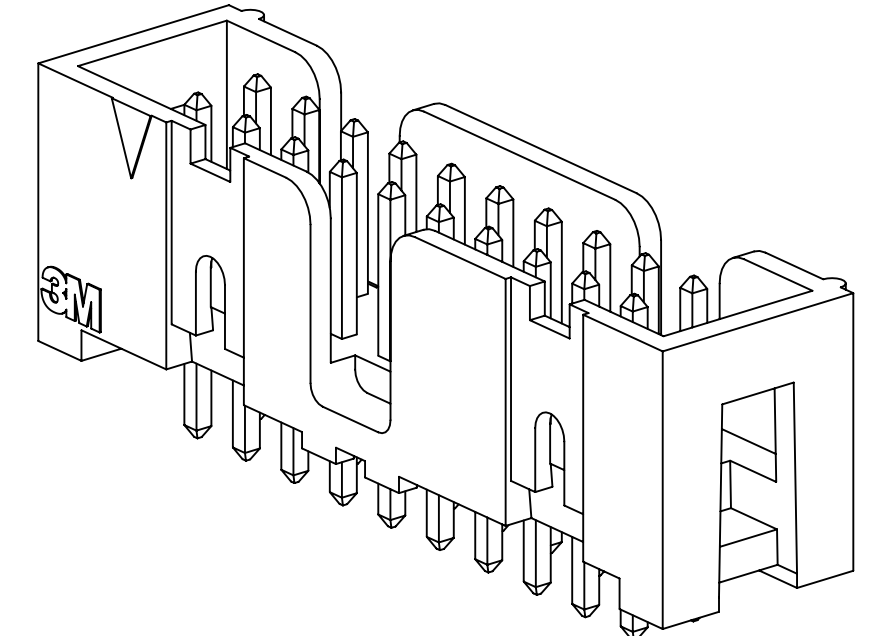


3M™ FOUR-WALL HEADER, 2500 SERIES

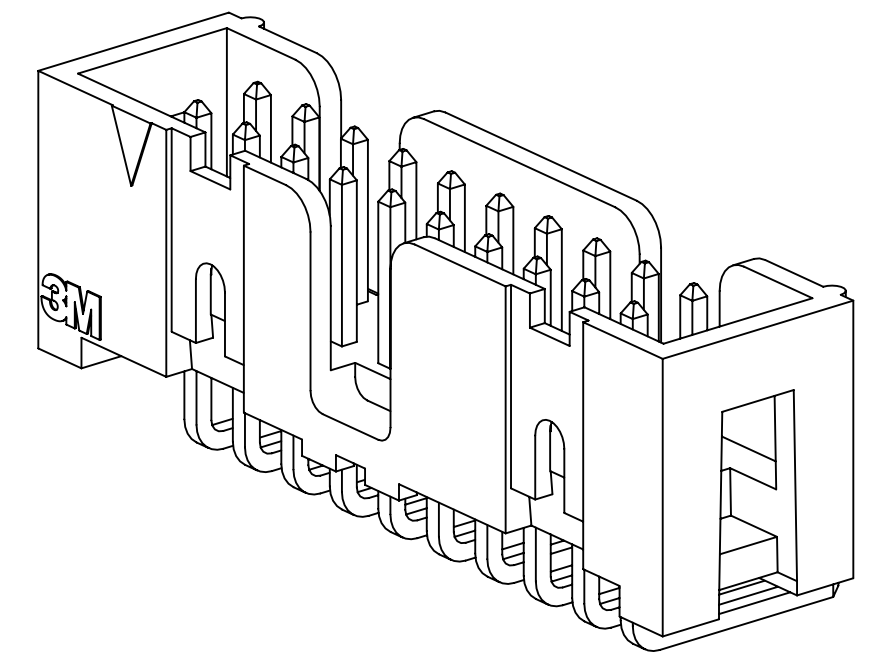
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE

- * 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.

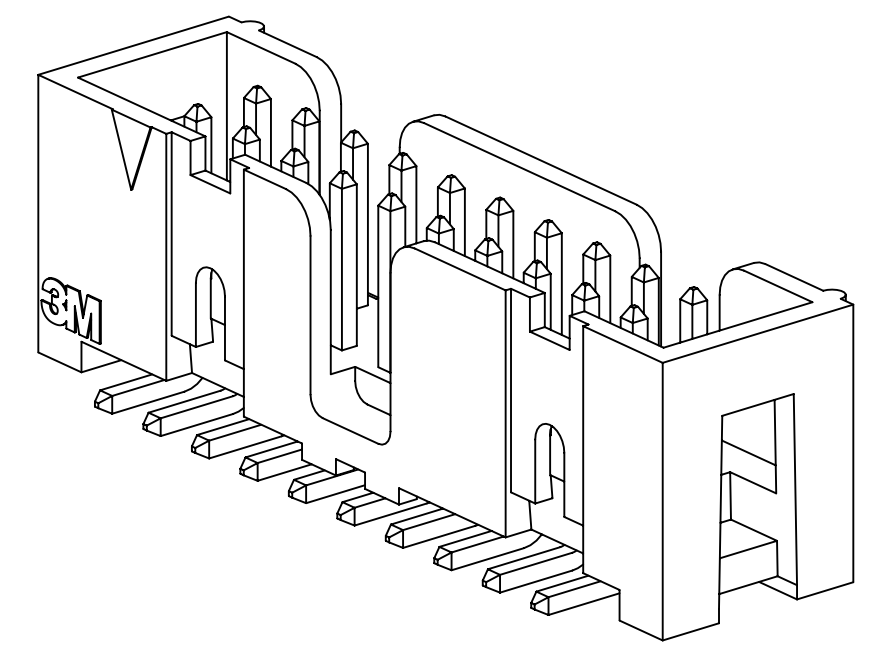
- NOTES
- REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
 - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION 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.



