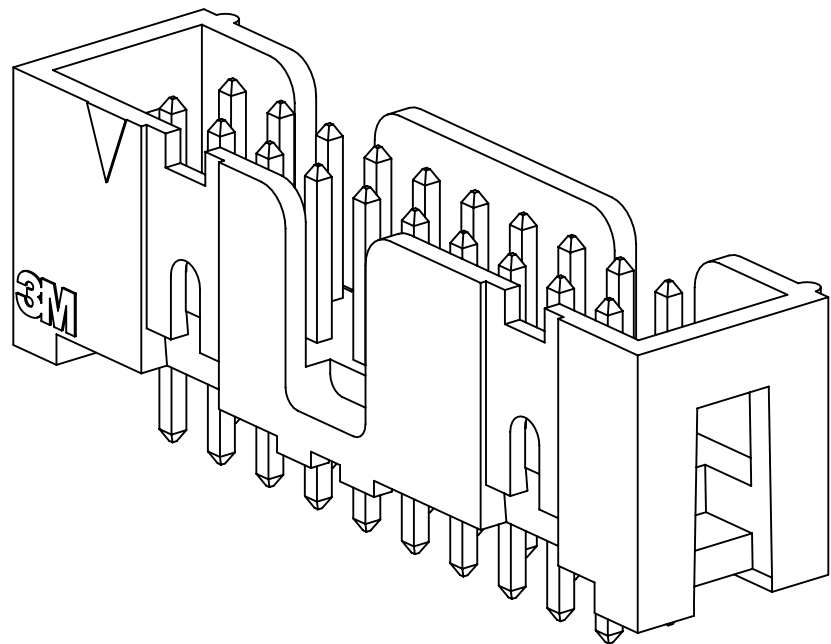
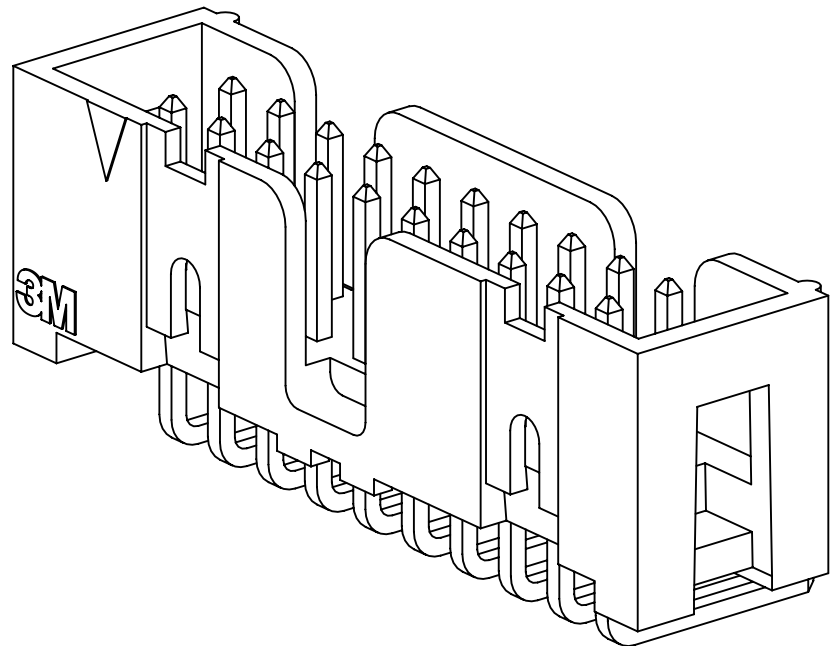


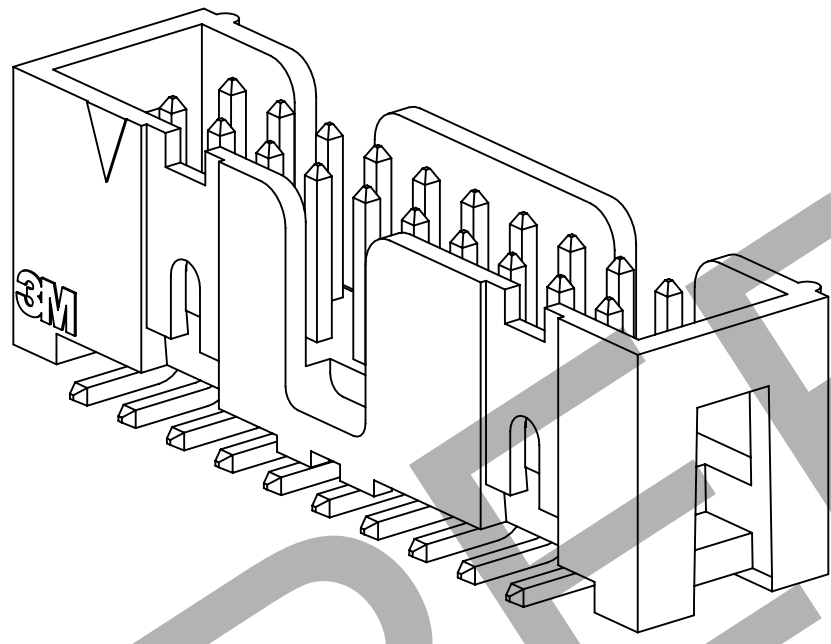
3M™ FOUR-WALL HEADER, D2500 SERIES
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



D25XX-6002
STRAIGHT VERSION



D25XX-5002
RIGHT ANGLE VERSION



D25XX-6V0C
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 : HIGH TEMP GLASS FILLED POLYESTER (PCT)
FLAMMABILITY : UL94V-0
COLOR : BLACK
CONTACT :
MATERIAL : BRASS
PLATING :
UNDER PLATING : 50-100µ" [1.27-2.54µm] NICKEL-OVERALL
WIPING AREA : 10µ" [25µm] GOLD
SOLDER TAILS : 40-120µ" [1-3µm] MATTE TIN
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 RADI
AND .028 [.072] DIAGONAL.
 5. SOLDER STANDOFFS FACILITATE
.01 [.3] CLEARANCE ABOVE
BOARD FOR REFLOW SOLDERING.

