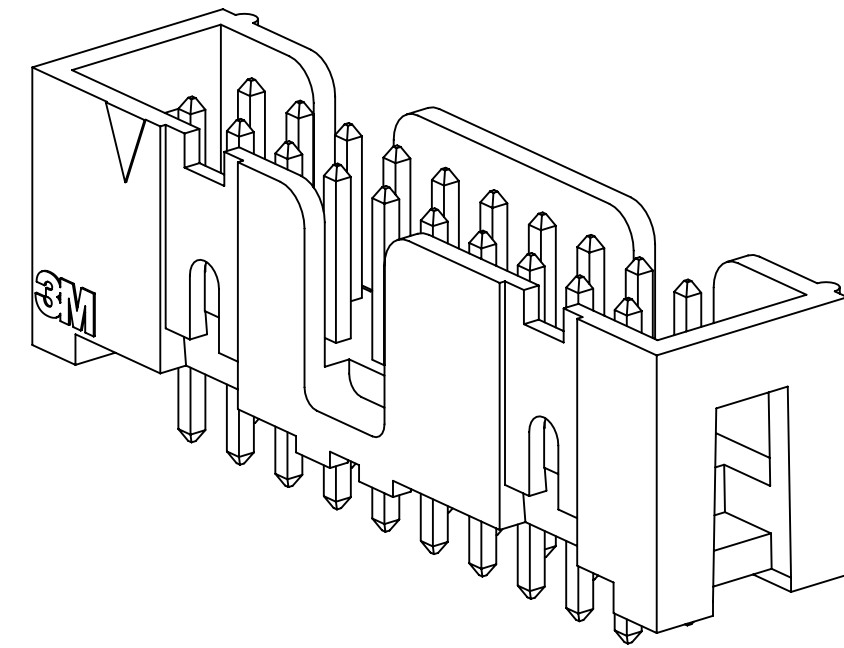
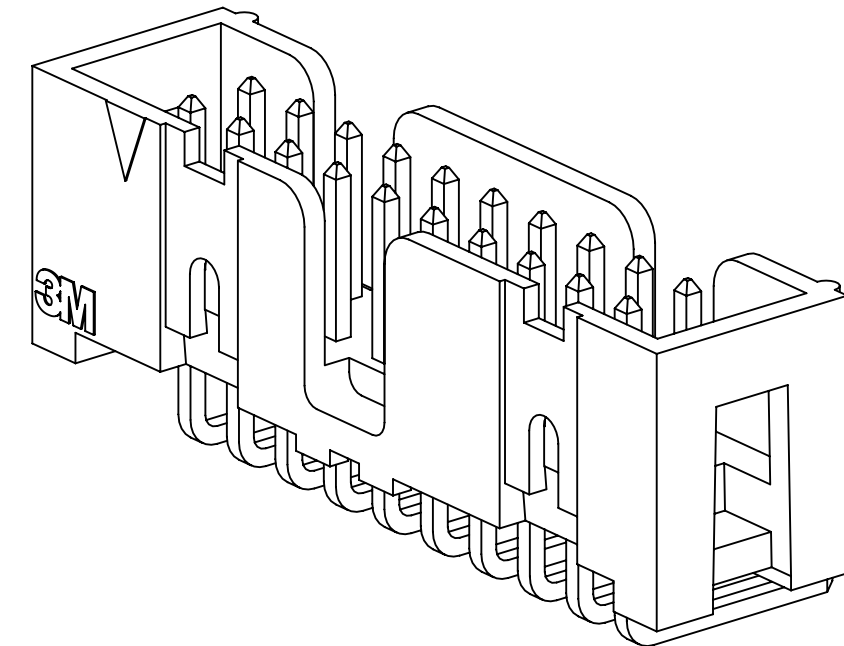


# 3M™ FOUR-WALL HEADER, 2500 SERIES

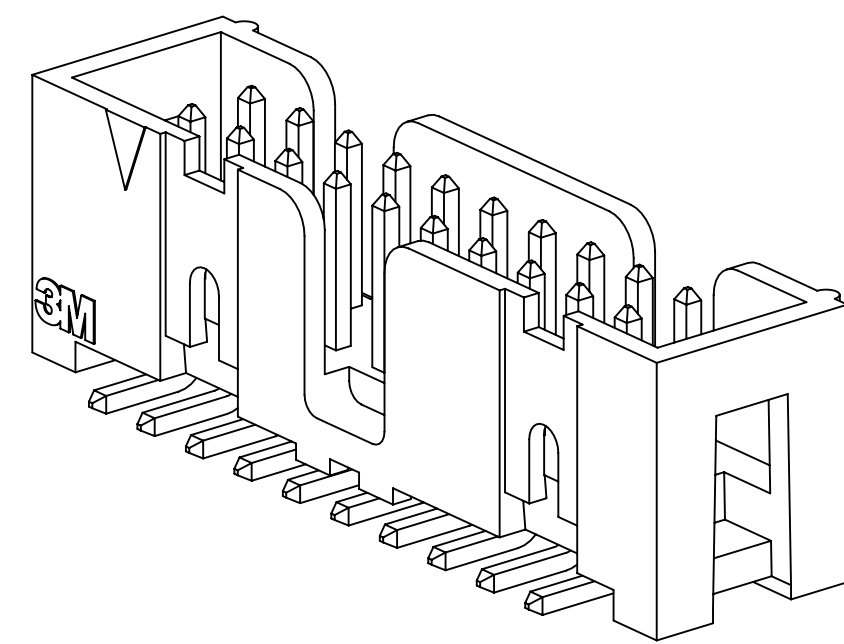
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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 10<sup>9</sup>Ω AT 500 V<sub>DC</sub>  
WITHSTANDING VOLTAGE: 1,000V<sub>RMS</sub> 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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD		
CHKD	DATE	APPR	DATE			
CASTIGLIONE	AUG 11, 2014	R. SCHERER	SEP 05, 2014			
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2016		
Interconnect Solutions		EMSD		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.		
DO NOT SCALE DRAWING	SCALE 4-1	TOLERANCES EXCEPT AS NOTED		TITLE		
THIRD ANGLE PROJECTION		INCHES		HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		CAGE NUMBER		
MAX SURFACE ROUGHNESS		.0 ± .01 .000 ± .005 .0000 ±		D78-5100-0770-7		
LX SURFACES		.0 ± .3 .00 ± .13 .000 ±		REV. N		
MARKED ONLY		ANGLES		MODEL		
				2500 SERIES		

