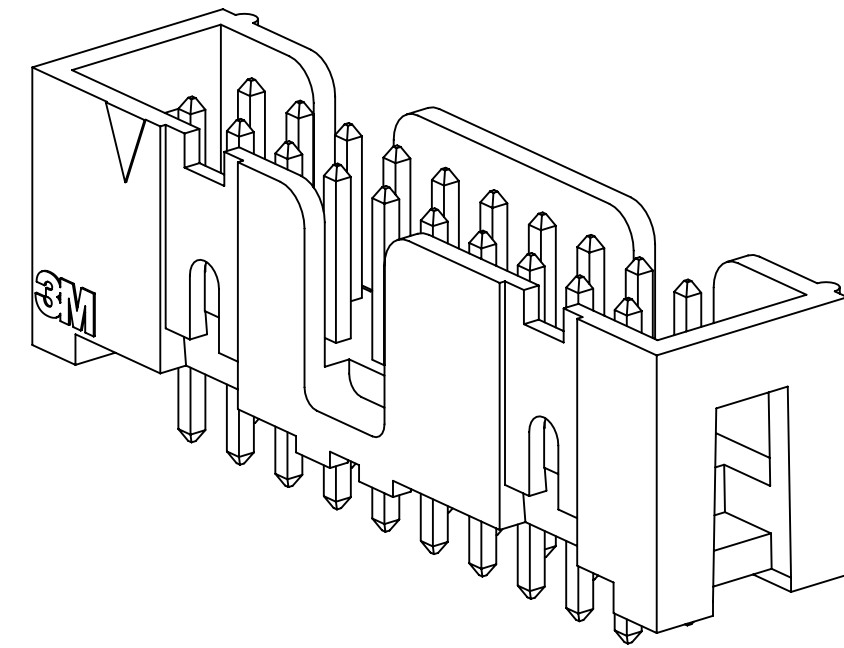
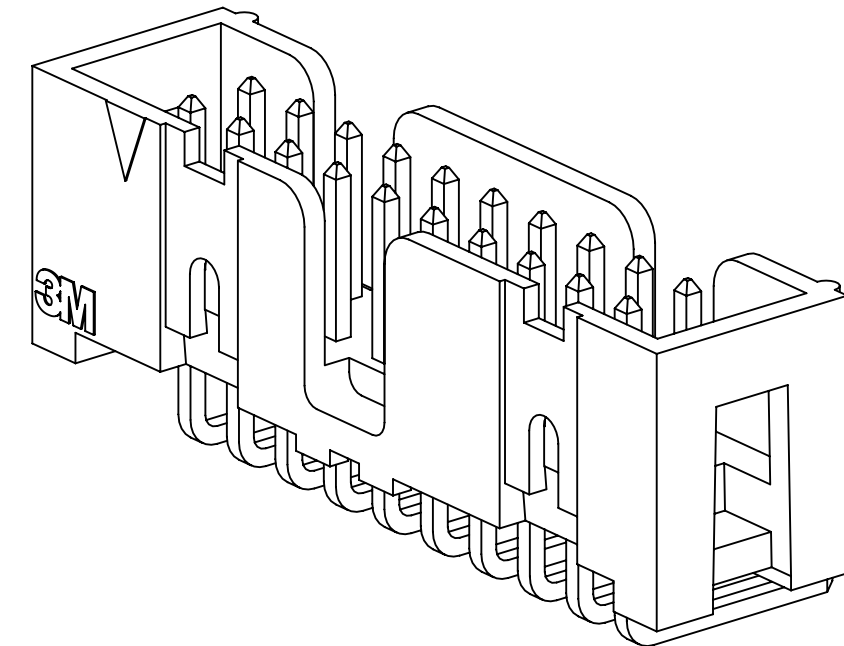


# 3M™ FOUR-WALL HEADER, 2500 SERIES

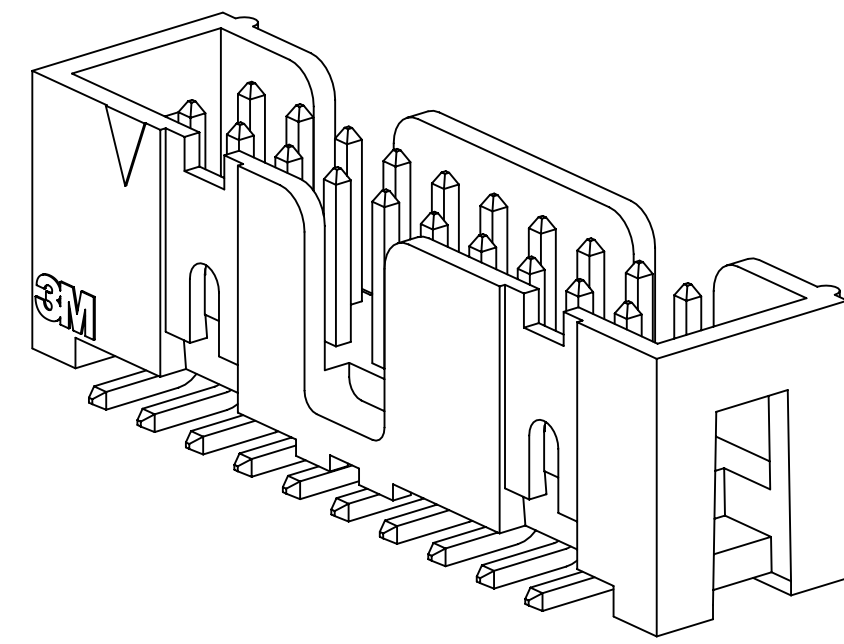
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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: 100 $\mu$ " [2.54 $\mu$ m] NICKEL-OVERALL  
WIPING AREA: AVG. GOLD (SEE ORDERING INFORMATION)  
SOLDER TAILS: 200 $\mu$ " [5.08 $\mu$ m] 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> $\Omega$  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 ACCOMODATE 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
		N	68908	AUG 02, 2016	JNC	SC
		M	56068	AUG 11, 2014	JNC	RS
				REVISED AND REDRAWN		
DESIGNER		APPV		DATE	DATE	DATE
				AUG 11, 2014		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				
		INCHES				
		.00 ± .01				
		.000 ± .005				
		.0000 ±				
		MILLIMETERS				
		0 ±				
		.0 ± .3				
		.00 ± .13				
		.000 ±				
		ANGLES				
		UNLESS OTHERWISE SPECIFIED				
		MARKED ONLY				
		THIRD ANGLE PROJECTION				
		INTERPRET PER ASME Y14.5 - 2009				
		MAX SURFACE ROUGHNESS				
		SURFACES				
		MARKED ONLY				
		CAGE NUMBER				
		D 78-5100-0770-7 N				
		MODEL				
		2500 SERIES				
		SHEET				
		1 OF 5				