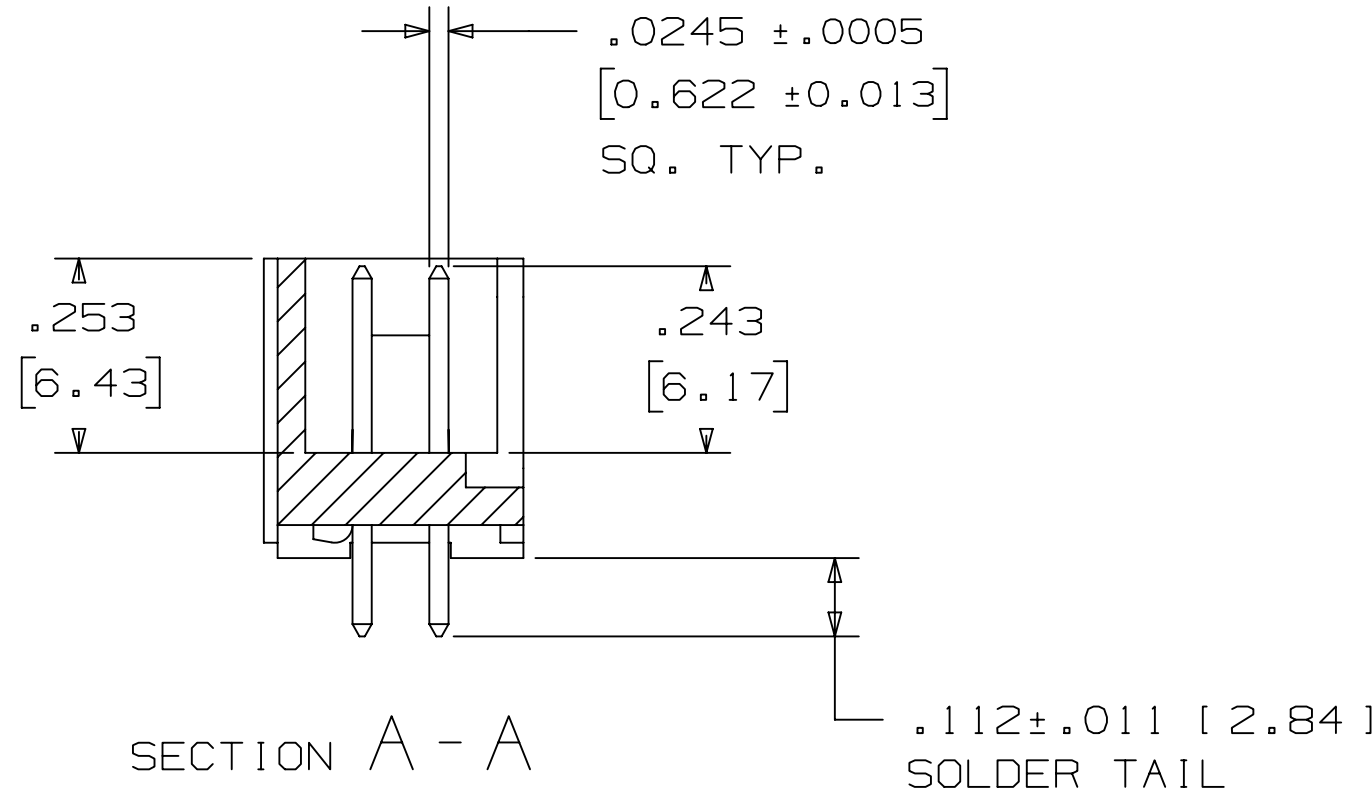
3M ELECTRONIC MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

3M IS A TRADEMARK OF 3M COMPANY.
FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

UL **us**
UL FILE NO: E68080

| | | | | | | | | | | | | | |
|------------------------|--|----------------------------|--|----------------------------|--|--------------|--|---------------------------------|--|---------------------------------|--|-----------------------|--|
| DESIGN REFERENCE | | NEXT ASSEMBLY | | REV | | ECO | | ISSUE DATE AND DESCRIPTION | | DRFT | | CHKD | |
| XREF | | XREF | | DRFT | | DATE | | DATE | | DATE | | DATE | |
| DIVISION | | DIVISION CODE | | CHKD | | DATE | | DATE | | DATE | | DATE | |
| Interconnect Solutions | | EMSD | | APPR | | DATE | | DATE | | DATE | | DATE | |
| DO NOT SCALE DRAWING | | SCALE 4 1 | | TOLERANCES EXCEPT AS NOTED | | INCHES | | MILLIMETERS | | INTERPRET PER ASME Y14.5 - 2009 | | MAX SURFACE ROUGHNESS | |
| THIRD ANGLE PROJECTION | | TOLERANCES EXCEPT AS NOTED | | INCHES | | MILLIMETERS | | INTERPRET PER ASME Y14.5 - 2009 | | MAX SURFACE ROUGHNESS | | MARKED ONLY | |
| CAGE NUMBER | | SIZE | | DRAWING NO. | | REV. | | MODEL | | DET | | SHT 1 OF 5 | |
| D | | 78-5100-2244-1 | | H | | D2500 SERIES | | YES | | NO | | | |

3M™ FOUR-WALL HEADER, D2500 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

