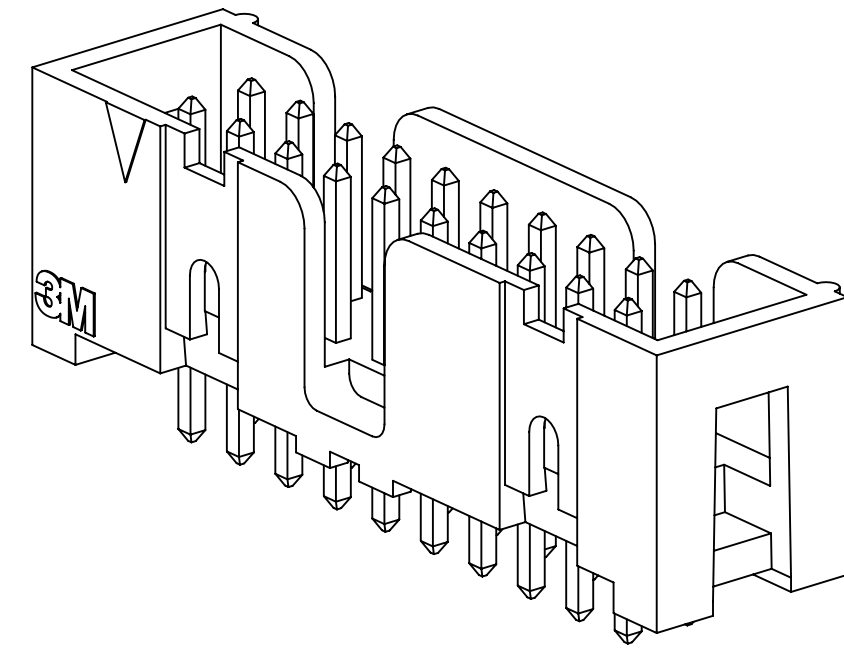


3M™ FOUR-WALL HEADER, 2500 SERIES

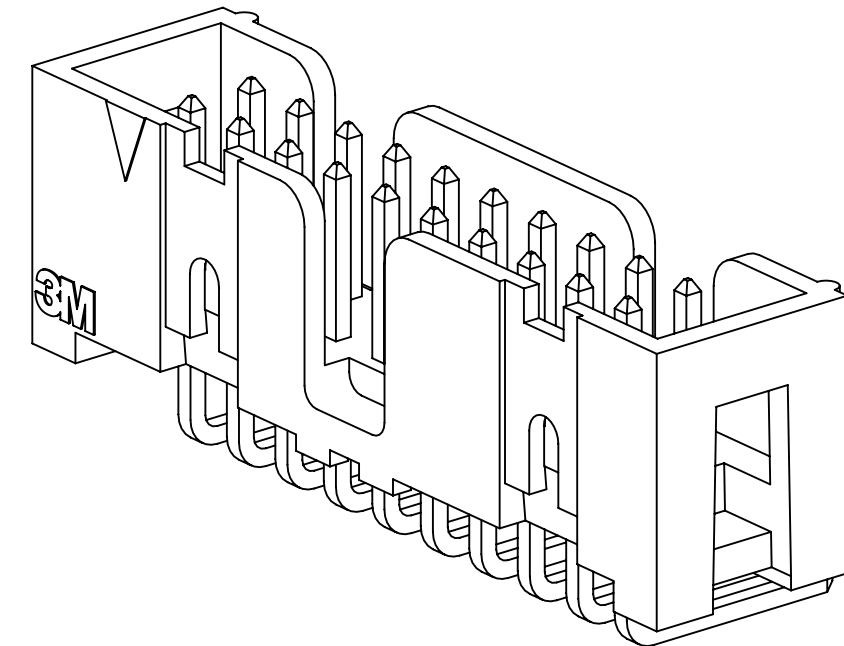
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE

- * 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.

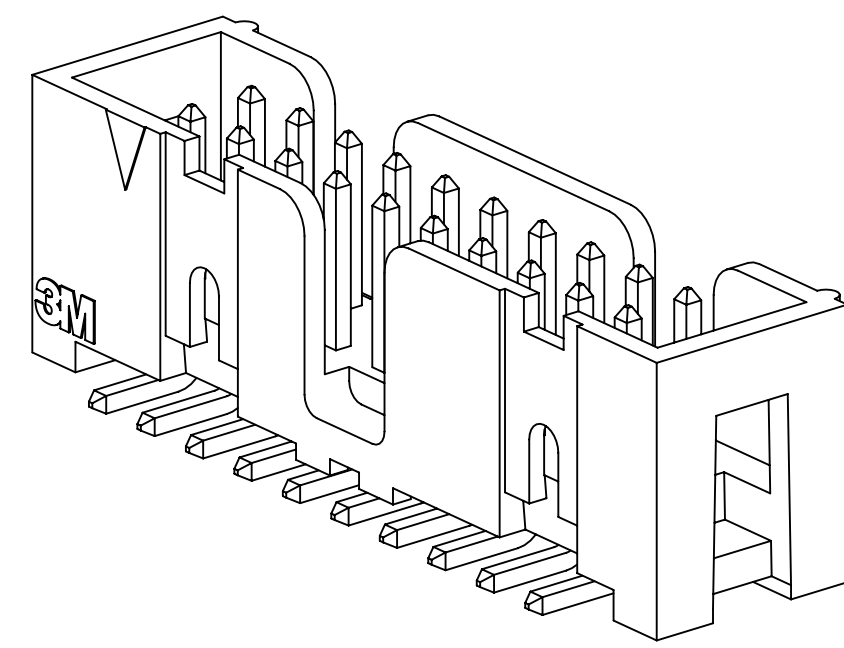
- NOTES
1. REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
 2. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 3. NOTCHES A & C WILL ACCOMMODATE 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.