78-5100-0770-7  
 DRAWING NUMBER  
 REVISION  
 N  
 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

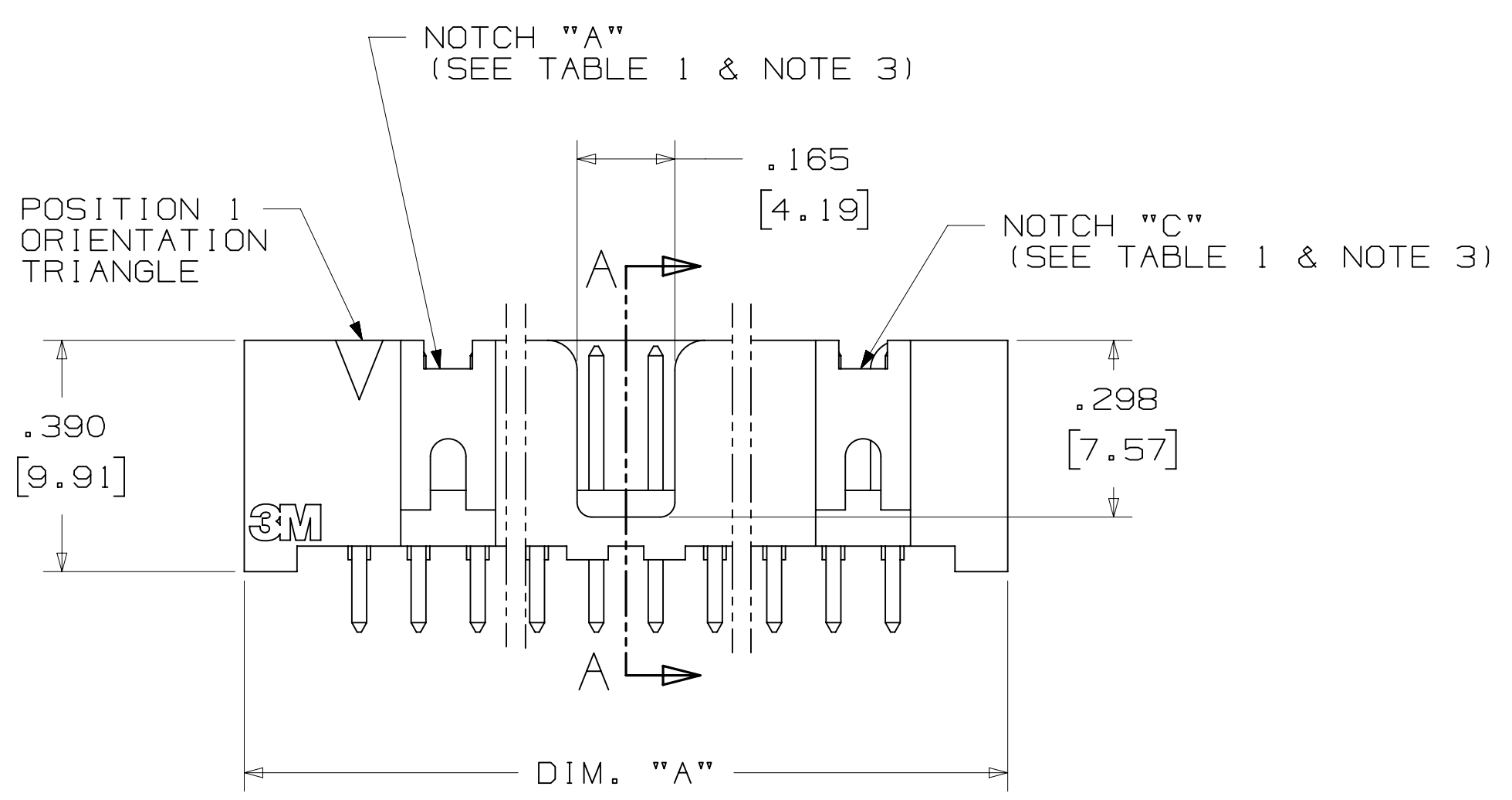
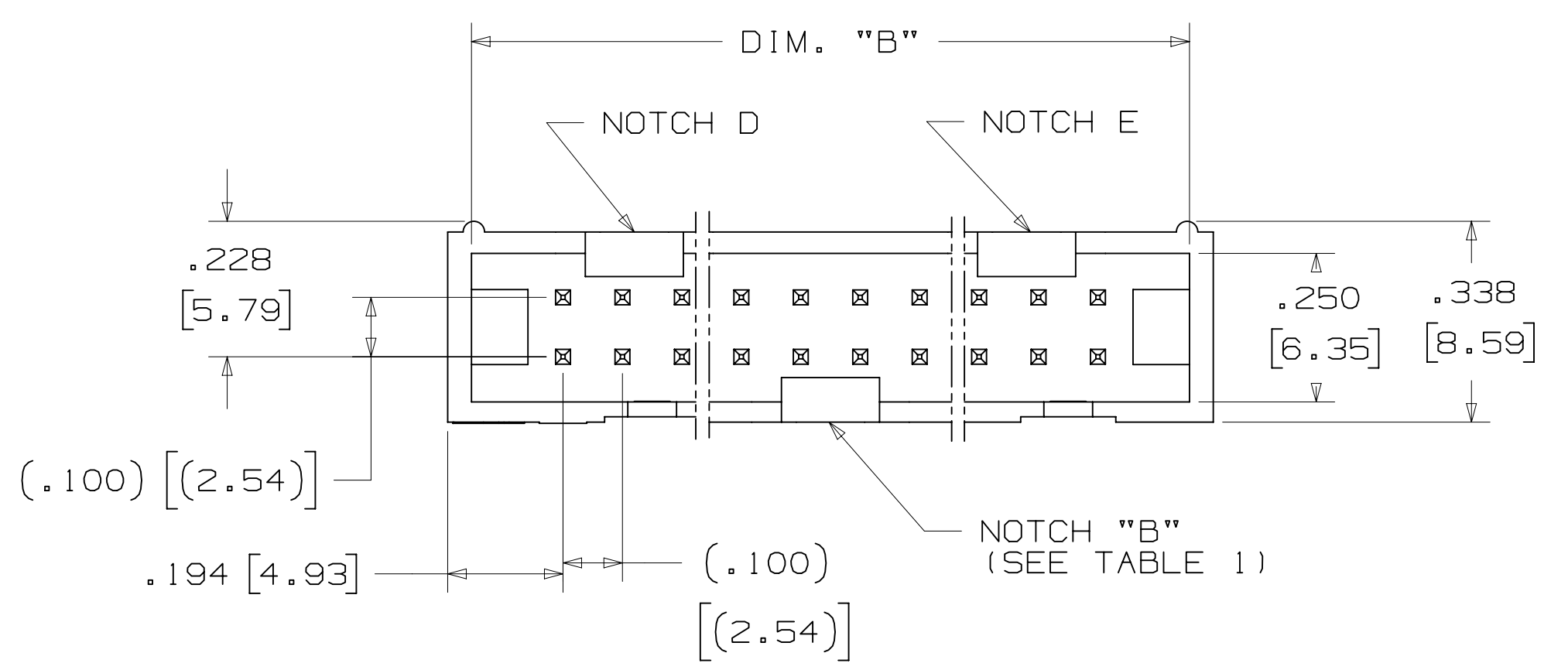
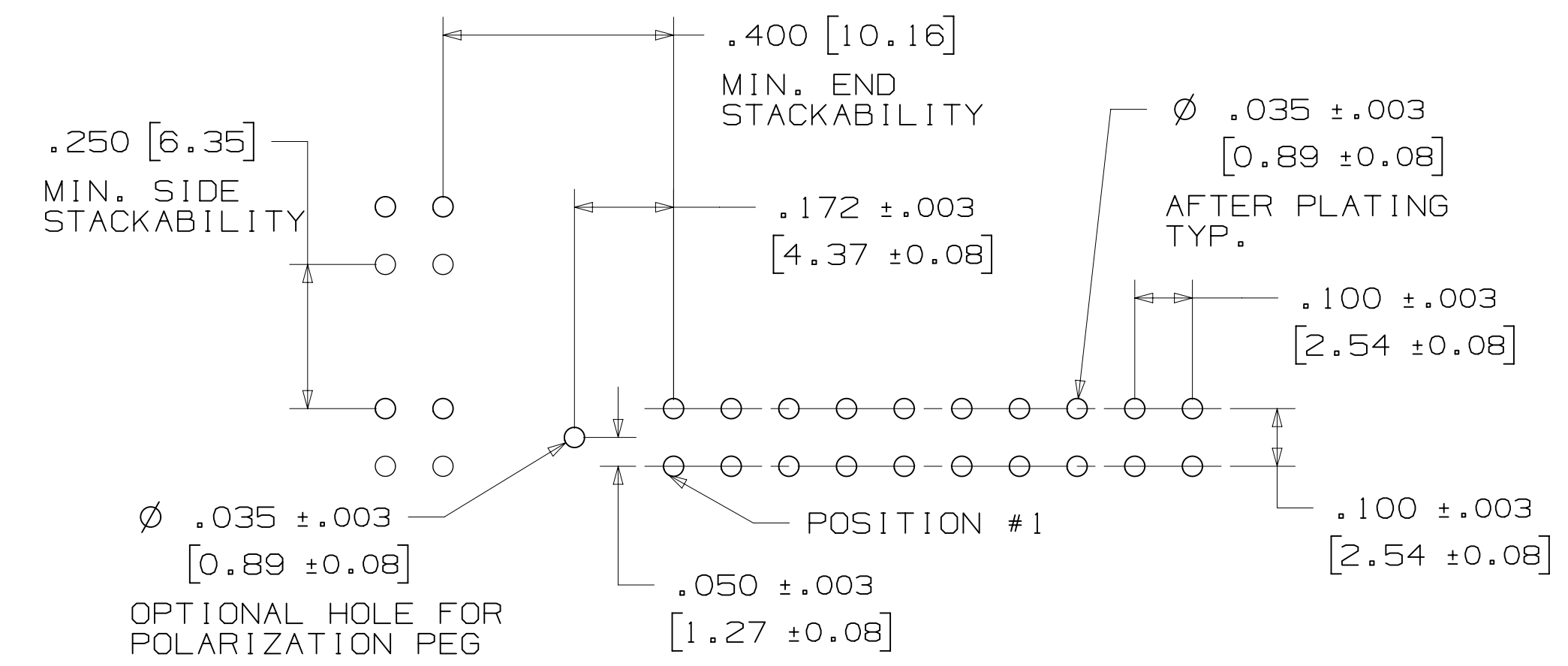


