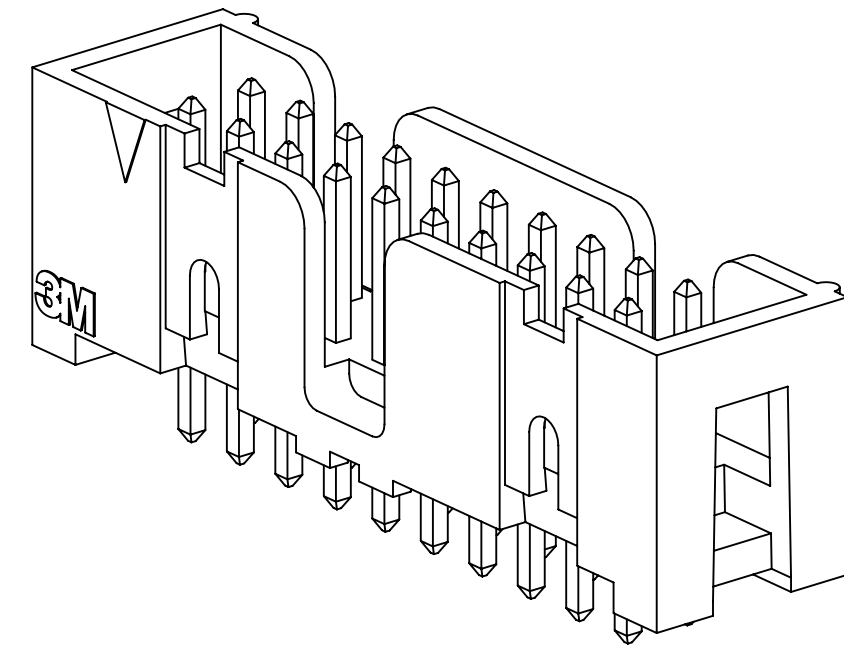
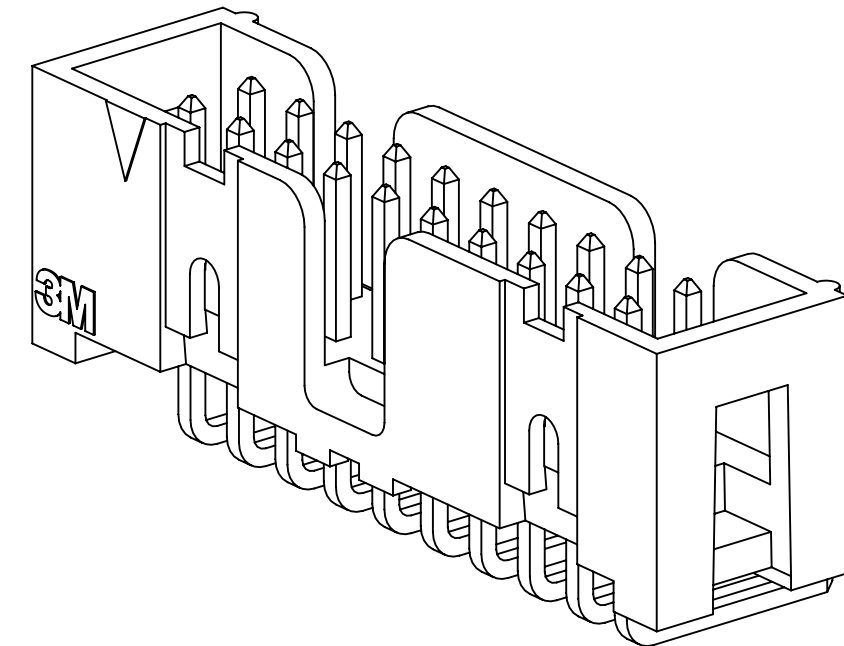