25XX-60XX
STRAIGHT VERSION



25XX-50XX
RIGHT ANGLE VERSION



25XX-6VOC
SURFACE MOUNT VERSION

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)

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
ACROSS CODES						
		CASTIGLIONE	AUG 11, 2014	MFG		
				R. SCHERER	DATE	SEP 05, 2014
DIVISION	INTERCONNECT SOLUTIONS	DIVISION CODE	EMSD	© 3M COPYRIGHT 2016		
DO NOT SCALE DRAWING	SCALE 4-1	TOLERANCES EXCEPT AS NOTED		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.		
		INCHES		TITLE		
		.00 ± .01		HEADER, 4-WALL,		
		.000 ± .005		LO-PRO, .100 X .100,		
		.0000 ±		SMT, STRAIGHT & RA		
		MILLIMETERS		CAGE NUMBER		
		0 ±		D 78-5100-0770-7		
		.0 ± .3		REV.		
		.00 ± .13		N		
		.000 ±		MODEL		
		ANGLES		2500 SERIES		
				SHEET 1 OF 5		

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

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 INFORMATION CALL 800-225-5373

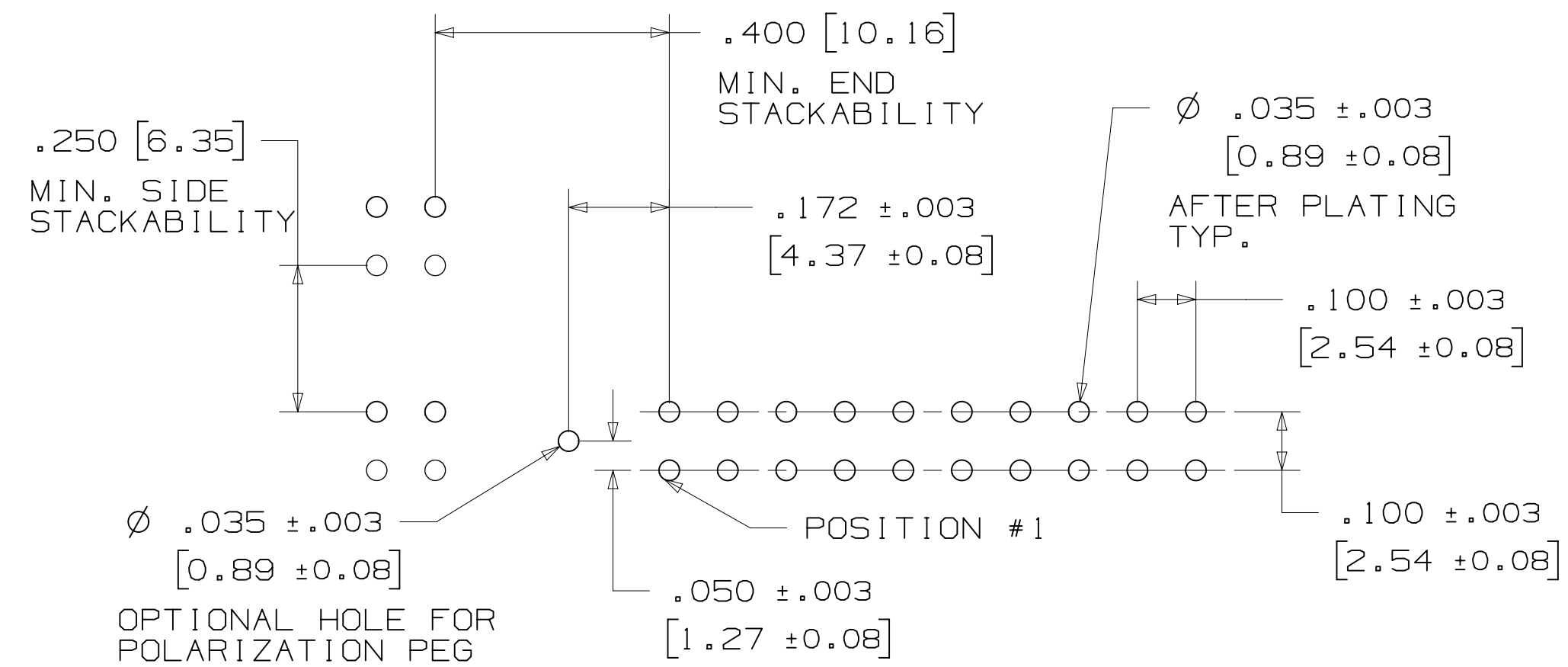
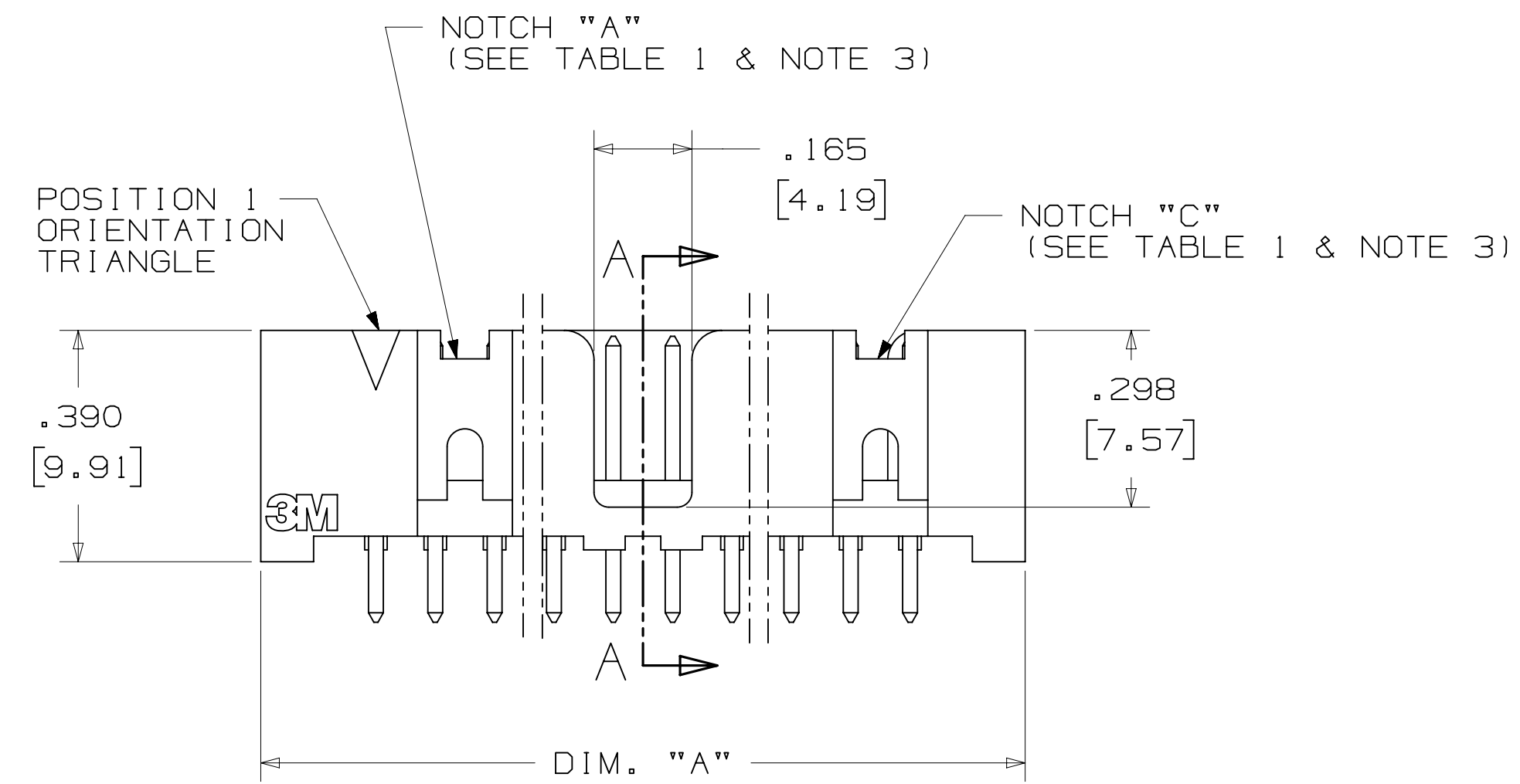
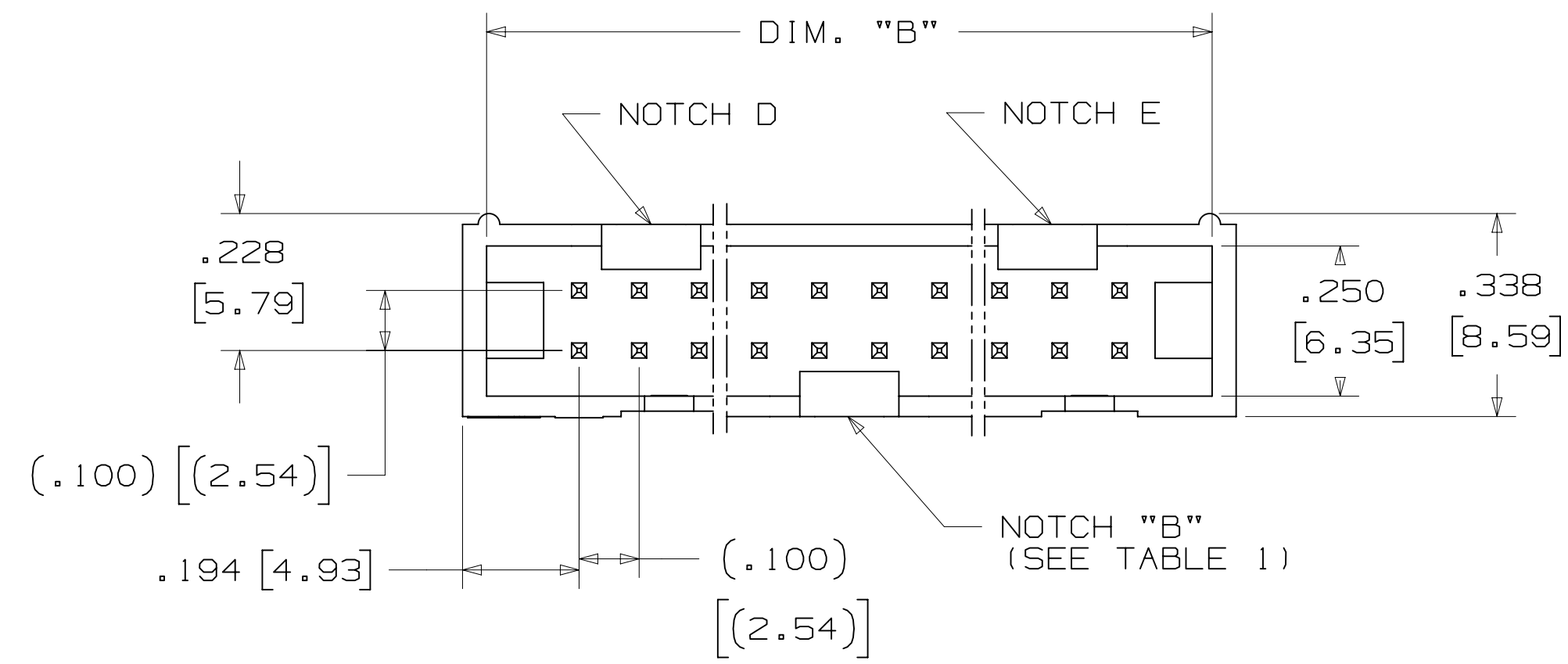
CAUS
 UL FILE NO: E68080