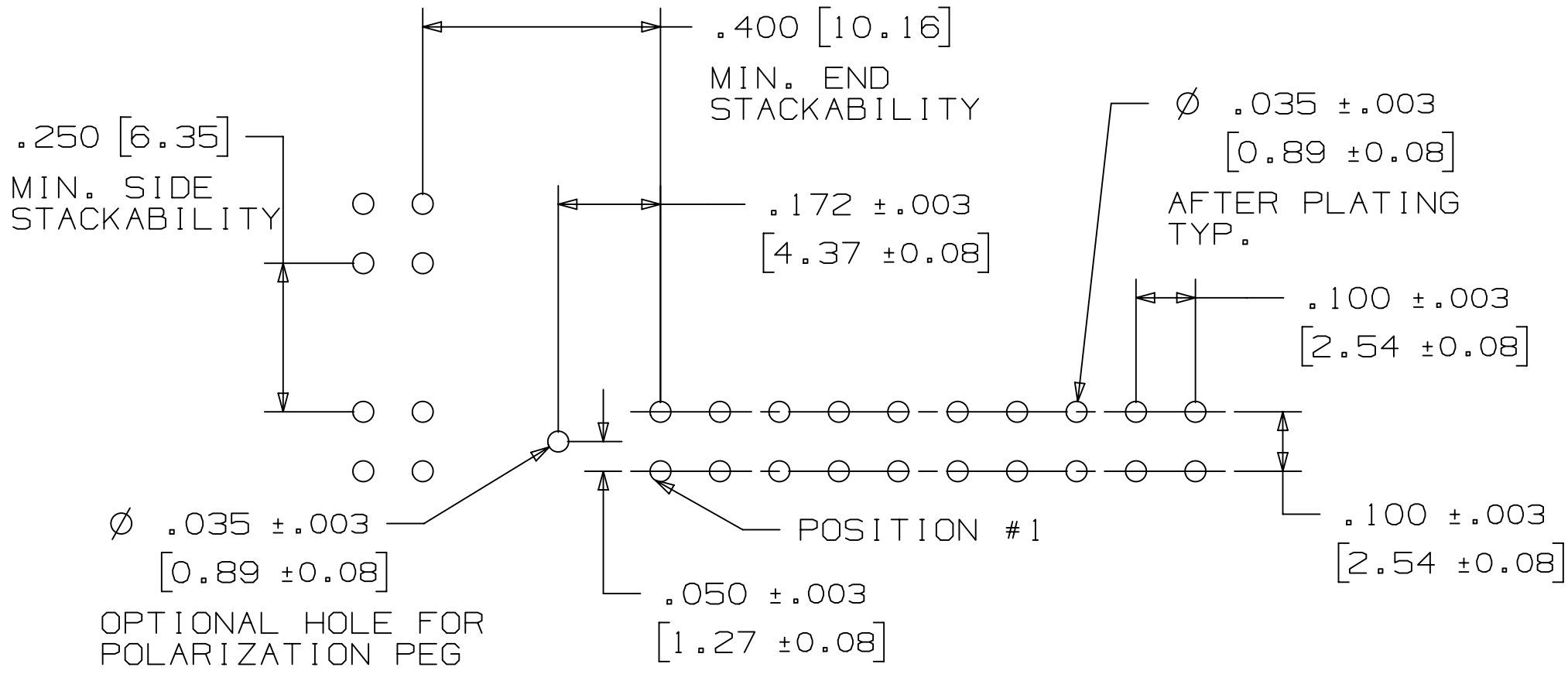
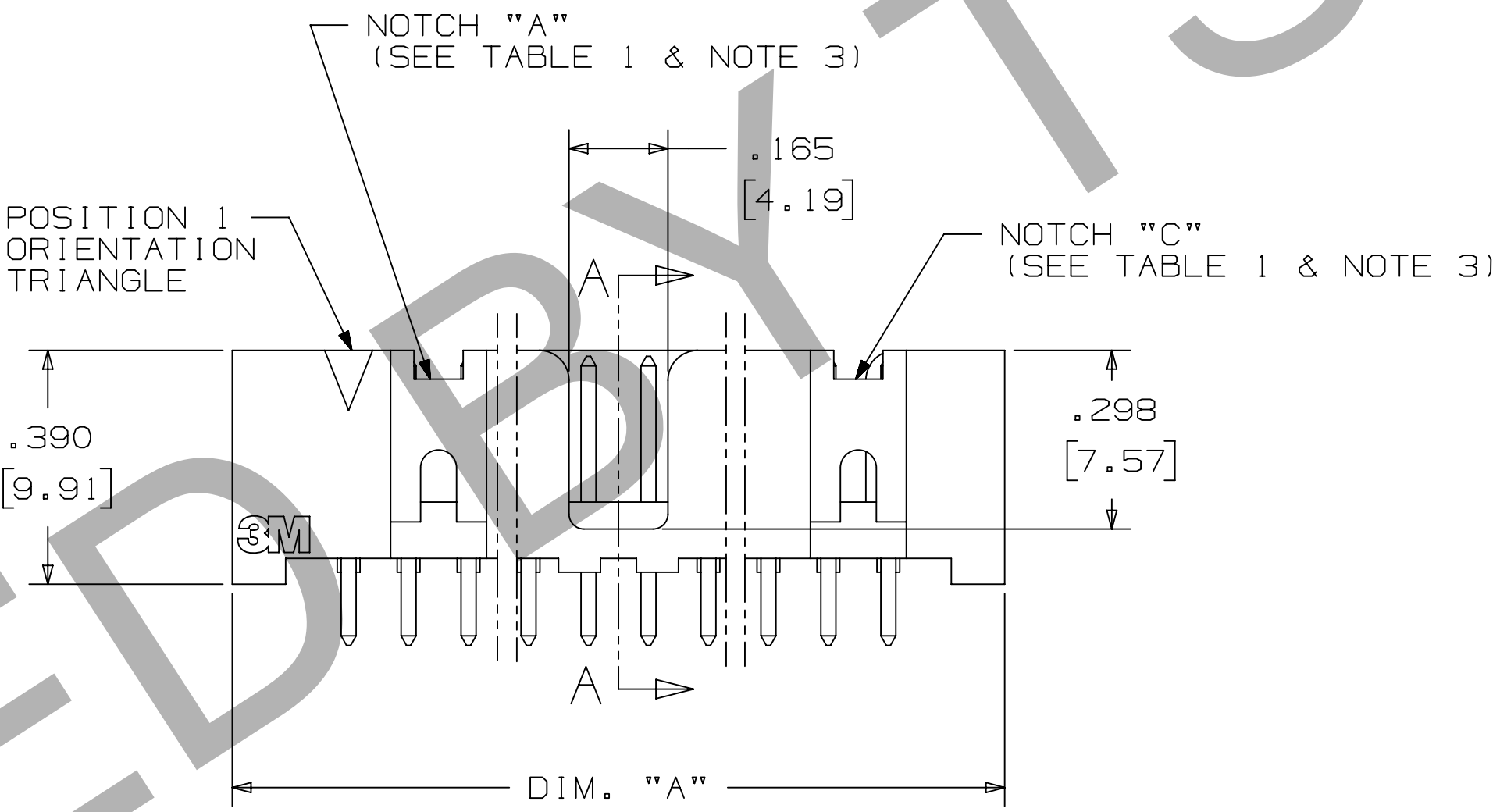
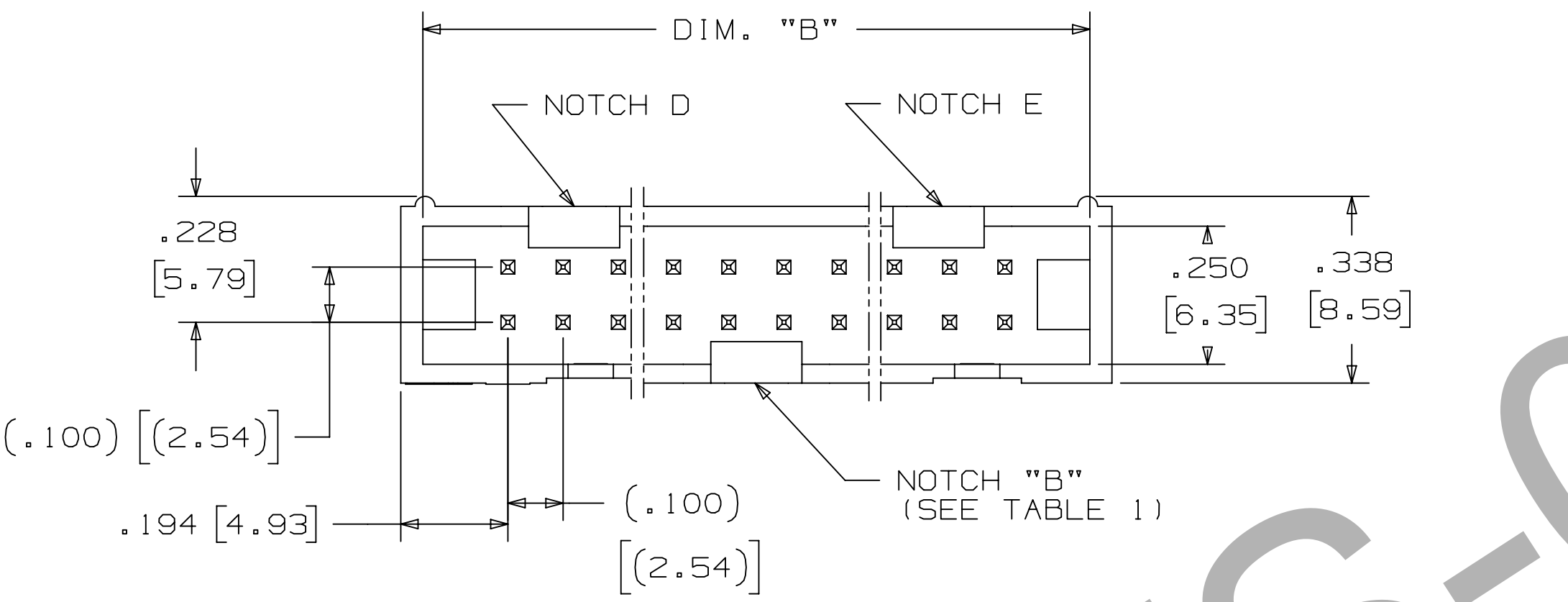
D25XX-6002-AR

PIN QUANTITY:
(SEE TABLE 1)

SOLDER TAIL:
FOR .062 [1.57] THICK BOARD

PLATING:

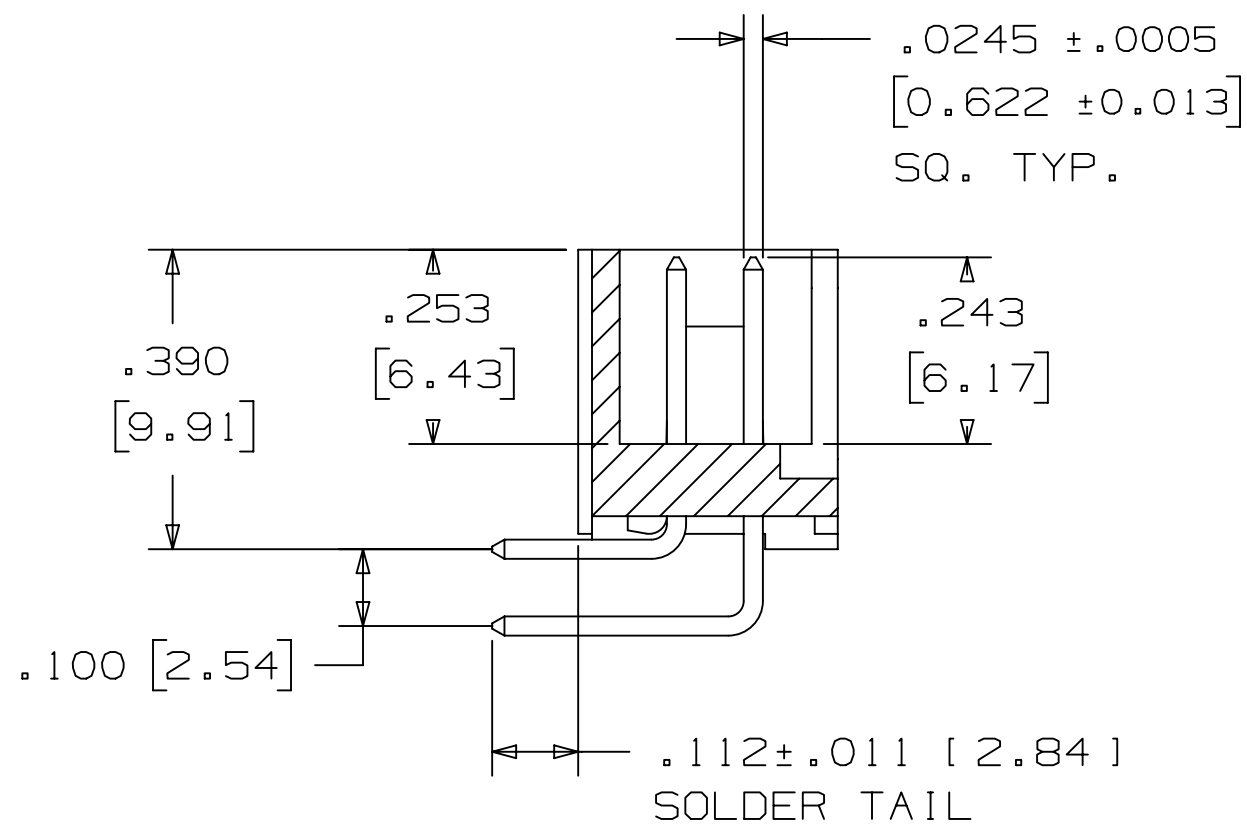
AR = 10µ" [0.25µm] GOLD
(R1A, E1 & C1 APPLY)



RECOMMENDED HOLE PATTERN
SHOWN FROM COMPONENT SIDE

| | | | | | |
|---------------------------------|------------------------|---|--------------------|-------------------------|------|
| DESIGN REFERENCE | NEXT ASSEMBLY | H 68908 | AUG 05,2016 | JNC | SC |
| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD | |
| DRFT | CSTIGLIONE | DATE AUG 05,2016 | MFG | DATE | |
| CHKD | | DATE | APPR. S. CLATANOFF | DATE AUG 05,2016 | |
| DIVISION | Interconnect Solutions | DIVISION CODE | EMSD | | |
| DO NOT SCALE DRAWING | SCALE 4/1 | TOLERANCES EXCEPT AS NOTED | | | |
| THIRD ANGLE PROJECTION | | INCHES .0 ±.00 ±.01 .000 ±.005 .0000 ± | | | |
| INTERPRET PER ASME Y14.5 - 2009 | | MILLIMETERS 0 ±.3 .00 ±.13 .000 ± | | | |
| MAX SURFACE ROUGHNESS | | ALL SURFACES | | | |
| MARKED ONLY | | ANGLES | | | |
| TITLE | | HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA | | | |
| CAGE NUMBER | | SIZE | | DRAWING NO. | REV. |
| D78-5100-2244-1 | | H | | | |
| MODEL | | D2500 SERIES | | LISTS YES NO SHT 2 OF 5 | |

3M™ FOUR-WALL HEADER, D2500 SERIES
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



SECTION B - B

| 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 |

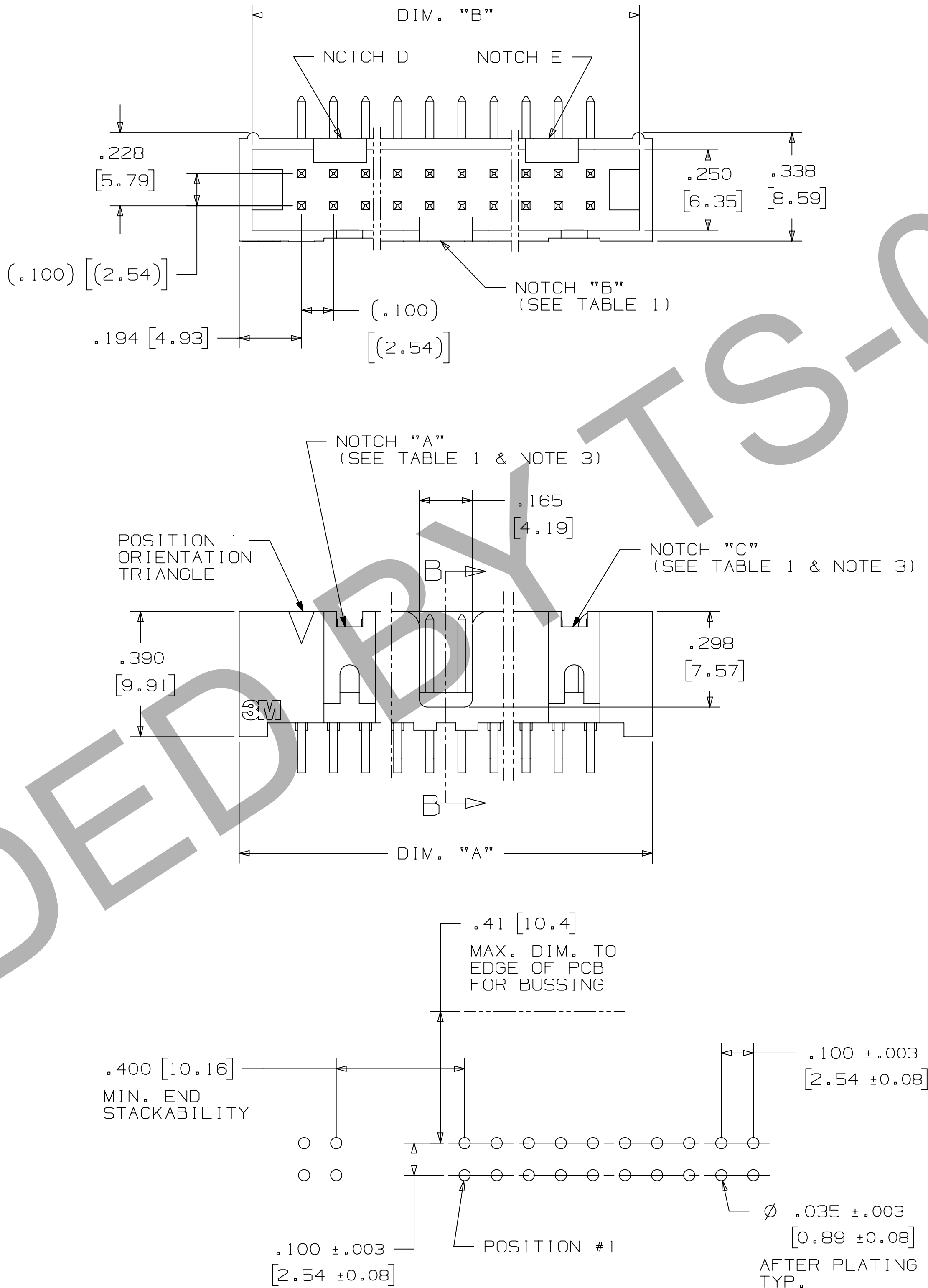
ORDERING INFORMATION
RIGHT ANGLE VERSION

D25XX-5002-AR

PIN QUANTITY:
(SEE TABLE 1)