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

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		AUG 11, 2014		
DR		CASTIGLIONE		
APPR		R. SCHERER		
DATE		AUG 11, 2014		

DESIGN REFERENCE	NEXT ASSEMBLY

DIVISION	INTERCONNECT SOLUTIONS	DIVISION CODE	EMSD
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	

TITLE	HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA
CAGE NUMBER	D78-5100-0770-7
SIZE	N
DRAWING NO.	D78-5100-0770-7
REV.	N
MODEL	2500 SERIES
DET	IS1S
YES	NO
SHT	1 OF 5

© 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

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

CA US
 UL FILE NO: E68080

78-5100-0770-7
 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

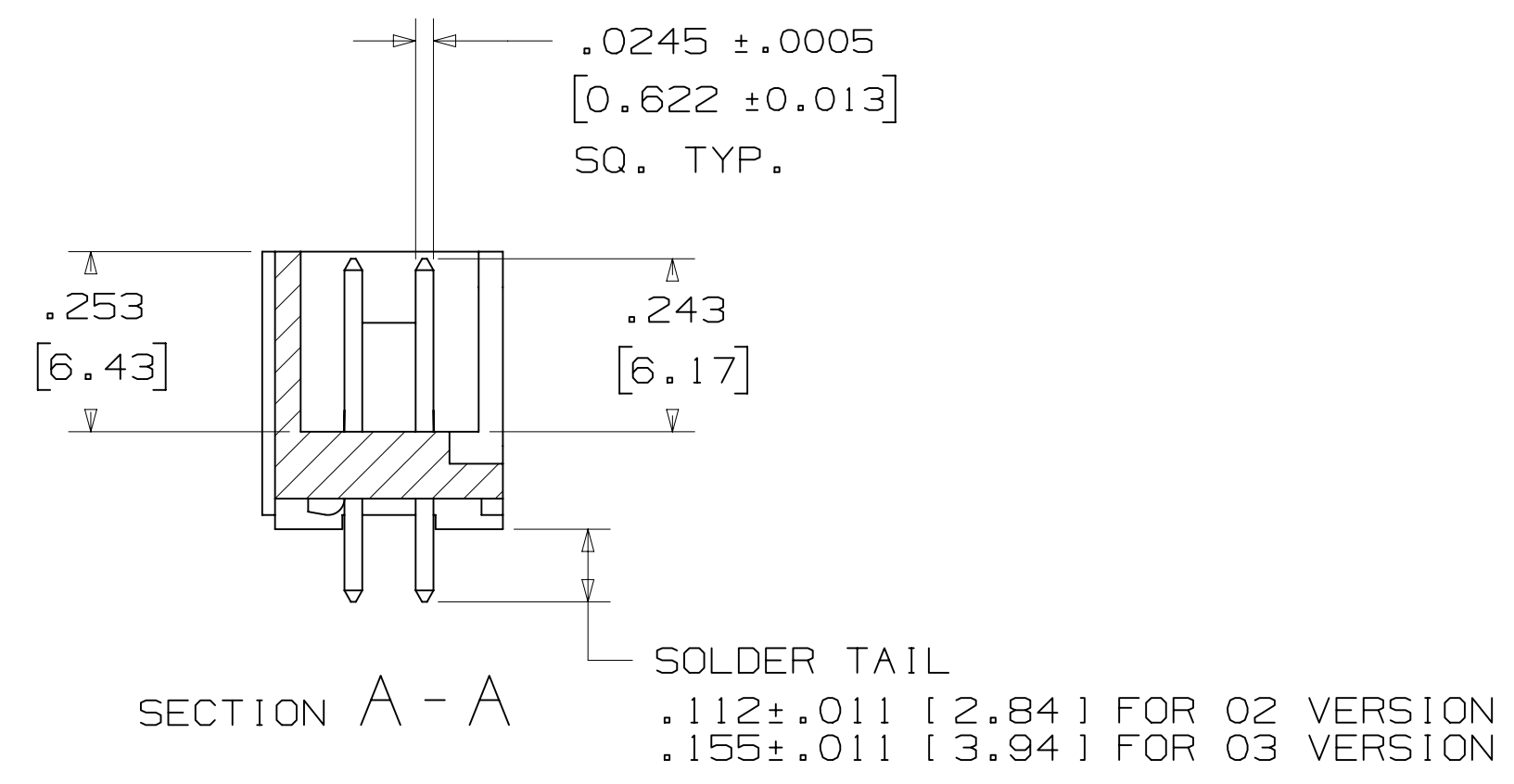
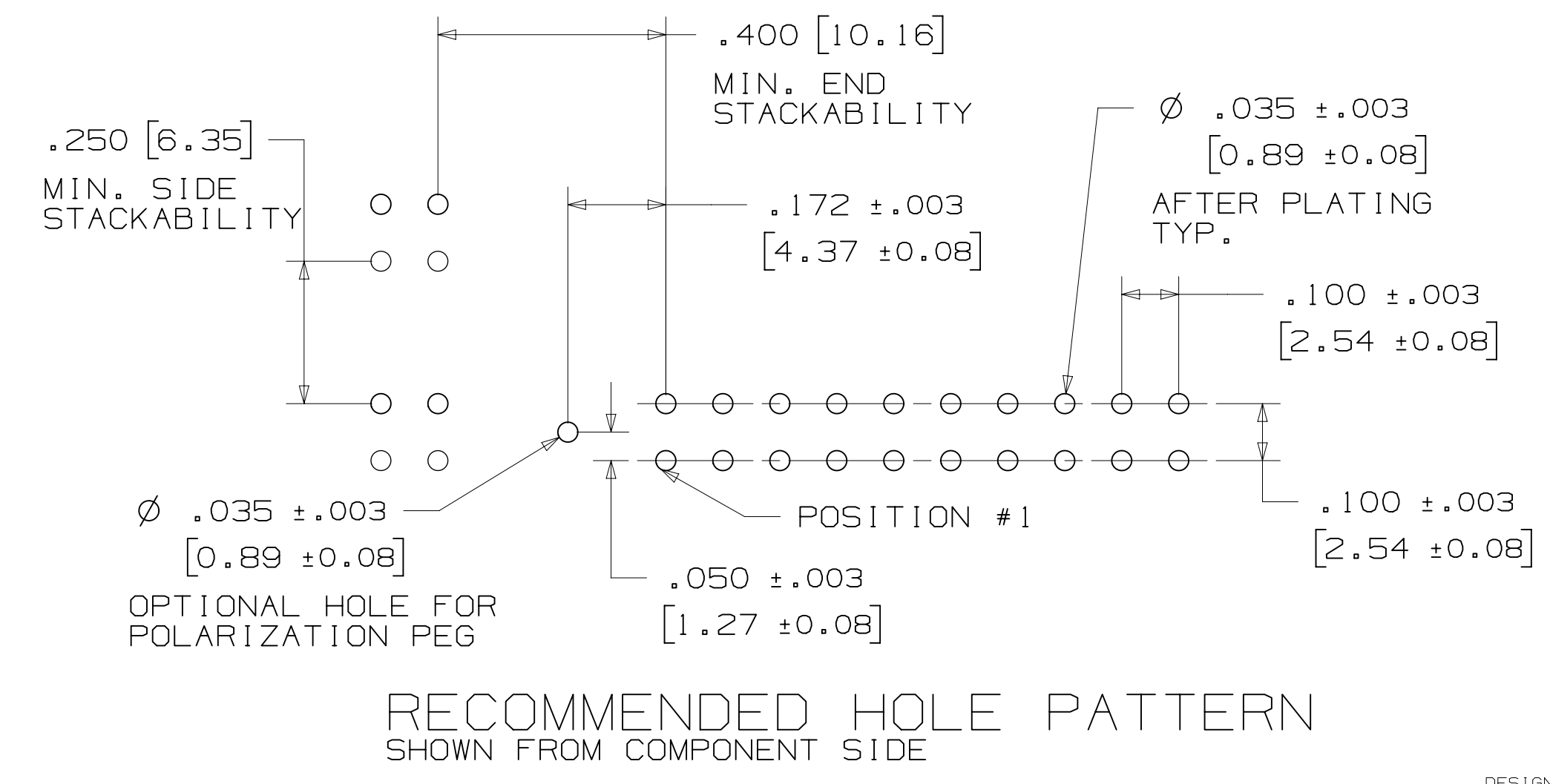
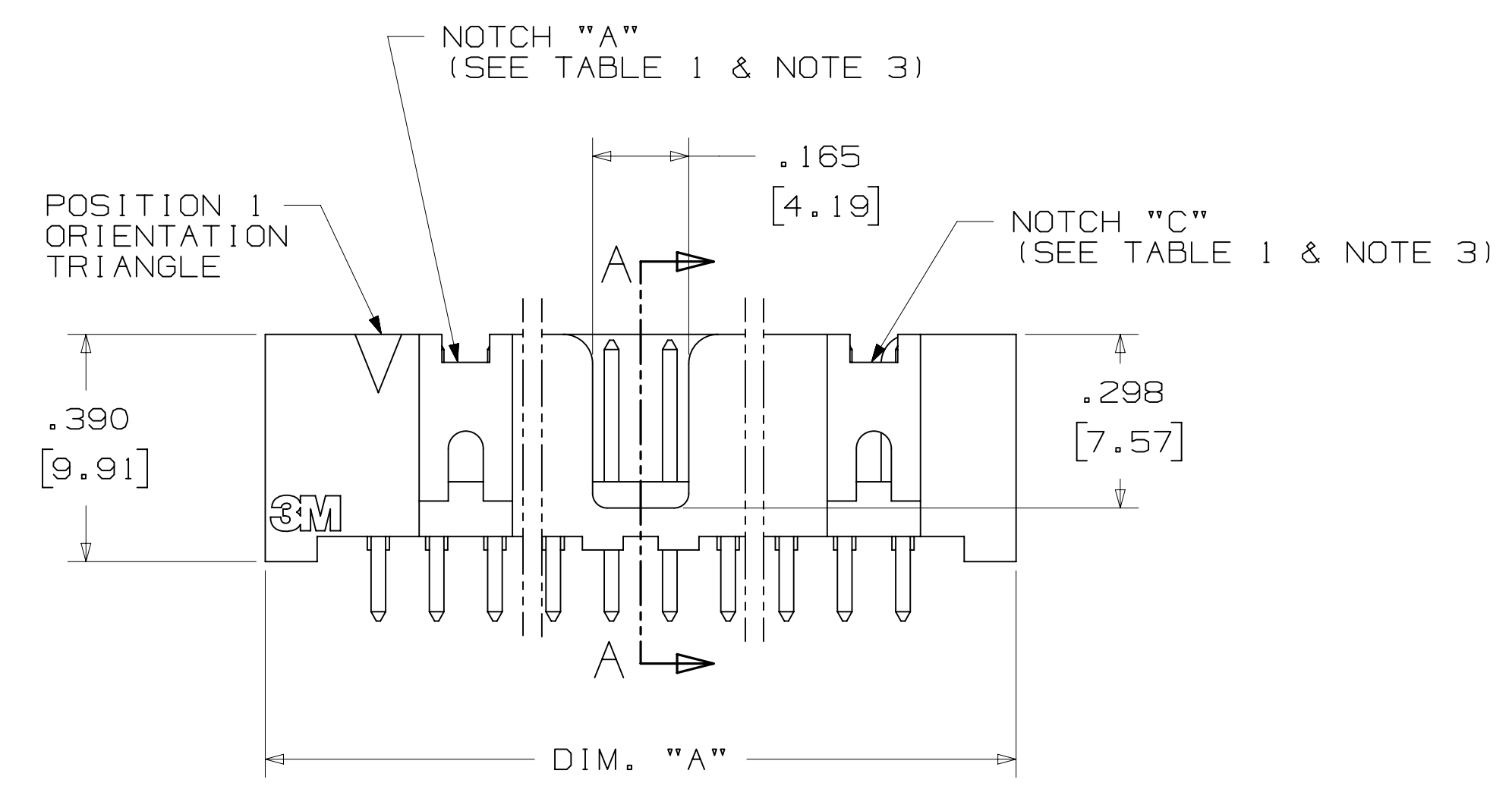
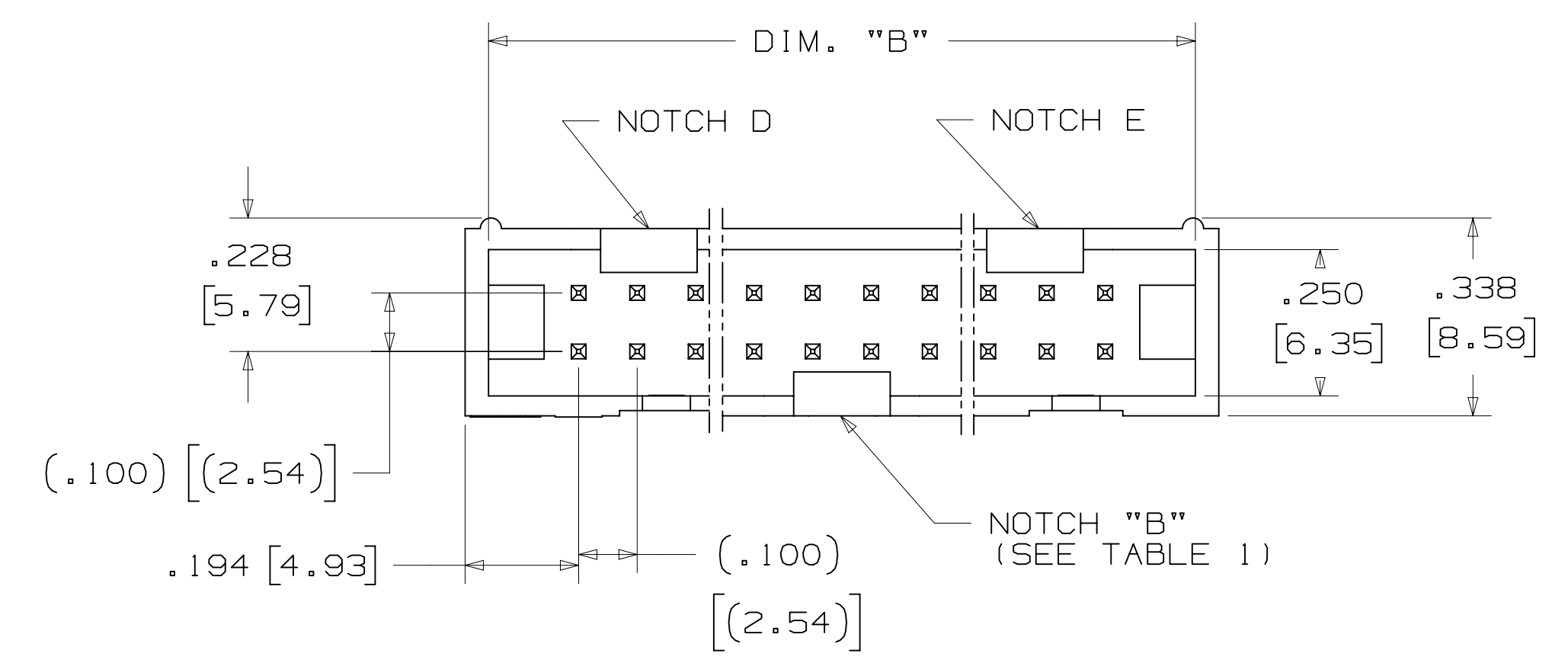