78-5100-0770-7 DRAWING NUMBER
 N 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



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

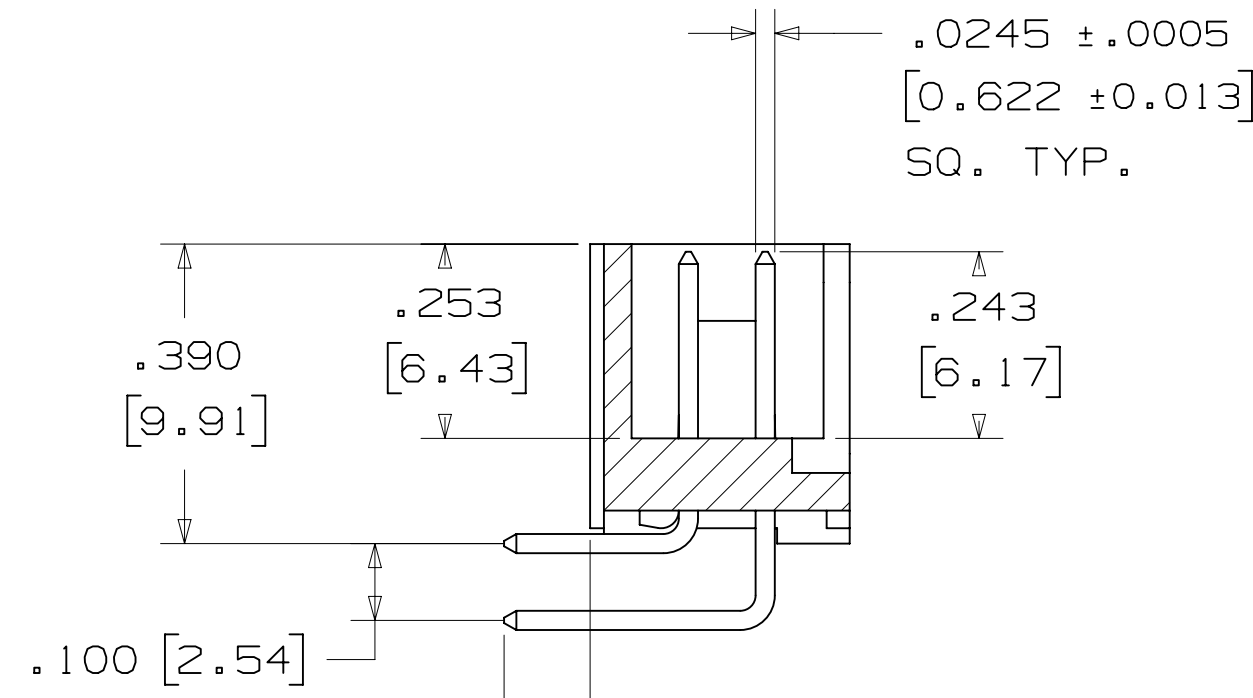
PLATING:
 RB = 30µ" [0.76µm] AVG. GOLD
 200µ" [5.08µm] MATTE TIN (RIA, E1 & C1 APPLY)
 UG = 15µ" [0.38µm] AVG. GOLD
 200µ" [5.08µm] 60:40 TIN-LEAD SOLDER TAILS
 (RIA E3 & C2 APPLY)
 UB = 30µ" [0.76µm] AVG. GOLD
 200µ" [5.08µm] 60:40 TIN LEAD SOLDER TAILS
 (RIA E3 & C2 APPLY)

RECOMMENDED HOLE PATTERN
 SHOWN FROM COMPONENT SIDE

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DATE	DATE	DATE	DATE	DATE	DATE	DATE
DIVISION	DIVISION CODE	© 3M COPYRIGHT 2016 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.				
Interconnect Solutions	EMSD	3M Center St. Paul, MN 55144				
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 ± .00 ± .13 .000 ±				
MAX SURFACE ROUGHNESS	MARKED ONLY	TITLE HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA				
		CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D		78-5100-0770-7	N	
		MODEL	2500 SERIES	DET	ISTS	YES X NO
						SHT 2 OF 5

