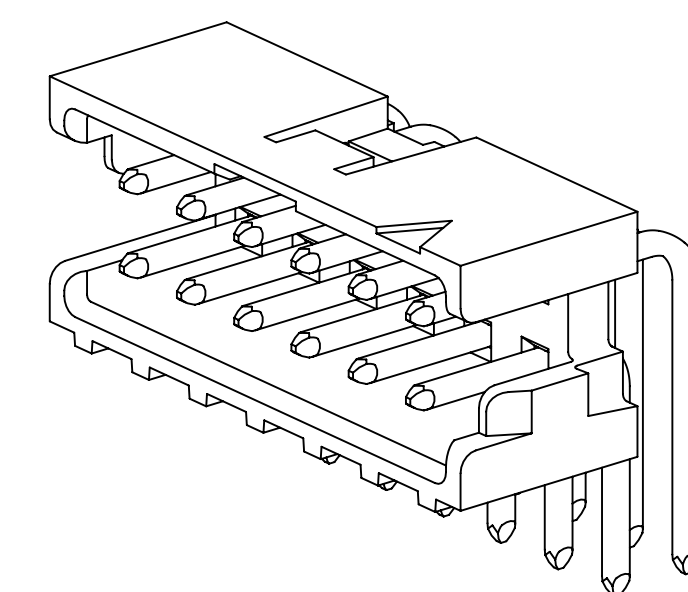
RECOMMENDED PCB HOLE PATTERN  
TOLERANCE = ±0.05 [ .002 ]



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 ]

