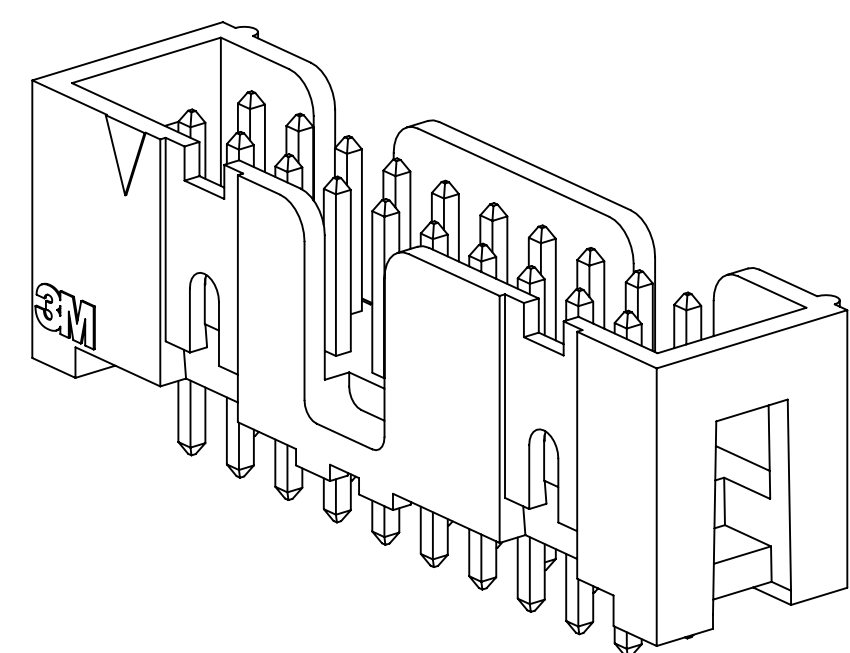
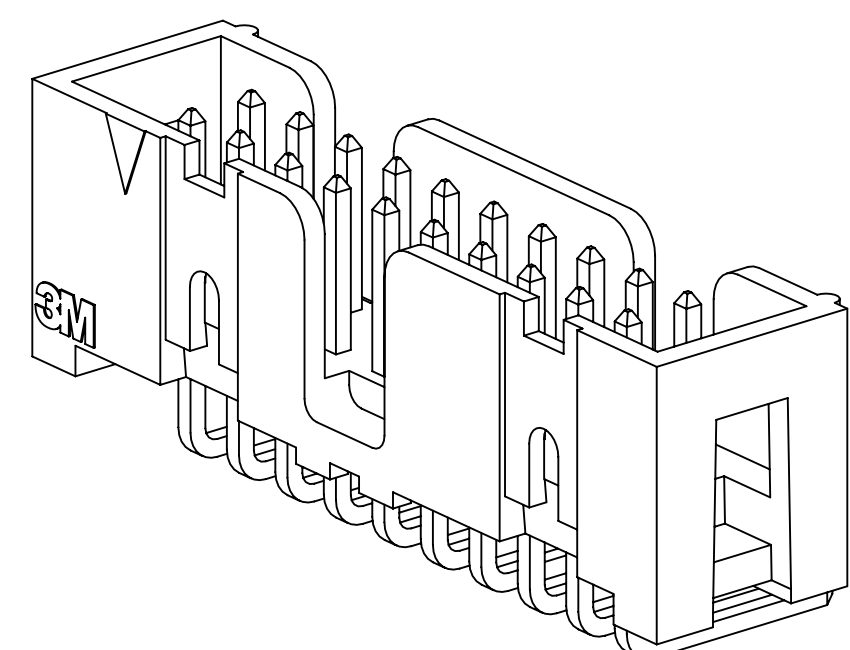


3M™ FOUR-WALL HEADER, 2500 SERIES

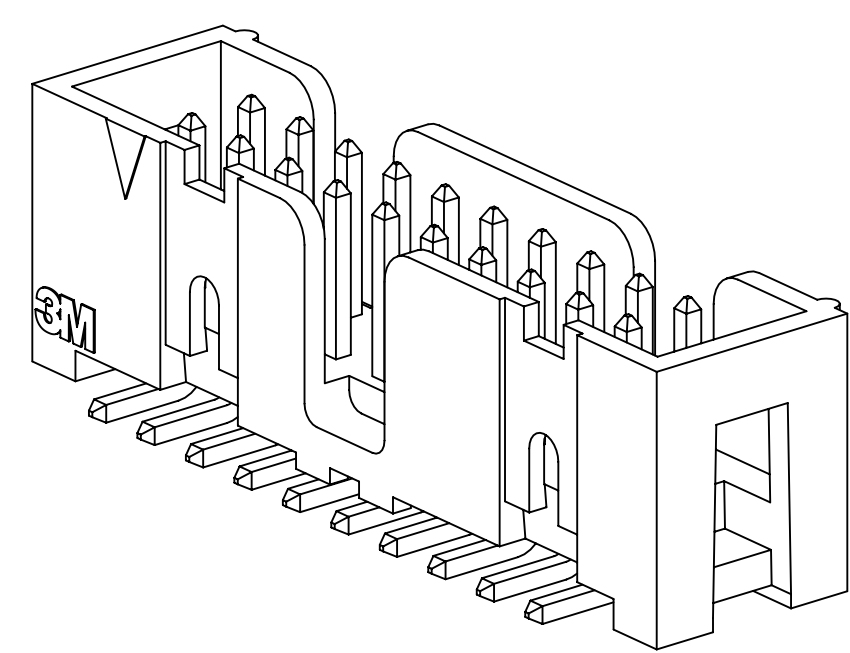
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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 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.

