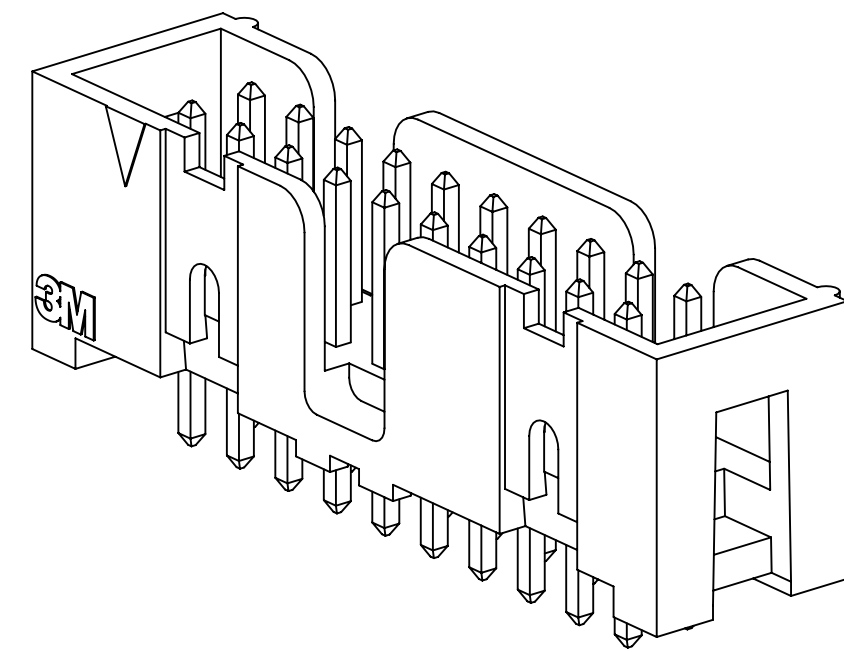
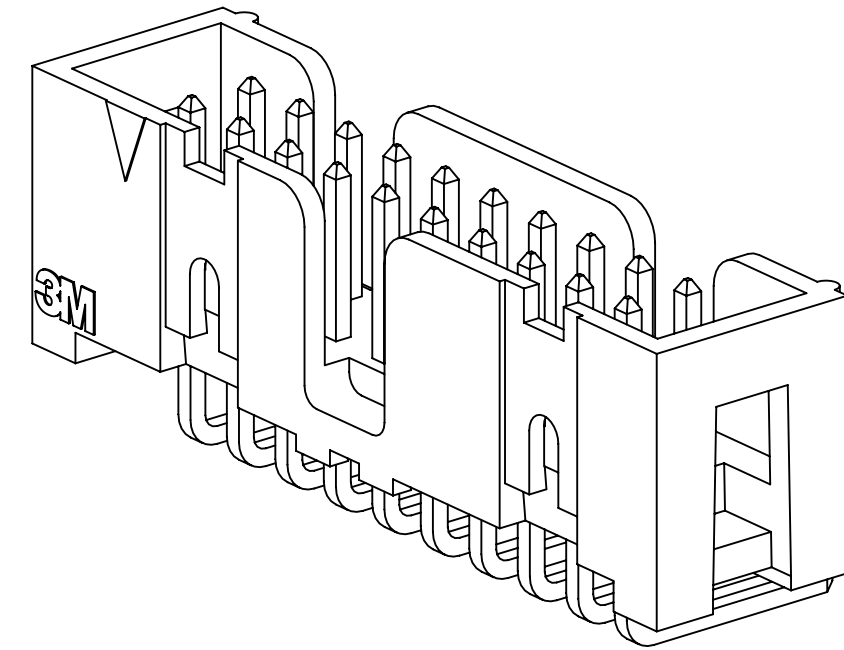


