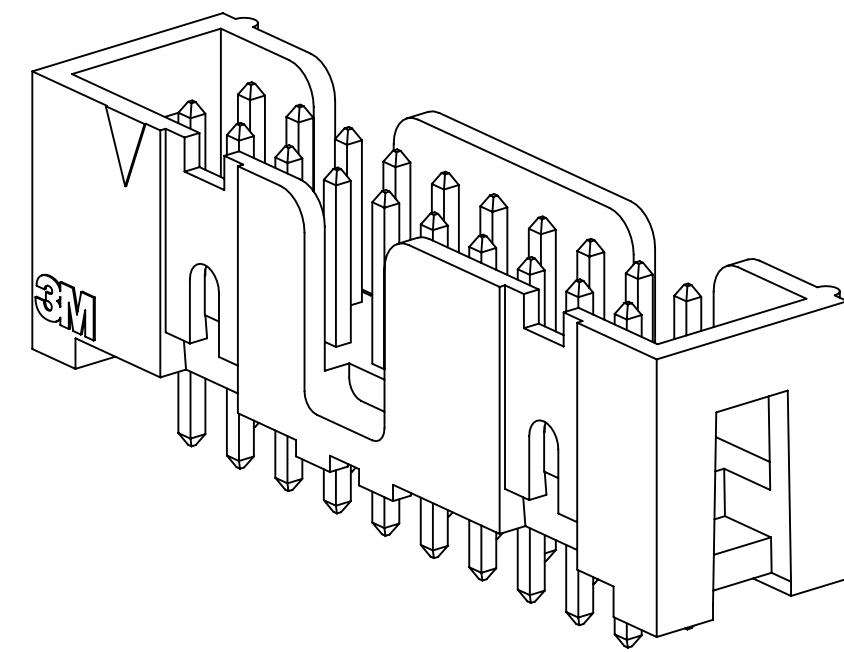
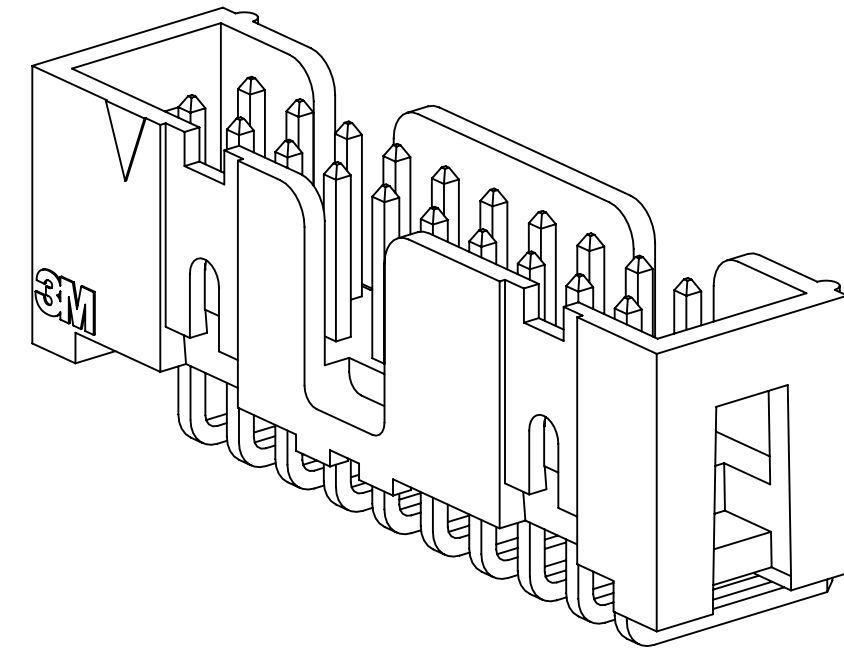


3M™ FOUR-WALL HEADER, 2500 SERIES

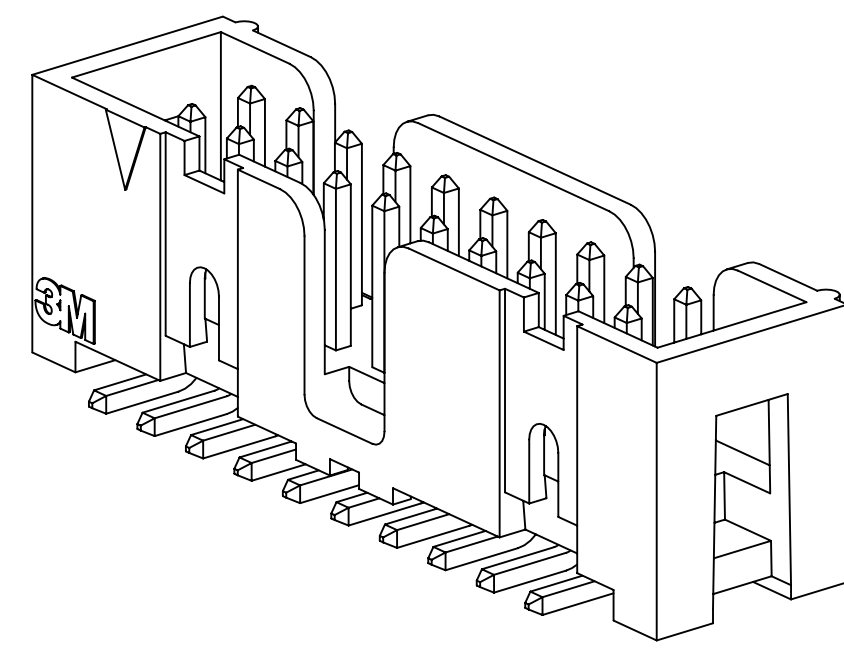
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