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 FILE NO: E68080

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
68908		AUG 02, 2016		REVISION	JNC	SC
56068		AUG 11, 2014		REVISED AND REDRAWN	JNC	RS
CASTIGLIONE		AUG 11, 2014		DATE		
		R. SCHERER		DATE		SEP 05, 2014

DIVISION	INTERCONNECT SOLUTIONS	EMSD	DIVISION CODE
DO NOT SCALE DRAWING	SCALE 4-1	TOLERANCES EXCEPT AS NOTED	
THIRD ANGLE PROJECTION		INCHES .00 ± .01 .000 ± .005 .0000 ±	
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS 0 ± .0 ± .3 .00 ± .13 .000 ±	
MAX SURFACE ROUGHNESS		INCHES	
MARKED ONLY		ANGLES	

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
N	68908	AUG 02, 2016	JNC	SC
M	56068	AUG 11, 2014	JNC	RS

CAGE NUMBER	SIZE	DRAWING NO.	REV.
D		78-5100-0770-7	N

MODEL	2500 SERIES	DET	IS1s	YES	NO	SHT	1 OF 5



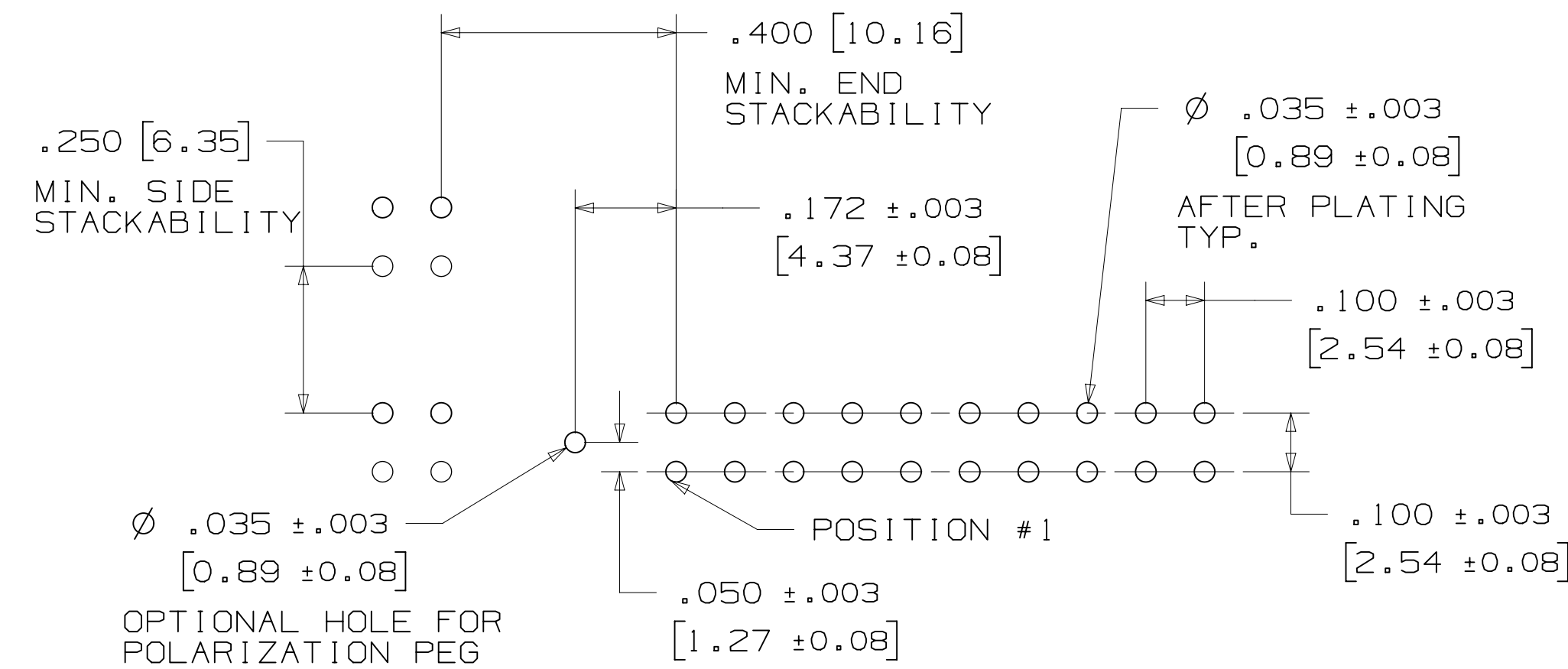
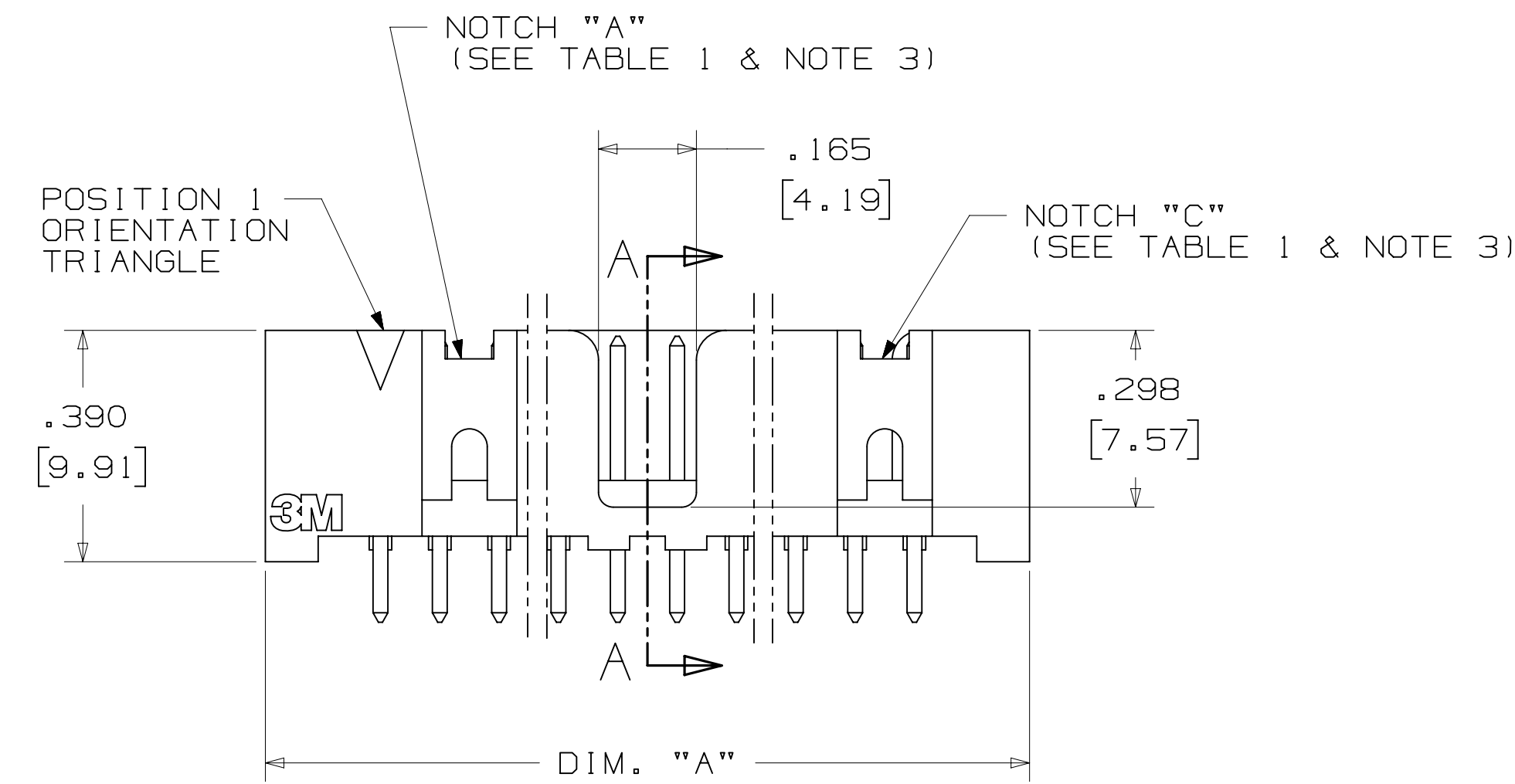
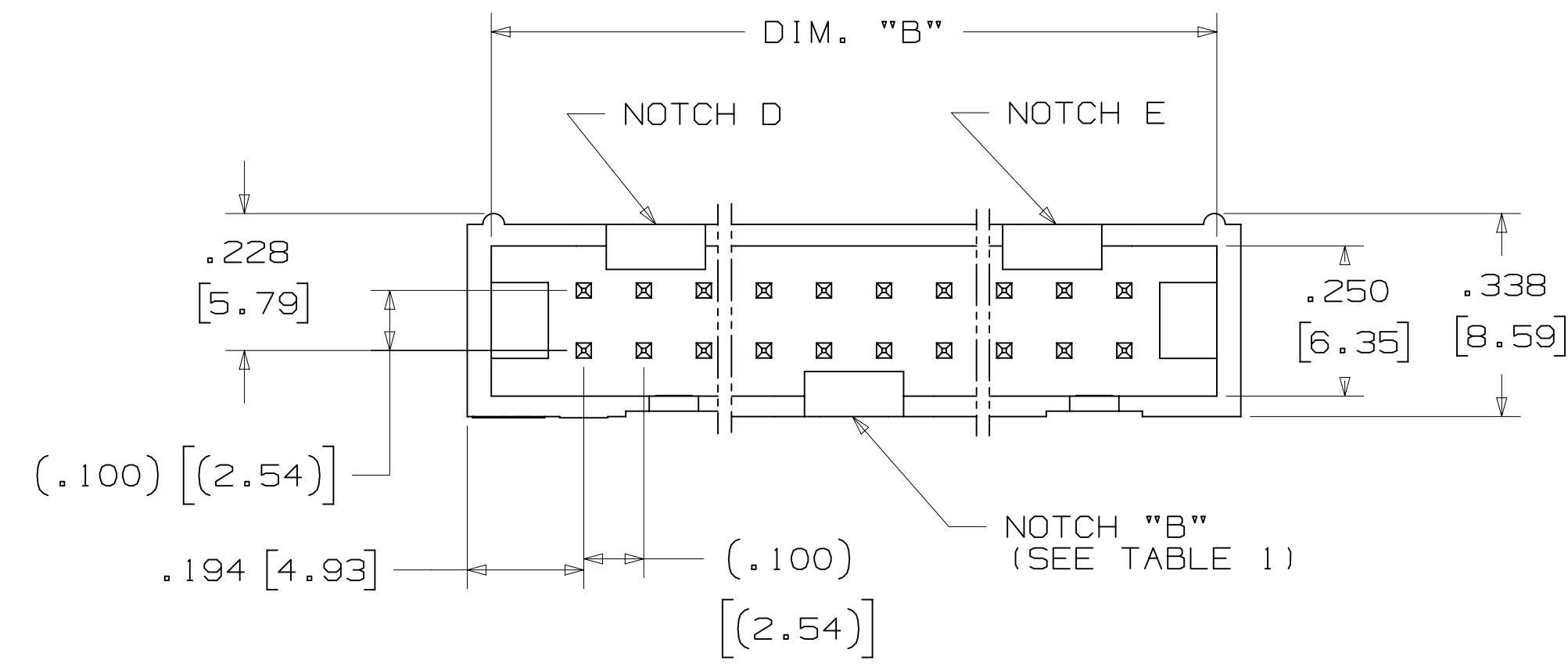
HEADER, 4-WALL,
LO-PRO, .100 X .100,
SMT, STRAIGHT & RA