3M™ FOUR-WALL HEADER, 2500 SERIES

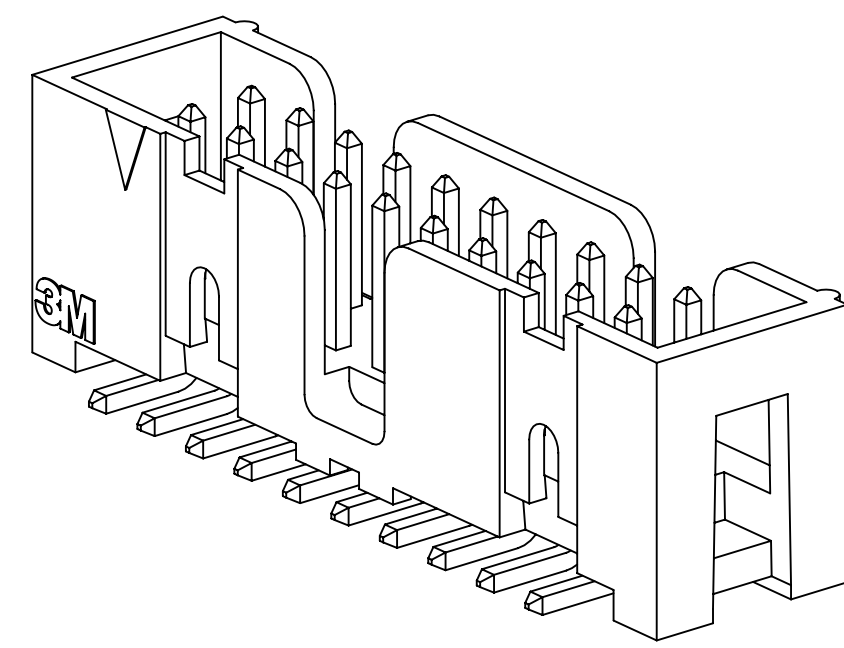
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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
- REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
 - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 - NOTCHES A & C WILL ACCOMMODATE 3M POLARIZING KEY: N3518.
 - CONTACT TAILS .0245 [.622] WIRE WITH .0075 [.191] CORNER RADIUS AND .028 [.072] DIAGONAL.
 - 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



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

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

DESIGN REFERENCE	NEXT ASSEMBLY	
SCALE	SCALE	TOLERANCES EXCEPT AS NOTED
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	MILLIMETERS
MAX SURFACE ROUGHNESS	MARKED SURFACES	0 ±
MARKED ONLY		.0 ± .3
		.00 ± .13
		.000 ±