3M™ FOUR-WALL HEADER, 2500 SERIES

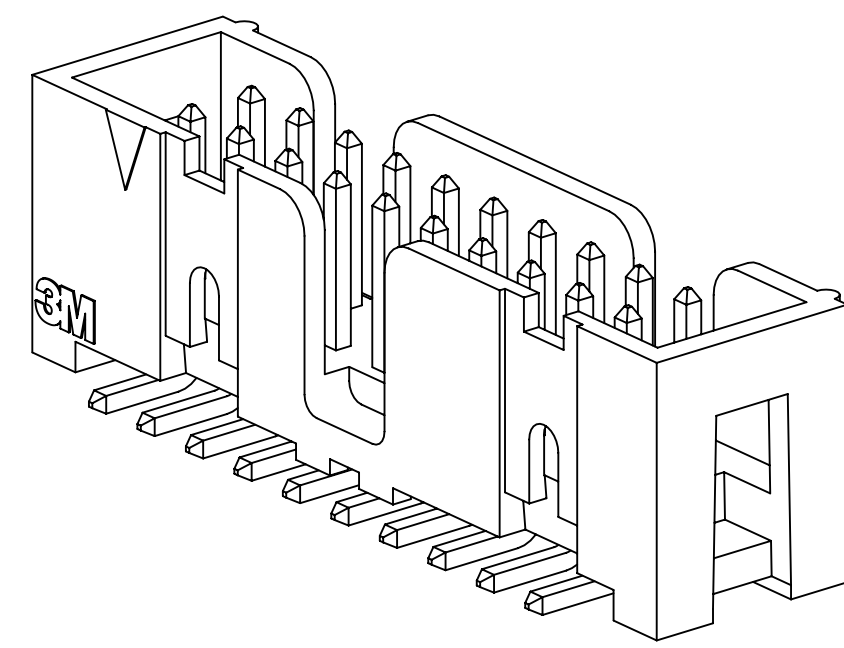
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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>

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 INFORMATION CALL 800-225-5373

CAUS
 UL FILE NO: E68080

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
ACROSS CODES						
		CASTIGLIONE	AUG 11, 2014	MFG		
				R. SCHERER	SEP 05, 2014	
DIVISION	INTERconnect Solutions	DIVISION CODE	EMSD	© 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.		
DO NOT SCALE DRAWING	SCALE 4-1	TOLERANCES EXCEPT AS NOTED		3M Center St. Paul, MN 55144		
		INCHES		TITLE HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		
		MILLIMETERS		CAGE NUMBER D78-5100-0770-7		
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009			REV. NUMBER N		
				MODEL 2500 SERIES		
				SHEET 1 OF 5		

78-5100-0770-7
N
REVISION
DRAWING NUMBER
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