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]	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:  
 O2 = FOR .062 [1.57] THICK BOARD  
 O3 = 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)

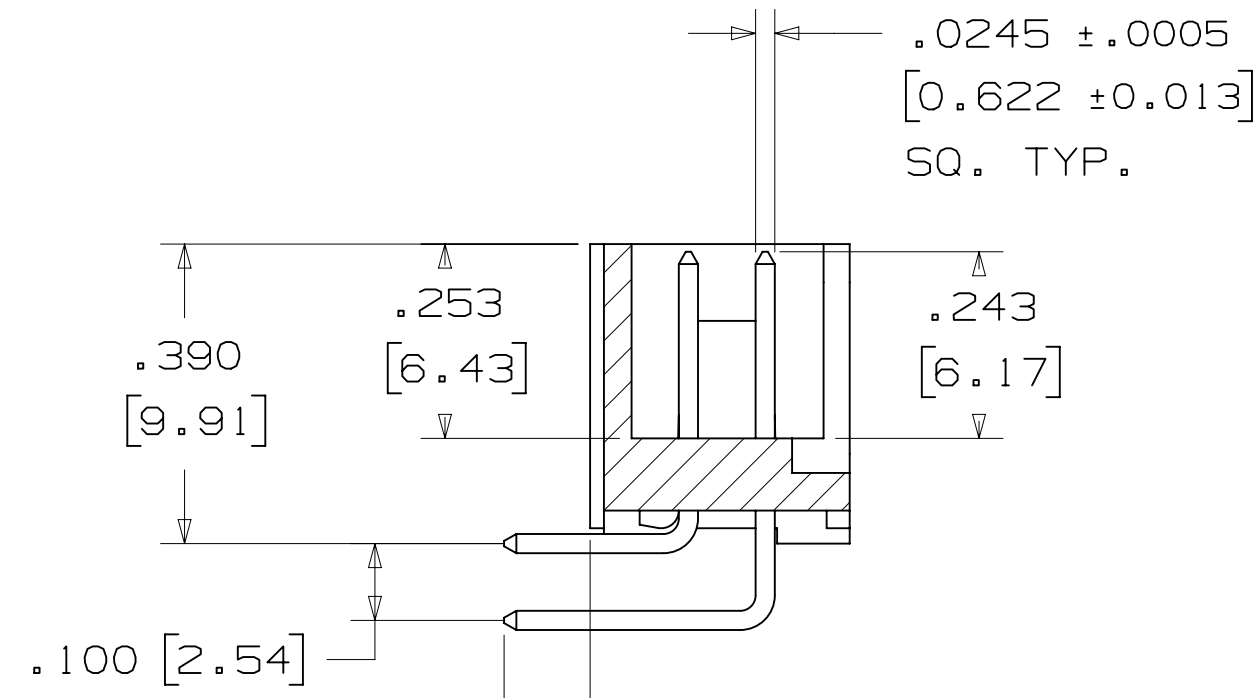
RECOMMENDED HOLE PATTERN  
 SHOWN FROM COMPONENT SIDE

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				AUG 11, 2014		
DIVISION CODES		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		
MODEL		CAGE NUMBER		DRAWING NO.		REV.
2500 SERIES		D78-5100-0770-7		N		

REVISION  
 DRAWING NUMBER  
 78-5100-0770-7  
 N  
 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