25XX-60XX
STRAIGHT VERSION



25XX-50XX
RIGHT ANGLE VERSION



25XX-6VOC
SURFACE MOUNT VERSION

- * LOW PROFILE, SPACE SAVING DESIGN.
- * CENTER SLOT POLARIZATION PREVENTS MIS-INSERTIONS AND REDUCES INSERTION TIME.
- * DUAL SLOT POLARIZATION MEANS BROADER COMPATIBILITY WITH COMPETITIVE POLARIZATION DESIGNS (NOT AVAILABLE ON 6, 8 OR 10 POSITIONS).
- * OPTIONAL RETAINER CLIP FOR LOCKING SOCKETS IN PLACE AND INCREASING CONNECTION RELIABILITY IN VIBRATION-PRONE ENVIRONMENTS.
- * HIGH TEMPERATURE INSULATOR SUITABLE FOR "NO LEAD" SOLDERING OPERATIONS.
- * THROUGH HOLE VERSION SUITABLE FOR REFLOW SOLDERING USING "PASTE IN HOLE" TECHNIQUES.
- * EXPOSED SOLDER TAILS (ON RIGHT ANGLE VERSION) PROVIDE EASE OF CLEANING AND REDUCED REPAIR COST.
- * STRAIGHT SURFACE MOUNT VERSION AVAILABLE.

2 PHYSICAL :

INSULATOR:
 MATERIAL: GLASS FILLED POLYESTER (PCT)
 FLAMMABILITY: UL94V-0
 COLOR: BLACK
 CONTACT:
 MATERIAL: COPPER ALLOY
 PLATING:
 UNDER PLATING: 100μ" [2.54μm] NICKEL-OVERALL
 WIPING AREA: AVG. GOLD (SEE ORDERING INFORMATION)
 SOLDER TAILS: 200μ" [5.08μm] TIN LEAD OR MATTE TIN (SEE ORDERING INFORMATION)
 MARKINGS: 3M LOGO, PART IDENTIFICATION NUMBER AND ORIENTATION TRIANGLE

2 ELECTRICAL :

CURRENT RATING: 5.00A, 1 CONTACT POWERED
 3.00A, 6 CONTACTS POWERED
 1.75A, ALL CONTACTS POWERED
 RATING CONDITIONS: EIA-364-070 METHOD 2, 30°C MAXIMUM TEMPERATURE RISE, 20% DERATED. REFERENCE APPROPRIATE 3M PRODUCT SPECIFICATION FOR DETAILED CURRENT DERATING CURVES.
 INSULATION RESISTANCE: >1 X 10⁹Ω AT 500 V_{DC}
 WITHSTANDING VOLTAGE: 1,000V_{RMS} AT SEA LEVEL

2 ENVIRONMENTAL :

TEMPERATURE RATING: -55°C TO 105°C
 PROCESS RATING: 260°C, PER J-STD-020C, SINGLE PASS
 MOISTURE SENSITIVITY LEVEL: 1 (PER J-STD-020C)

- NOTES
1. REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
 2. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 3. NOTCHES A & C WILL ACCOMODATE 3M POLARIZING KEY: N3518.
 4. CONTACT TAILS .0245 [.622] WIRE WITH .0075 [.191] CORNER RADIUS AND .028 [.072] DIAGONAL.
 5. SOLDER STANDOFFS FACILITATE .01 [.3] CLEARANCE ABOVE BOARD FOR REFLOW SOLDERING.

3M ELECTRONIC MATERIALS SOLUTIONS DIVISION
 INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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 INFORMATION CALL 800-225-5373