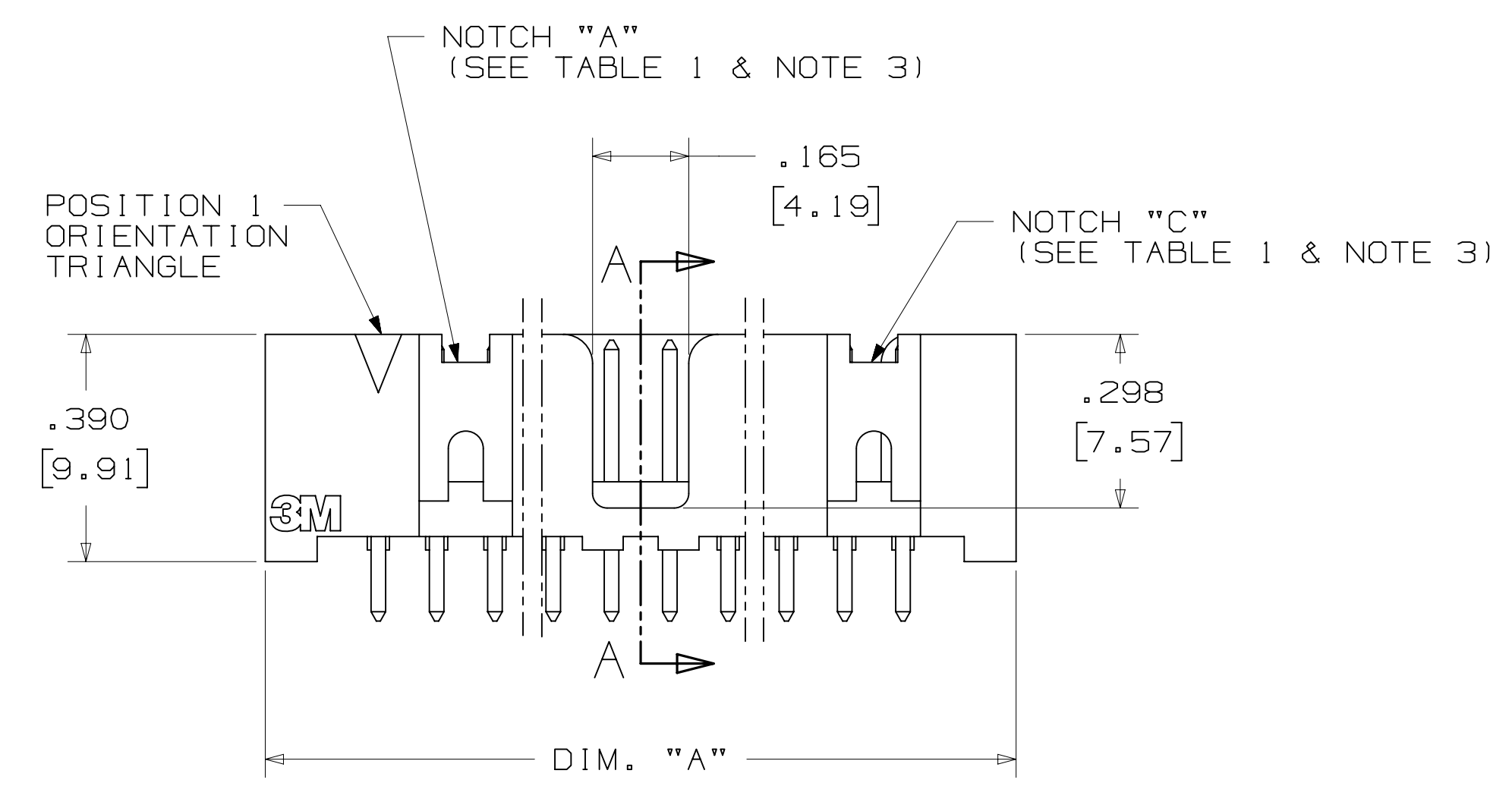