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

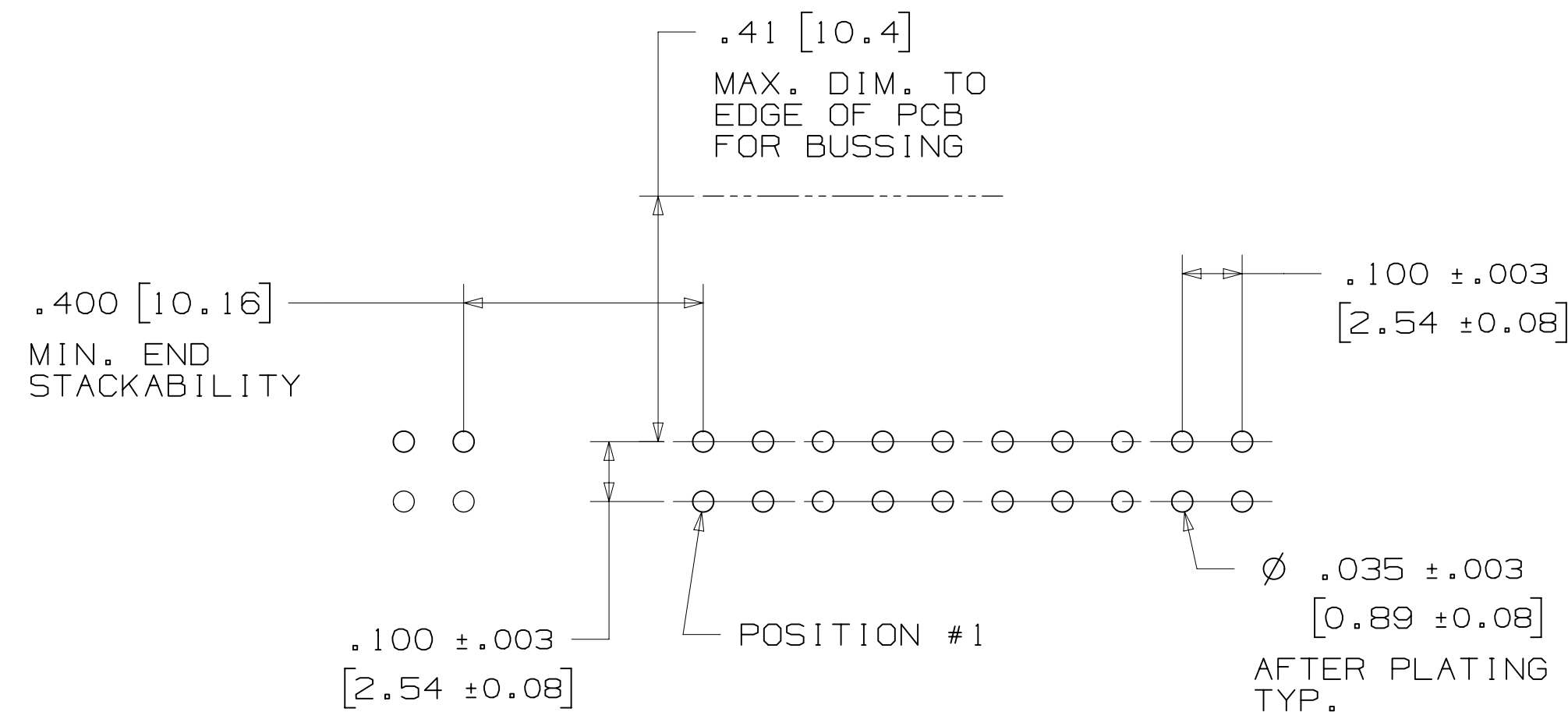
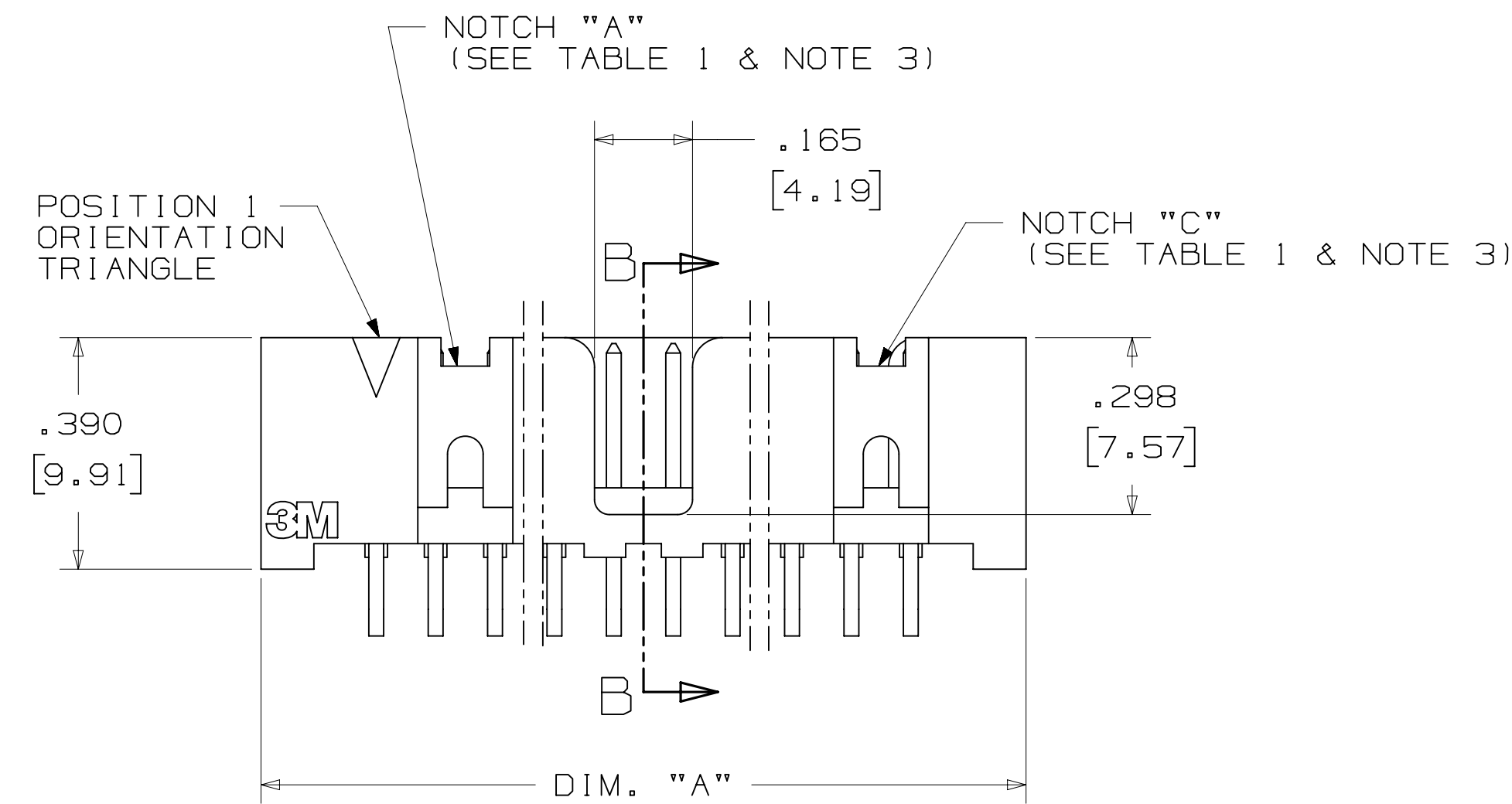