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 1 OF 5

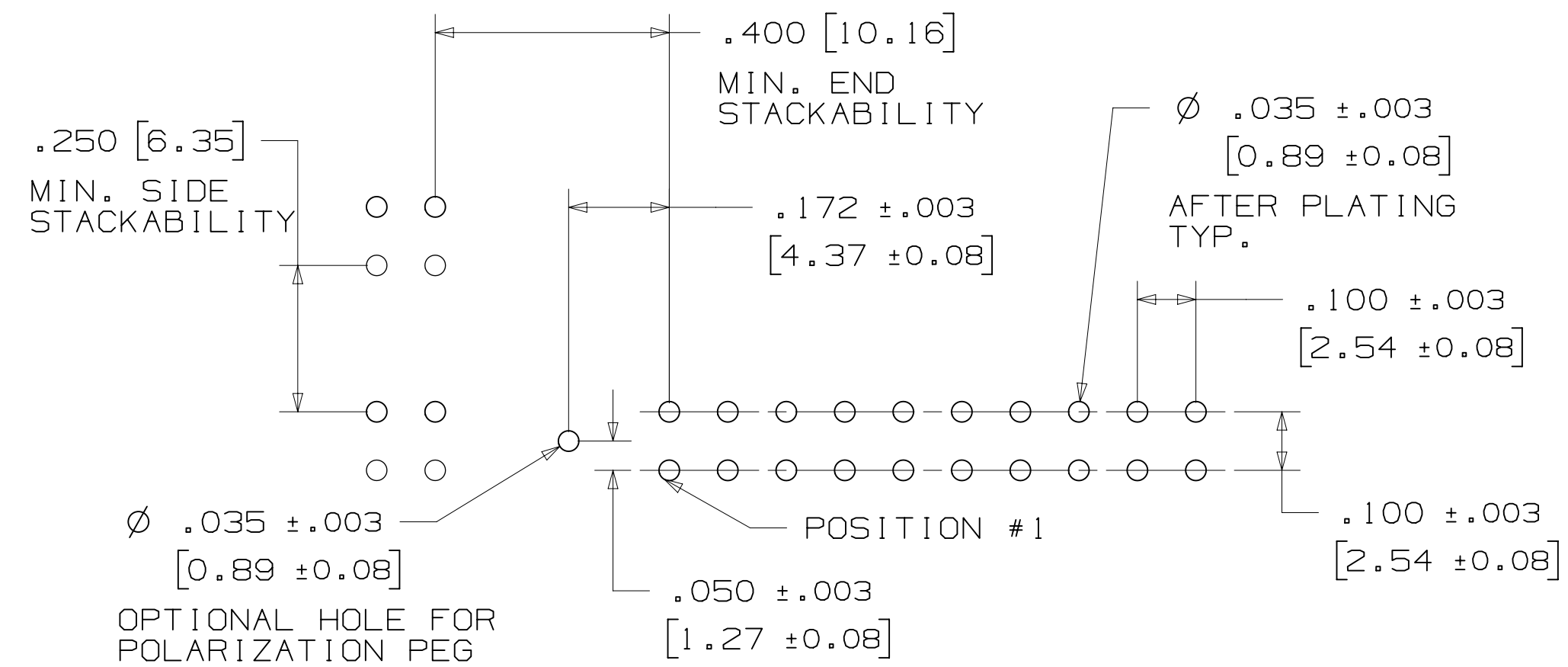