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]	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:
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		
MODEL		CAGE NUMBER		DRAWING NO.		
2500 SERIES		D 78-5100-0770-7		REV. N		
		SHEET		SHT 2 OF 5		

3M Center St. Paul, MN 55144

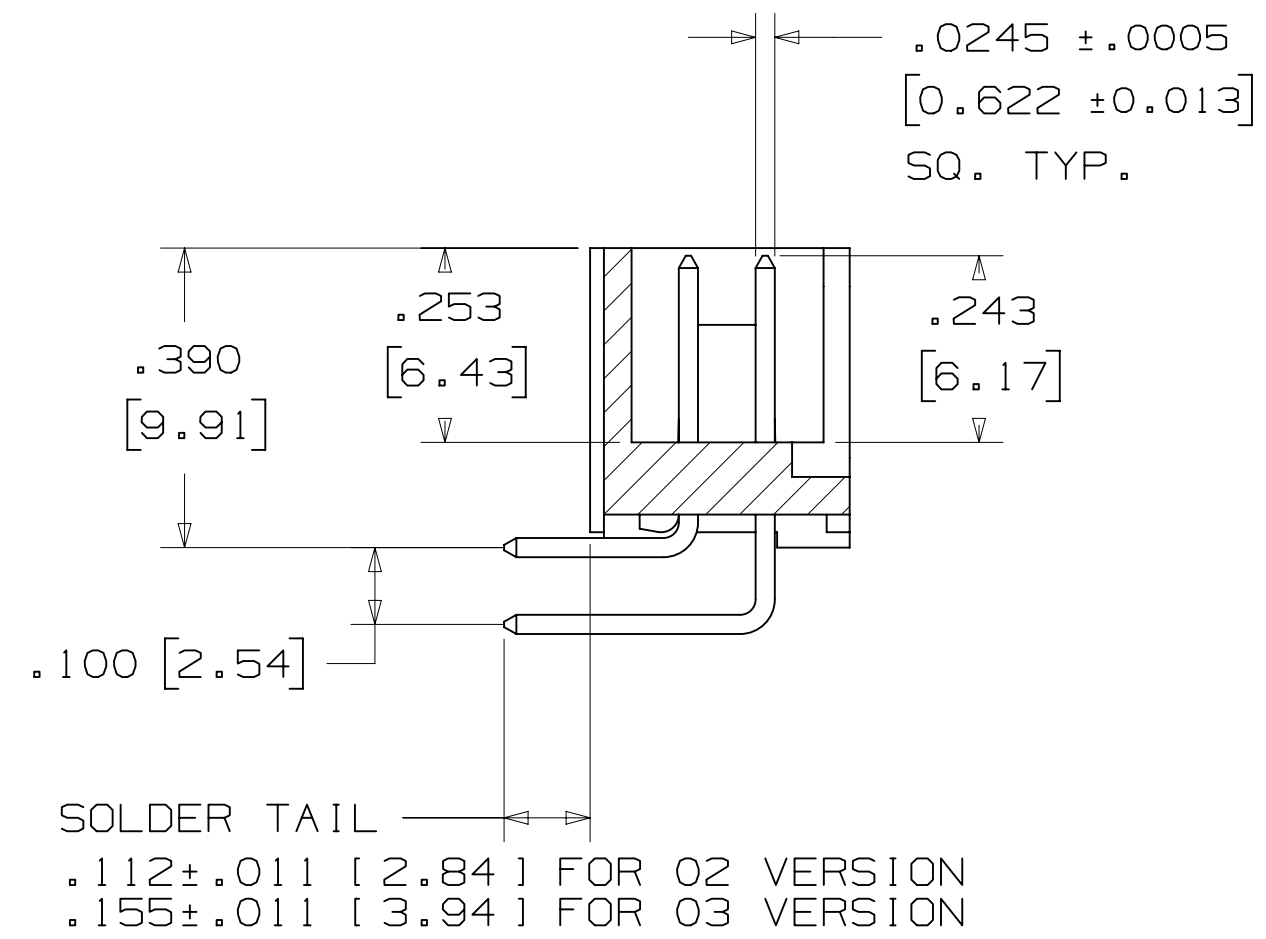
© 3M COPYRIGHT 2016

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

78-5100-0770-7
DRAWING NUMBER
REV. N
DATE AUG 11, 2014
MFG DATE
APPROV. R. SCHERER
DATE SEP 05, 2014
IMAGED: N.1 8/5/2016 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