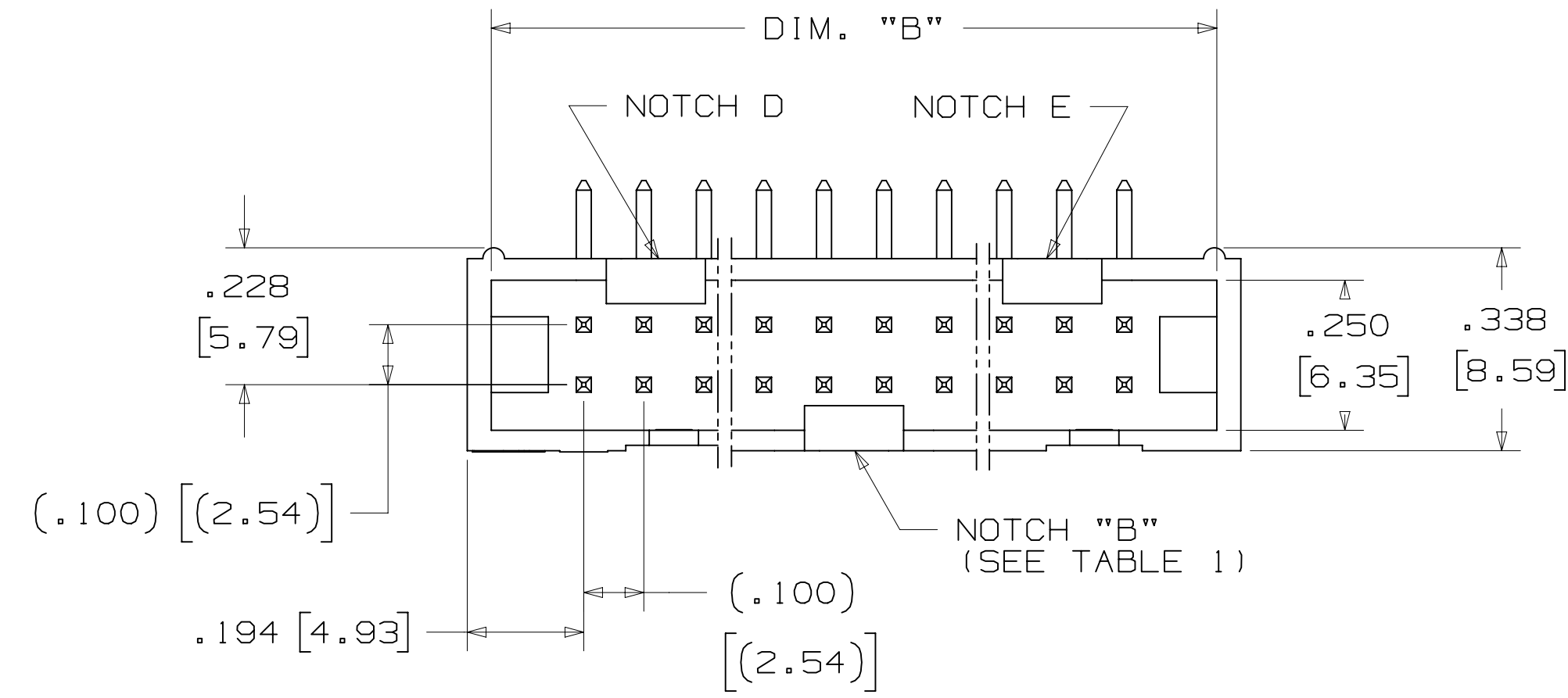
N= HIGH TEMP BLACK (PCT)  
 (RB, UB OR UG PLATING REQ'D)  
 BLANK= (UB OR UG PLATING)