78-5100-0770-7 DRAWING NUMBER  
N REVISION  
A B C D  
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

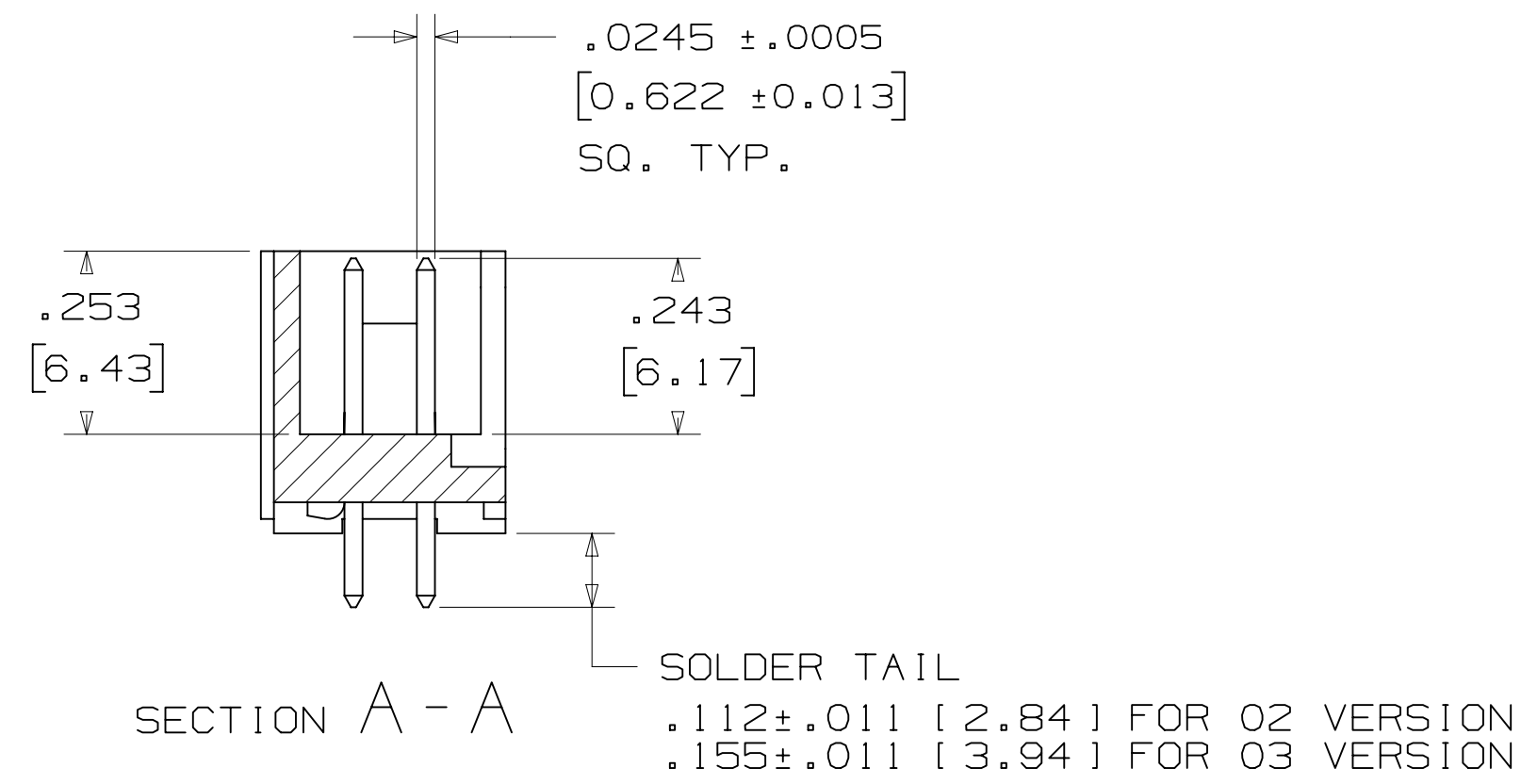
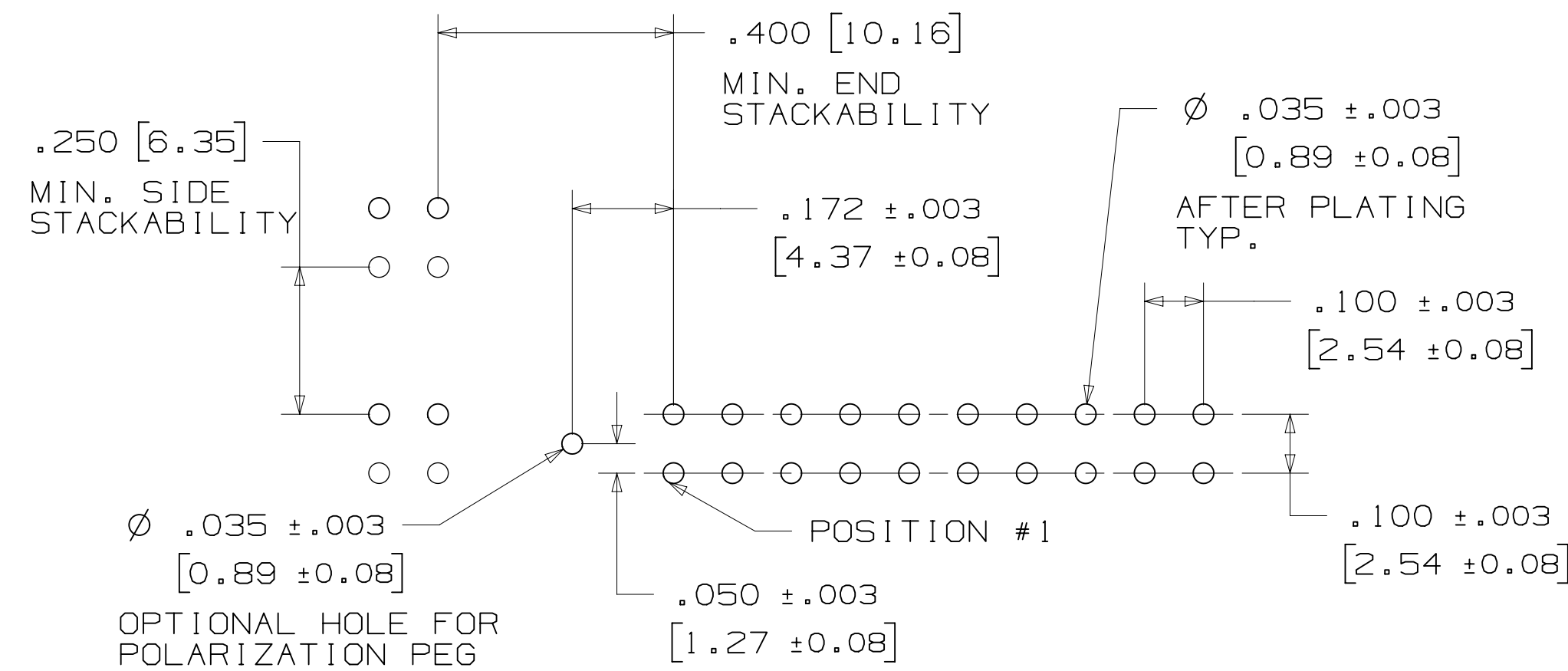