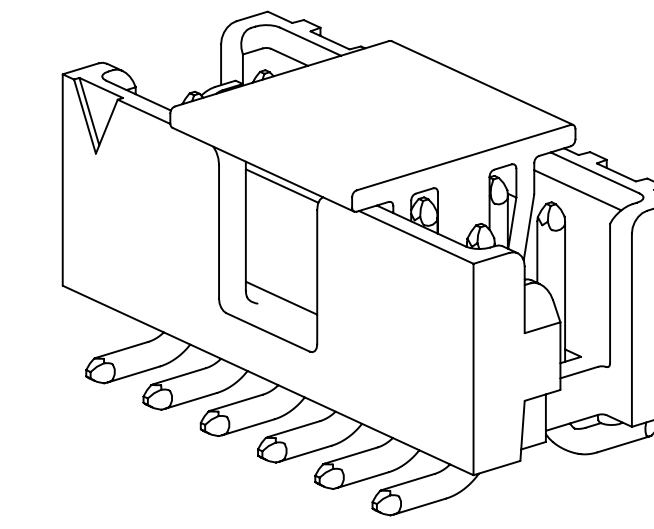
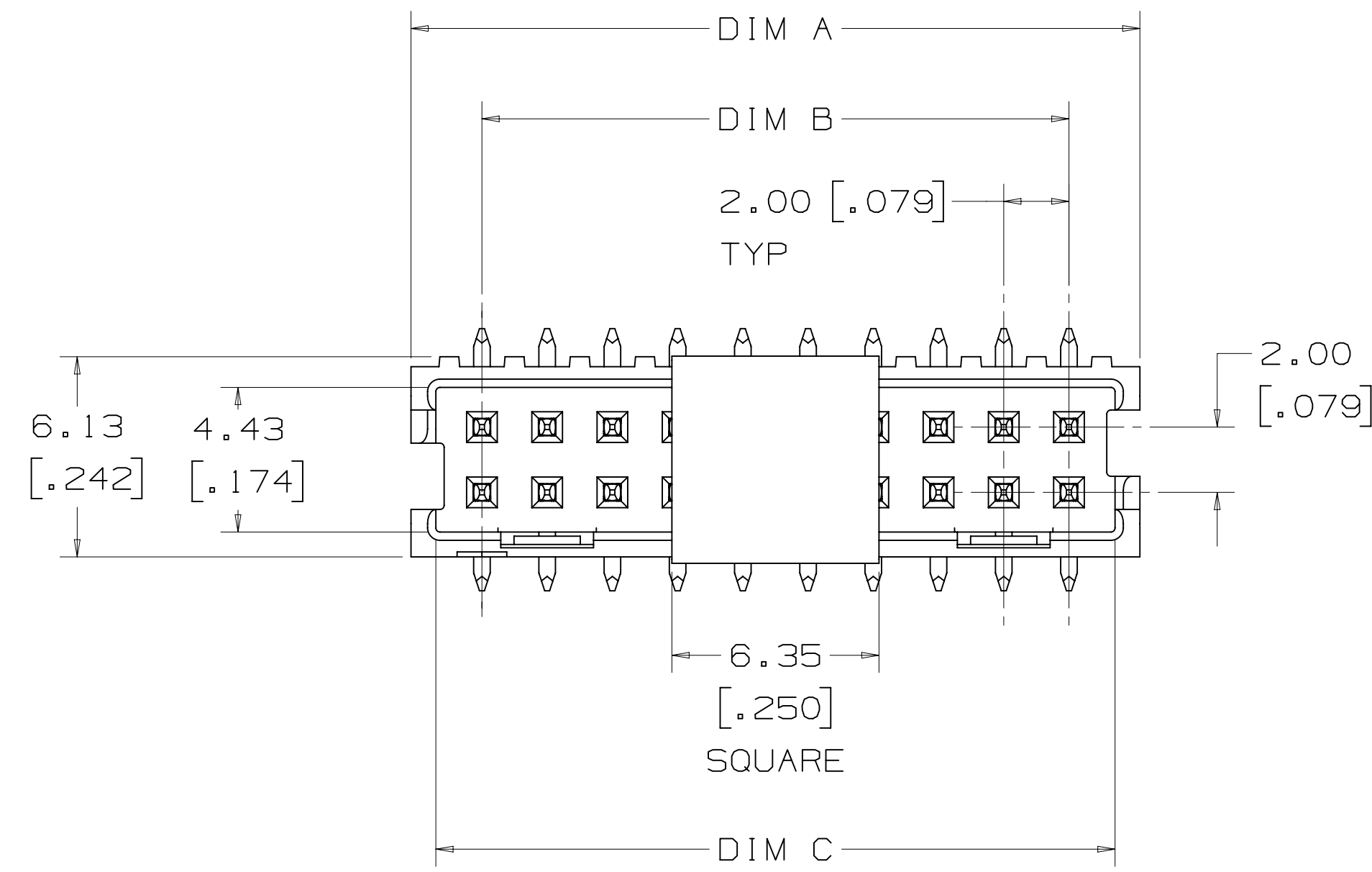
|                                 |  |  |              |   |      |      |
|---------------------------------|--|--|--------------|---|------|------|
| DESIGN REFERENCE                | NEXT ASSEMBLY  | REV  | ECO          | ISSUE DATE AND DESCRIPTION  | DRFT | CHKD |
|                                 |  |  |              | OCT 28, 2010<br>INITIAL RELEASE   | LDS  | SF   |
| DATE                            | DATE   | DATE   | DATE         | DATE  | DATE | DATE |
|                                 |  | L. SCHMIDT   | JUL 29, 2010 | MFG   |      |      |
| DIVISION                        | DIVISION CODE  | CHKD   | DATE         | APPR  | DATE |      |
|                                 |  | S FELDMAN  | AUG 09, 2010 |   |      |      |
| DO NOT SCALE DRAWING            | SCALE 4/1  | TOLERANCES EXCEPT AS NOTED                         |              |   |      |      |
| THIRD ANGLE PROJECTION          |  | INCHES<br>.00 ±<br>.000 ±<br>.0000 ±               |              | © 3M COPYRIGHT 2010<br>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<br>0 ±<br>.0 ±<br>.00 ± 0.13<br>.000 ± |              | TITLE<br>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES  |      |      |
| MAX SURFACE ROUGHNESS 125       | <input type="checkbox"/> ALL SURFACES<br><input checked="" type="checkbox"/> MARKED ONLY | CAGE NUMBER  | SIZE         | DRAWING NO.   | REV. |      |
|                                 |  | D  |              | 78-5100-2359-7  | A    |      |
|                                 |  | MODEL  |              |   |      |      |
|                                 |  |  |              |   |      |      |