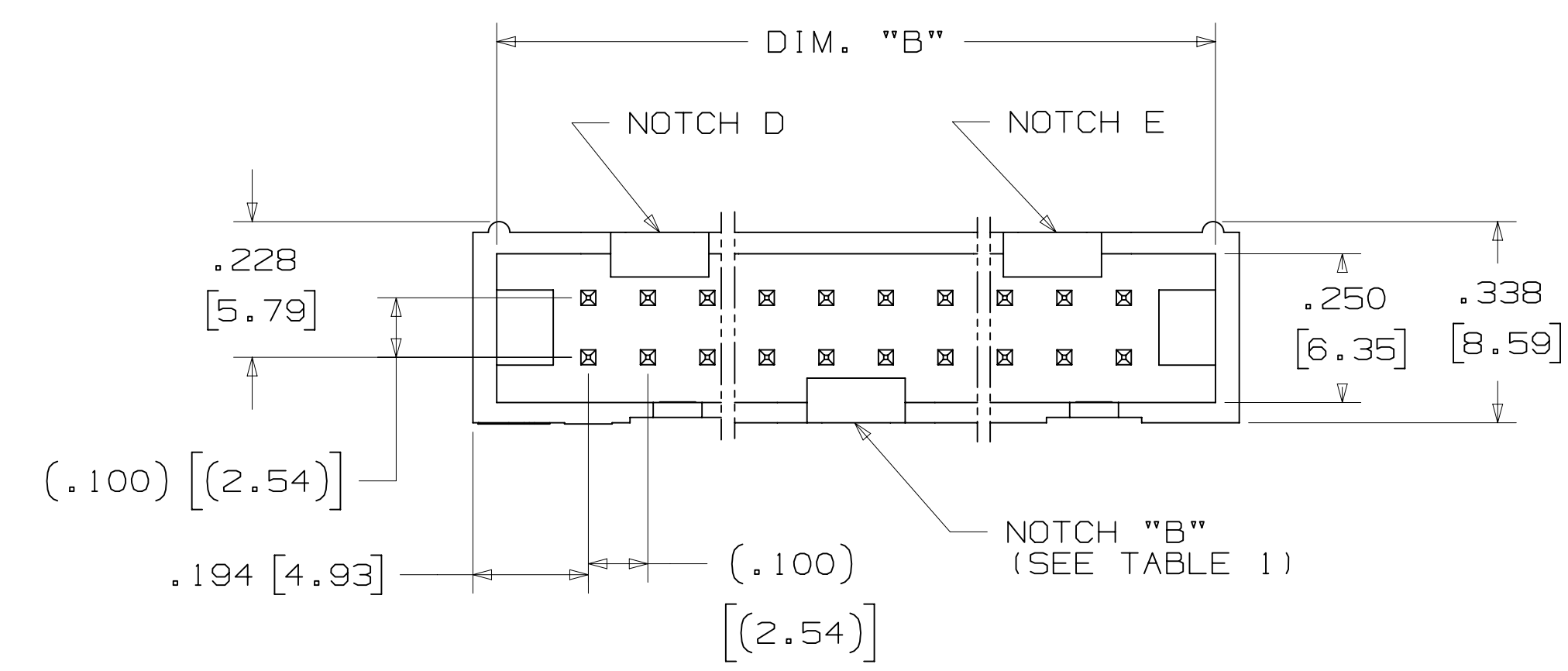
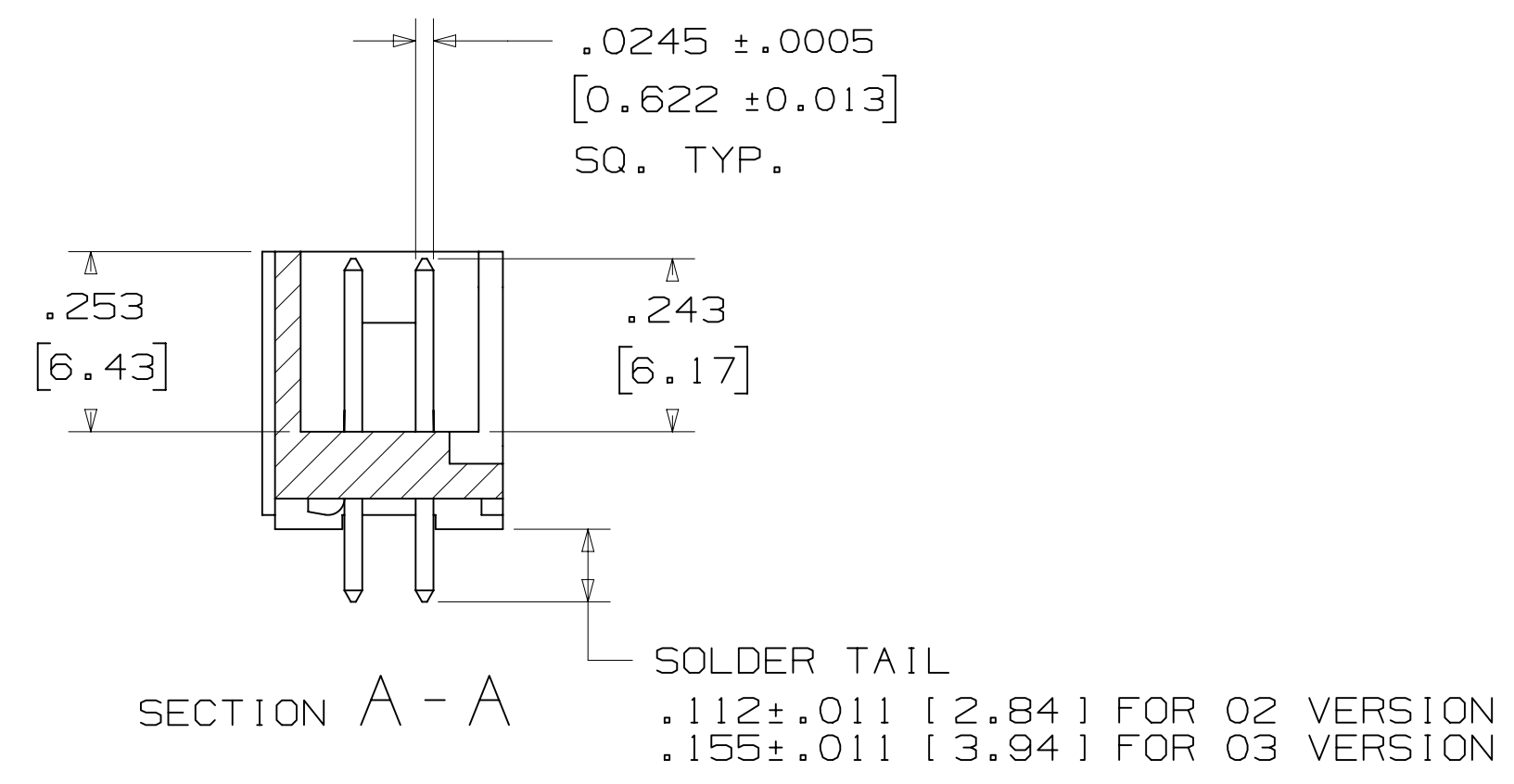