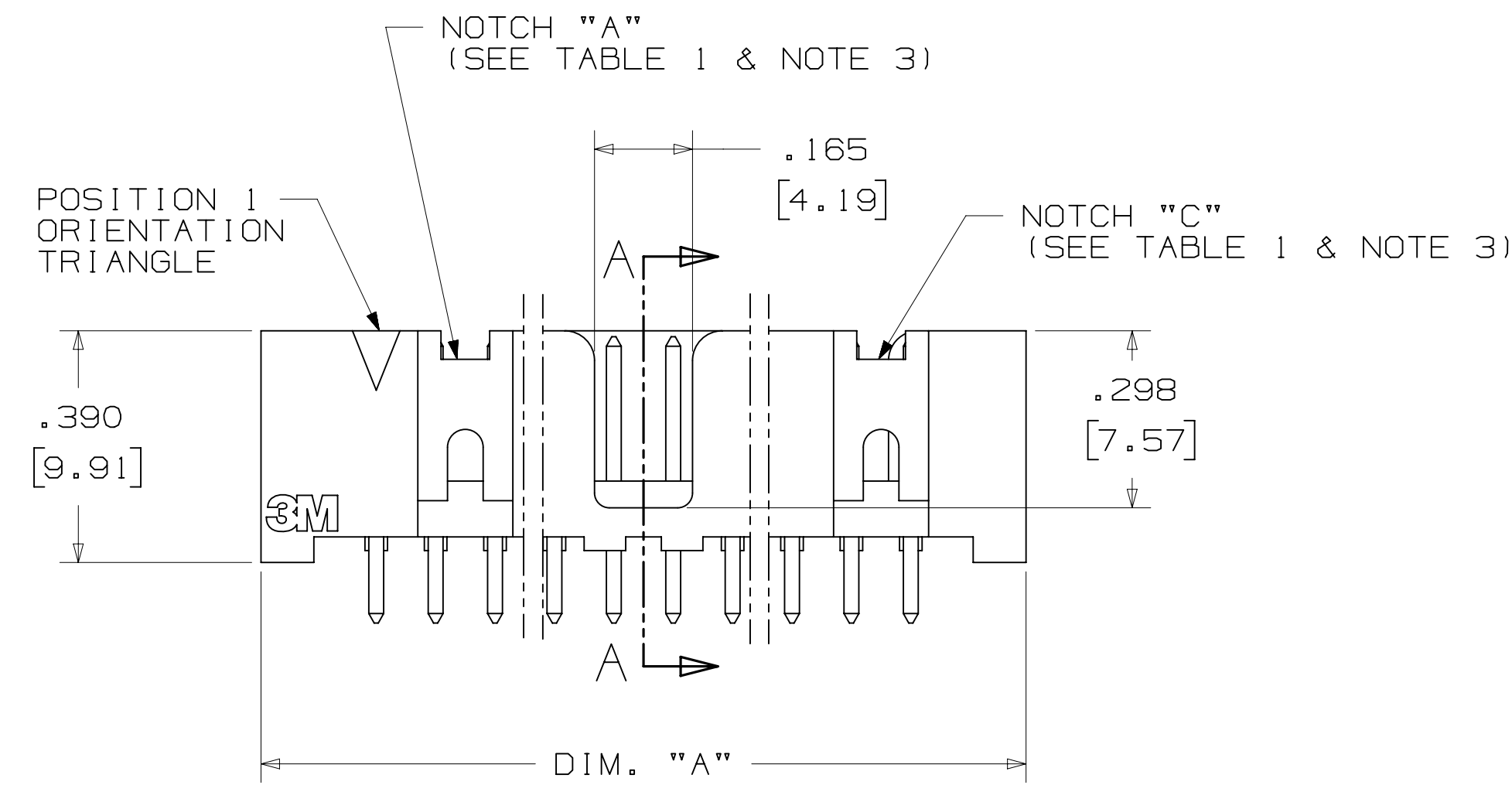
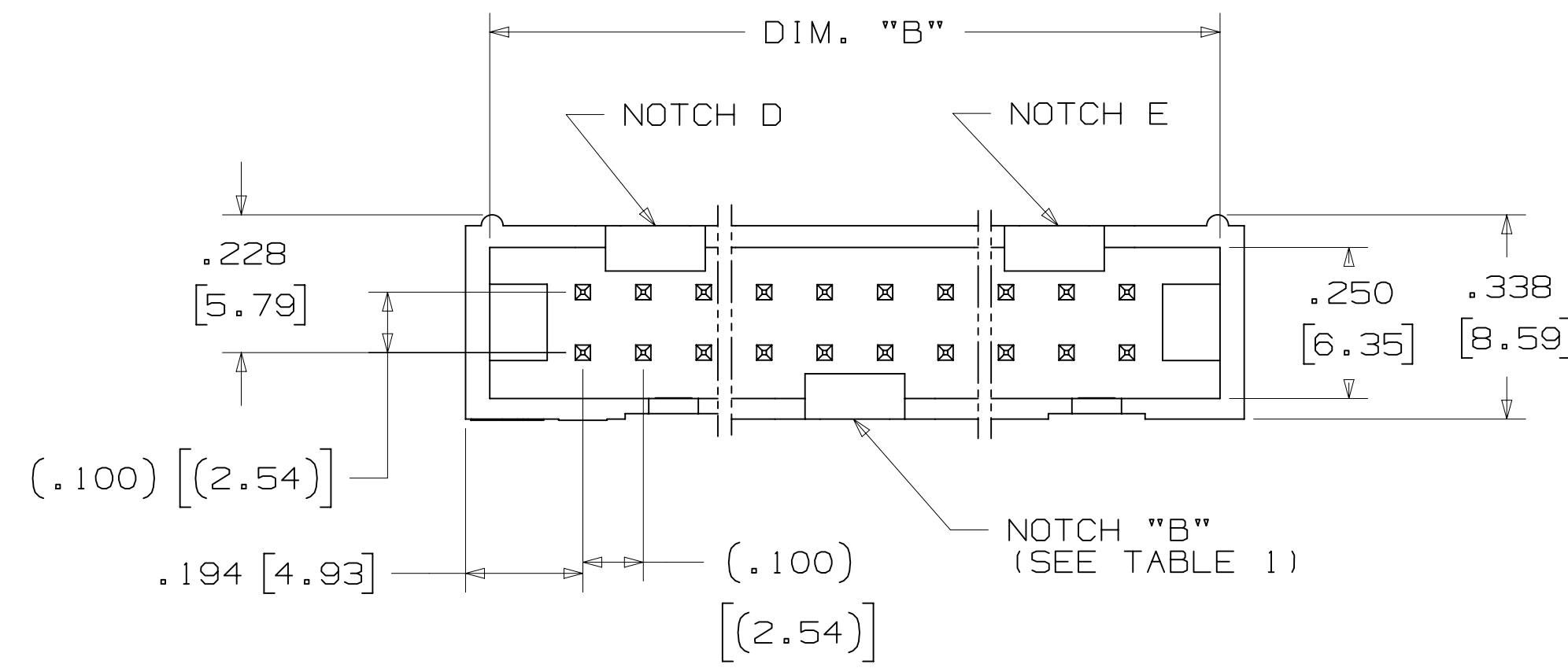