78-5100-2359-7  
DRAWING NUMBER

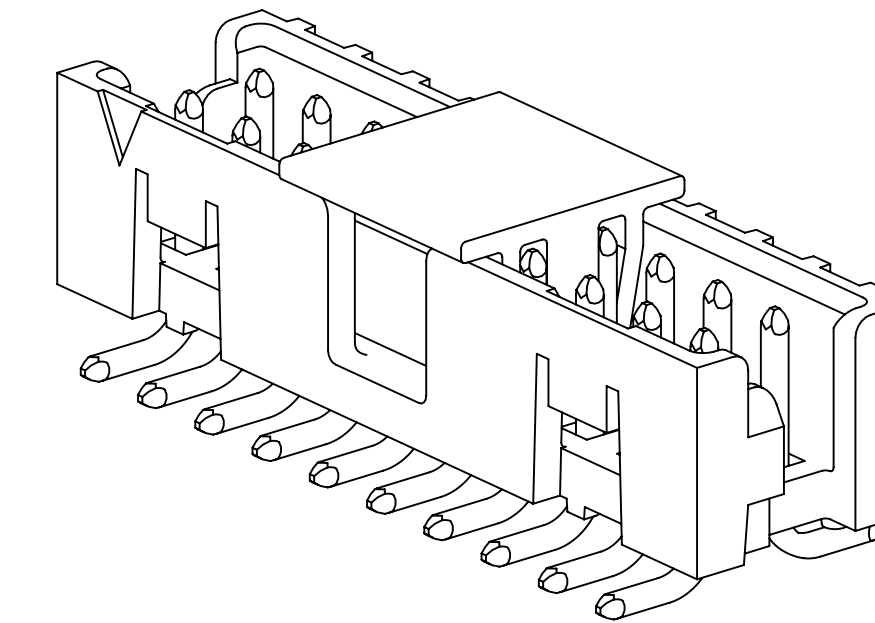
A

SHT 2 OF 4

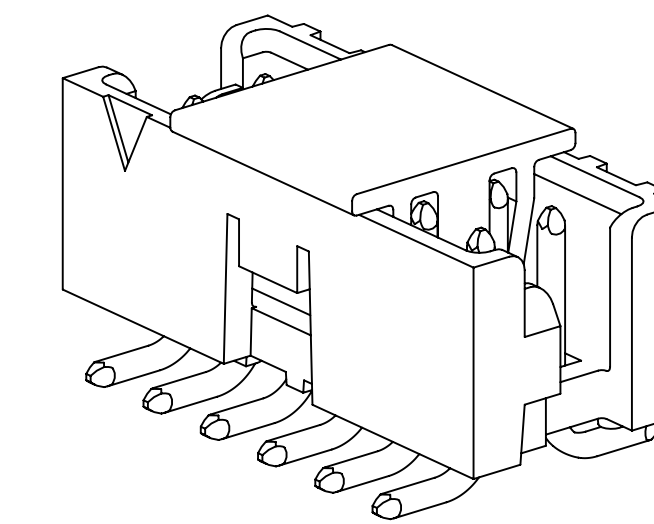
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length [3] and Extended Length [4]