SOLDER TAIL:
FOR .062 [1.57] THICK BOARD

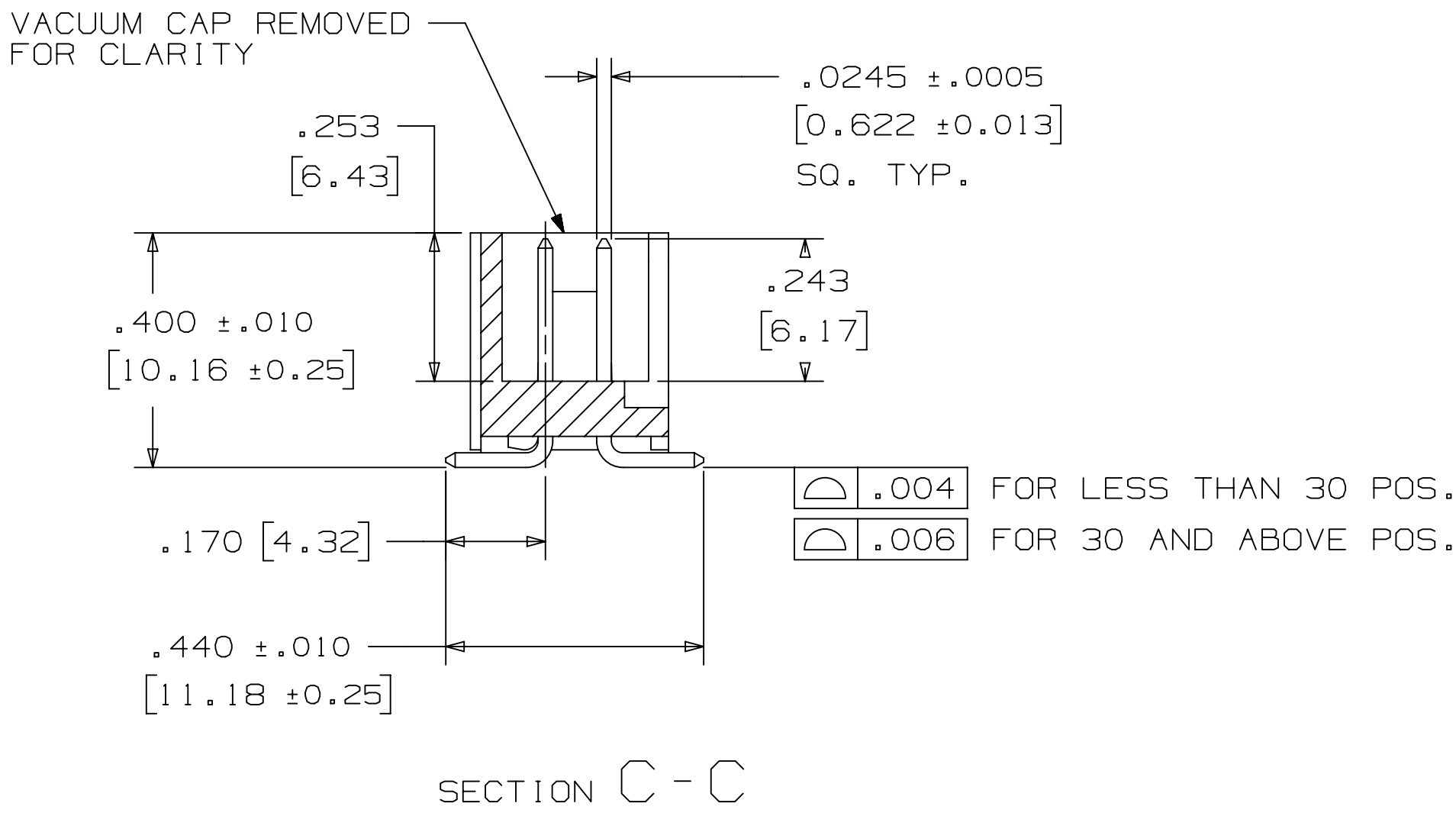
PLATING:
AR = 10µ" [0.25µm] GOLD
(R1A, E1 & C1 APPLY)



RECOMMENDED HOLE PATTERN
SHOWN FROM COMPONENT SIDE

| | | | | | | | | | |
|------------------------|--|---------------------------------|--|----------------------------|--|--------------------------------------|--|-------------------------------------|--|
| DESIGN REFERENCE | | NEXT ASSEMBLY | | H 68908 | | AUG 05,2016 | | JNC SC | |
| REV | | ECO | | REVISED AND REDRAWN | | DRFT | | CHKD | |
| DRFT | | CASTIGLIONE | | DATE | | AUG 05,2016 | | MFS | |
| CHKD | | DATE | | APPR | | DATE | | AUG 05,2016 | |
| DIVISION | | Interconnect Solutions | | DIVISION CODE | | EMSD | | 3M | |
| DO NOT SCALE DRAWING | | SCALE 4/1 | | TOLERANCES EXCEPT AS NOTED | | INCHES .00 ± .01 .000 ± .005 .0000 ± | | MILLIMETERS 0 ± .3 .00 ± .13 .000 ± | |
| THIRD ANGLE PROJECTION | | INTERPRET PER ASME Y14.5 - 2009 | | MAX SURFACE ROUGHNESS | | ALL SURFACES MARKED ONLY | | CAGE NUMBER D78-5100-2244-1 | |
| MODEL | | D2500 SERIES | | LISTS | | YES NO | | SHT 3 OF 5 | |

3M™ FOUR-WALL HEADER, D2500 SERIES
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