SECTION B - B

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

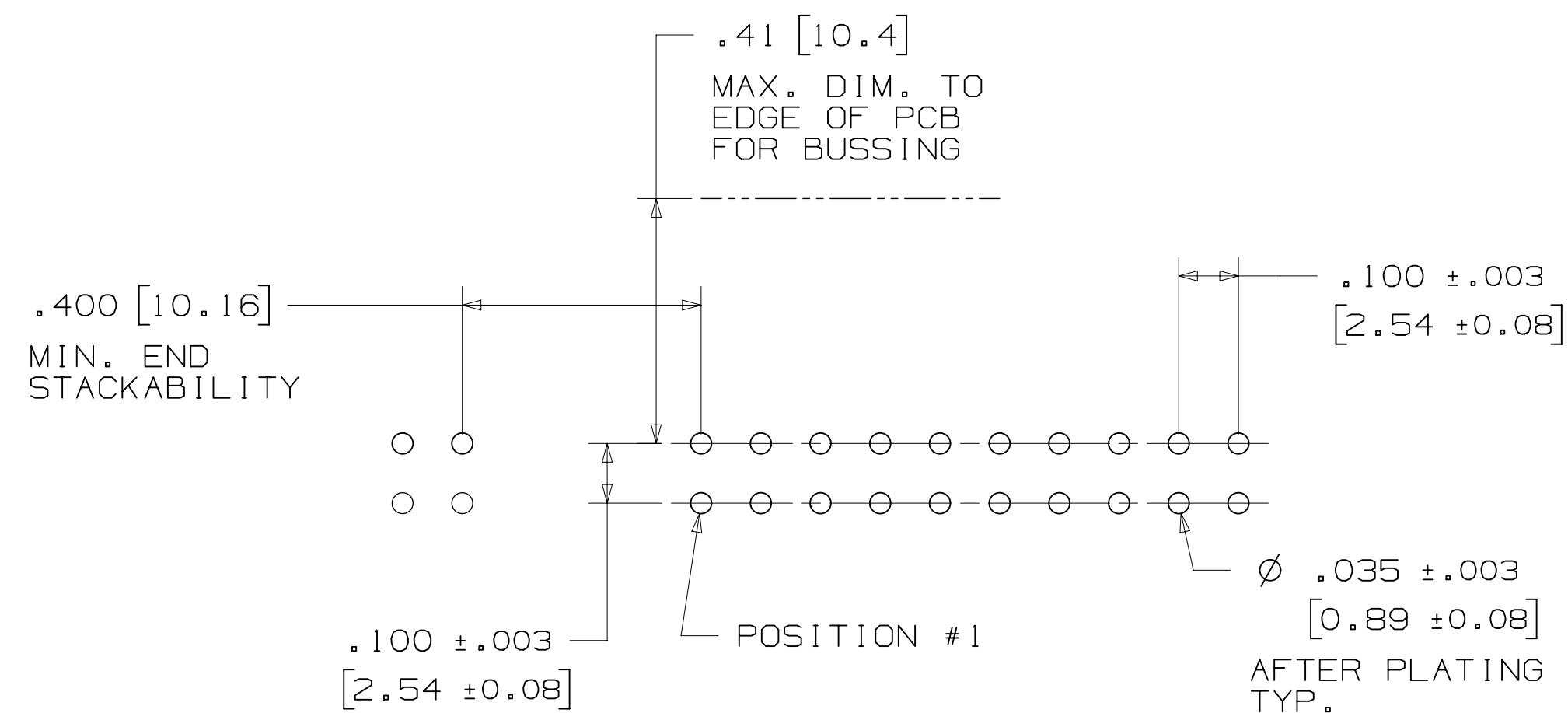
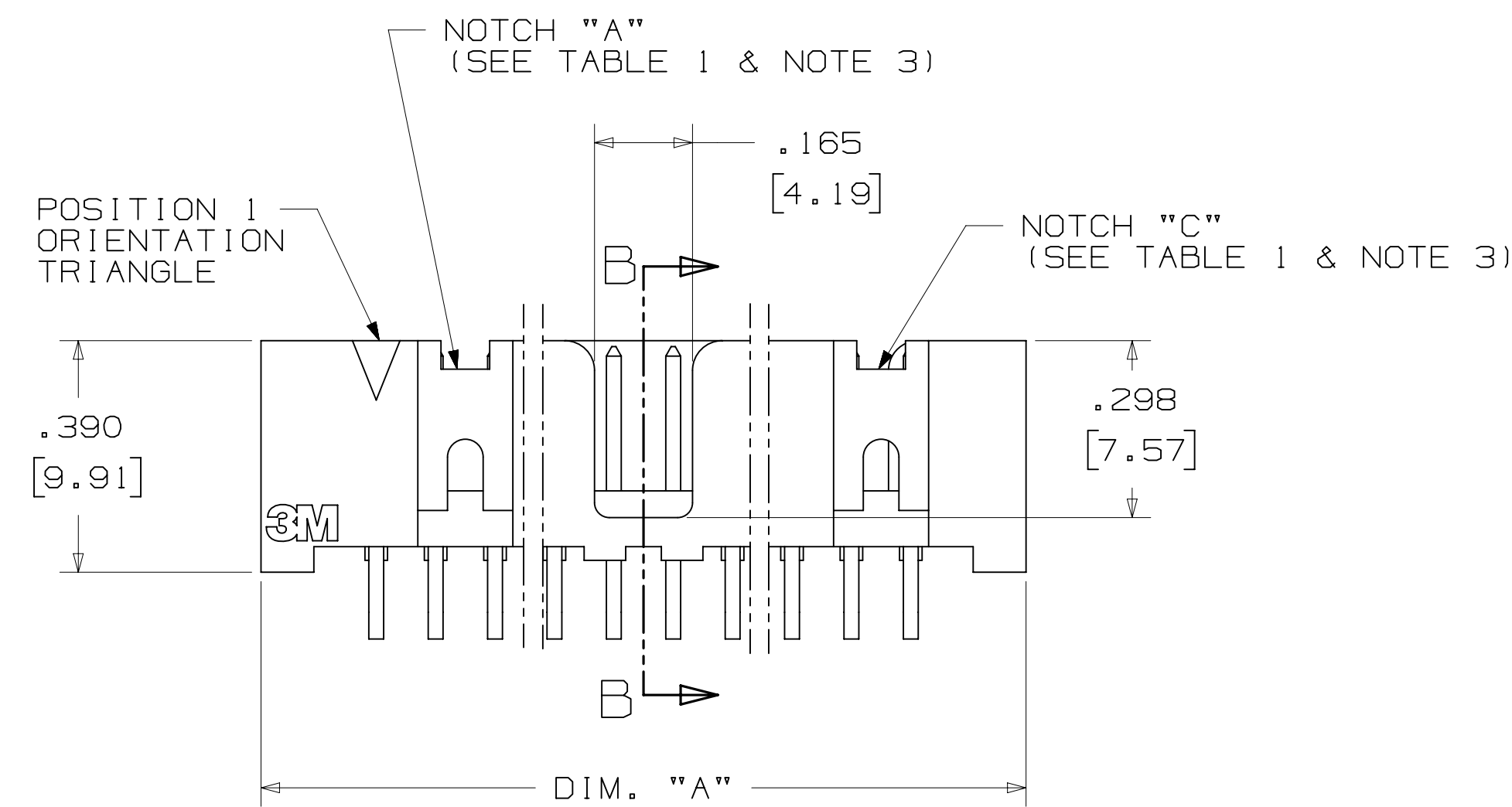