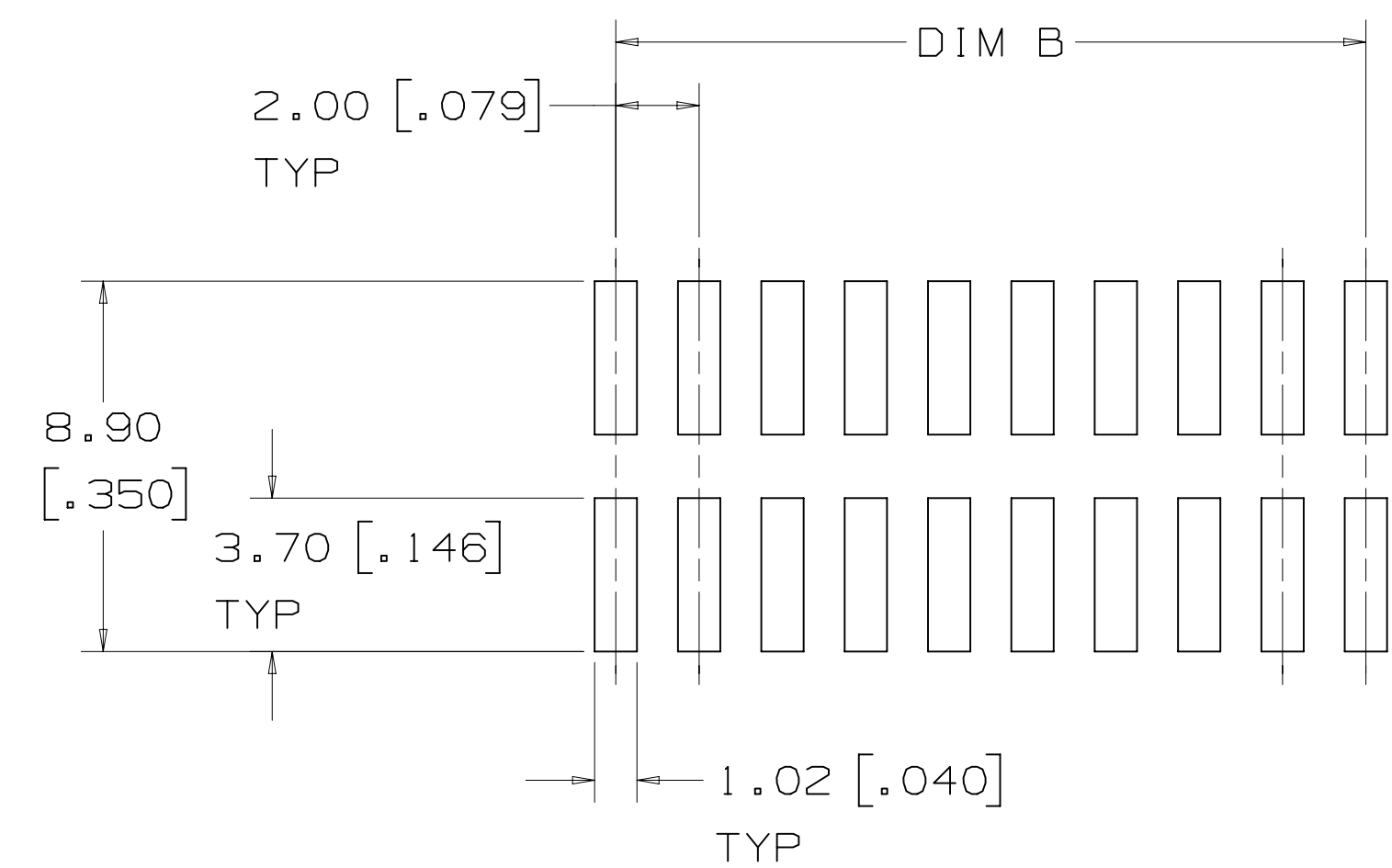
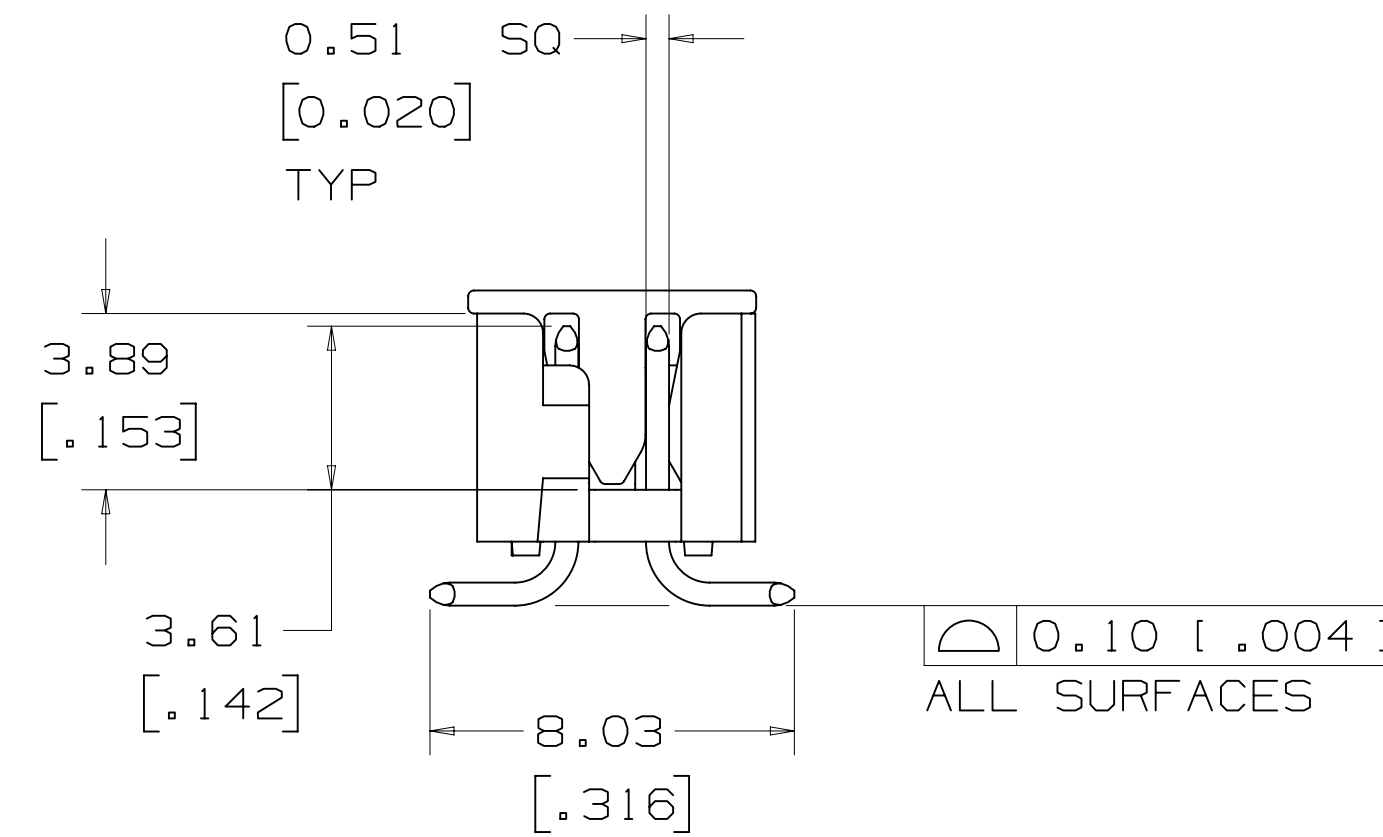