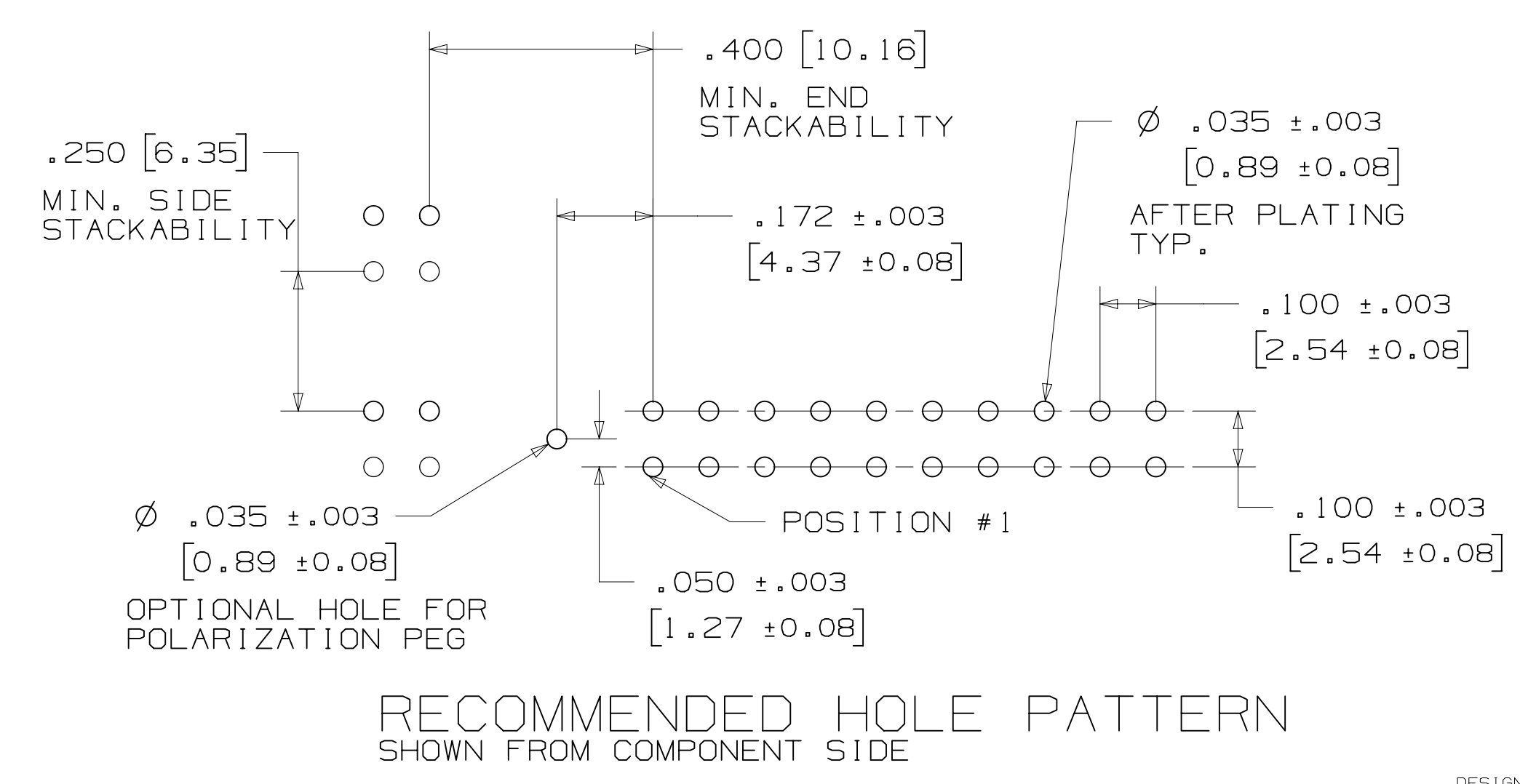