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

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
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED		INCHES		
THIRD ANGLE PROJECTION		MILLIMETERS		REV.		
INTERPRET PER ASME Y14.5 - 2009		0 ±		NUMBER		
MAX SURFACE ROUGHNESS		.00 ± .01		D 78-5100-0770-7 N		
SURFACES		.000 ± .005		CAGE NUMBER		
MARKED ONLY		.000 ±		MODEL		
		.0 ± .3		2500 SERIES		
		.00 ± .13		DATE		
		.000 ±		MFG		
		ANGLES		DATE		
				SEP 05, 2014		

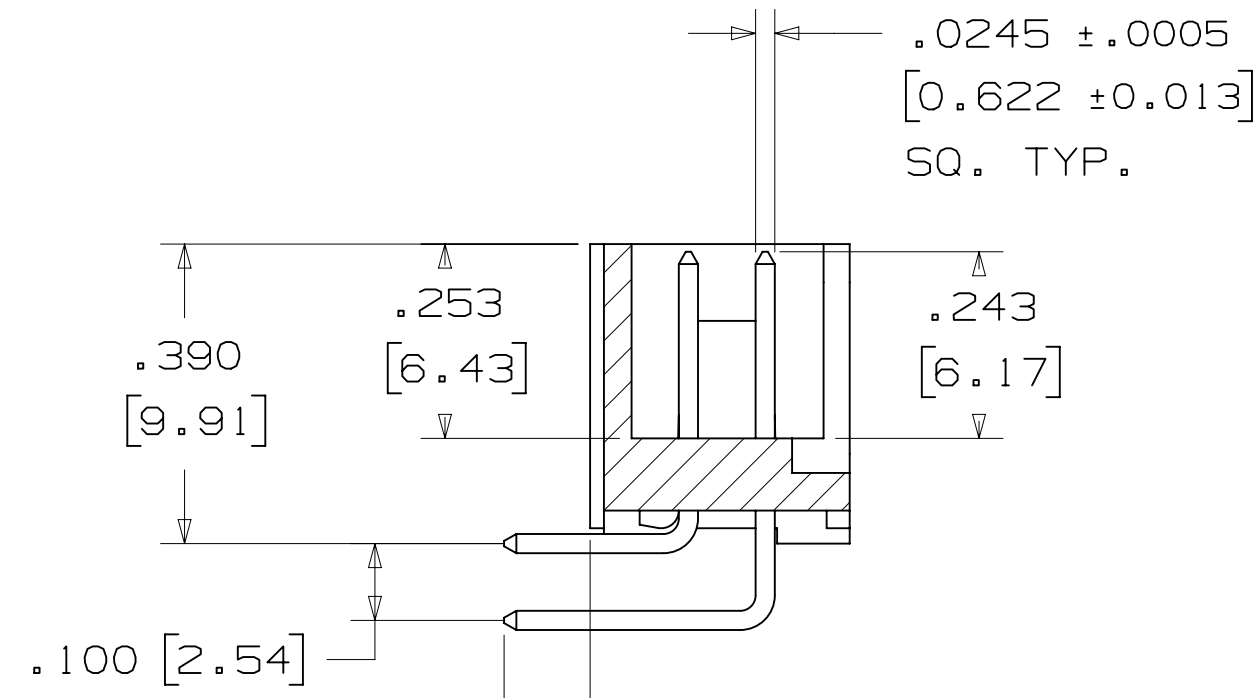
N 68908 AUG 02, 2016 JNC SC
 REVISE DIM ON SHT2 & CLIP CHART ON SHT5
 M 56068 AUG 11, 2014 JNC RS
 REVISED AND REDRAWN
 DRFT CASTIGLIONE AUG 11, 2014
 CHKD R. SCHERER SEP 05, 2014

TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA
 MODEL: 2500 SERIES
 SHEET: 2 OF 5

78-5100-0770-7
 N
 11:10 AM UTC-05:00
 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