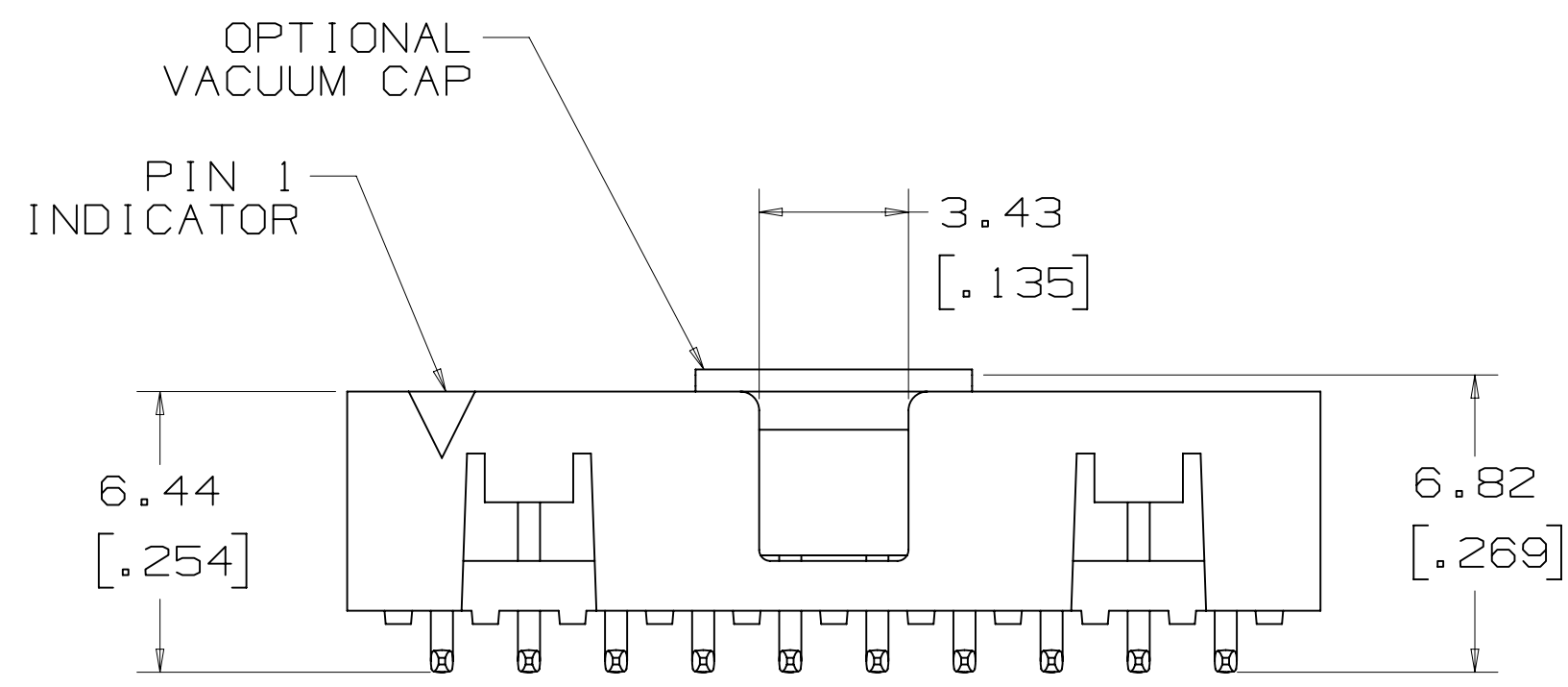
POLARIZATION SLOT SURFACE MOUNT HEADER 6-12 POSITIONS ONLY