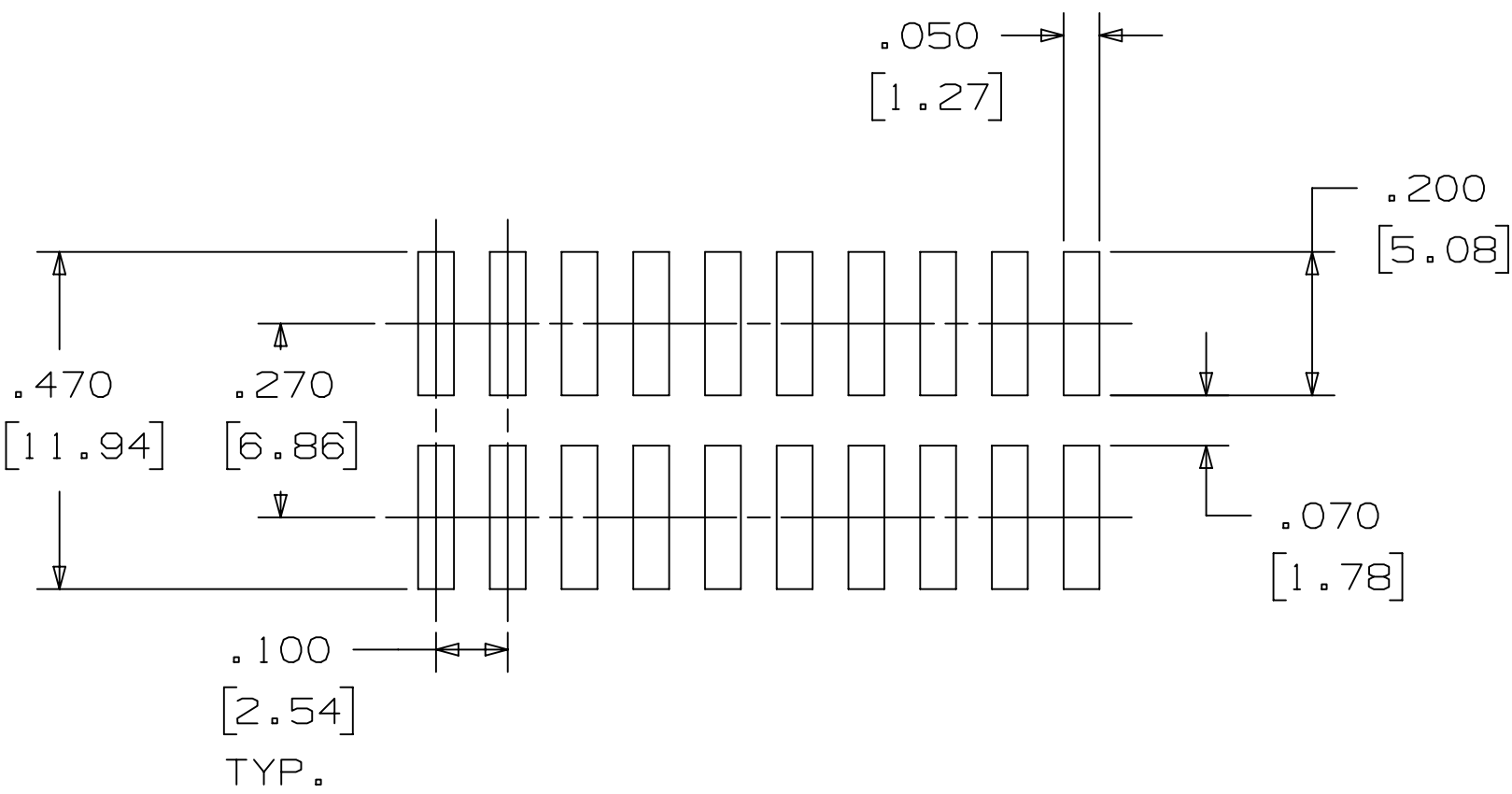
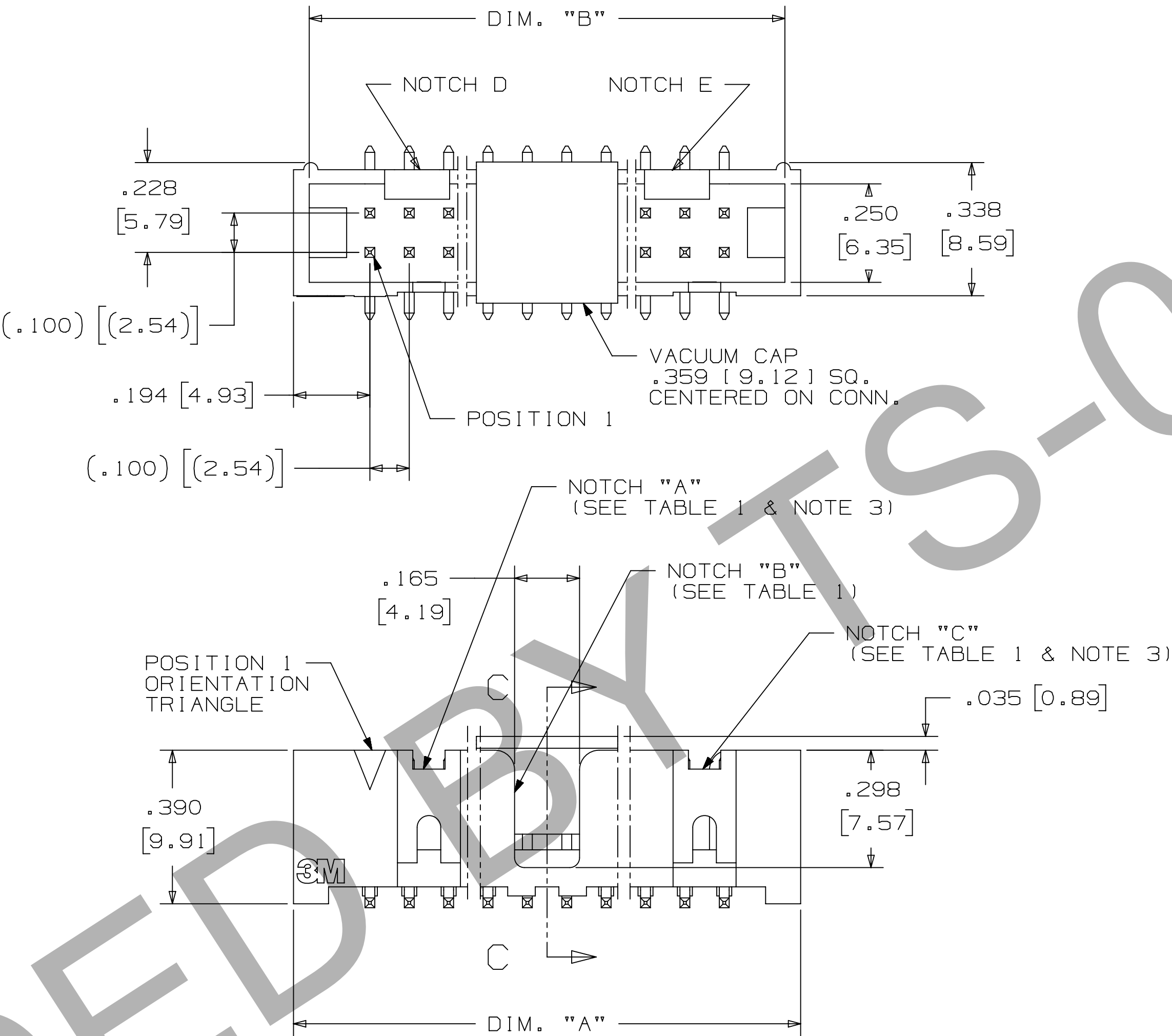
| TABLE 1 | | | | | |
|----------|---------------|---------------|--------------------|------------------------|----------|
| PIN QTY. | DIM. "A" | DIM. "B" | POLARIZING NOTCHES | TAPE AND REEL PKG CODE | PIN QTY. |
| 06 | .588 [14.94] | .508 [12.90] | B | WD (44 MM) | 06 |
| 08 | .688 [17.48] | .608 [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 |

ORDERING INFORMATION
SURFACE MOUNT VERSION
D25XX-6VOC-AR-XX

PIN QUANTITY:
(SEE TABLE 1)

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

PLATING:
AR = 10µ" [0.25µm] GOLD
(RIA, E1 & C1 APPLY)



RECOMMENDED PAD LAYOUT

| | | | | | | | | | |
|---------------------------------|--|---|--|----------------------------|-------|-------------|------|-------------|------|
| DESIGN REFERENCE | | NEXT ASSEMBLY | | H | 68908 | AUG 05,2016 | | JNC | SC |
| REV | | ECO | | ISSUE DATE AND DESCRIPTION | | DRFT | CHKD | | |
| ACCORDS | | CASTIGLIONE | | DATE | | AUG 05,2016 | | APPR | DATE |
| CHKD | | DATE | | APPR | | DATE | | AUG 05,2016 | |
| DIVISION | | DIVISION CODE | | EMSD | | | | | |
| Interconnect Solutions | | EMSD | | EMSD | | | | | |
| DO NOT SCALE DRAWING | | SCALE | | TOLERANCES EXCEPT AS NOTED | | NOTED | | | |
| DRAWING | | 1 | | INCHES | | MILLIMETERS | | | |
| THIRD ANGLE PROJECTION | | .00 ±.01 | | .00 ±.005 | | .00 ±.03 | | .00 ±.13 | |
| INTERPRET PER ASME Y14.5 - 2009 | | .000 ± | | .000 ± | | .000 ± | | .000 ± | |
| MAX SURFACE ROUGHNESS | | .000 ± | | .000 ± | | .000 ± | | .000 ± | |
| ALL SURFACES | | .000 ± | | .000 ± | | .000 ± | | .000 ± | |
| MARKED ONLY | | .000 ± | | .000 ± | | .000 ± | | .000 ± | |
| TITLE | | HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA | | CAGE NUMBER | | DRAWING NO. | | REV. | |
| D | | 78-5100-2244-1 | | H | | D | | H | |
| MODEL | | D2500 SERIES | | LISTS | | YES | | NO | |
| SHT 4 OF 5 | | SHT 4 OF 5 | | SHT 4 OF 5 | | SHT 4 OF 5 | | SHT 4 OF 5 | |

3M™ FOUR-WALL HEADER, D2500 SERIES
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE

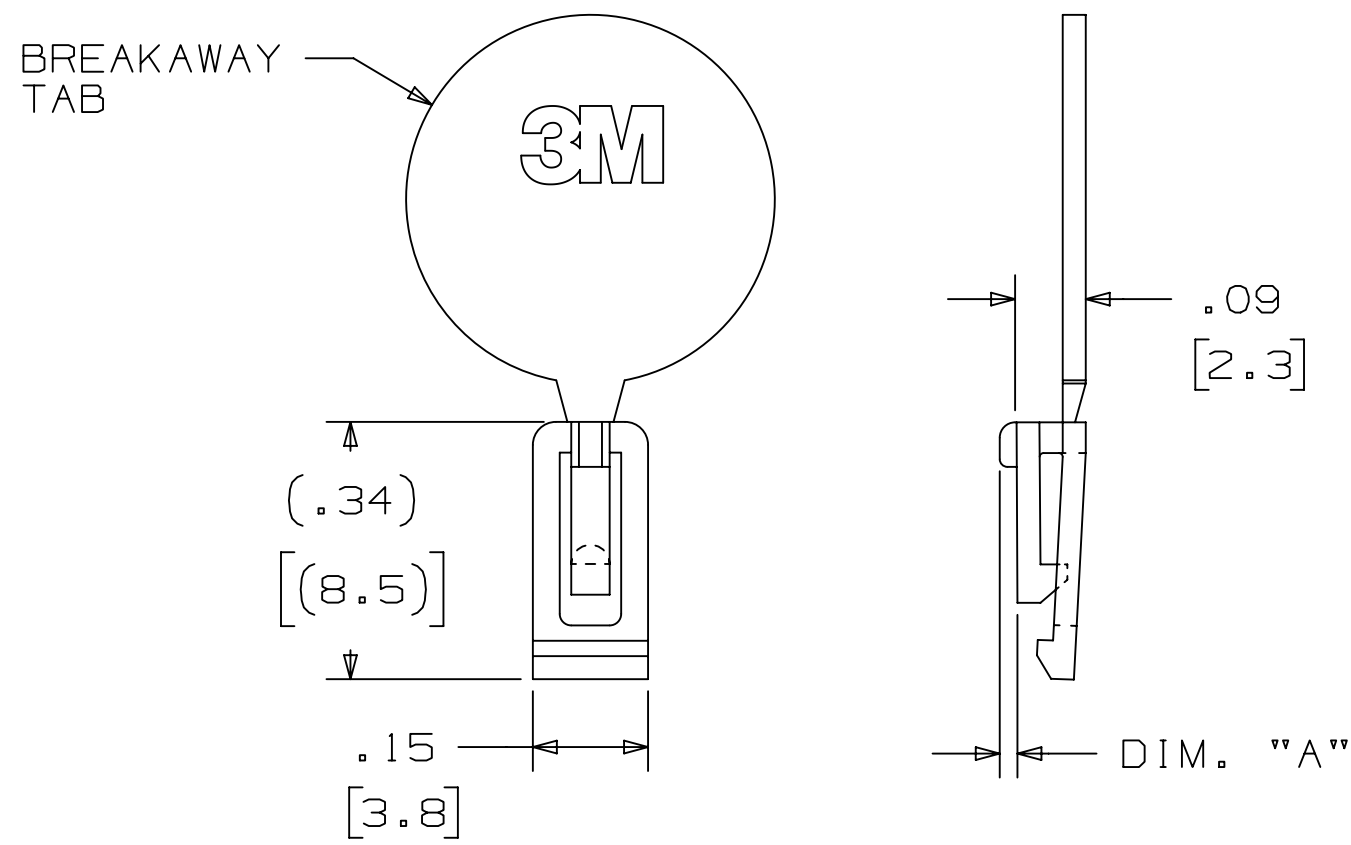
PART CUSTOMIZATION

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.