CAUS
 UL FILE NO: E68080

DIMENSIONS: INCHES [MM]
 [MM] IS REF. ONLY

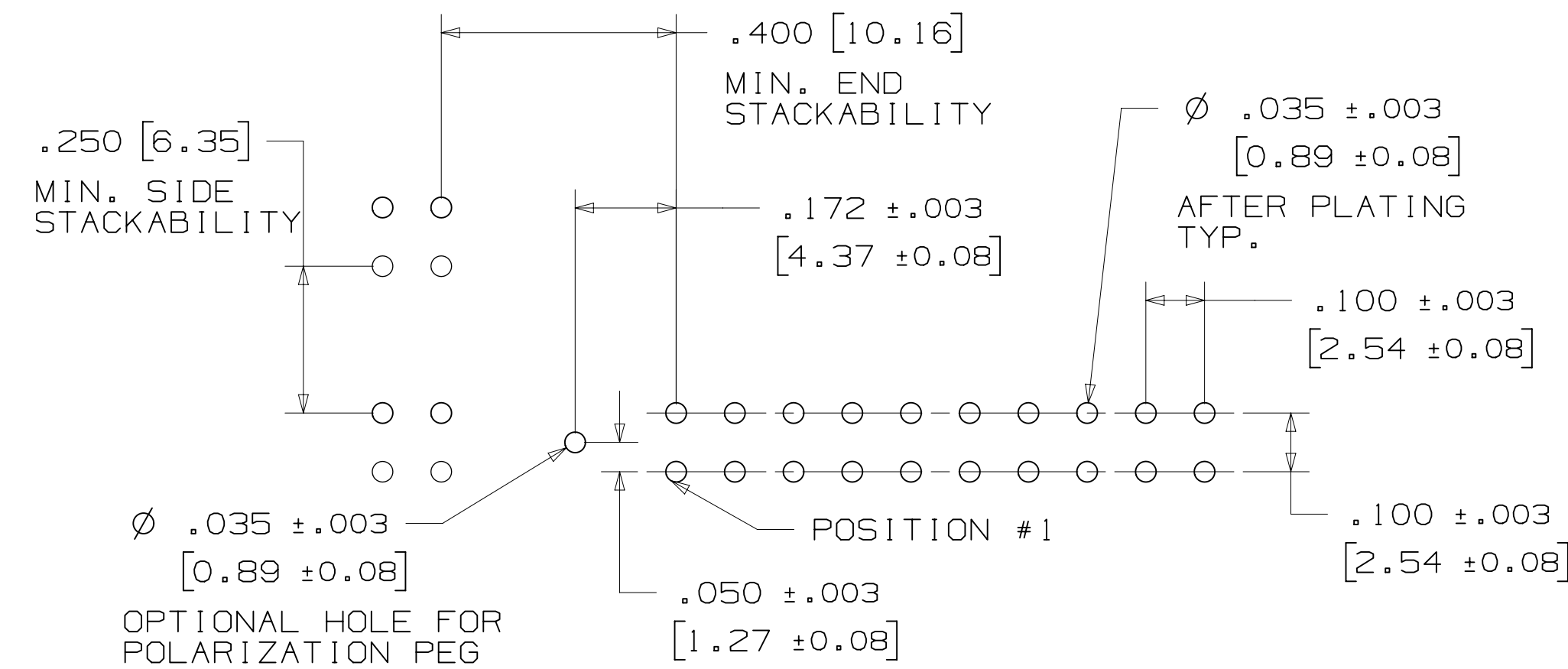
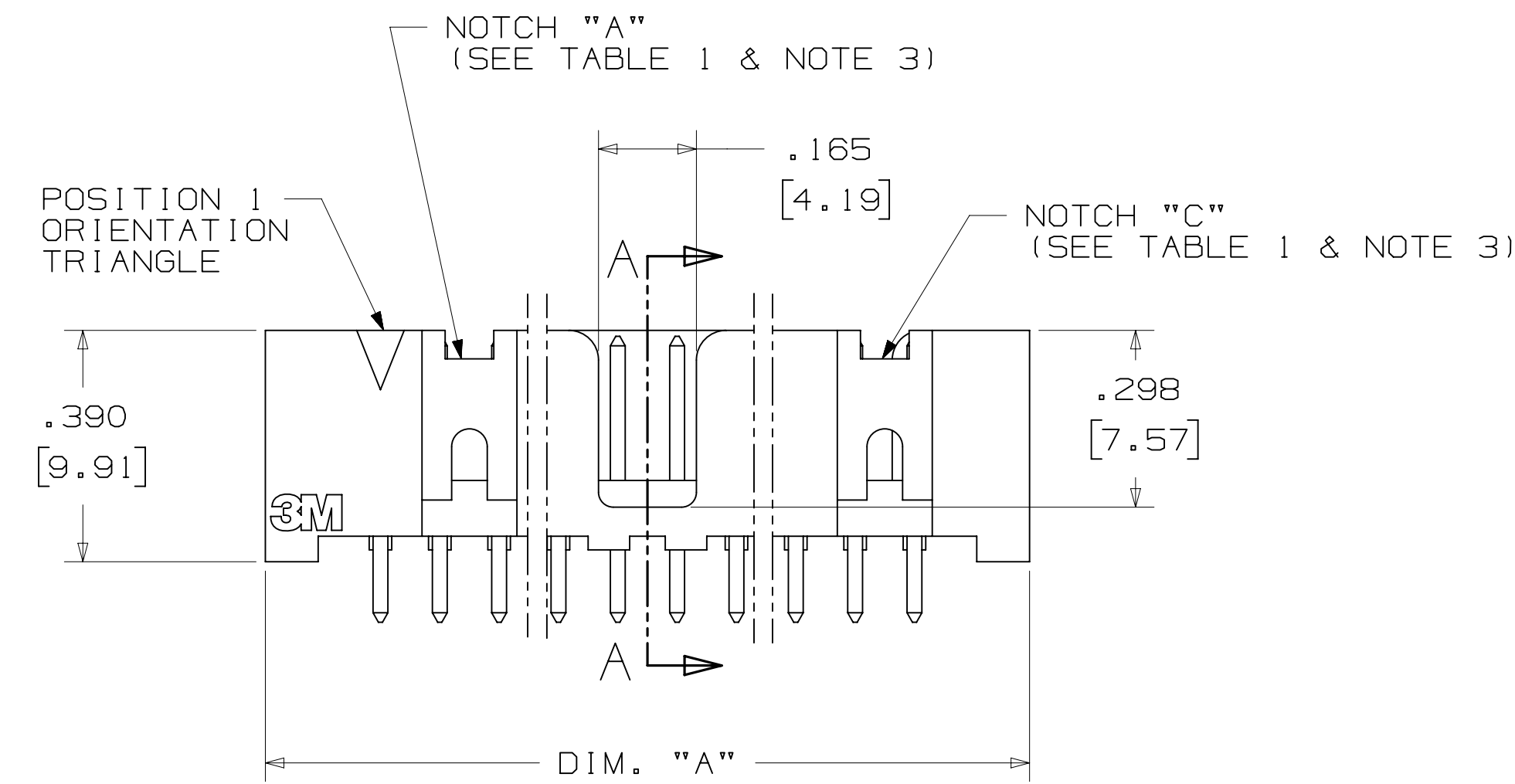
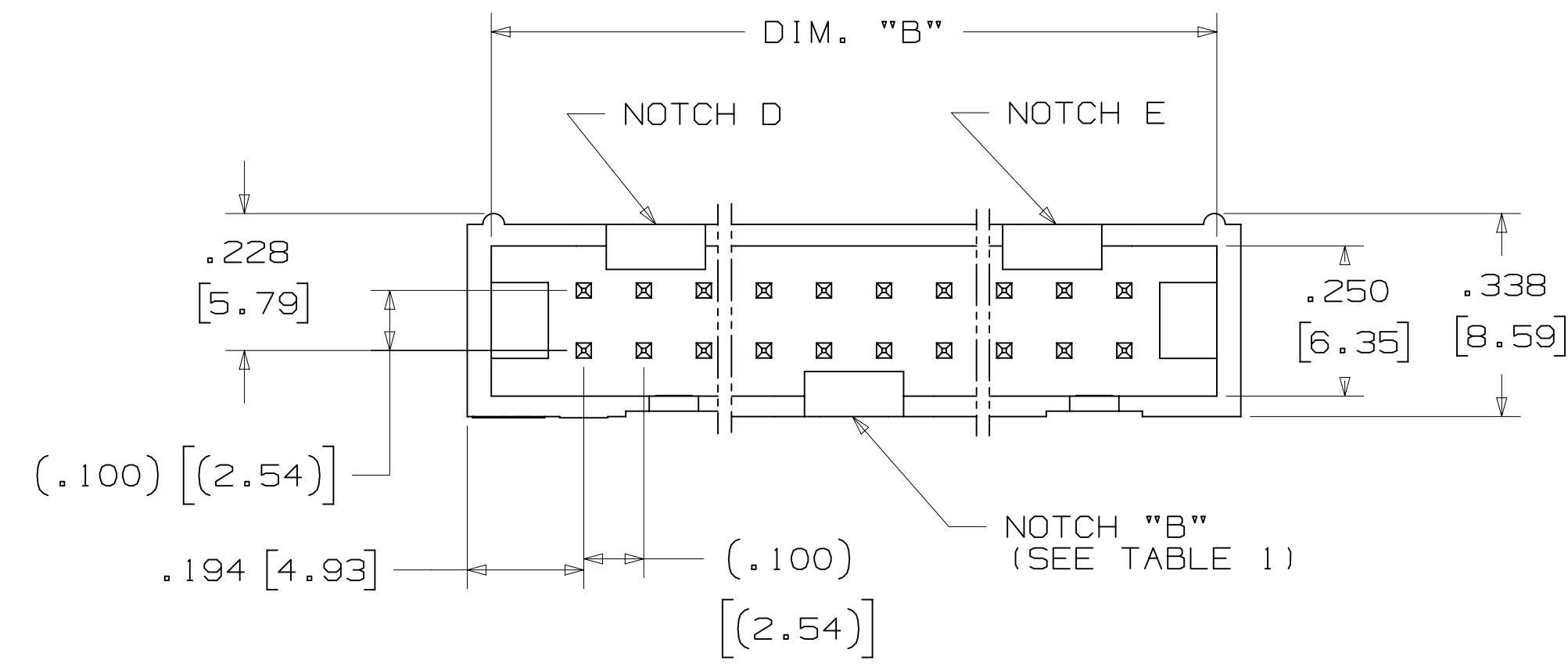
| DESIGN REFERENCE | NEXT ASSEMBLY | REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|----------------------|------------------------|----------------------------|------|--|------|--------------|
| | | | | AUG 02, 2016 | JNC | SC |
| | | | | REVISE DIM ON SHT2 & CLIP CHART ON SHT5 | | |
| | | | | AUG 11, 2014 | JNC | RS |
| | | | | REVISED AND REDRAWN | | |
| DRW CODES | | DRFT | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| | | | | AUG 11, 2014 | | |
| | | CHKD | APPR | DATE | DATE | DATE |
| | | | | R. SCHERER | | SEP 05, 2014 |
| DIVISION | Interconnect Solutions | DIVISION CODE | EMSD | © 3M COPYRIGHT 2016 | | |
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| | | INCHES | | TITLE | | |
| | | .00 ± .01 | | HEADER, 4-WALL, | | |
| | | .000 ± .005 | | LO-PRO, .100 X .100, | | |
| | | .0000 ± | | SMT, STRAIGHT & RA | | |
| | | MILLIMETERS | | CAGE NUMBER | | |
| | | 0 ± | | D78-5100-0770-7 | | |
| | | .0 ± .3 | | REV. | | |
| | | .00 ± .13 | | N | | |
| | | .000 ± | | MODEL | | |
| | | ANGLES | | 2500 SERIES | | |
| | | | | SHT 1 OF 5 | | |