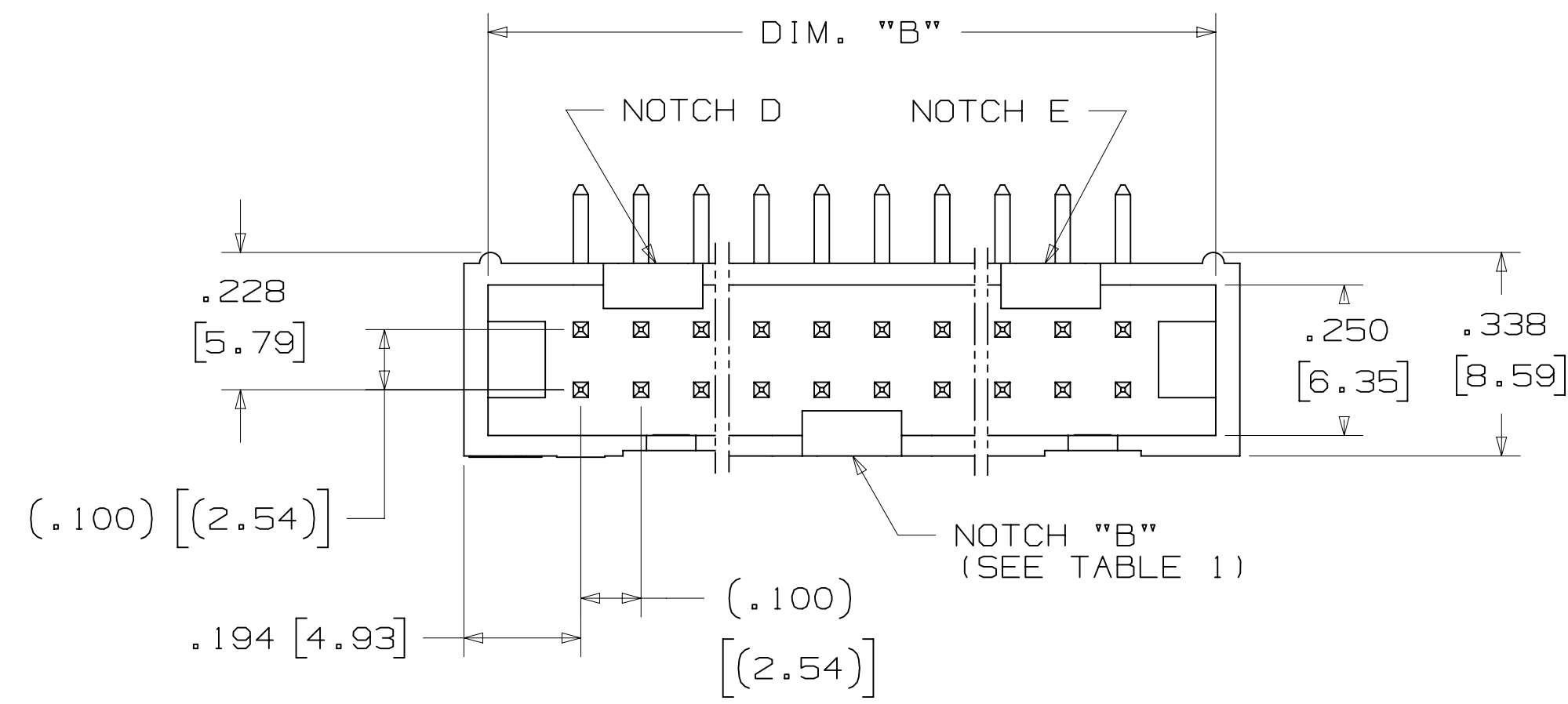
N = HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK = (UB OR UG PLATING)