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
				AUG 02, 2016	JNC	SC
				REVISE DIM ON SHT2 & CLIP CHART ON SHT5		
				AUG 11, 2014	JNC	RS
				REVISED AND REDRAWN		
				AUG 11, 2014		
				R. SCHERER		SEP 05, 2014

DIVISION	Interconnect Solutions	DIVISION CODE	EMSD
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 ±	
		ANGLES	

TITLE	HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA
CAGE NUMBER	D78-5100-0770-7
SIZE	N
DRAWING NO.	78-5100-0770-7
REV.	N
MODEL	2500 SERIES
DET.	IS1s YES NO SHT 3 OF 5

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



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: 12.5 SURFACES		MARKED ONLY		CAGE NUMBER: D78-5100-0770-7		
				MODEL: 2500 SERIES		
				REV. N		

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	CHKD	DATE	DATE	DATE
CASTIGLIONE		AUG 11, 2014		
			R. SCHERER	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

CAGE NUMBER: D78-5100-0770-7

MODEL: 2500 SERIES

REV. N

SHT 4 OF 5

DRAWING NUMBER: 78-5100-0770-7

REVISION: N

AM UTC-05:00

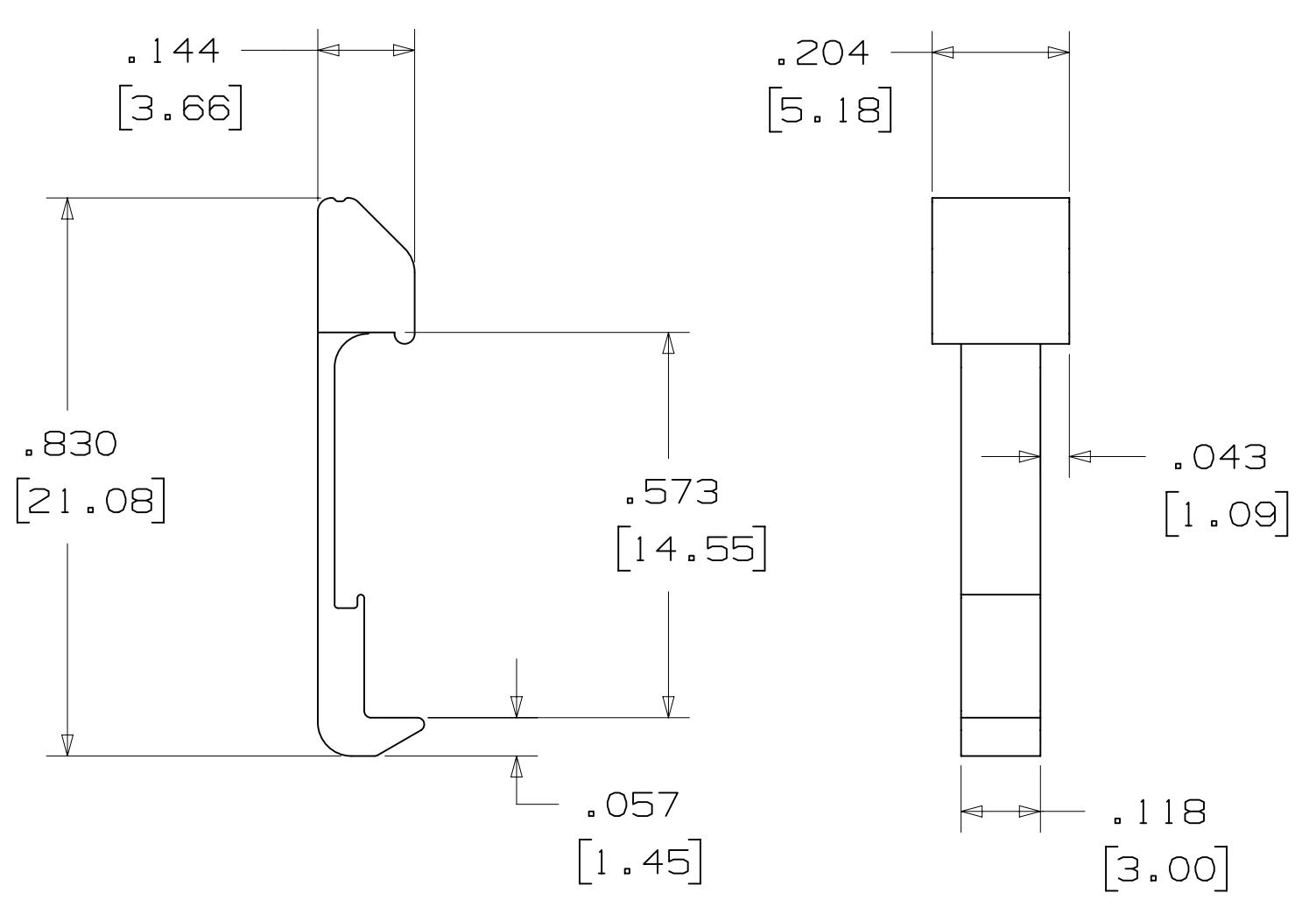
Imaged: N.1 B/5/2016 11:10

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.