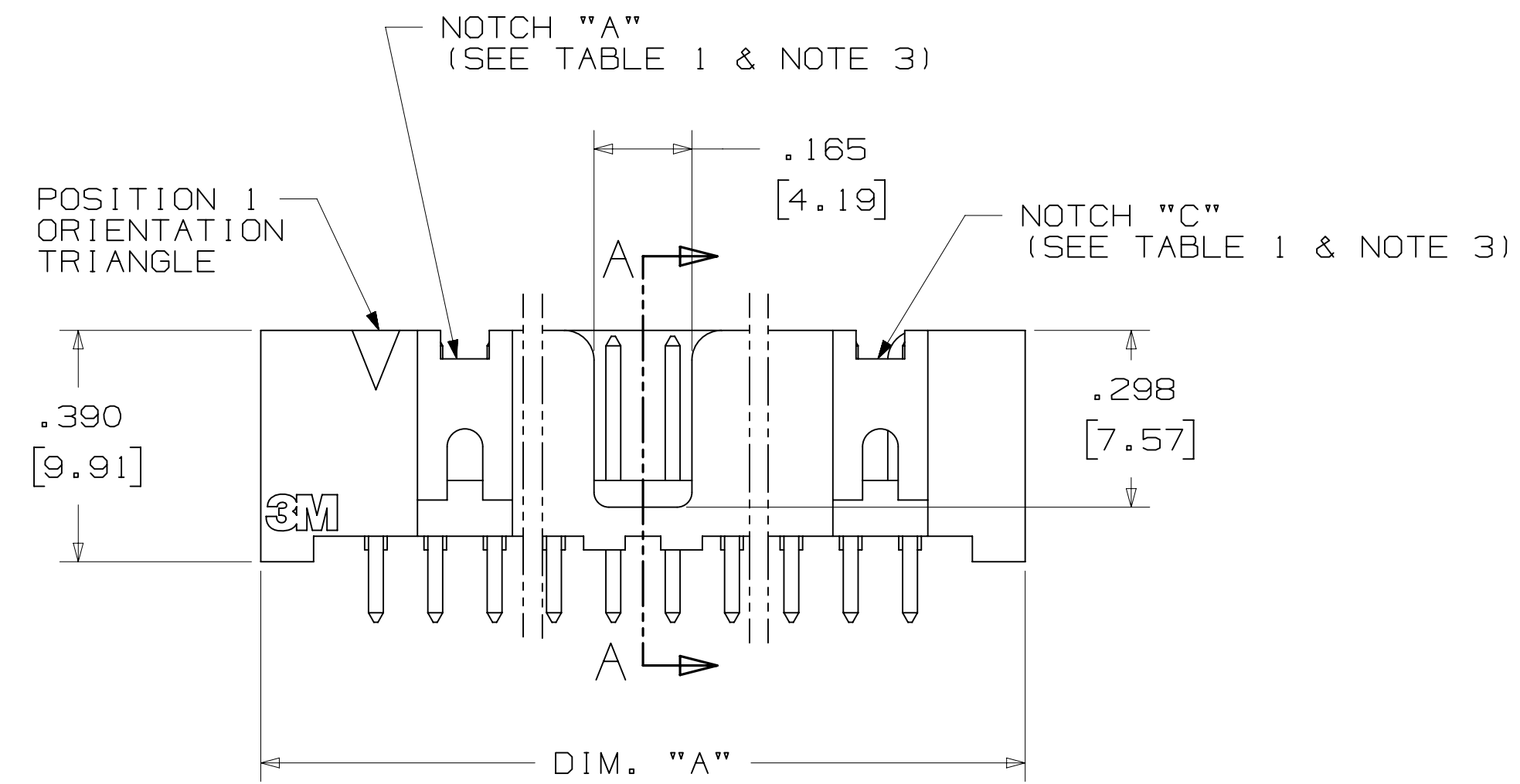
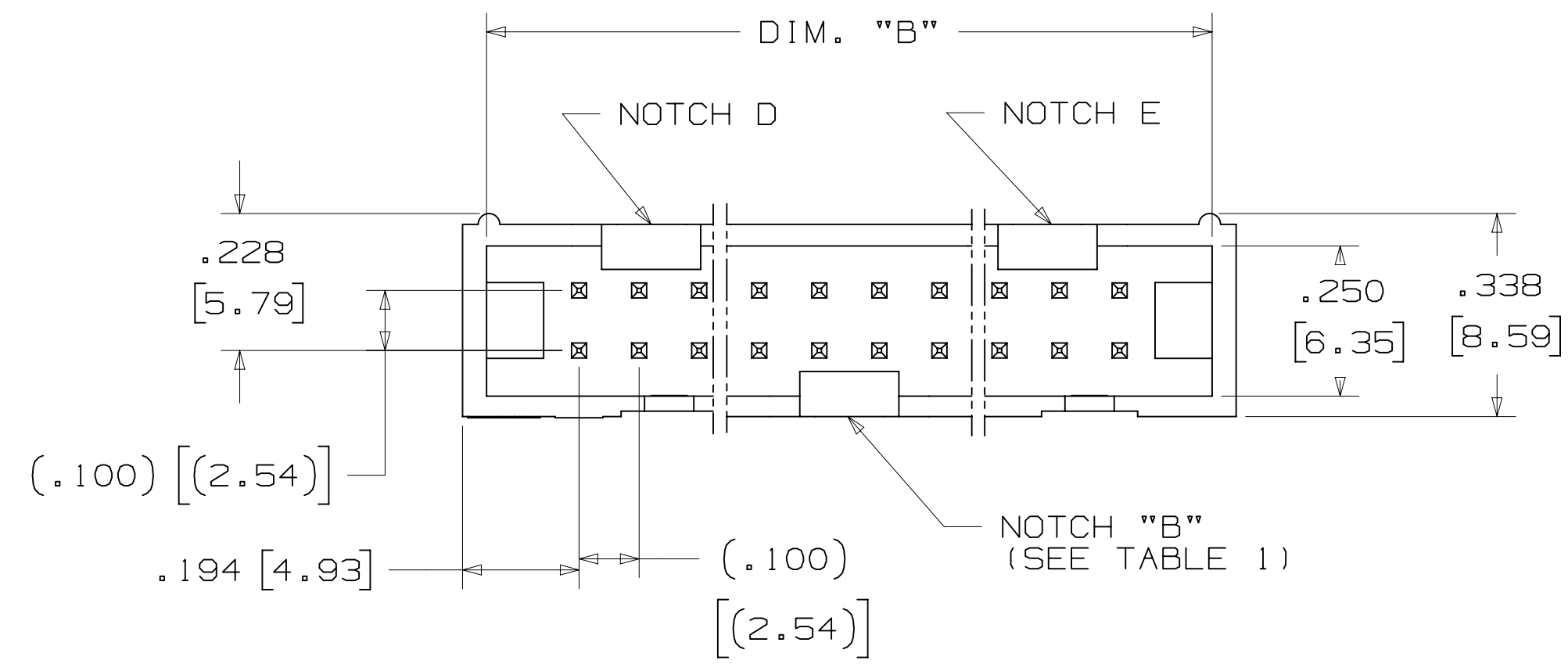
78-5100-0770-7