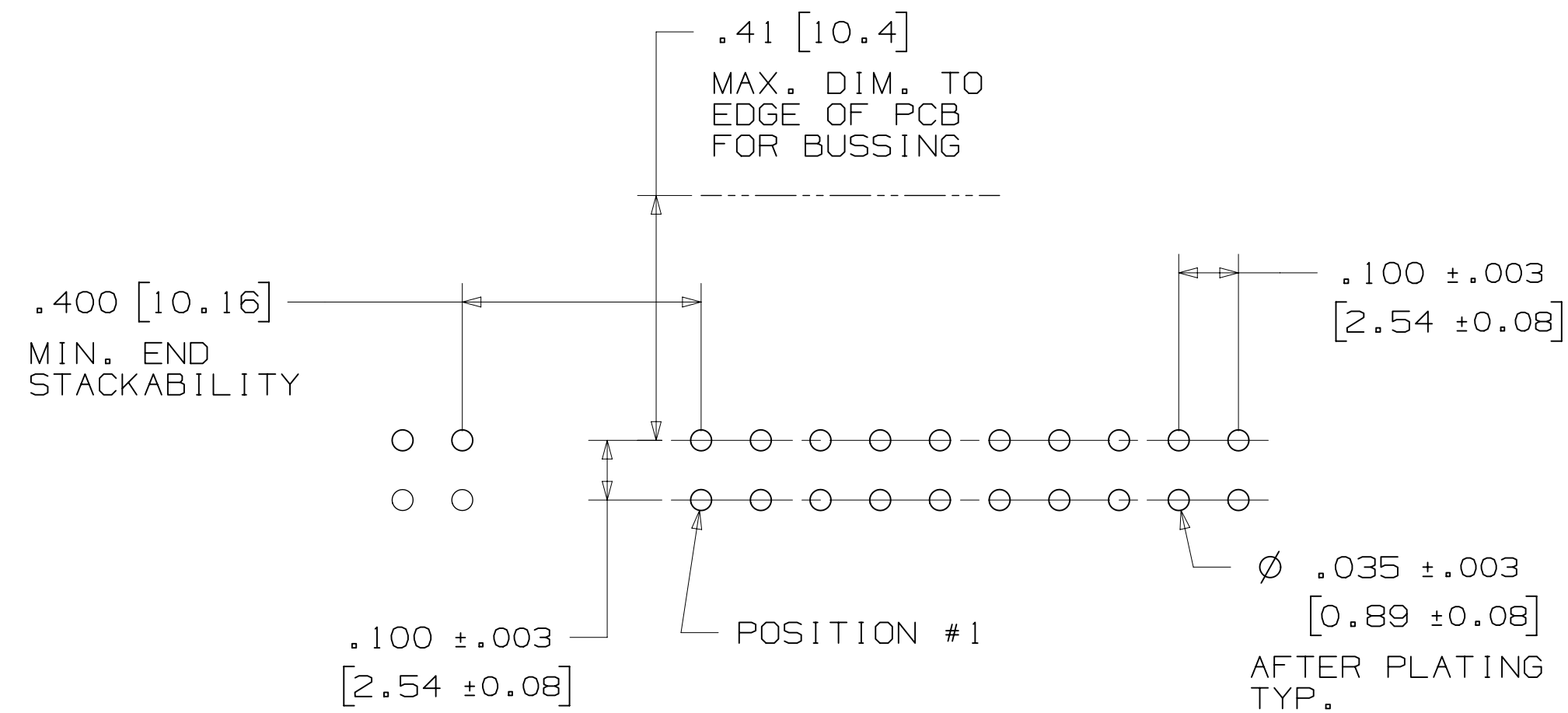
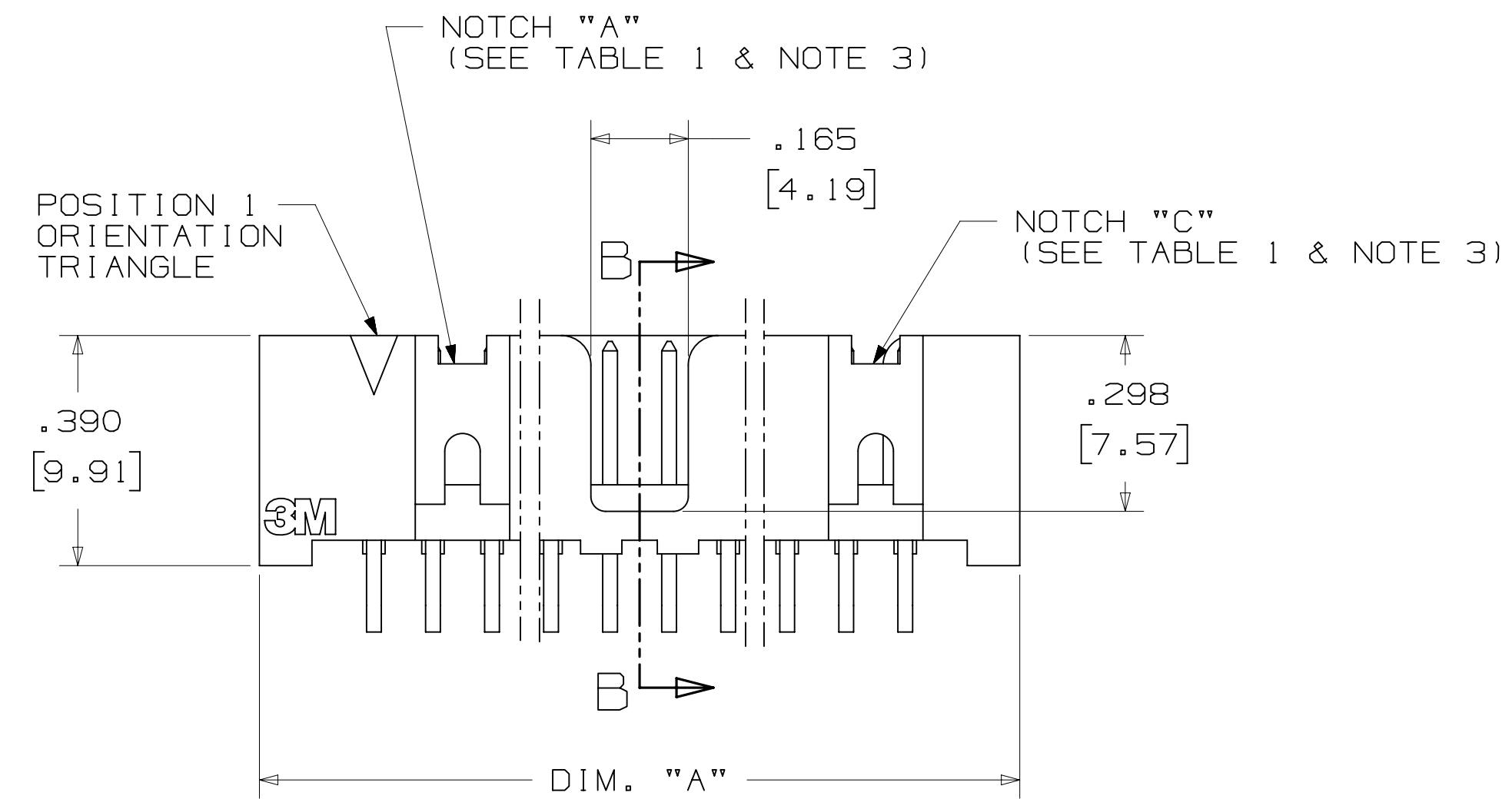
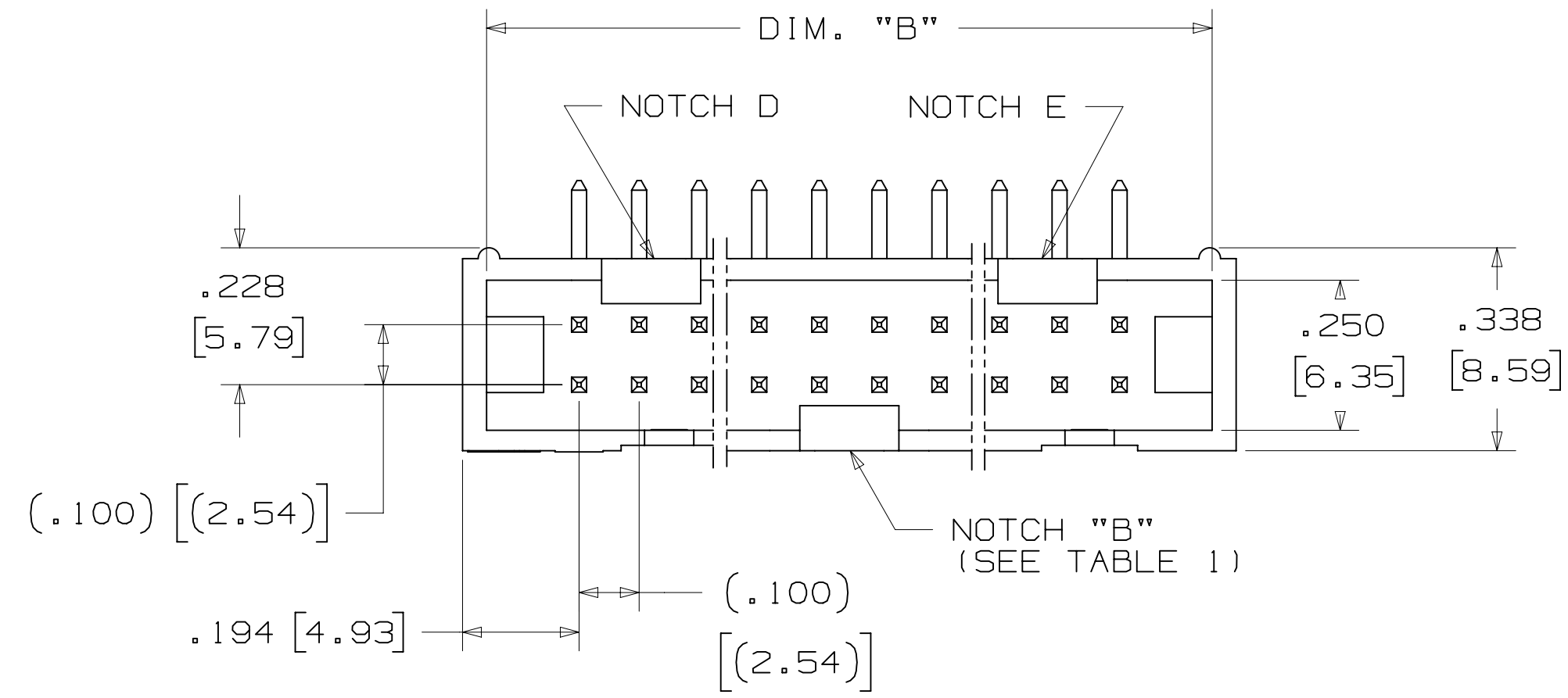
N = HIGH TEMP BLACK (PCT)
 (RB, UB OR UG PLATING REQ'D)
 BLANK = (UB OR UG PLATING)