N REVISION
 78-5100-0770-7
 DRAWING NUMBER
 B
 A
 11:10 AM UTC-05:00
 Imaged: N.1 B/5/2016

3M™ FOUR-WALL HEADER, 2500 SERIES
 .100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



| TABLE 1 | | | | |
|----------|---------------|---------------|--------------------|----------|
| PIN QTY. | DIM. "A" | DIM. "B" | POLARIZING NOTCHES | PIN QTY. |
| 06 | .588 [14.94] | .508 [12.90] | B | 06 |
| 08 | .688 [17.48] | .608 [15.44] | B | 08 |
| 10 | .788 [20.02] | .708 [17.98] | BC | 10 |
| 14 | .988 [25.10] | .908 [23.06] | BCDE | 14 |
| 16 | 1.088 [27.64] | 1.008 [25.60] | ABCDE | 16 |
| 20 | 1.288 [32.72] | 1.208 [30.68] | ABCDE | 20 |
| 24 | 1.488 [37.80] | 1.408 [35.76] | ABCDE | 24 |
| 26 | 1.588 [40.34] | 1.508 [38.30] | ABCDE | 26 |
| 30 | 1.788 [45.42] | 1.708 [43.38] | ABCDE | 30 |
| 34 | 1.988 [50.50] | 1.908 [48.46] | ABCDE | 34 |
| 36 | 2.088 [53.04] | 2.008 [51.00] | ABCDE | 36 |
| 40 | 2.288 [58.12] | 2.208 [56.08] | ABCDE | 40 |
| 50 | 2.788 [70.82] | 2.708 [68.78] | ABCDE | 50 |
| 60 | 3.288 [83.52] | 3.208 [81.48] | ABCDE | 60 |
| 64 | 3.488 [88.60] | 3.408 [86.56] | ABCDE | 64 |



ORDERING INFORMATION
 STRAIGHT VERSION

X25XX-60XX-XX

N = HIGH TEMP BLACK (PCT)
 (RB, UB OR UG PLATING REQ'D)
 BLANK = (UB OR UG PLATING)

PIN QUANTITY:
 (SEE TABLE 1)

SOLDER TAIL:
 02 = FOR .062 [1.57] THICK BOARD
 03 = FOR .094 TO .125 [2.39 TO 3.18]
 THICK BOARD

PLATING:
 RB = 30µ" [0.76µm] AVG. GOLD
 200µ" [5.08µm] MATTE TIN (RIA, E1 & C1 APPLY)
 UG = 15µ" [0.38µm] AVG. GOLD
 200µ" [5.08µm] 60:40 TIN-LEAD SOLDER TAILS
 (RIA E3 & C2 APPLY)
 UB = 30µ" [0.76µm] AVG. GOLD
 200µ" [5.08µm] 60:40 TIN LEAD SOLDER TAILS
 (RIA E3 & C2 APPLY)

RECOMMENDED HOLE PATTERN
 SHOWN FROM COMPONENT SIDE

| | | | | | | |
|---------------------------------|---------------|----------------------------|-----|----------------------------|------|------|
| DESIGN REFERENCE | NEXT ASSEMBLY | REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| | | | | | | |
| DIVISION | | DIVISION CODE | | DATE | | |
| Interconnect Solutions | | EMSD | | AUG 11, 2014 | | |
| DO NOT SCALE DRAWING | SCALE 4-1 | TOLERANCES EXCEPT AS NOTED | | DATE | | |
| THIRD ANGLE PROJECTION | | INCHES | | DATE | | |
| INTERPRET PER ASME Y14.5 - 2009 | | MILLIMETERS | | DATE | | |
| MAX SURFACE ROUGHNESS | | ANGLES | | DATE | | |
| SURFACES | | | | DATE | | |
| MARKED ONLY | | | | DATE | | |
| MODEL | | CAGE NUMBER | | DRAWING NO. | | REV. |
| 2500 SERIES | | D 78-5100-0770-7 | | N | | N |
| | | SHEET | | SHT 2 OF 5 | | |

78-5100-0770-7
 N
 DRAWING NUMBER
 REVISION
 11:10 AM UTC-05:00
 Imaged: N.1 B/5/2016

3M™ FOUR-WALL HEADER, 2500 SERIES

.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



SECTION C - C

| TABLE 1 | | | | | |
|----------|---------------|---------------|--------------------|------------------------|----------|
| PIN QTY. | DIM. "A" | DIM. "B" | POLARIZING NOTCHES | TAPE AND REEL PKG CODE | PIN QTY. |
| 06 | .588 [14.94] | .508 [12.90] | B | WD (44 MM) | 06 |
| 08 | .688 [17.48] | .608 [15.44] | B | WD (44 MM) | 08 |
| 10 | .788 [20.02] | .708 [17.98] | BC | WD (44 MM) | 10 |
| 14 | .988 [25.10] | .908 [23.06] | BCDE | WD (44 MM) | 14 |
| 16 | 1.088 [27.64] | 1.008 [25.60] | ABCDE | WD (44 MM) | 16 |
| 20 | 1.288 [32.72] | 1.208 [30.68] | ABCDE | WE (56 MM) | 20 |
| 24 | 1.488 [37.80] | 1.408 [35.76] | ABCDE | WE (56 MM) | 24 |
| 26 | 1.588 [40.34] | 1.508 [38.30] | ABCDE | WE (56 MM) | 26 |
| 30 | 1.788 [45.42] | 1.708 [43.38] | ABCDE | WF (72 MM) | 30 |
| 34 | 1.988 [50.50] | 1.908 [48.46] | ABCDE | WF (72 MM) | 34 |
| 36 | 2.088 [53.04] | 2.008 [51.00] | ABCDE | WG (88 MM) | 36 |
| 40 | 2.288 [58.12] | 2.208 [56.08] | ABCDE | WG (88 MM) | 40 |
| 50 | 2.788 [70.82] | 2.708 [68.78] | ABCDE | WG (88 MM) | 50 |
| 60 | 3.288 [83.52] | 3.208 [81.48] | ABCDE | WH (120 MM) | 60 |
| 64 | 3.488 [88.60] | 3.408 [86.56] | ABCDE | WH (120 MM) | 64 |



RECOMMENDED PAD LAYOUT

ORDERING INFORMATION SURFACE MOUNT VERSION

N25XX-6VOC-XX-XX

N = HIGH TEMP BLACK (PCT) (RB PLATING REQ'D)