Imaged: N.1 B/5/2016 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



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 ± .0 ± .3 .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
 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

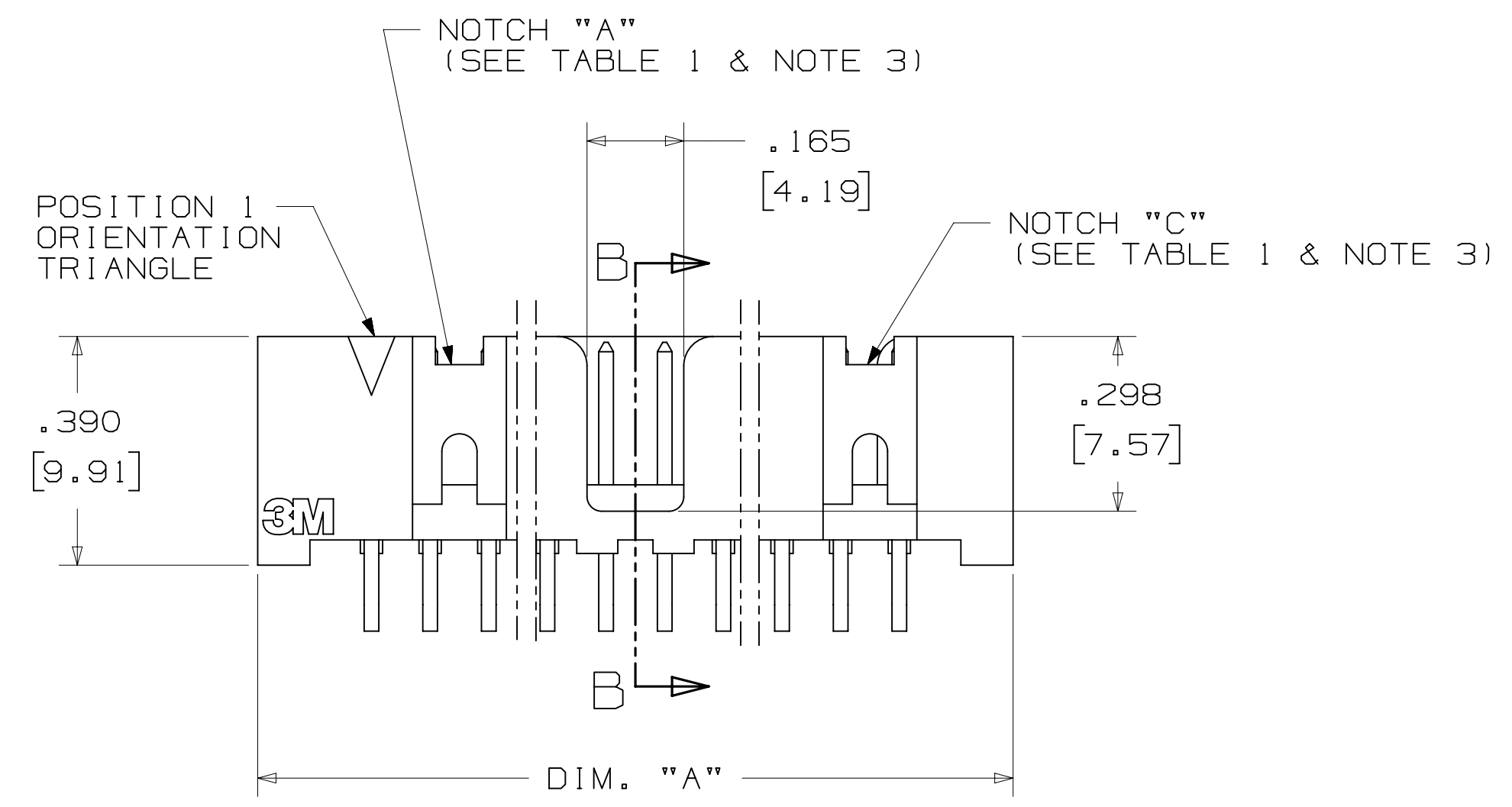