78-5100-0770-7
 N
 REVISION
 DRAWING NUMBER
 11:10 AM UTC-05:00
 Imaged: N.1 8/5/2016

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



SOLDER TAIL
 .112 ± .011 [2.84] FOR 02 VERSION
 .155 ± .011 [3.94] FOR 03 VERSION

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

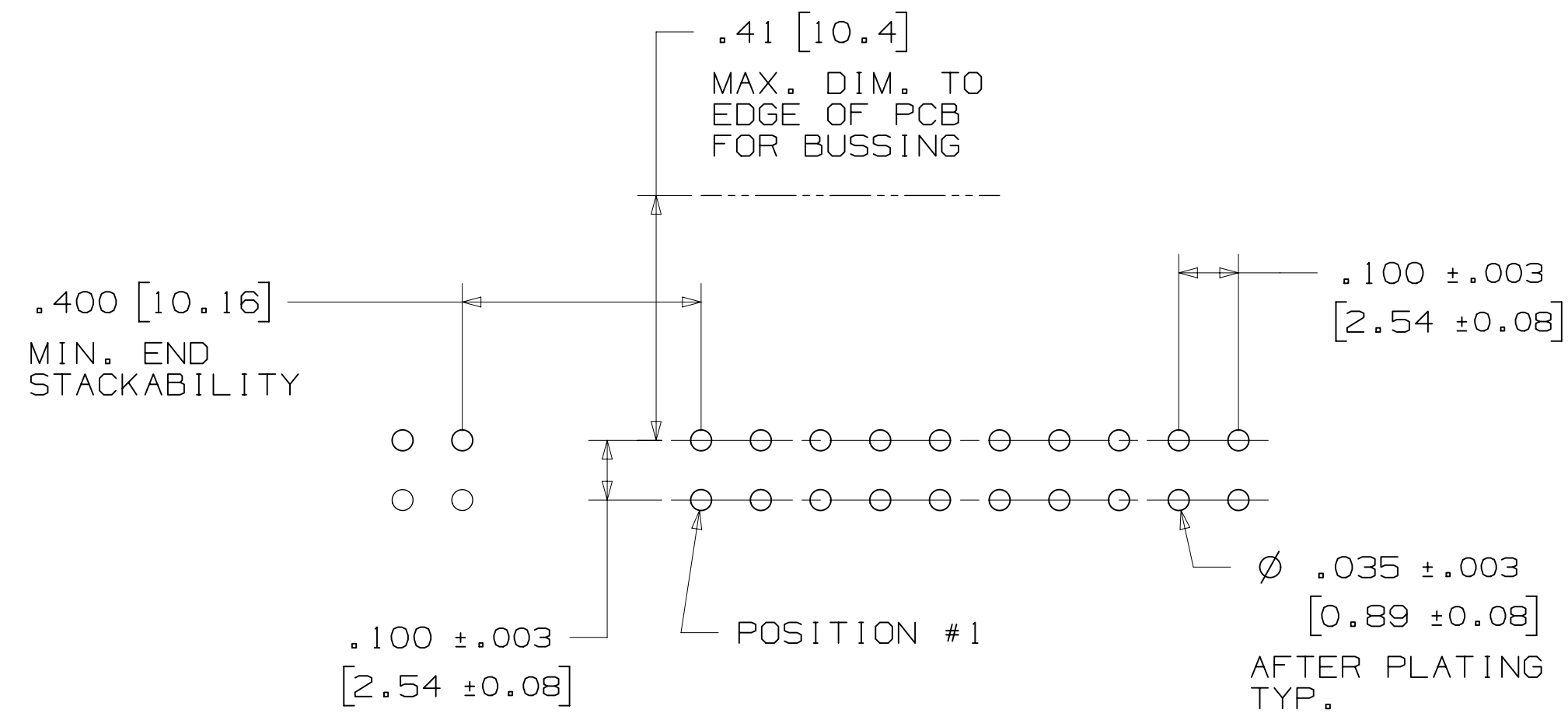
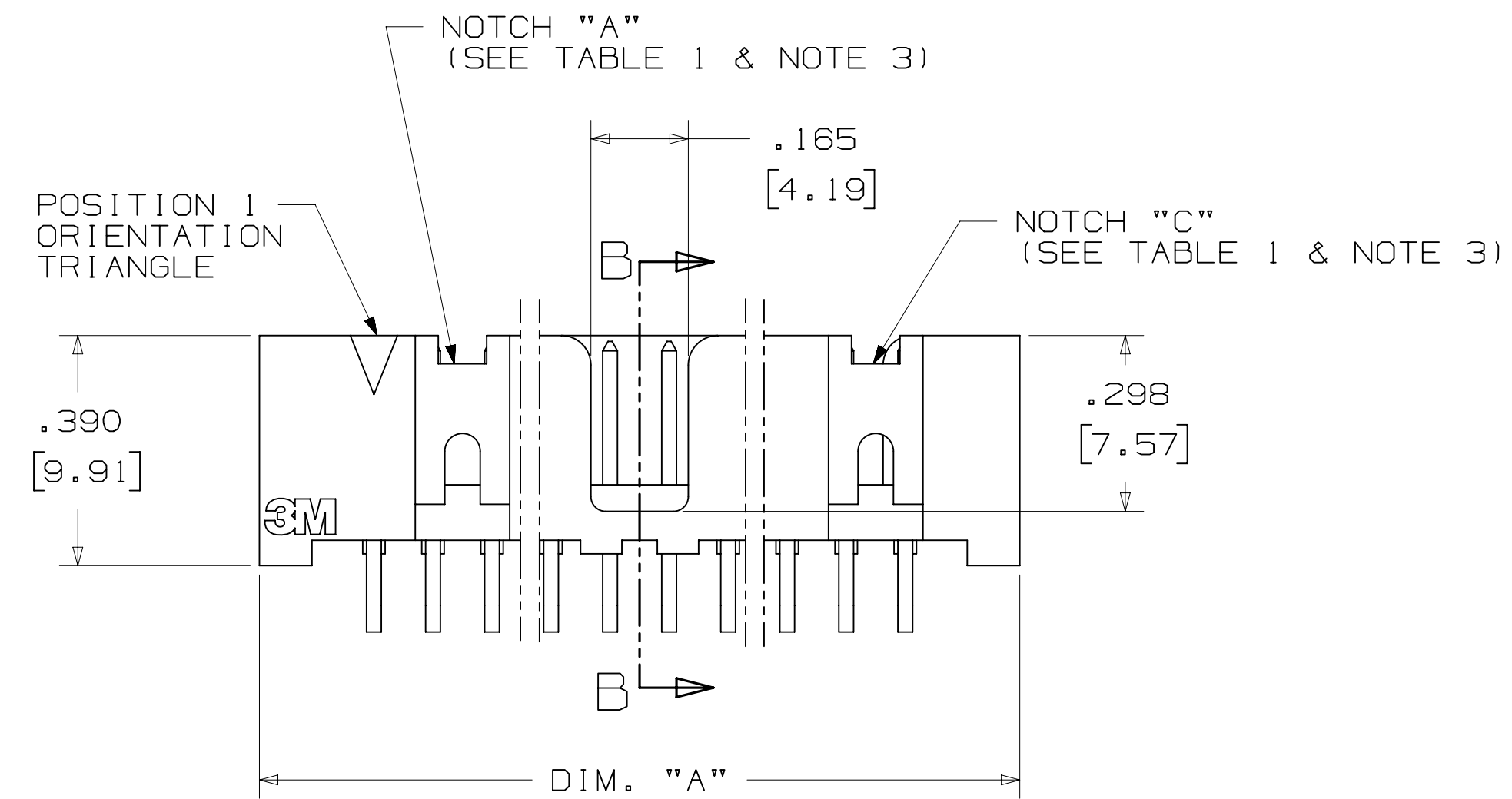
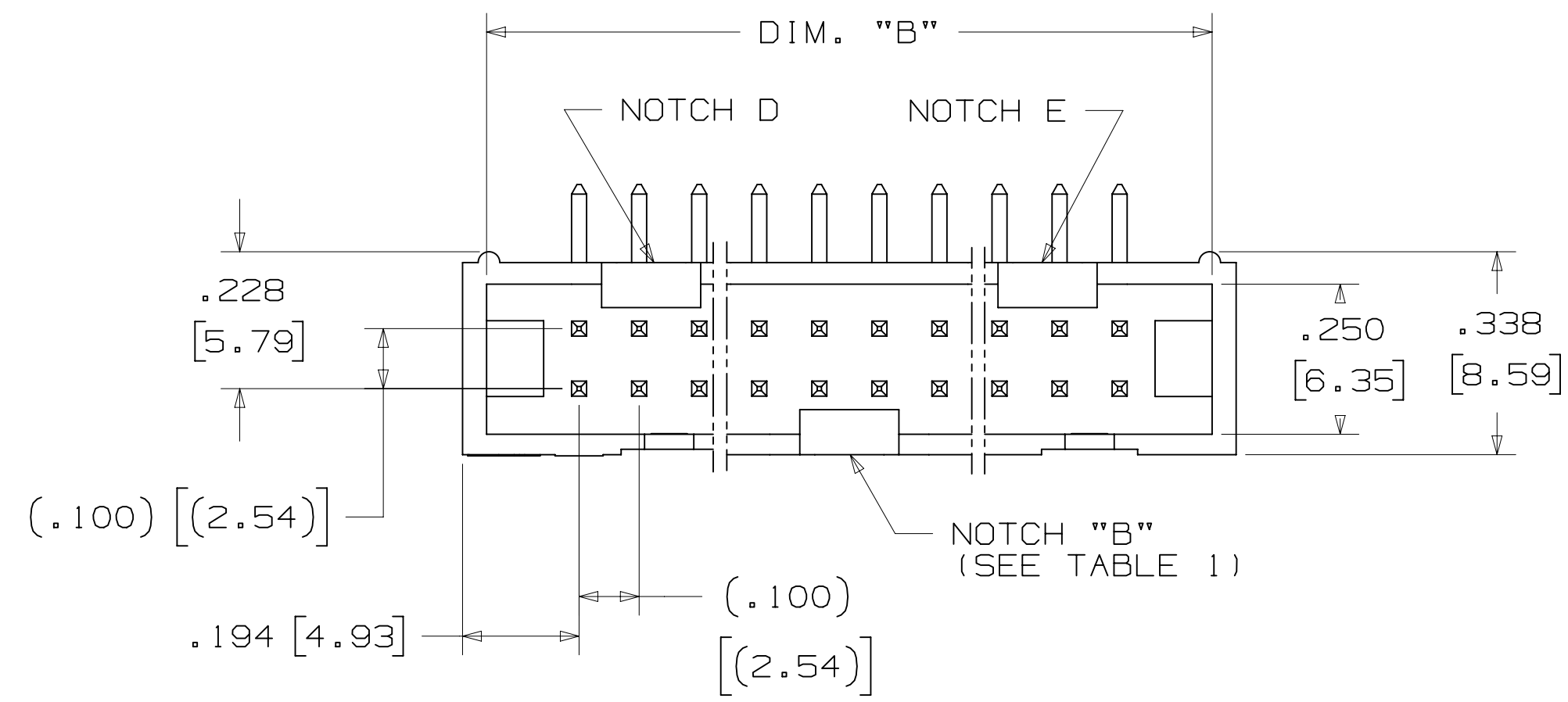
X25XX-50XX-XX