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



SINGLE FRICTION LATCH SURFACE MOUNT HEADER 6-12 POSITIONS ONLY



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

REFERENCE TABLE ON SHEET 4 FOR AVAILABLE POSITIONS

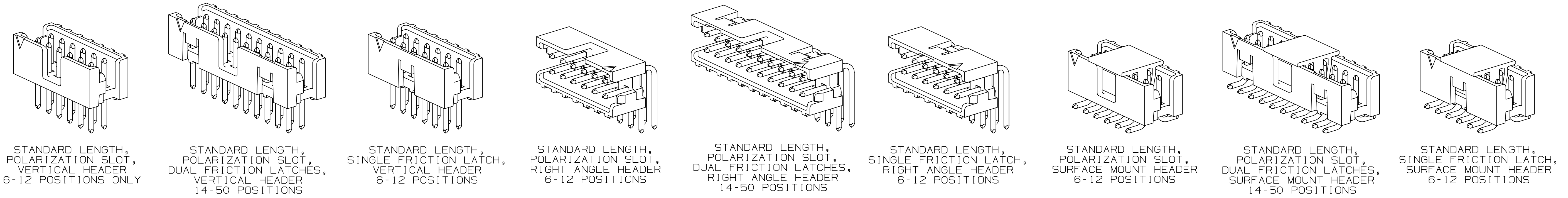
METRIC ( ENGLISH )