PIN QUANTITY: (SEE TABLE 1)

PACKAGING OPTIONS: WX = TAPE & REEL PACKAGING (SEE TABLE 1)

PLATING: RB = 30μ" [0.76μm] AVG. GOLD
200μ" [5.08μm] MATTE TIN (RIA, E1 & C1 APPLY)

| | | | | | | |
|----------------------------------|---------------|------------------------|--------------|------------------------------|------|------|
| DESIGN REFERENCE | NEXT ASSEMBLY | REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| 3M Center St. Paul, MN 55144 | EMSD | CASTIGLIONE | AUG 11, 2014 | MFG DATE | | |
| DIVISION: Interconnect Solutions | | SCALE: 4/1 | | TOLERANCES EXCEPT AS NOTED | | |
| DO NOT SCALE DRAWING | | THIRD ANGLE PROJECTION | | MILLIMETERS | | |
| INTERPRET PER ASME Y14.5 - 2009 | | MAX SURFACE ROUGHNESS | | REVISIONS | | |
| MARKED ONLY | | ANGLES | | CAGE NUMBER: D78-5100-0770-7 | | |
| | | MODEL: 2500 SERIES | | REV. N | | |

| | | | | |
|---|-------|--------------|-----|----|
| N | 68908 | AUG 02, 2016 | JNC | SC |
| M | 56068 | AUG 11, 2014 | JNC | RS |

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HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA

DET: [] SHT 4 OF 5

DRAWING NUMBER: 78-5100-0770-7

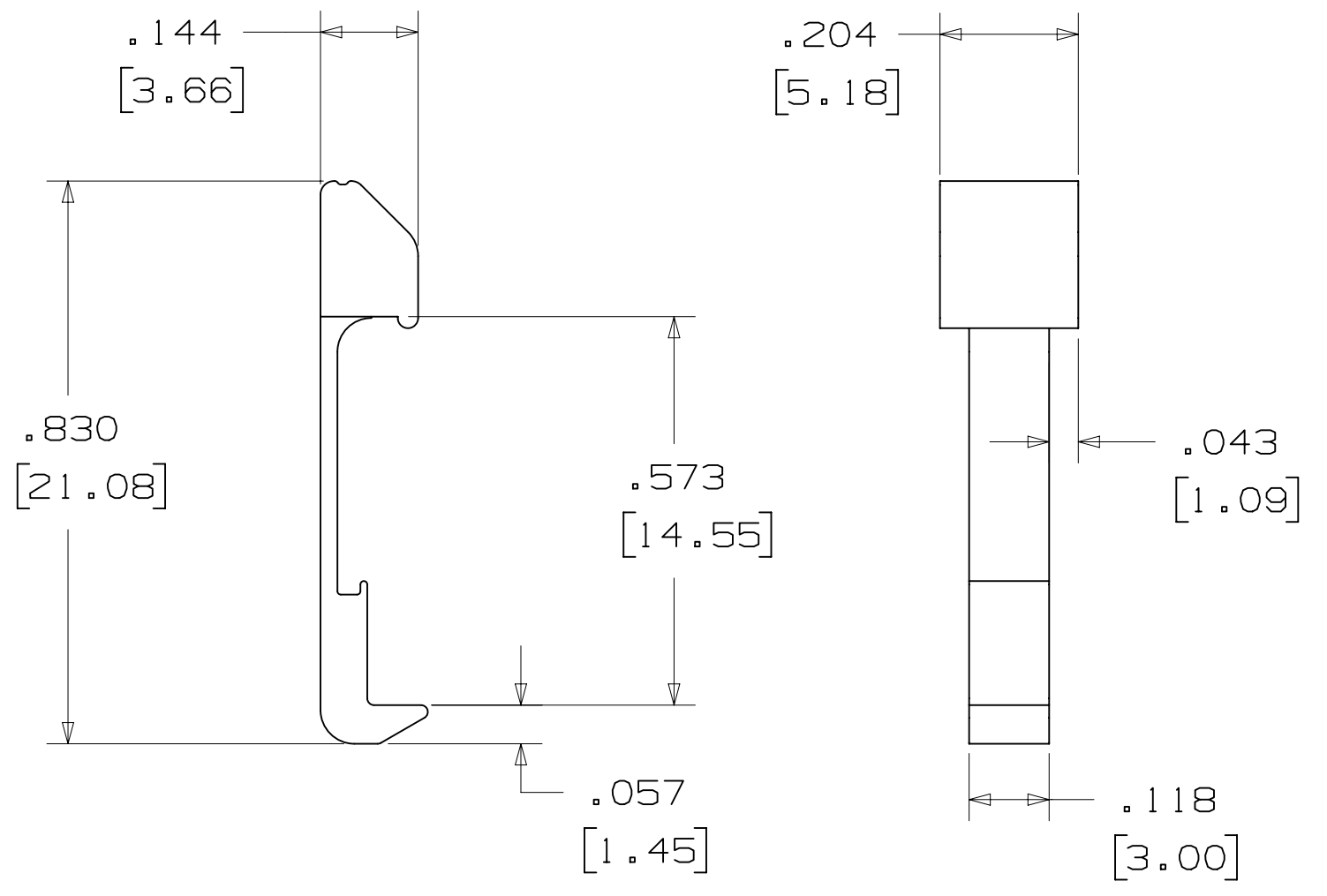
3M™ FOUR-WALL HEADER, 2500 SERIES
 .100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE

PART CUSTOMIZATION

THIS SPEC SHEET DETAILS OUR STANDARD OFFERING.
 3M HAS SEVERAL CAPABILITIES THAT CAN PROVIDE A PART TAILORED TO YOUR SPECIFIC NEEDS. ASK YOUR 3M SALES REPRESENTATIVE OR CUSTOMER SERVICE FOR MORE DETAILS.