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		
		CAGE NUMBER		DRAWING NO.		
		D		78-5100-0770-7		
		MODEL		2500 SERIES		
		REV.		SHT 3 OF 5		
		N				

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
				AUG 11, 2014		
DIVISION: Interconnect Solutions		DIVISION CODE: EMSD		DATE: AUG 11, 2014		
DO NOT SCALE DRAWING		SCALE: 4/1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES: .00 ± .01, .000 ± .005, .0000 ±		MILLIMETERS: 0 ±, .0 ± .3, .00 ± .13, .000 ±		
MAX SURFACE ROUGHNESS: SURFACES		MARKED ONLY		CAGE NUMBER: D78-5100-0770-7		
				MODEL: 2500 SERIES		

REV. 1: JNC SC

REV. 2: JNC RS

REV. 3: R. SCHERER

DATE: AUG 02, 2016

DATE: AUG 11, 2014

DATE: SEP 05, 2014

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3M Center St. Paul, MN 55144

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

REV. N

SHT 4 OF 5

DRAWING NUMBER: 78-5100-0770-7

REVISION: N

DATE: AUG 02, 2016 11:10 AM UTC-05:00

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

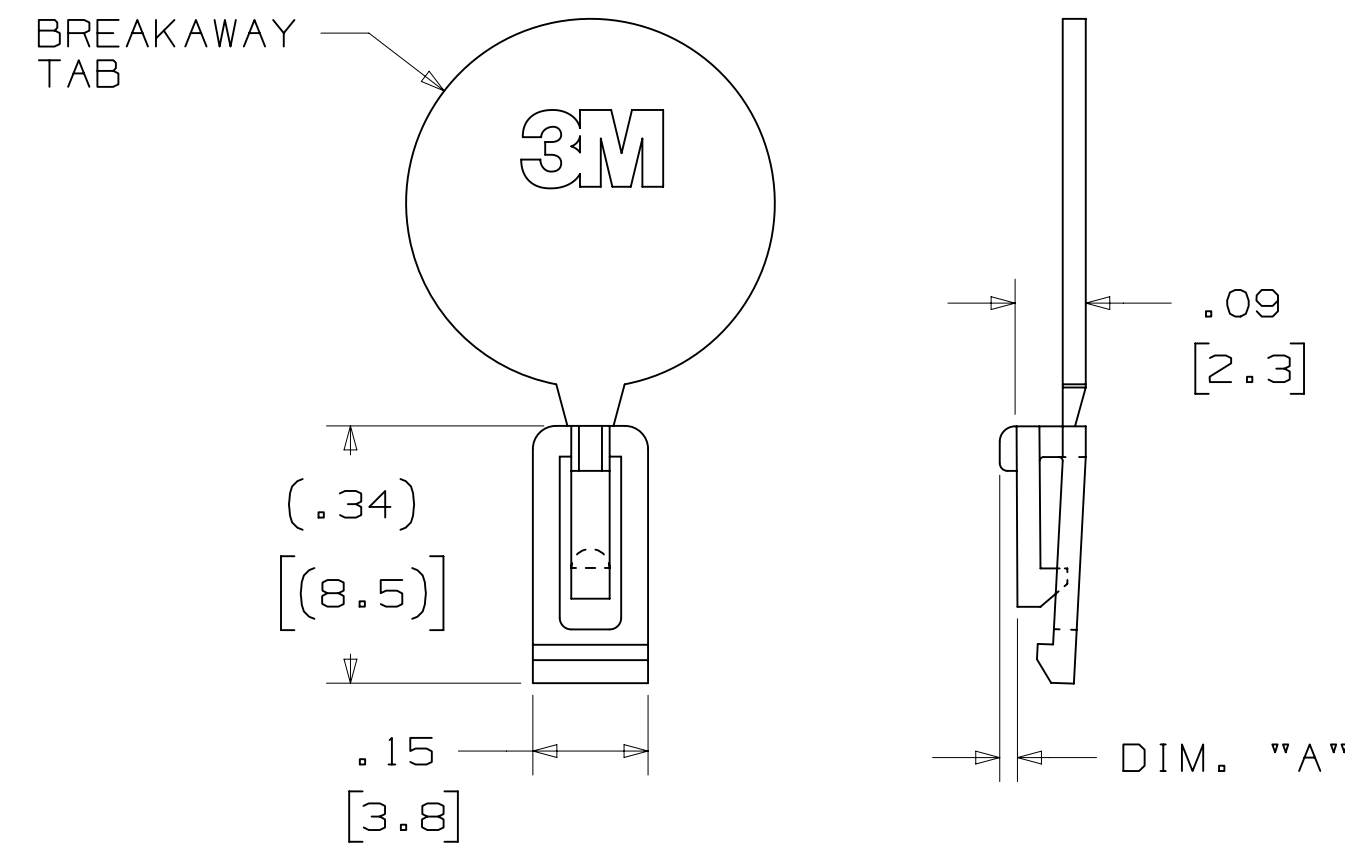
PART CUSTOMIZATION

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.