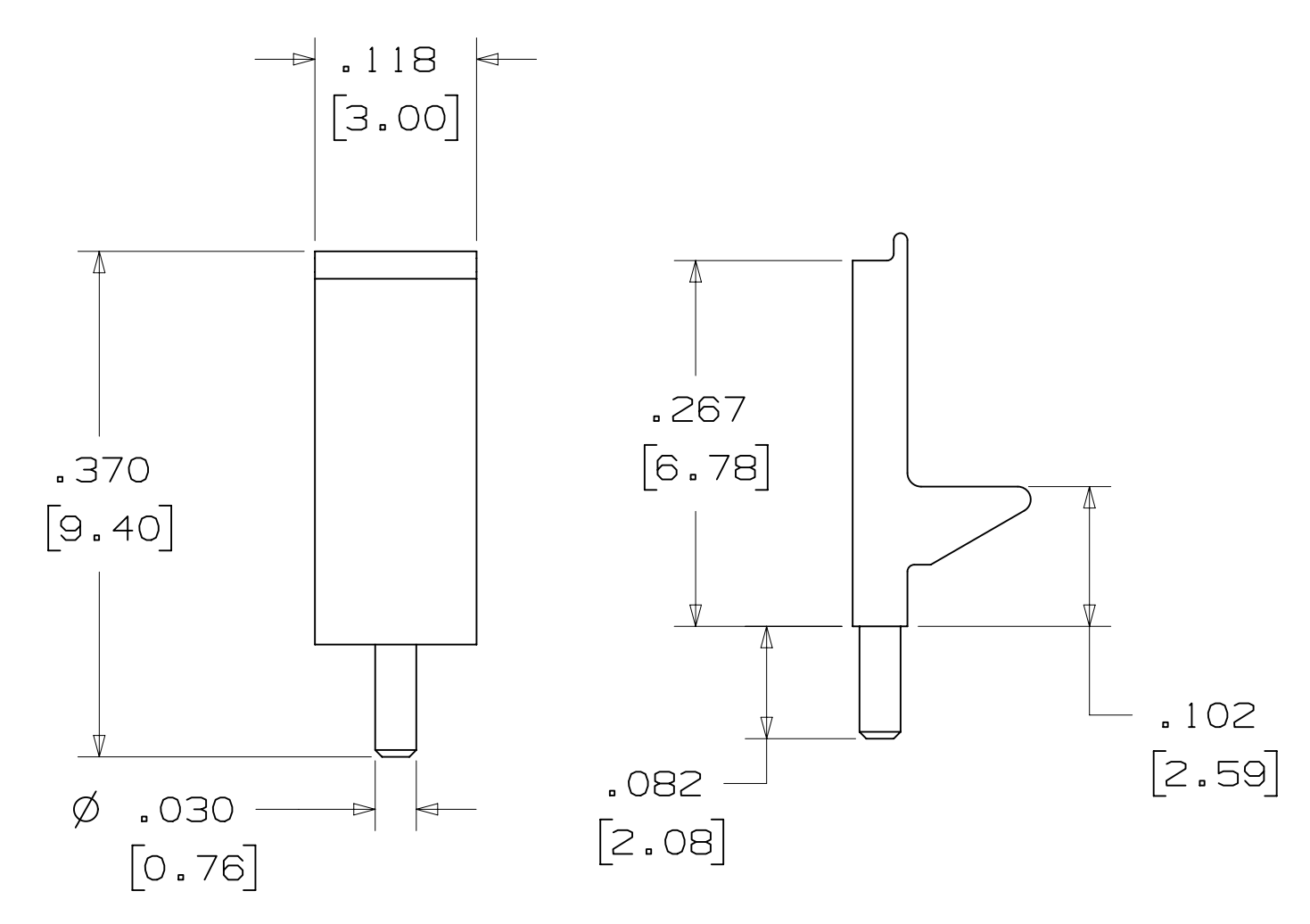
LOW PROFILE LATCH



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

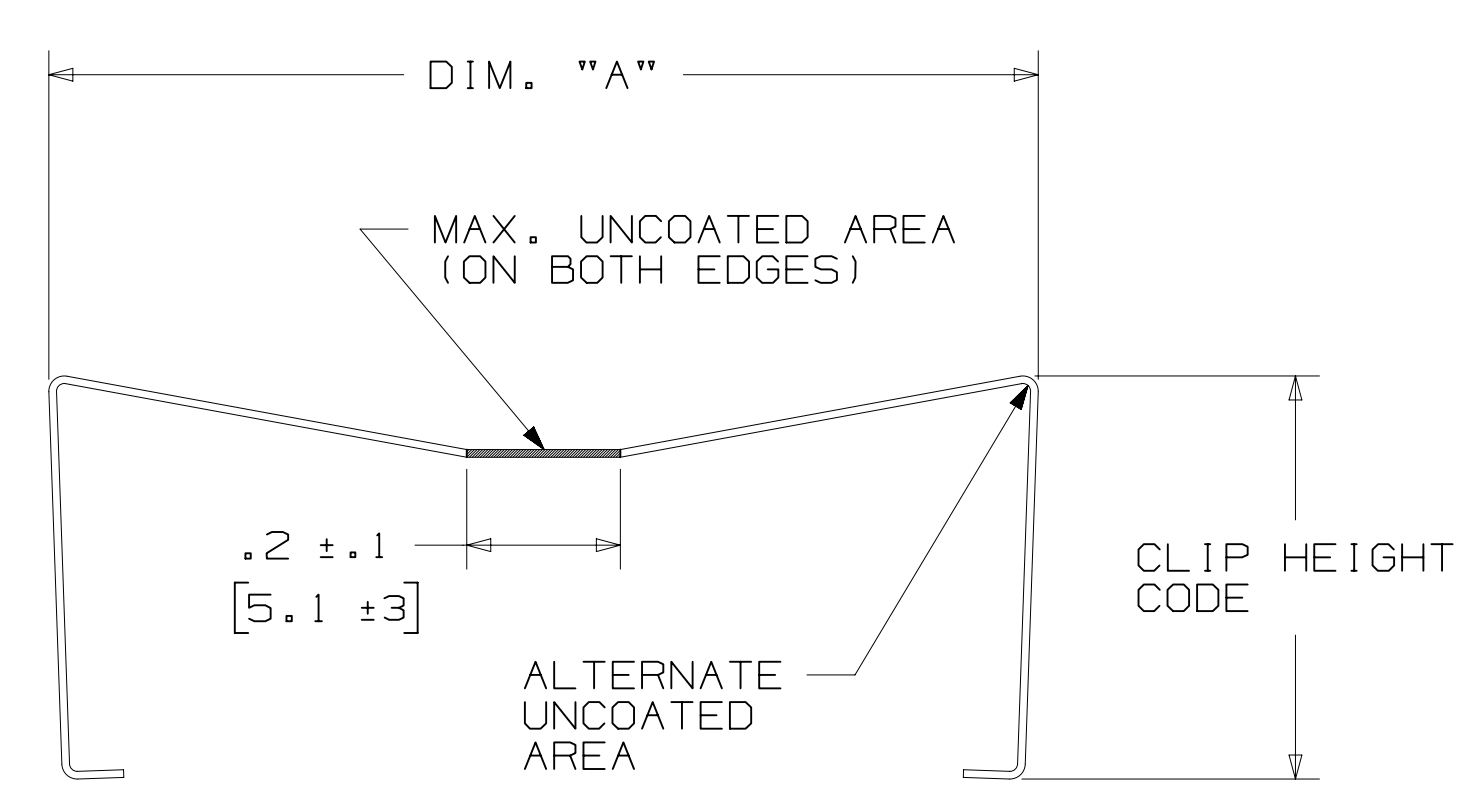
POLARIZING KEY



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		
APPROVED	DATE	APPROVED	DATE	DATE		
		R. SCHERER		SEP 05, 2014		
DIVISION Interconnect Solutions		DIVISION CODE EMSD				
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 ± .3 .00 ± .13 .000 ±				
MAX SURFACE ROUGHNESS SURFACES MARKED ONLY		CAGE NUMBER D78-5100-0770-7				
		MODEL 2500 SERIES			REV. N	

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



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

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.