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		INCHES		DATE		
SURFACES		MILLIMETERS		DATE		
MARKED ONLY		ANGLES		DATE		
MODEL		CAGE NUMBER		DRAWING NO.		REV.
2500 SERIES		D 78-5100-0770-7		N		N
TITLE		CAGE NUMBER		DRAWING NO.		REV.
HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		D 78-5100-0770-7		N		N
MODEL		CAGE NUMBER		DRAWING NO.		REV.
2500 SERIES		D 78-5100-0770-7		N		N

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

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
				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. N		

© 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.

3M Center St. Paul, MN 55144

REVISIONS:

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

REVISIONS: REVISE DIM ON SHT2 & CLIP CHART ON SHT5
REVISED AND REDRAWN
ISSUE DATE AND DESCRIPTION

DATE: AUG 11, 2014
DATE: SEP 05, 2014

APPR: R. SCHERER
DATE: SEP 05, 2014

MODEL: 2500 SERIES
SHT 4 OF 5

DRAWING NUMBER: 78-5100-0770-7
REVISION: N
DATE: 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

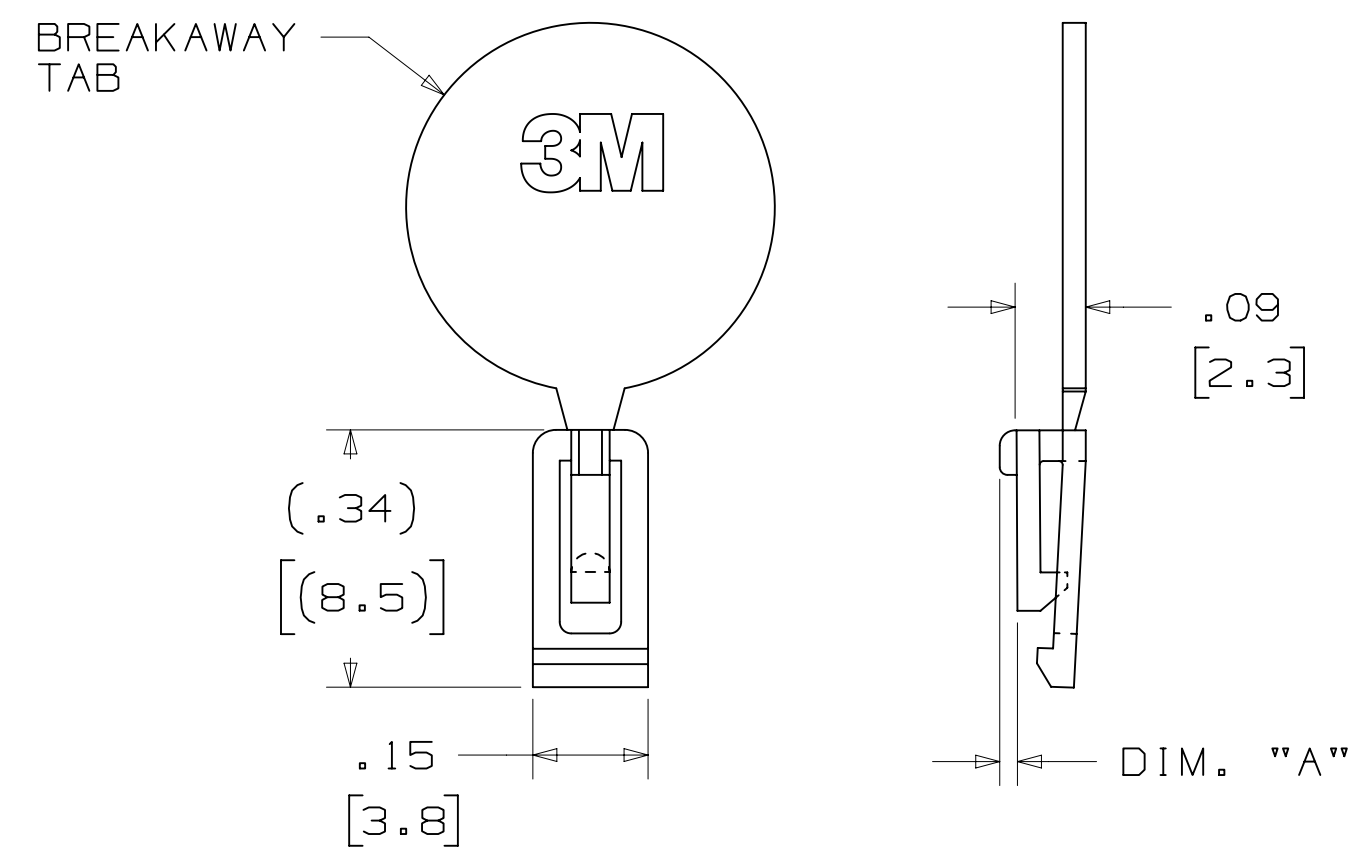
PART CUSTOMIZATION

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.