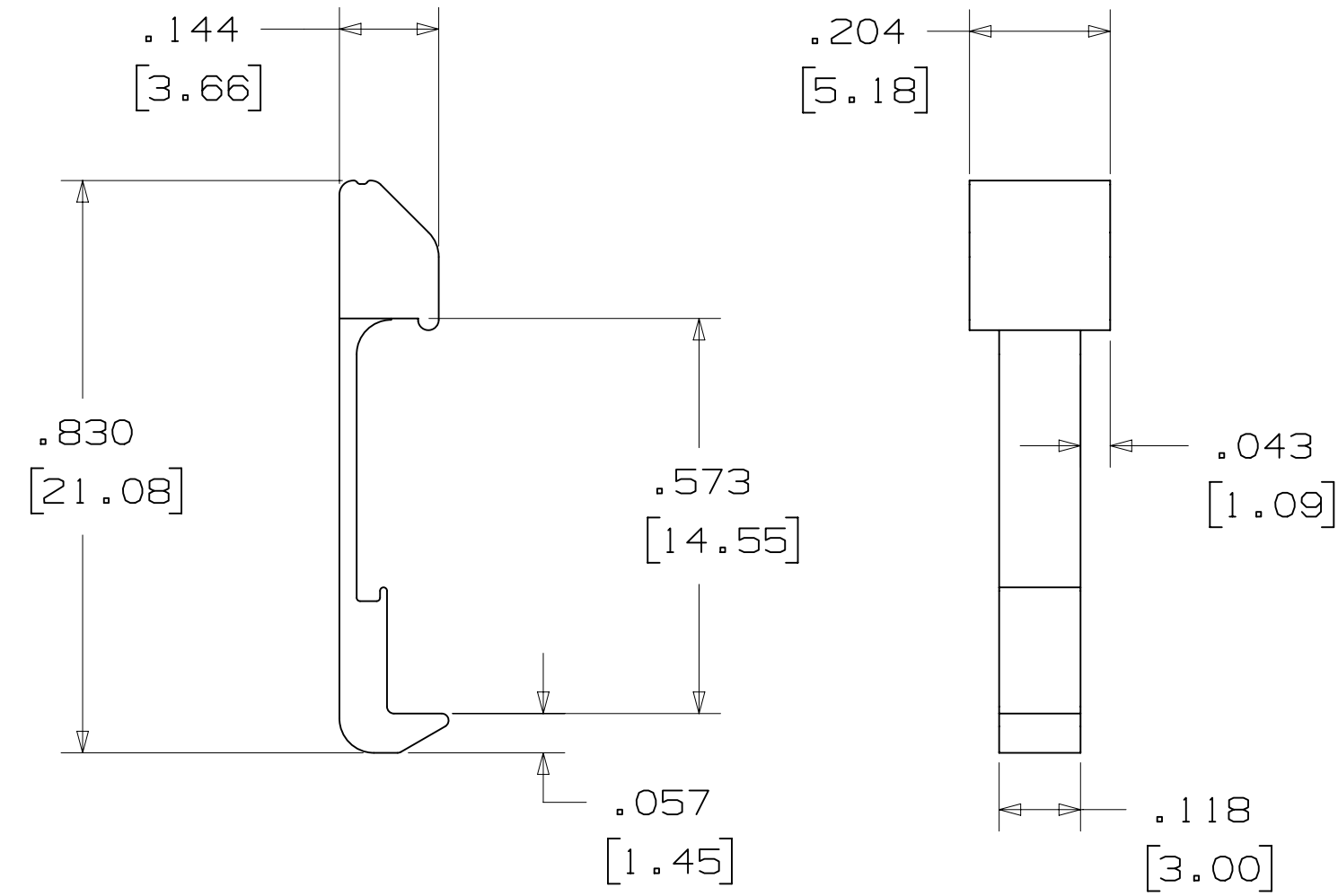
POLARIZING KEY



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

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

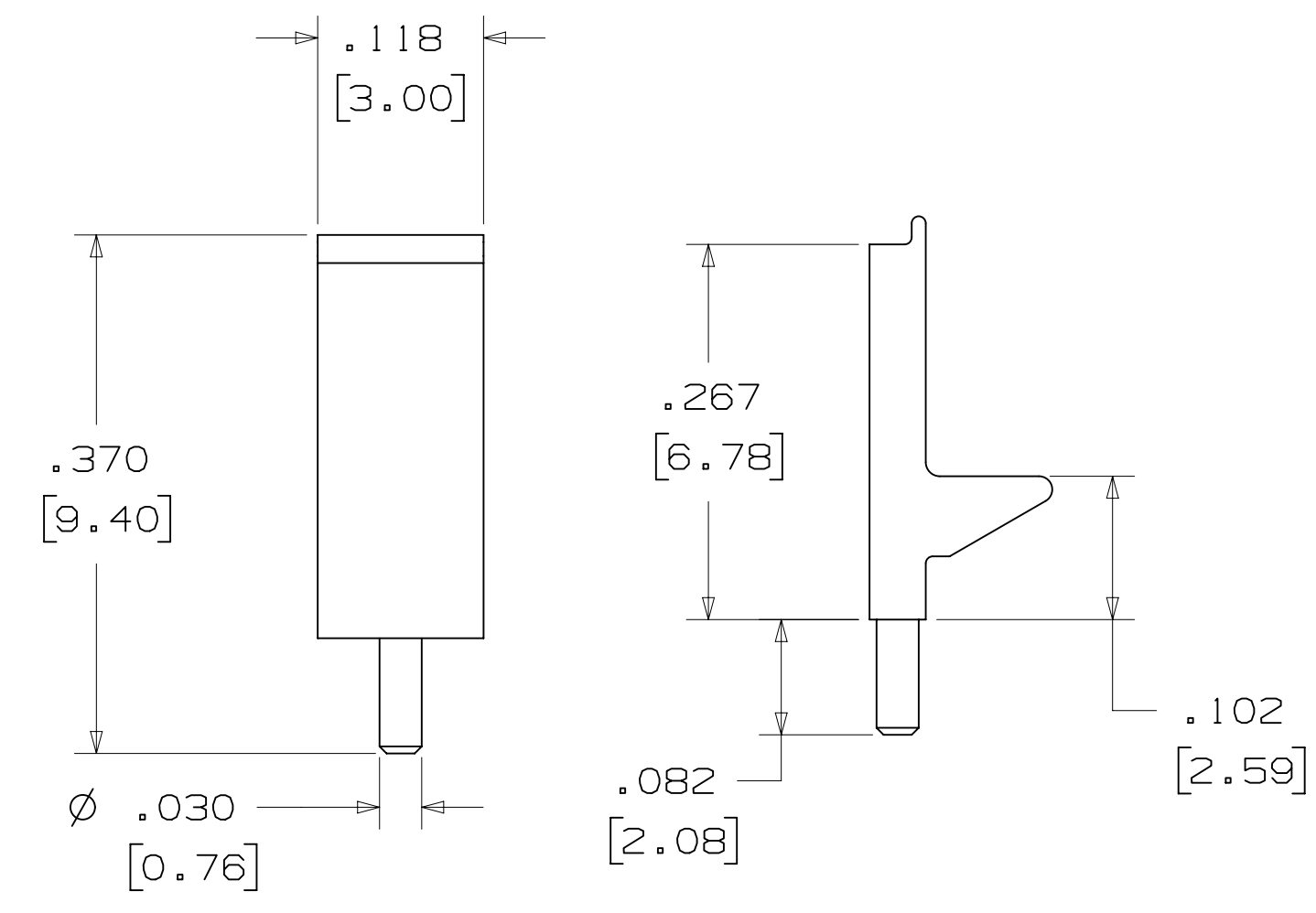
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

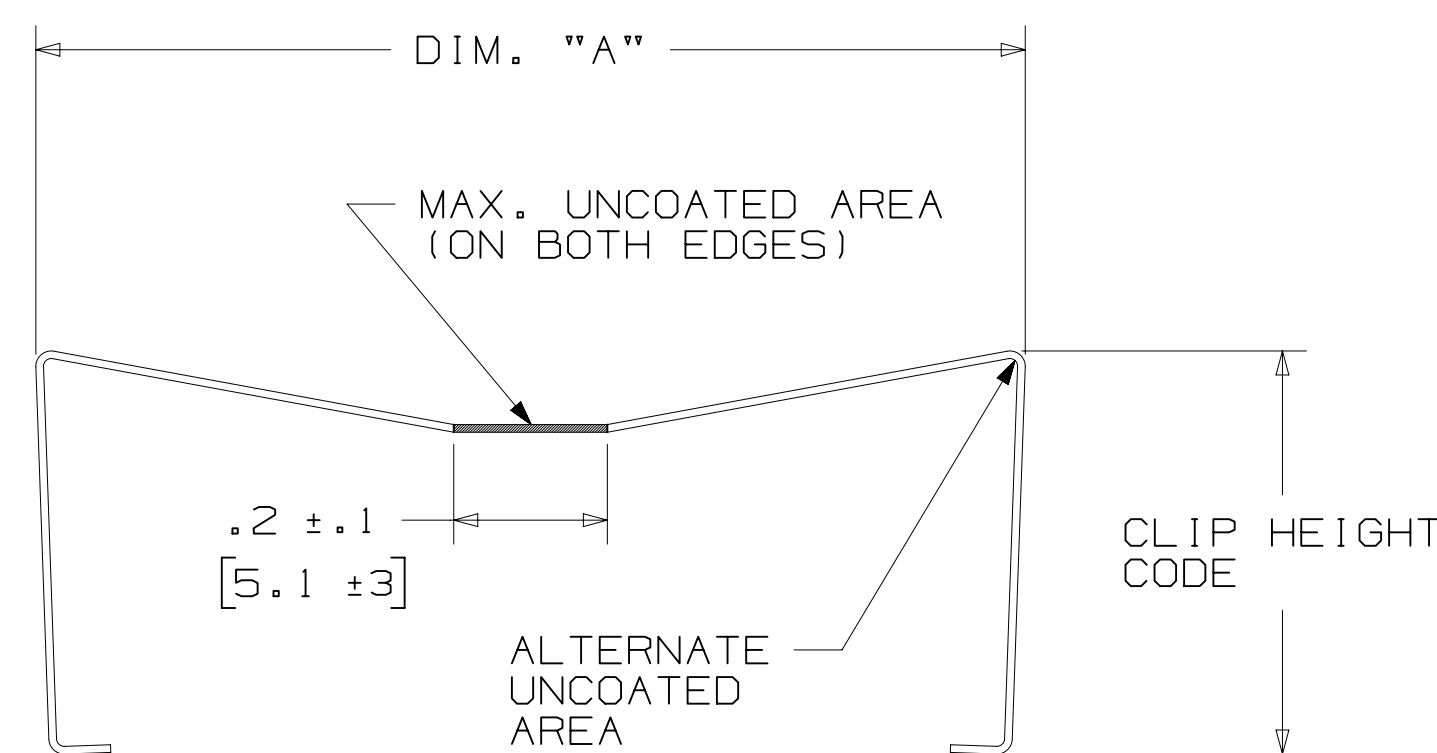
NOTE:
 LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
 ATTACH LATCHES AFTER SOLDERING.

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	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
ACROSS CODES		CASTIGLIONE		AUG 11, 2014		
DIVISION	DIVISION CODE	DATE	DATE	DATE	DATE	DATE
Interconnect Solutions	EMSD					
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	TOLERANCES EXCEPT AS NOTED	TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA			
MAX SURFACE ROUGHNESS	MARKED ONLY	CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D78-5100		0770-7	N	
		MODEL	2500 SERIES	DET	ISTS	YES X NO
				SHT	5 OF 5	

78-5100-0770-7
 N
 REVISION
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 8/5/2016