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]	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
DIVISION CODES		DRFT		DATE	DATE	
Interconnect Solutions		EMSD		AUG 11, 2014	MFG	
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		
INTERPRET PER ASME Y14.5 - 2009		0 ± .01		0 ± .005		
MAX SURFACE ROUGHNESS		0 ± .03		0 ± .13		
SURFACES		0 ± .000		0 ± .000		
MARKED ONLY		ANGLES		ANGLES		
CAGE NUMBER		DRAWING NO.		REV.		
D 78-5100-0770-7		N		N		
MODEL		2500 SERIES		SHT 2 OF 5		

3M Center St. Paul, MN 55144  
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REVISIONS:  
 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

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

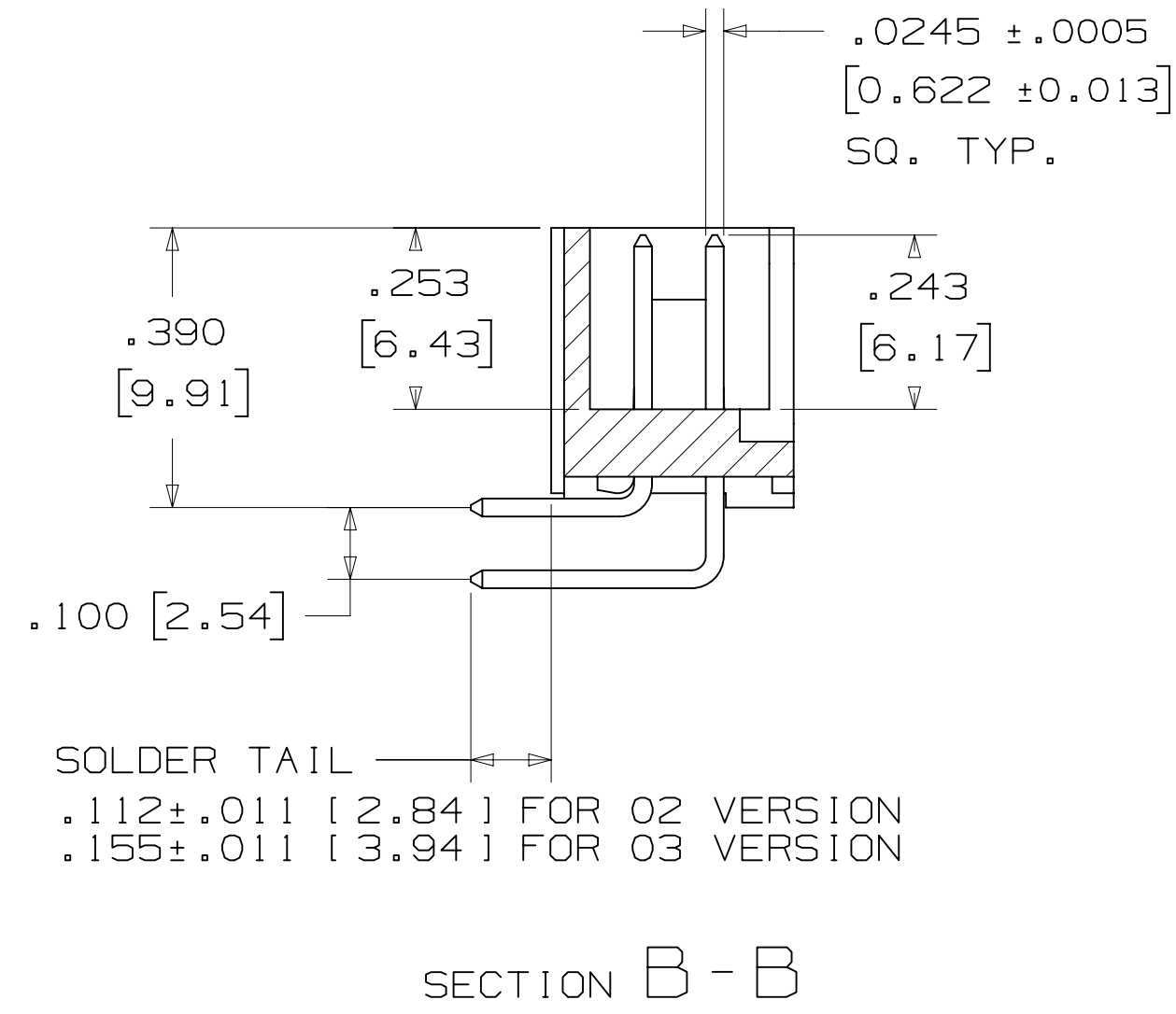
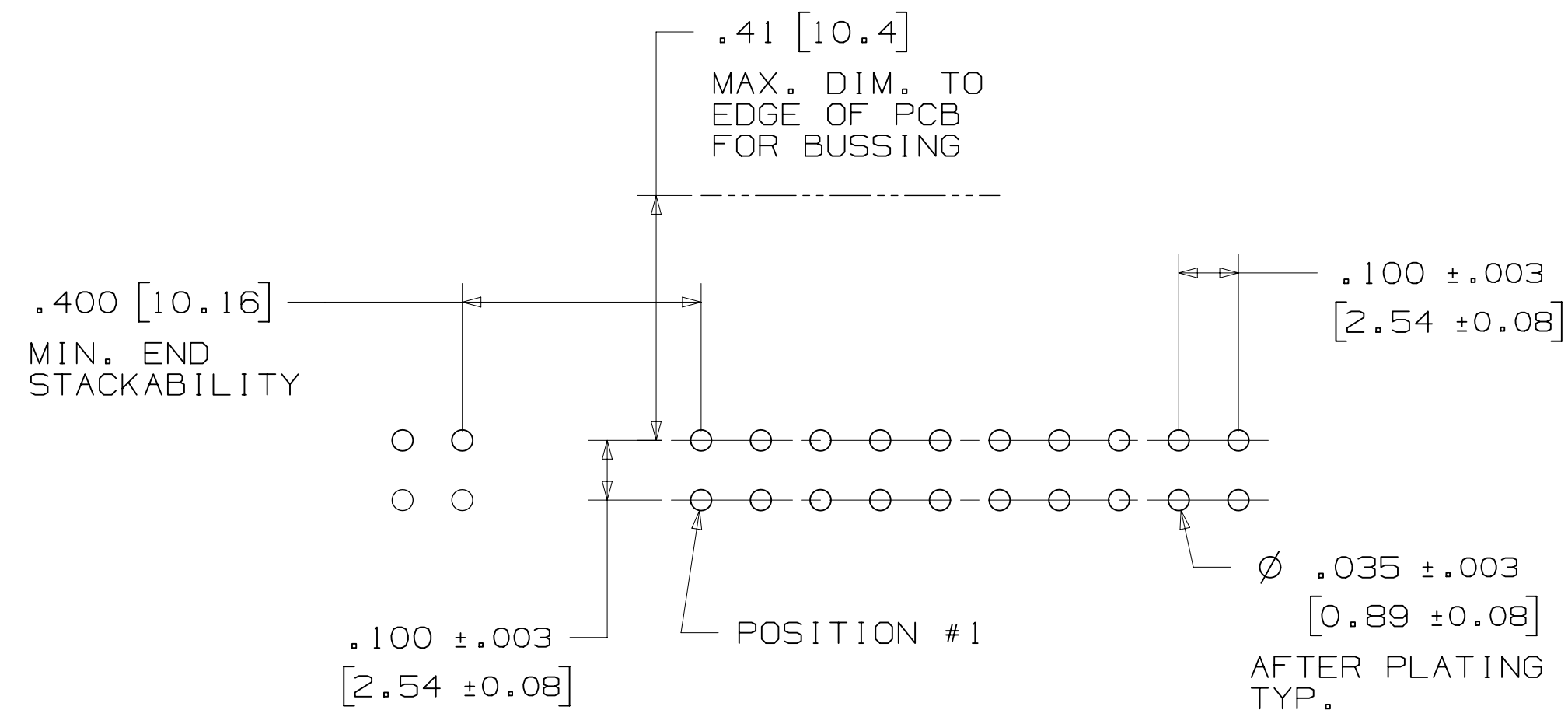
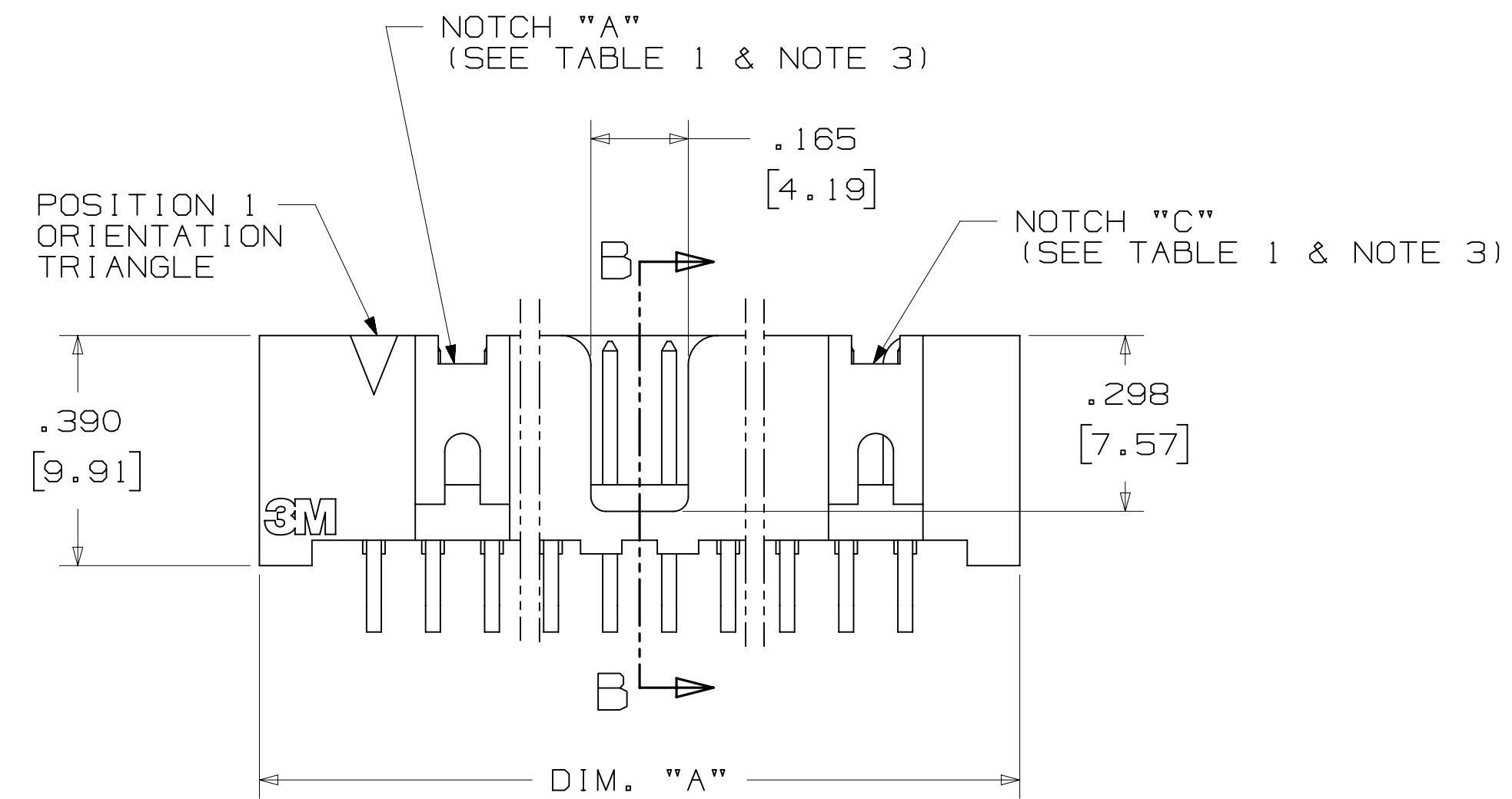
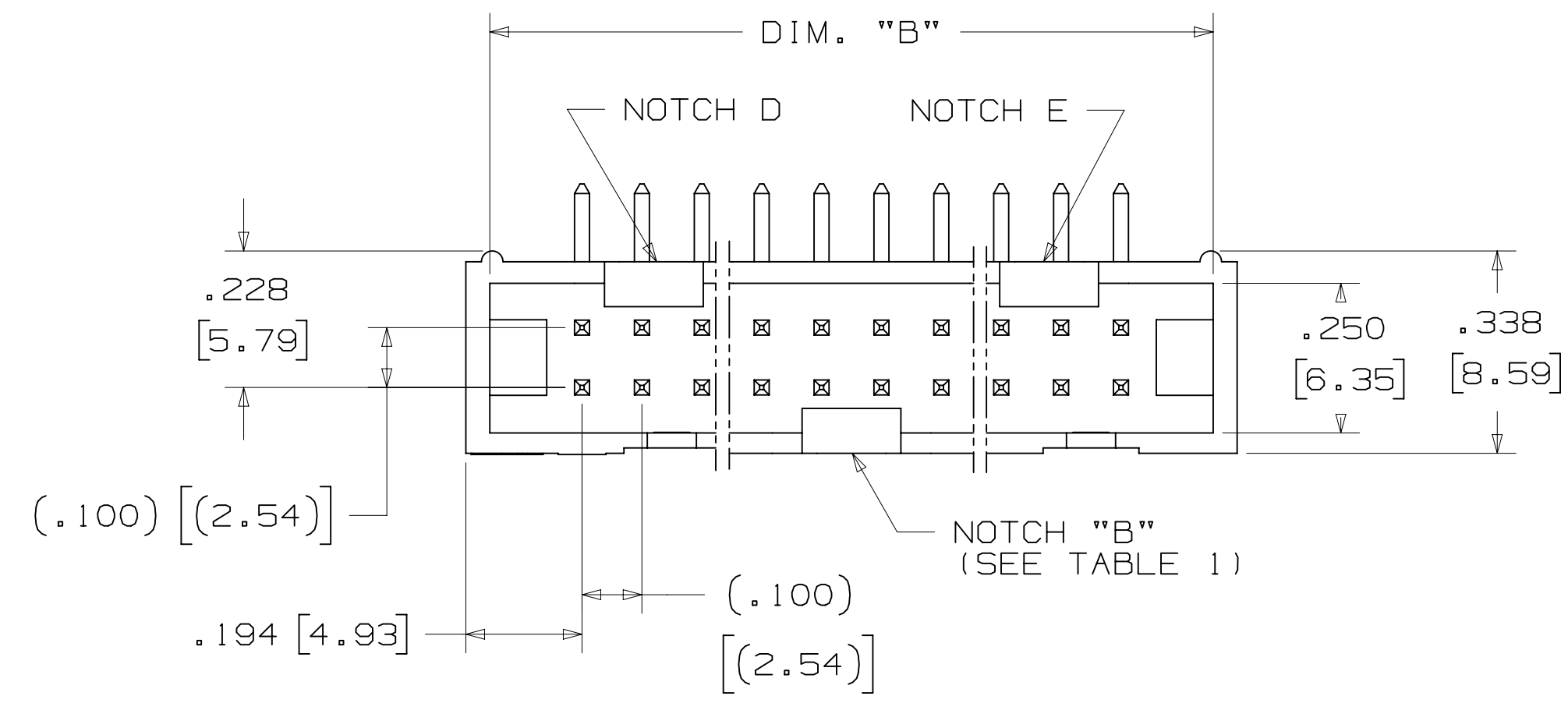