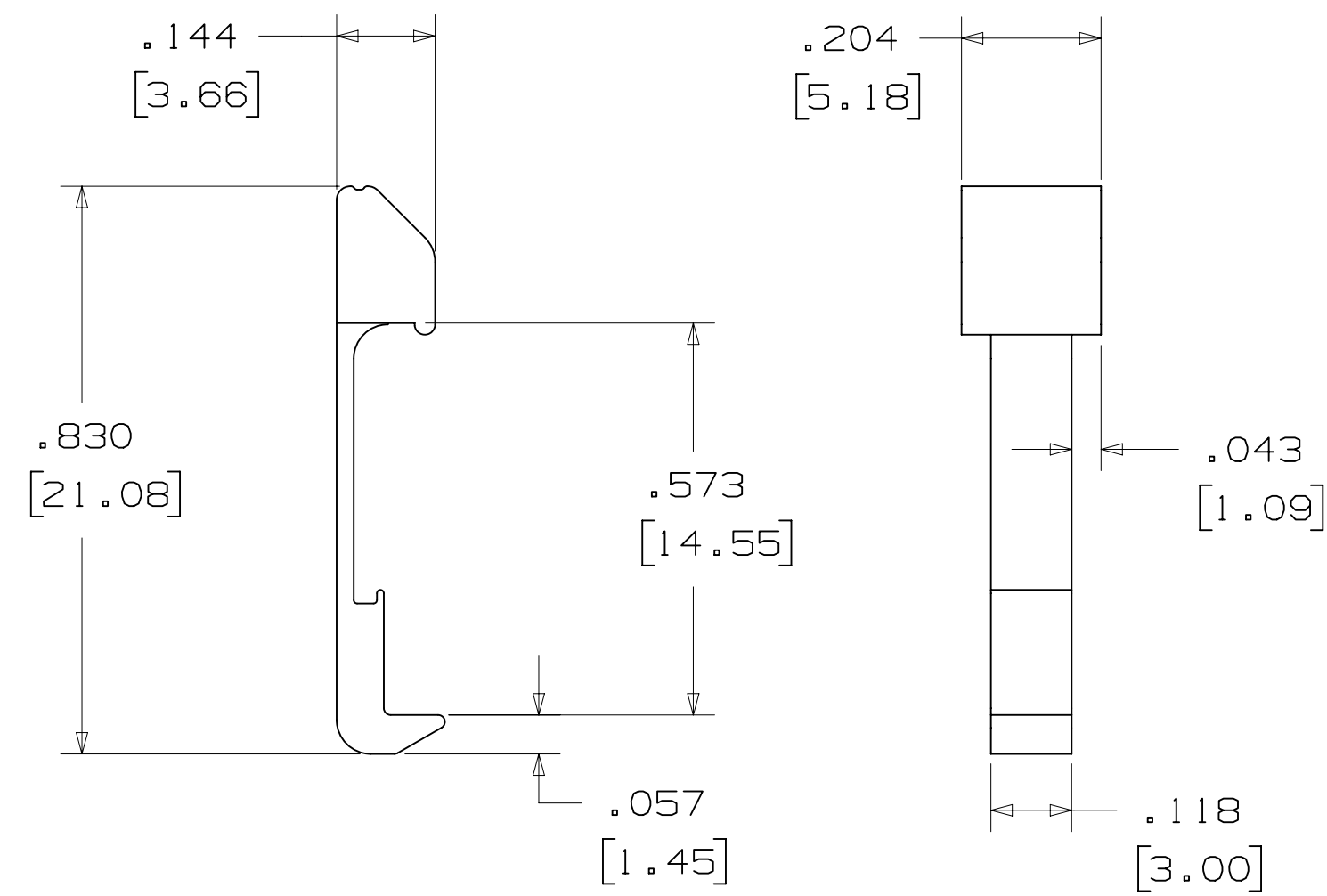
- * SELECTIVE PIN REMOVAL (FOR BOARD ASSEMBLY POLARIZATION).
- * DIFFERENT PIN LENGTHS.

POLARIZING KEY



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

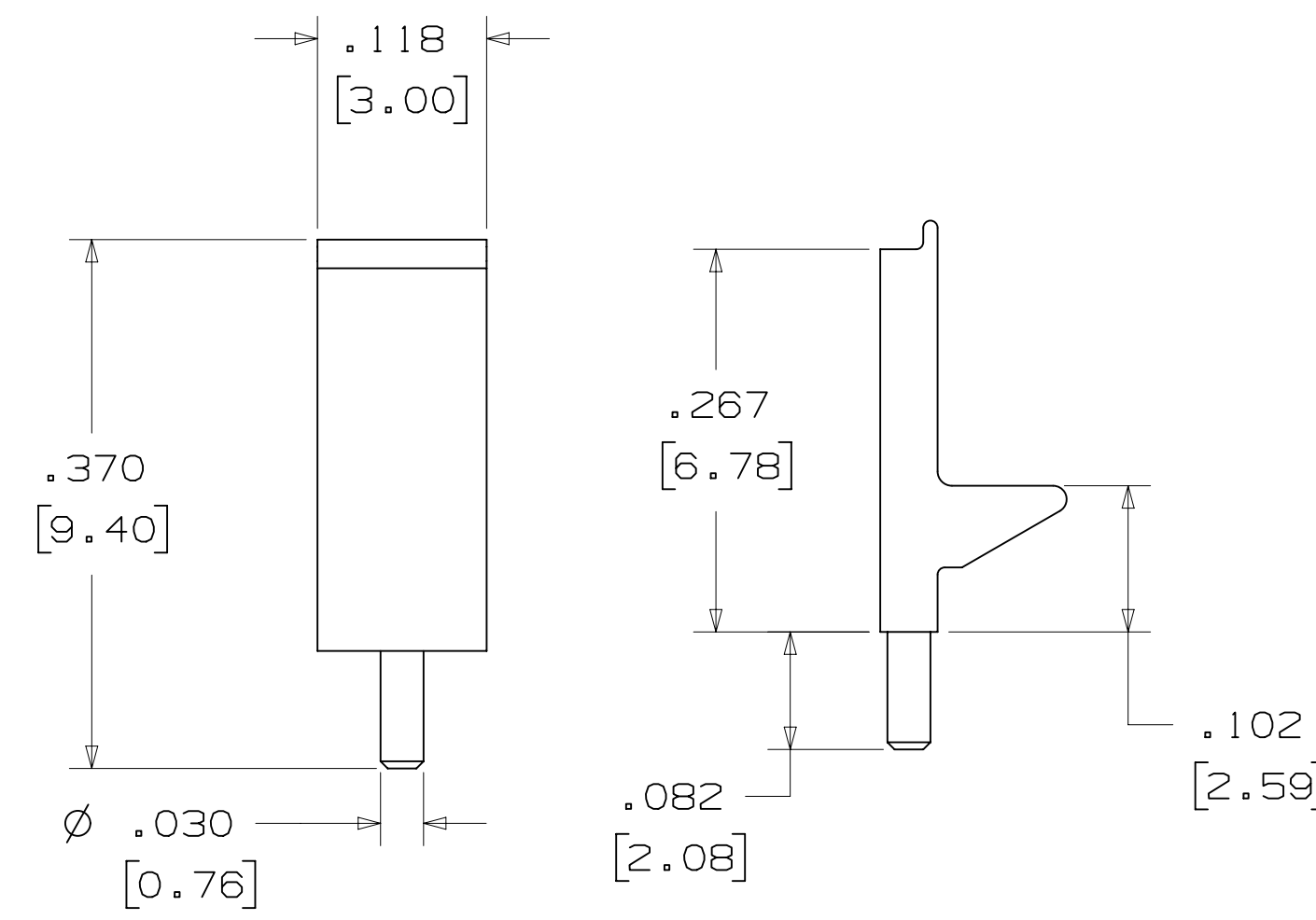
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