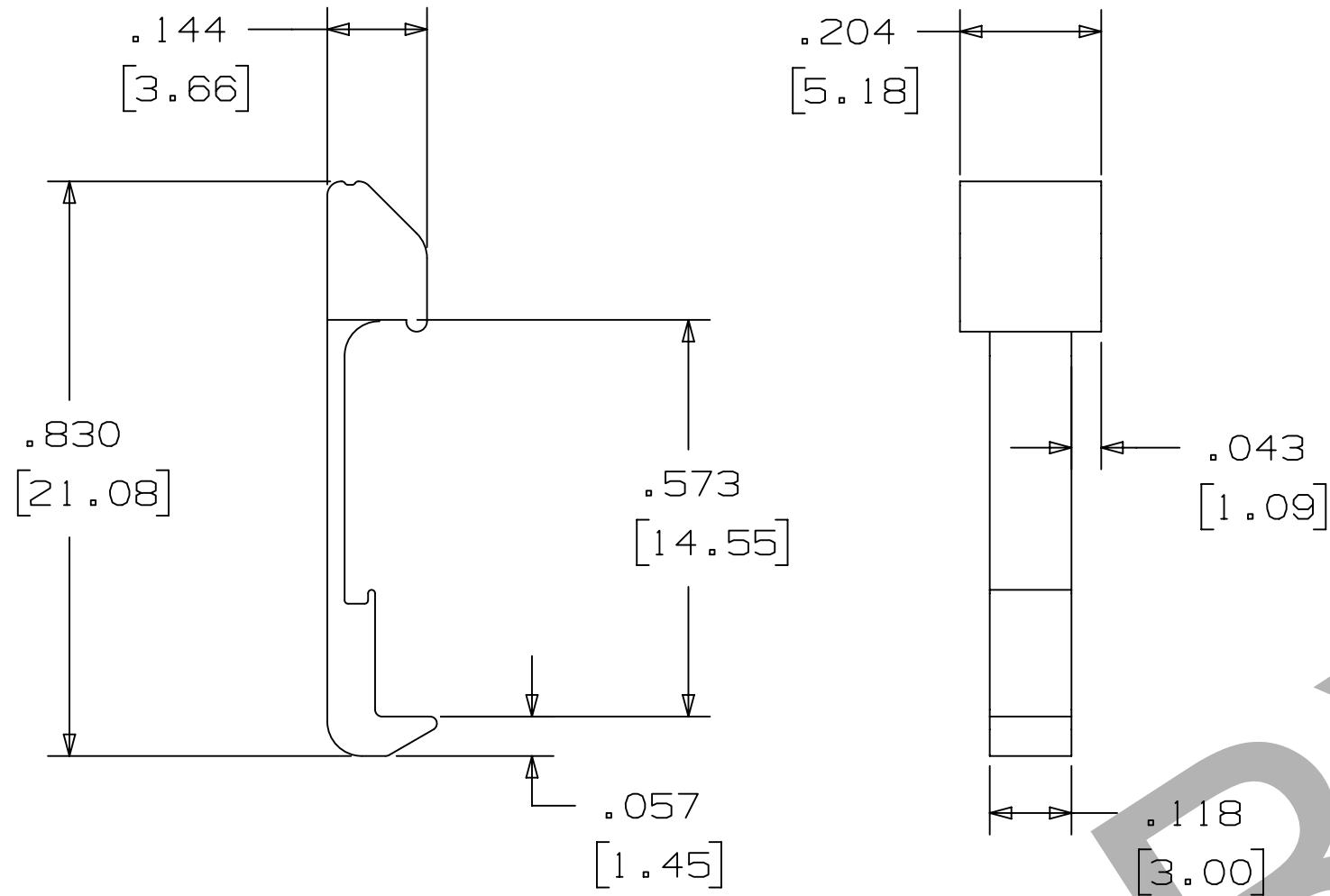
POLARIZING KEY



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

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

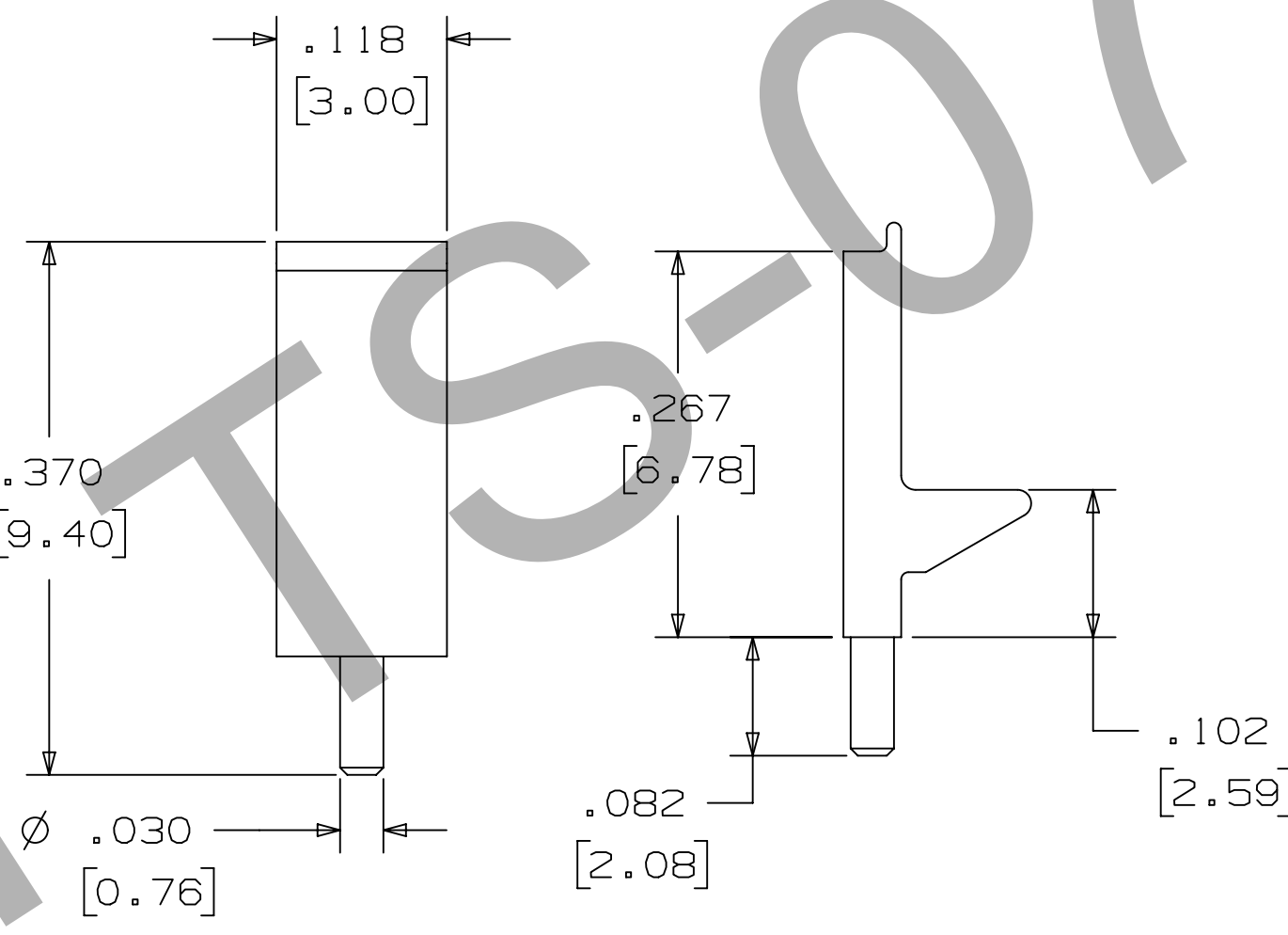
LOW PROFILE LATCH



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

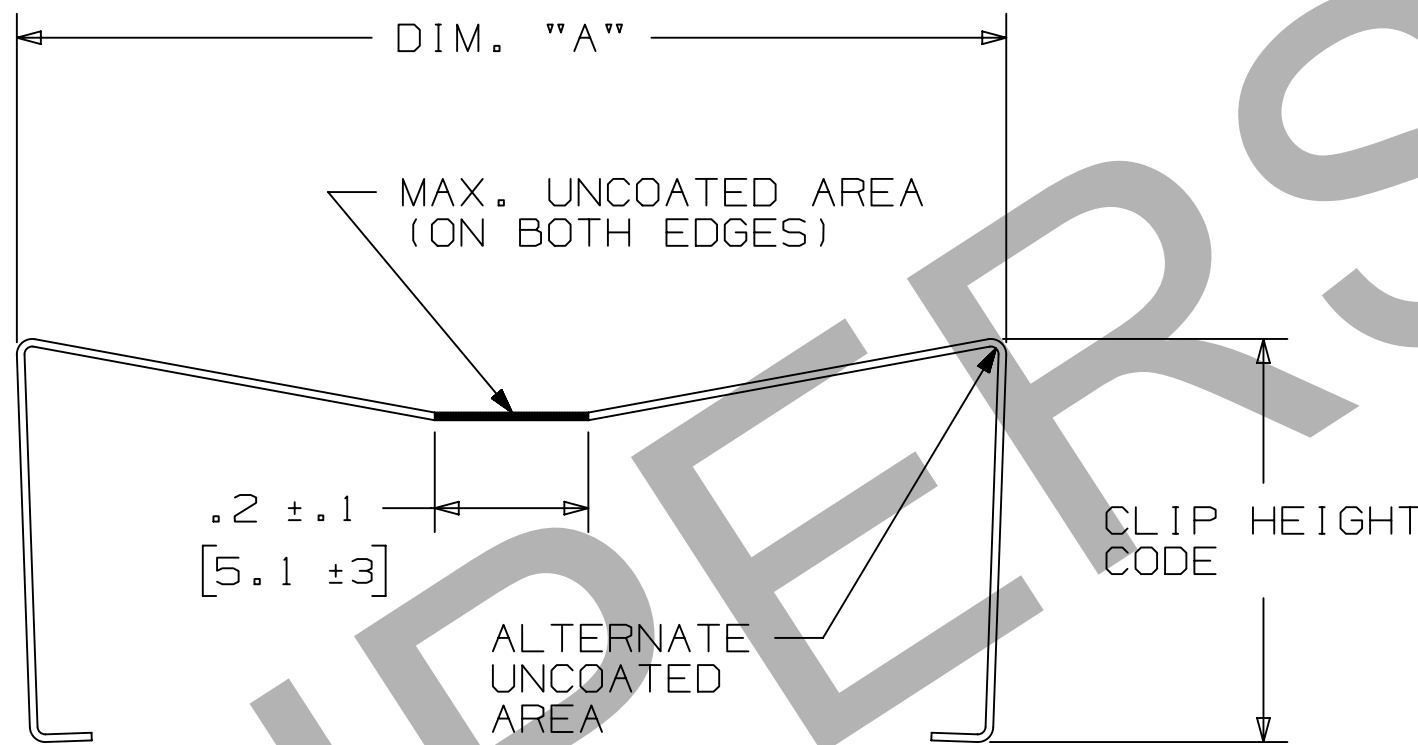
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

POLARIZING POST



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

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 | | H 68908 | | AUG 05,2016 | | JNC | SC |
| REV | | ECO | | ISSUE DATE AND DESCRIPTION | | DRFT | | CHKD | |
| DIVISION | | Interconnect Solutions | | DIVISION CODE | | EMSD | | 3M | |
| DO NOT SCALE DRAWING | | SCALE 4 1 | | TOLERANCES EXCEPT AS NOTED | | INCHES .00 ± .01 .000 ± .005 .0000 ± | | MILLIMETERS 0 ± .3 .00 ± .13 .000 ± | |
| THIRD ANGLE PROJECTION | | INTERPRET PER ASME Y14.5 - 2009 | | MAX. SURFACE ROUGHNESS | | ALL SURFACES | | MARKED ONLY | |
| CAGE NUMBER | | D78-5100-2244-1 | | DRAWING NO. | | REV. H | | MODEL | |
| D2500 SERIES | | LISTS | | YES | | NO | | SHT 5 OF 5 | |