|                                 |               |                            |              |   |      |      |
|---------------------------------|---------------|----------------------------|--------------|---|------|------|
| DESIGN REFERENCE                | NEXT ASSEMBLY | REV                        | ECO          | ISSUE DATE AND DESCRIPTION  | DRFT | CHKD |
|                                 |               |                            |              | OCT 28, 2010 INITIAL RELEASE  | LDS  | SF   |
| DIST. PART CODES                |               | DRP                        | DATE         | MFG   |      |      |
|                                 |               | 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 |              |   |      |      |
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| INTERPRET PER ASME Y14.5 - 1994 |               | MILLIMETERS                |              | TITLE<br>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES  |      |      |
| MAX SURFACE ROUGHNESS 125       | ALL SURFACES  | .00 ± .013                 |              | CAGE NUMBER<br>D 78-5100-2359-7   |      |      |
| MARKED ONLY                     | ANGLES ±1°    |                            |              | DRAWING NO.<br>78-5100-2359-7   |      |      |
|                                 |               |                            |              | REV. A  |      |      |
|                                 |               |                            |              | DET. [ ] YES [X] NO [ ] SHT 3 OF 4  |      |      |

DRAWING NUMBER 78-5100-2359-7

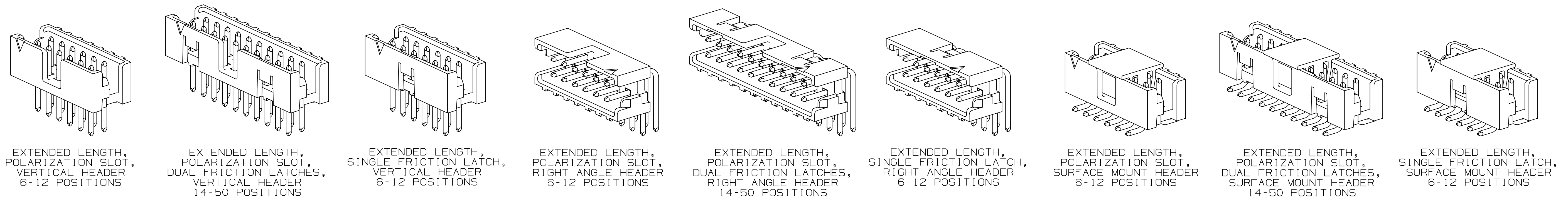
3M™ Shrouded Board Mount Header 2 mm X 2 mm Pitch 159 Series, Standard Length 3

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]

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)

| 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   |      |      |
| DISTRICT CODES            |                                 | DRP                        | DATE         | MFG   | DATE |      |
|                           |                                 | L. SCHMIDT                 | JUL 29, 2010 |   |      |      |
| DIVISION                  | DIVISION CODE                   | CHKD                       | DATE         | APPV  | DATE |      |
|                           |                                 | S FELDMAN                  | AUG 09, 2010 |   |      |      |
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| THIRD ANGLE PROJECTION    | INTERPRET PER ASME Y14.5 - 1994 | MILLIMETERS                |              | TITLE<br>3M SHROUDED BOARD MOUNT HEADER 2 MM X 2 MM PITCH 159 SERIES  |      |      |
| MAX SURFACE ROUGHNESS 125 | ALL SURFACES MARKED ONLY        | INCHES                     |              | CAGE NUMBER<br>D 78-5100-2359-7   |      |      |
|                           |                                 | ANGLES ±1°                 |              | DRAWING NO.<br>78-5100-2359-7   |      |      |
|                           |                                 |                            |              | REV. A  |      |      |
|                           |                                 |                            |              | 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!

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- 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)

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(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/>

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