- * SELECTIVE PIN REMOVAL (FOR BOARD ASSEMBLY POLARIZATION).
- * DIFFERENT PIN LENGTHS.

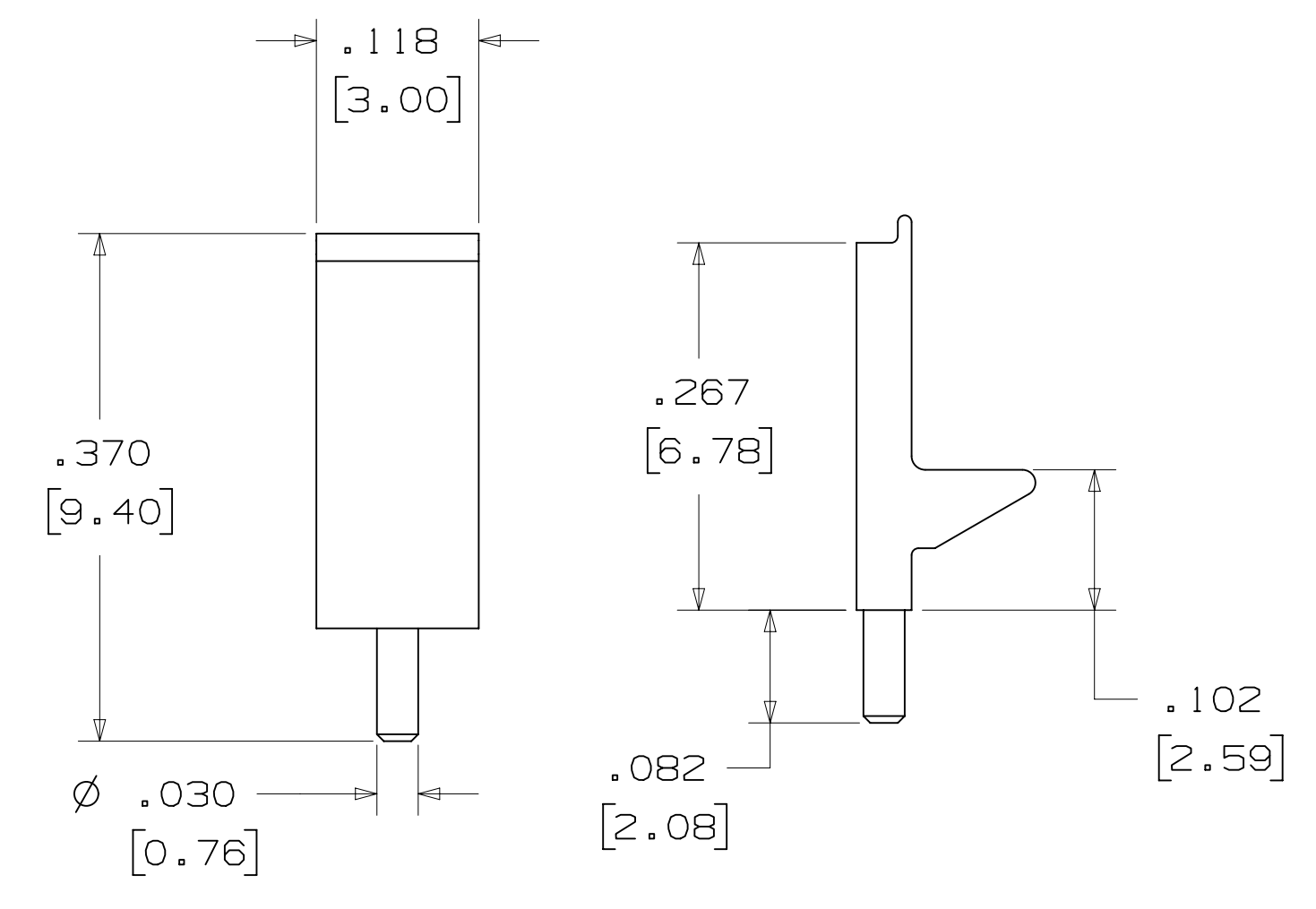
LOW PROFILE LATCH



| PART NO. | MATERIAL | COLOR |
|----------|----------|-------|
| 3505-33B | NYLON | BLACK |

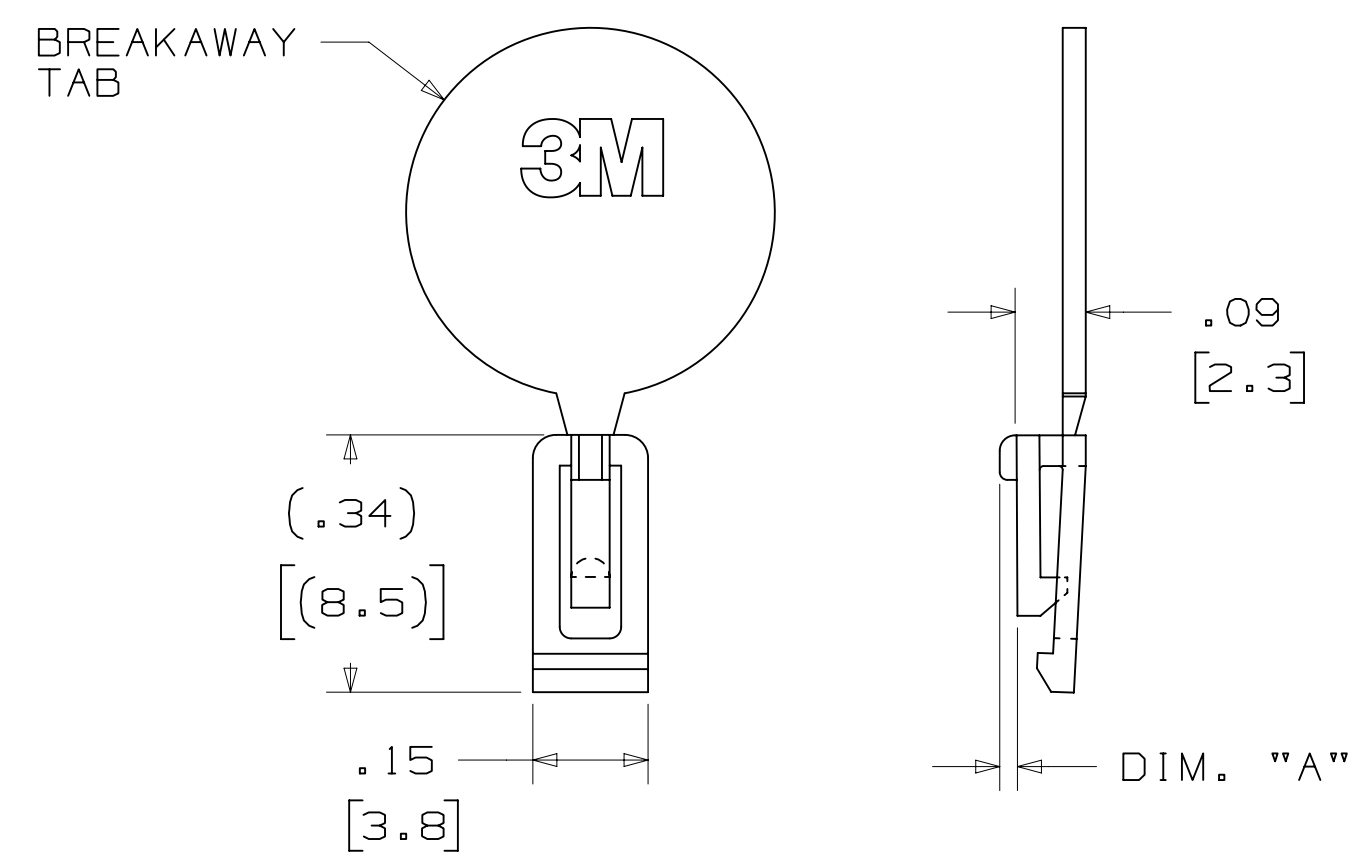
NOTE:
 LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
 ATTACH LATCHES AFTER SOLDERING.

POLARIZING POST



| PART NO. | MATERIAL | COLOR |
|----------|----------|-------|
| 3201-3 | PCT | BLACK |

POLARIZING KEY



| 3M PART NO. | MATERIAL | COLOR | DIM. "A" |
|-------------|----------|-------|----------|
| N3518 | LCP | BLACK | .02 |

NOTE:
 #2216 B/A SCOTCHWELD CAN BE USED TO ADHERE KEYS.

SHORT/LONG SOCKET RETAINER CLIP



| PIN QTY. | DIM. "A" |
|----------|-------------|
| 06 | N/A |
| 08 | N/A |
| 10 | .81 [20.6] |
| 14 | 1.02 [25.9] |
| 16 | 1.12 [28.4] |
| 20 | 1.32 [33.5] |
| 24 | 1.52 [38.7] |
| 26 | 1.63 [41.4] |
| 30 | 1.83 [46.4] |
| 34 | 2.03 [51.6] |
| 36 | N/A |
| 40 | 2.33 [59.2] |
| 50 | 2.83 [71.9] |
| 60 | 3.33 [84.6] |
| 64 | 3.53 [89.7] |

NOTE:
 STAINLESS STEEL WITH GRAY POLYURETHANE COATING.

3505-8XXX

CLIP HEIGHT CODE _____ PIN COUNT (SEE TABLE)
 0 = .31 [7.9] FOR SOCKETS WITHOUT STRAIN RELIEF
 1 = .53 [13.5] FOR SOCKETS WITH STRAIN RELIEF

NOTE:
 1) THE FOLLOWING RETAINER CLIPS HAVE BEEN DISCONTINUED:
 3505-8064
 3505-8124
 3505-8150

| | | | | | | |
|--|---------------------------------|--------------------------------|-----|---|------|------|
| DESIGN REFERENCE | NEXT ASSEMBLY | REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
| | | | | AUG 11, 2014 | | |
| DIVISION Interconnect Solutions | | DIVISION CODE EMSD | | DATE AUG 11, 2014 | | |
| DO NOT SCALE DRAWING | SCALE 4/1 | TOLERANCES EXCEPT AS NOTED | | INCHES .00 ± .01 .000 ± .005 .0000 ± | | |
| THIRD ANGLE PROJECTION | INTERPRET PER ASME Y14.5 - 2009 | MILLIMETERS | | .0 ± .3 .00 ± .13 .000 ± | | |
| MAX SURFACE ROUGHNESS | DTX SURFACES | MARKED ONLY | | ANGLE ± | | |
| TITLE HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA | | CAGE NUMBER D78-5100-0770-7 | | REV. N | | |
| MODEL 2500 SERIES | | DET I1S1 | | YES X NO SHT 5 OF 5 | | |