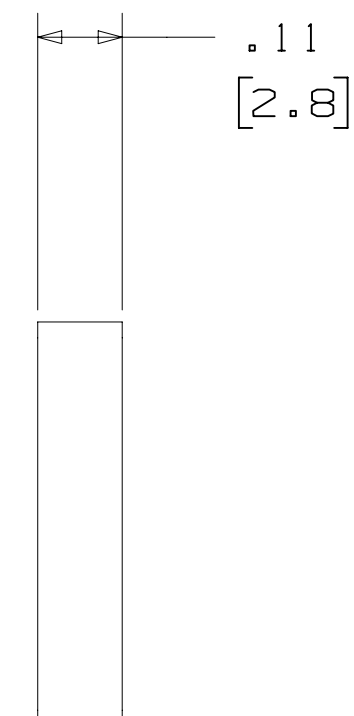
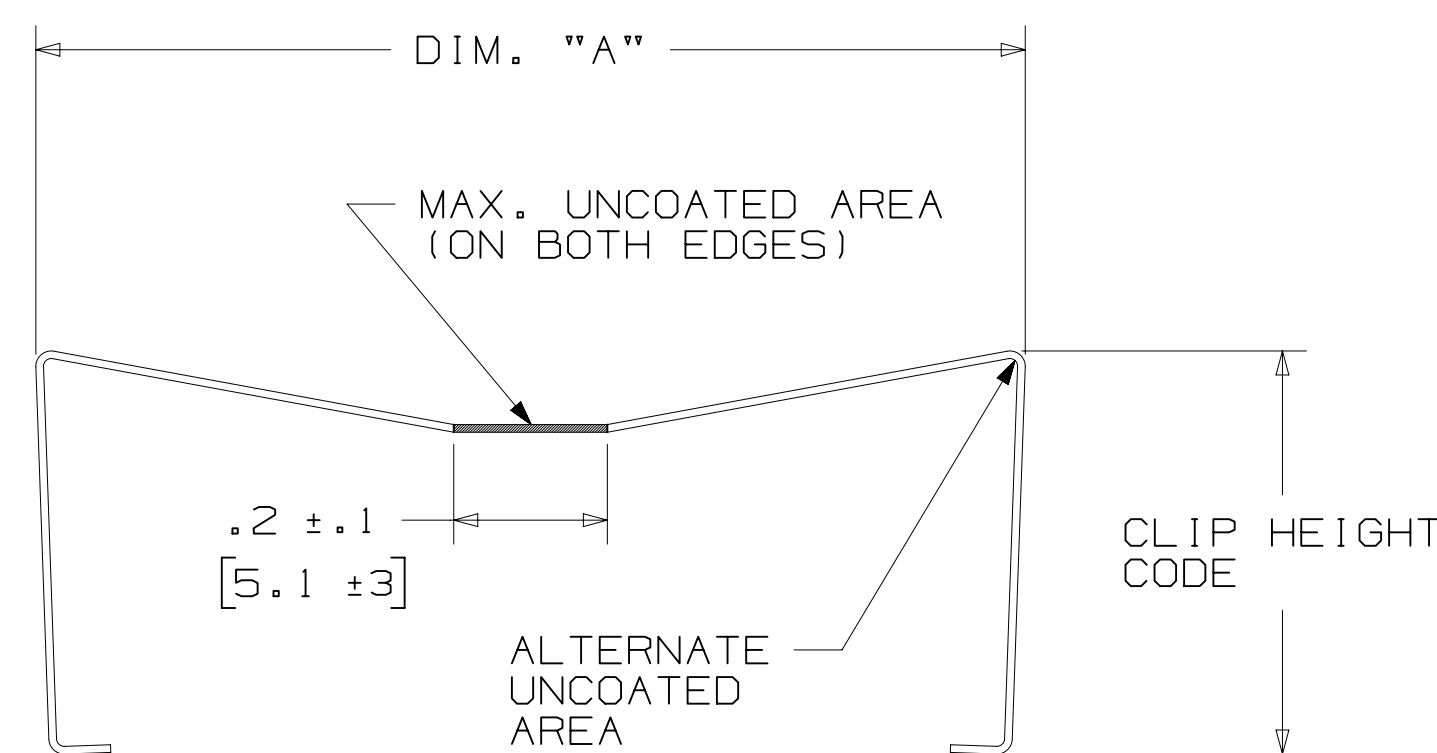
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

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
3505-8064				AUG 11, 2014		
3505-8124				AUG 11, 2014		
3505-8150				AUG 11, 2014		
3505-8064				AUG 11, 2014		
3505-8124				AUG 11, 2014		
3505-8150				AUG 11, 2014		

N	68908	AUG 02, 2016	JNC	SC
M	56068	AUG 11, 2014	JNC	RS
		REVISOR	DATE	

DIVISION	INTERCONNECT SOLUTIONS	DIVISION CODE	EMSD
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED	
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	INCHES .00 ± .01 .000 ± .005 .0000 ±	MILLIMETERS 0 ± .3 .00 ± .13 .000 ±
MAX SURFACE ROUGHNESS	MARKED ONLY	ANGLES	

CAGE NUMBER	SIZE	DRAWING NO.	REV.
D	78-5100-0770-7	N	
MODEL	2500 SERIES	DET	IS1s YES XNO SHT 5 OF 5

3M

© 2016 3M COPYRIGT 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.

St. Paul, MN 55144

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

78-5100-0770-7

Imaged: N.1 8/5/2016 11:10 AM UTC-05:00