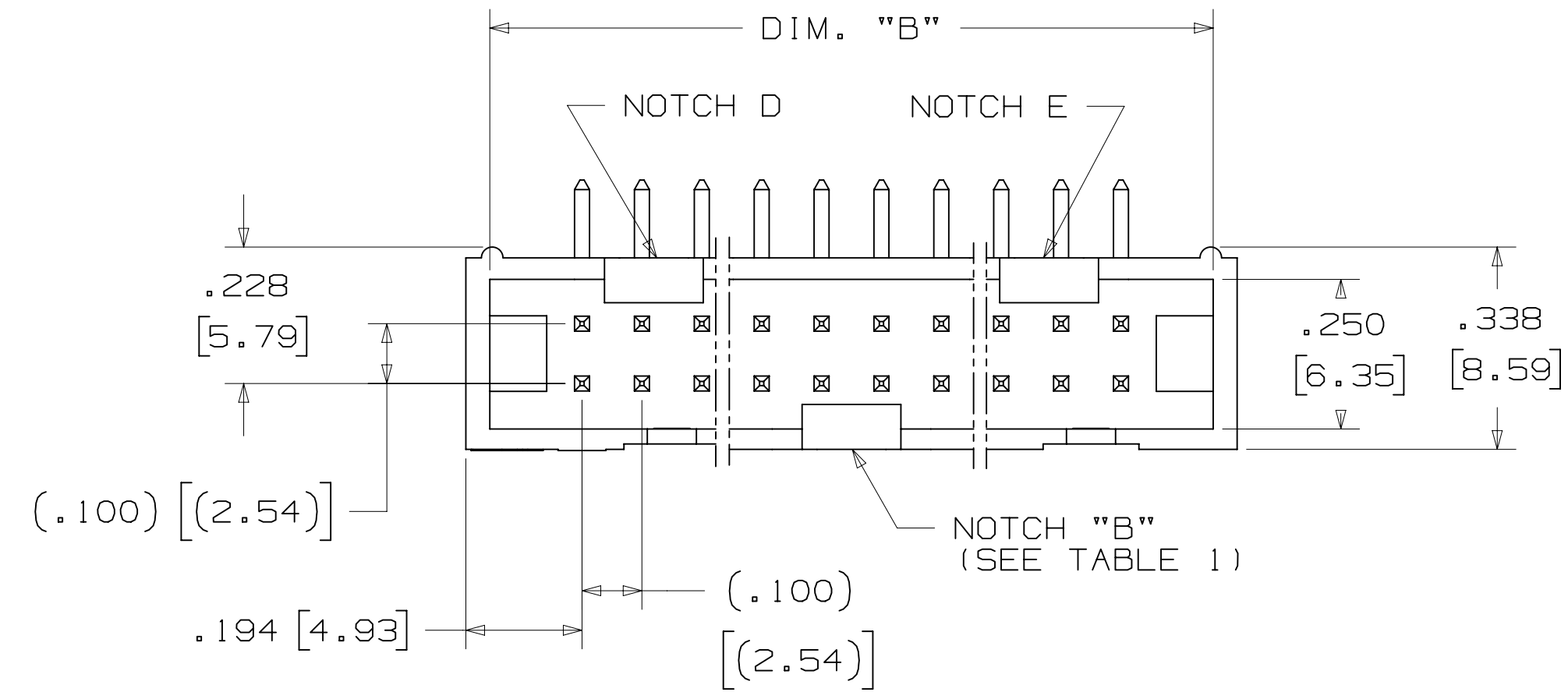
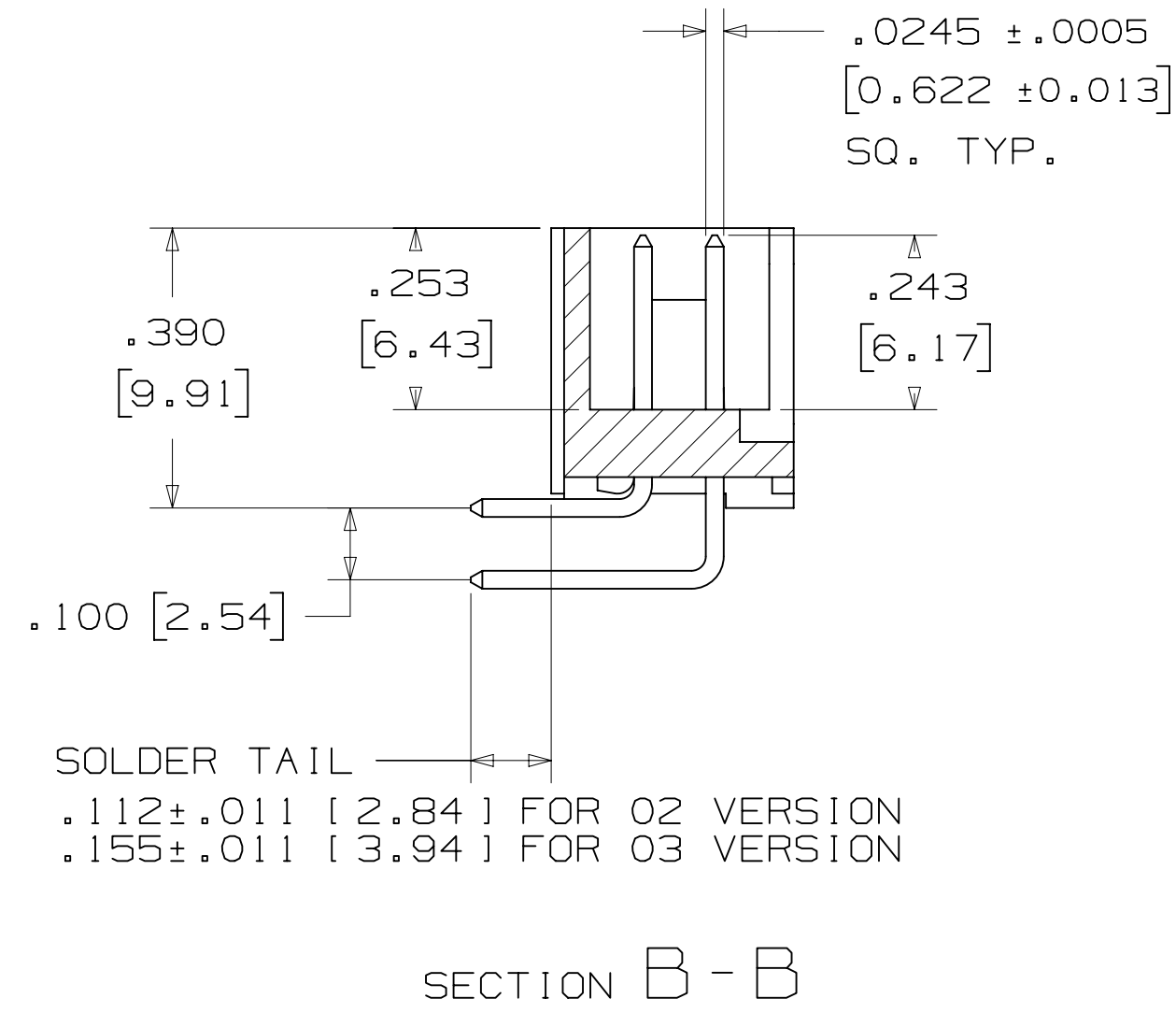
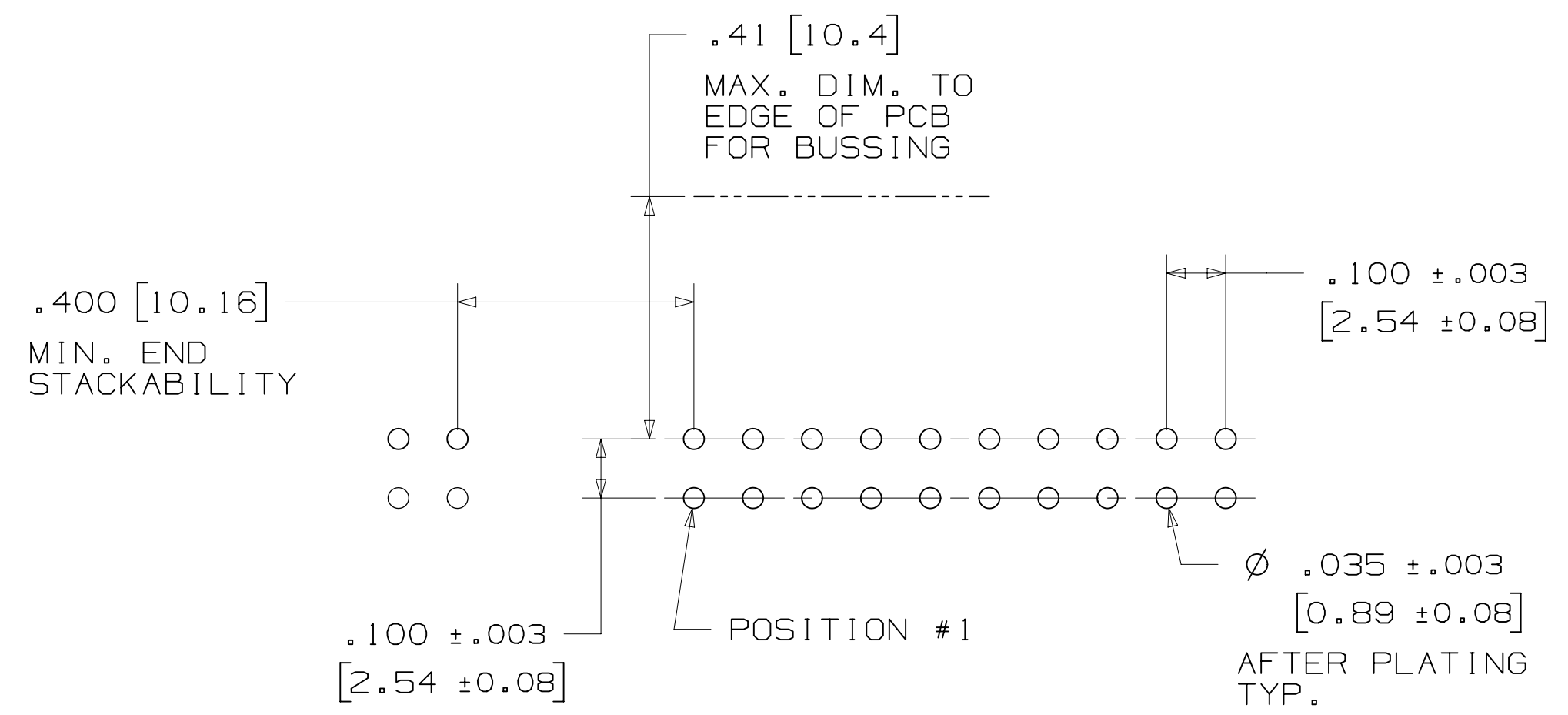