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]	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
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: 1.6 µm		SURFACES: MARKED ONLY		INCHES: 0 ± .00 ± .01 ± .0005 ± .0000 ±		
CAGE NUMBER: D78-5100-0770-7		SIZE: 2500 SERIES		TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		
MODEL: 2500 SERIES		REV. N		SHT 3 OF 5		

78-5100-0770-7

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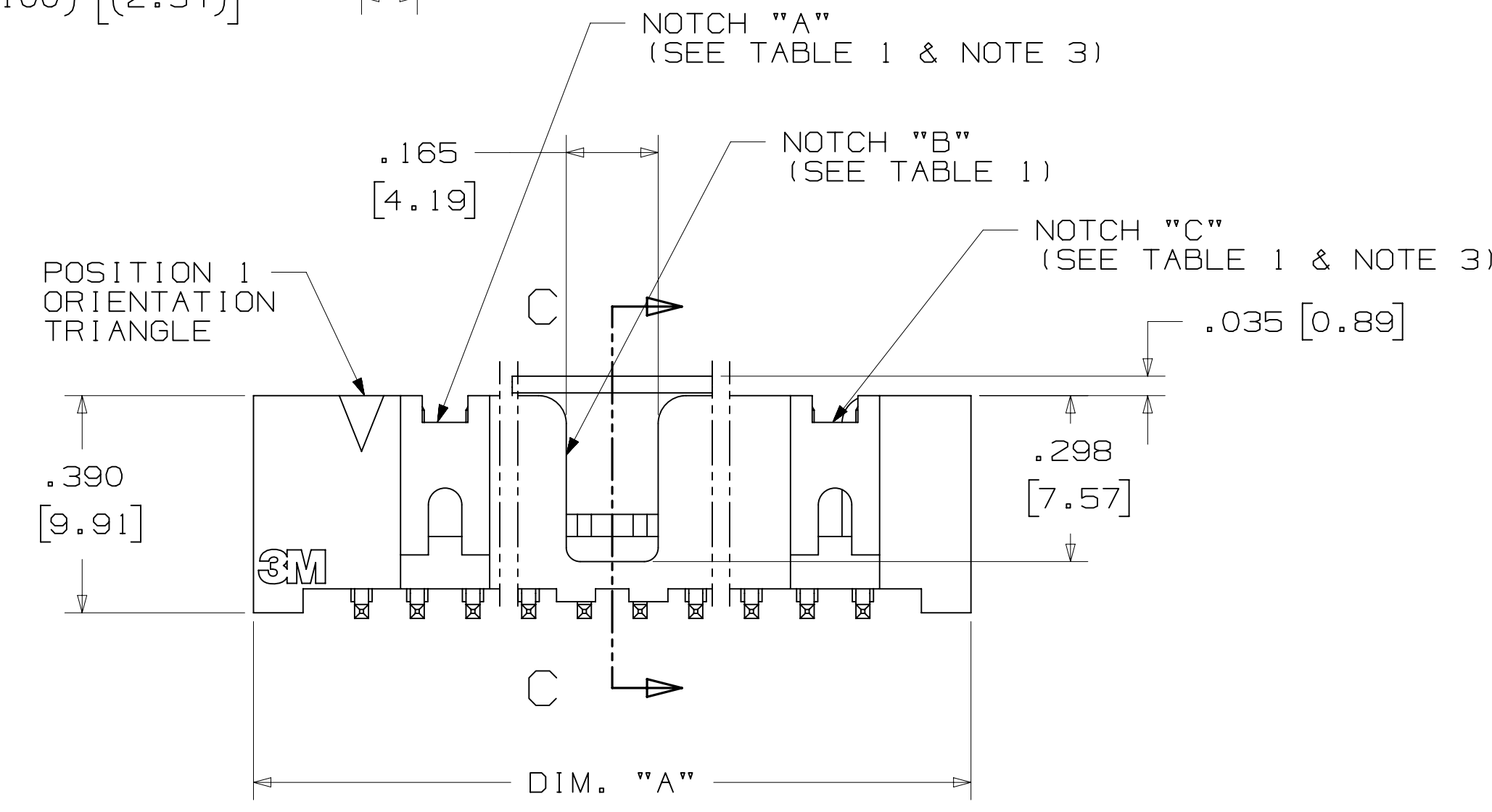
# 3M™ FOUR-WALL HEADER, 2500 SERIES

.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 ± .013		
MAX SURFACE ROUGHNESS: 1.6		SURFACES: 1.6		MARKED ONLY		
CAGE NUMBER: D78-5100-0770-7		SIZE: N		DRAWING NO.: 2500 SERIES		
MODEL: 2500 SERIES		REV.:		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 SCALE: 4/1 DRAWING: THIRD ANGLE PROJECTION		DIVISION CODE: EMSD TOLERANCES EXCEPT AS NOTED INCHES: .00 ± .01, .000 ± .005, .0000 ± MILLIMETERS: 0 ± .3, .00 ± .13		DATE: AUG 11, 2014 MFG DATE: SEP 05, 2014 APPR: R. SCHERER		
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, REVISE DIM ON SHT2 & CLIP CHART ON SHT5 REV. 2: AUG 11, 2014, REVISED AND REDRAWN		

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

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



## JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А