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

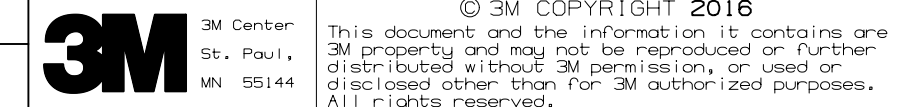
PLATING:

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. N	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		M		REVISE DIM ON SHT2 & CLIP CHART ON SHT5	JNC	SC
				AUG 11, 2014	JNC	RS
				REVISED AND REDRAWN		
				AUG 11, 2014		
				APPV. R. SCHERER		
				DATE		
				SEP 05, 2014		
DIVISION Interconnect Solutions		DIVISION CODE EMSD				
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		
INTERPRET PER ASME Y14.5 - 2009		.00 ± .01 .000 ± .005 .0000 ±		0 ± .0 ± .3 .00 ± .13 .000 ±		
MAX SURFACE ROUGHNESS		SURFACES		CAGE NUMBER		
MARKED ONLY		ANGLES		D78-5100-0770-7		
				REV. N		
				MODEL 2500 SERIES		
				SHT 3 OF 5		



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

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 µm		SURFACES: 1.6 µm		MARKED ONLY		
CAGE NUMBER: D78-5100-0770-7		SIZE: N		DRAWING NO.: 2500 SERIES		
MODEL: 2500 SERIES		REV.:		SHT 4 OF 5		

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

© 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

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

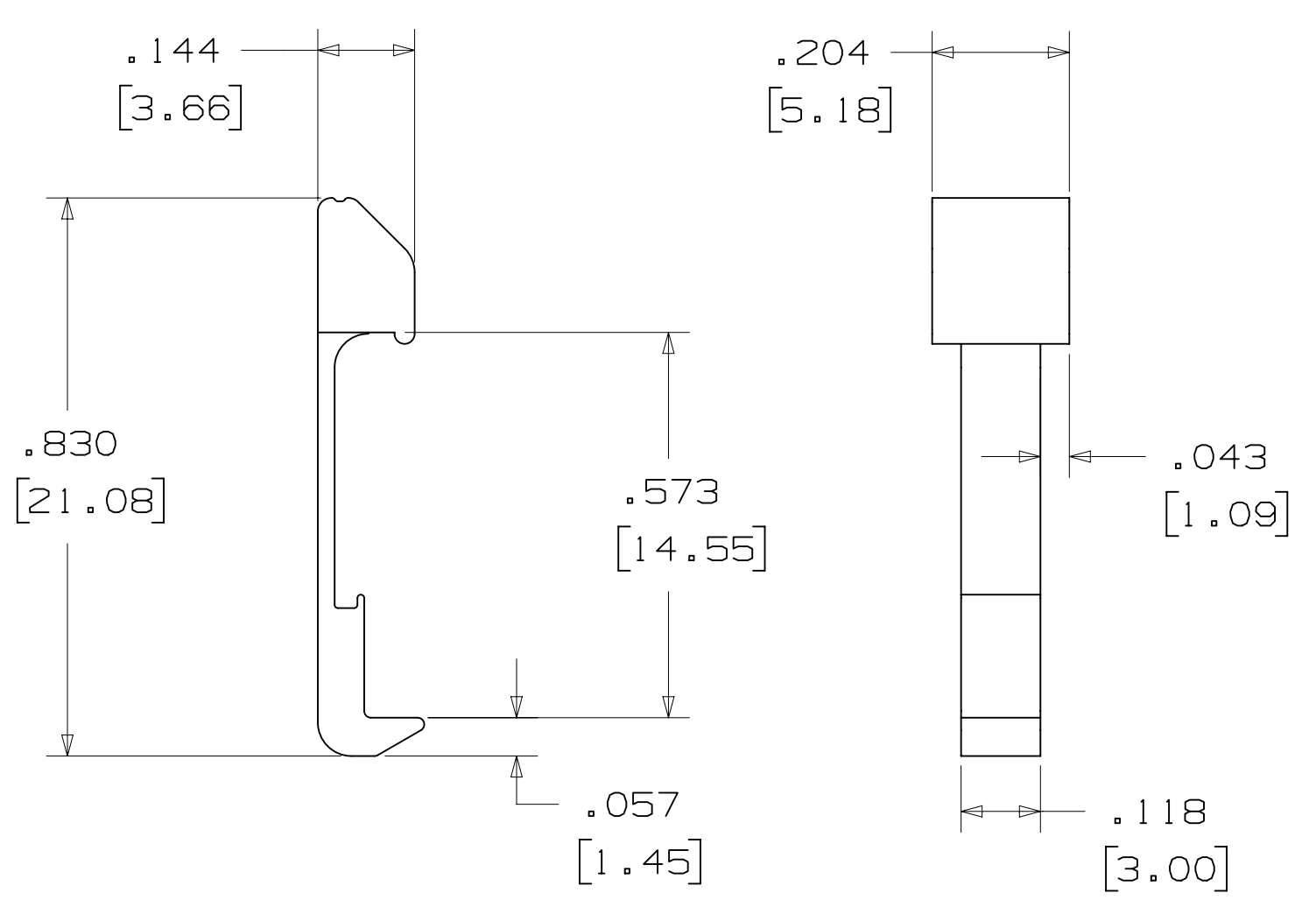
DRAWING NUMBER: 78-5100-0770-7
REVISION: N
DATE: AUG 11, 2014
APPV: R. SCHERER
DATE: SEP 05, 2014
IMAGED: N.1 8/5/2016 11:10 AM UTC-05:00