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]	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
				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		INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS: 0 ± .000 ± .005 ± .0000 ±		
MAX SURFACE ROUGHNESS		SURFACES		INCHES: .0 ± .01 ± .005 ± .0000 ±		
MARKED ONLY				MILLIMETERS: 0 ± .000 ± .013 ± .000 ±		
CAGE NUMBER: D78-5100-0770-7		SIZE: N		DRAWING NO.: 2500 SERIES		
MODEL: 2500 SERIES		REV.:		SHT 3 OF 5		

3M Center St. Paul, MN 55144

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REV. N 68908 AUG 02, 2016 JNC SC
M 56068 AUG 11, 2014 JNC RS
REVISION: REVISE DIM ON SHT2 & CLIP CHART ON SHT5
ISSUE AND REDRAWN

DRFT: CASTIGLIONE, DATE: AUG 11, 2014, MFG: R. SCHERER, DATE: SEP 05, 2014

REVISED AND REDRAWN

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		MILLIMETERS: 0 ± .005		
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS: 0 ± .005		INCHES: .00 ± .01		
MAX SURFACE ROUGHNESS: 1.6		SURFACES: .000 ± .005		MILLIMETERS: 0 ± .005		
MARKED ONLY		ANGLES: 1/16		INCHES: 0 ± .005		
CAGE NUMBER: D78-5100-0770-7		SIZE: N		DRAWING NO.: 78-5100-0770-7		
MODEL: 2500 SERIES		REV.:		DATE: SEP 05, 2014		

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

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3M Center St. Paul, MN 55144

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

CAGE NUMBER: D78-5100-0770-7 N

MODEL: 2500 SERIES

REV.:

DATE: SEP 05, 2014

SHT 4 OF 5

DRAWING NUMBER: 78-5100-0770-7

REVISION: N

AM UTC-05:00

Imaged: N.1 B/5/2016 11:10

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 SCALE: 4/1 DO NOT SCALE DRAWING		DIVISION CODE: EMSD TOLERANCES EXCEPT AS NOTED INCHES: .00 ± .01, .000 ± .005, .0000 ± MILLIMETERS: 0 ± .3, .00 ± .13		DATE: AUG 11, 2014 APPR: R. SCHERER DATE: SEP 05, 2014		
THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS: SURFACES MARKED ONLY		TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA CAGE NUMBER: D78-5100-0770-7 MODEL: 2500 SERIES		
				REV. 1: AUG 02, 2016, JNC, SC, REVISE DIM ON SHT2 & CLIP CHART ON SHT5 REV. 2: AUG 11, 2014, JNC, RS, REVISED AND REDRAWN		

78-5100-0770-7
 11:10 AM UTC-05:00
 N REVISION
 C
 B
 A