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

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.

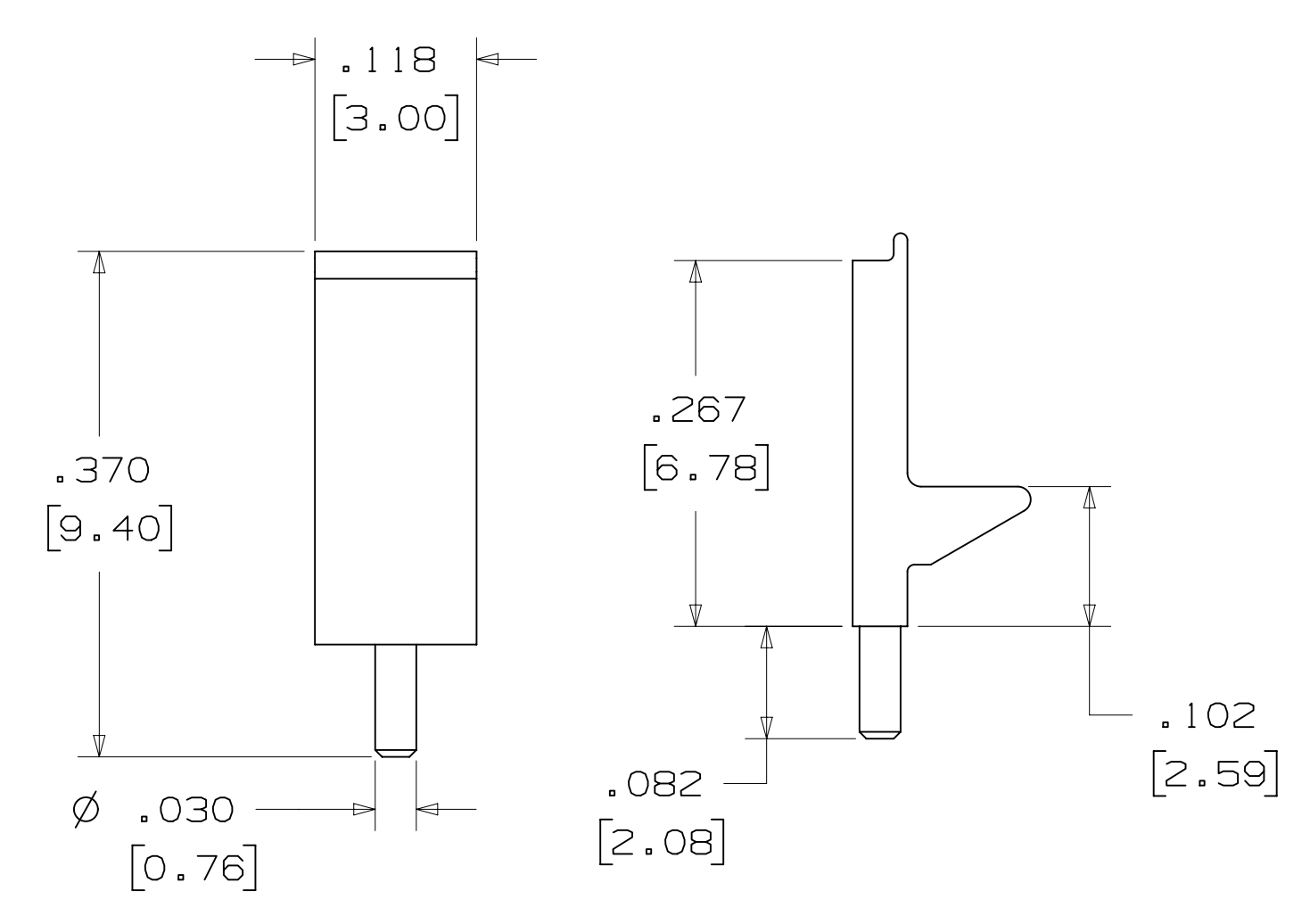
LOW PROFILE LATCH



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 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 SCALE: 4/1 DO NOT SCALE DRAWING THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2009 MAX SURFACE ROUGHNESS: 1.6 μm (R) SURFACES MARKED ONLY		DIVISION CODE: EMSD TOLERANCES EXCEPT AS NOTED INCHES: .00 ± .01, .000 ± .005, .0000 ± MILLIMETERS: 0 ± .3, .00 ± .13, .000 ±		3M Center St. Paul, MN 55144 © 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.		
TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		CAGE NUMBER: D78-5100-0770-7 MODEL: 2500 SERIES		REV. N SHT 5 OF 5		

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