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]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

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)

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

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

DESIGN REFERENCE NEXT ASSEMBLY
 DIVISION CODES
 Interconnect Solutions
 DO NOT SCALE DRAWING
 THIRD ANGLE PROJECTION
 MAX SURFACE ROUGHNESS
 INTERPRET PER ASME Y14.5 - 2009

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 TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA
 CAGE NUMBER: D78-5100-0770-7
 MODEL: 2500 SERIES
 SHEET: 2 OF 5

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

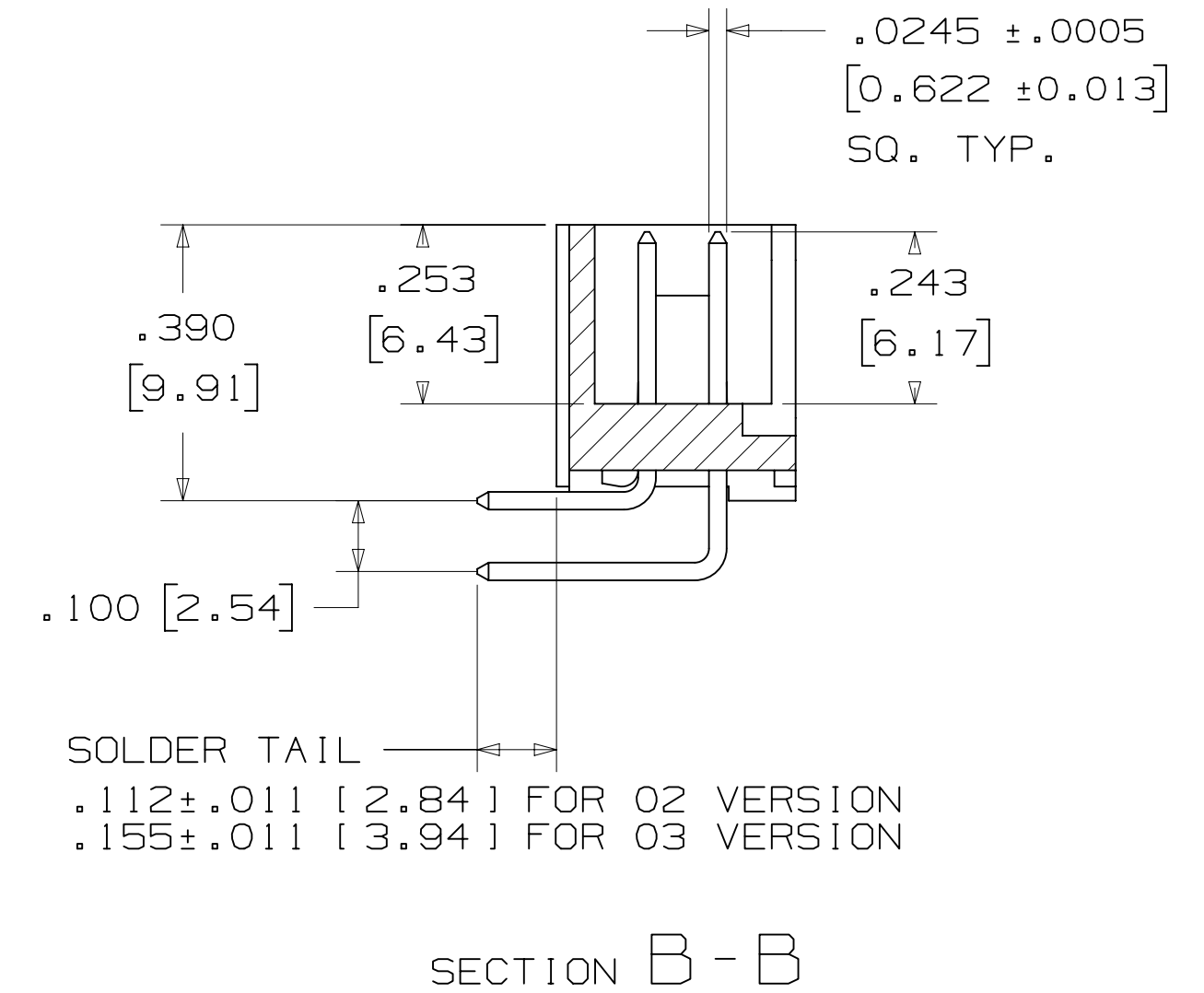
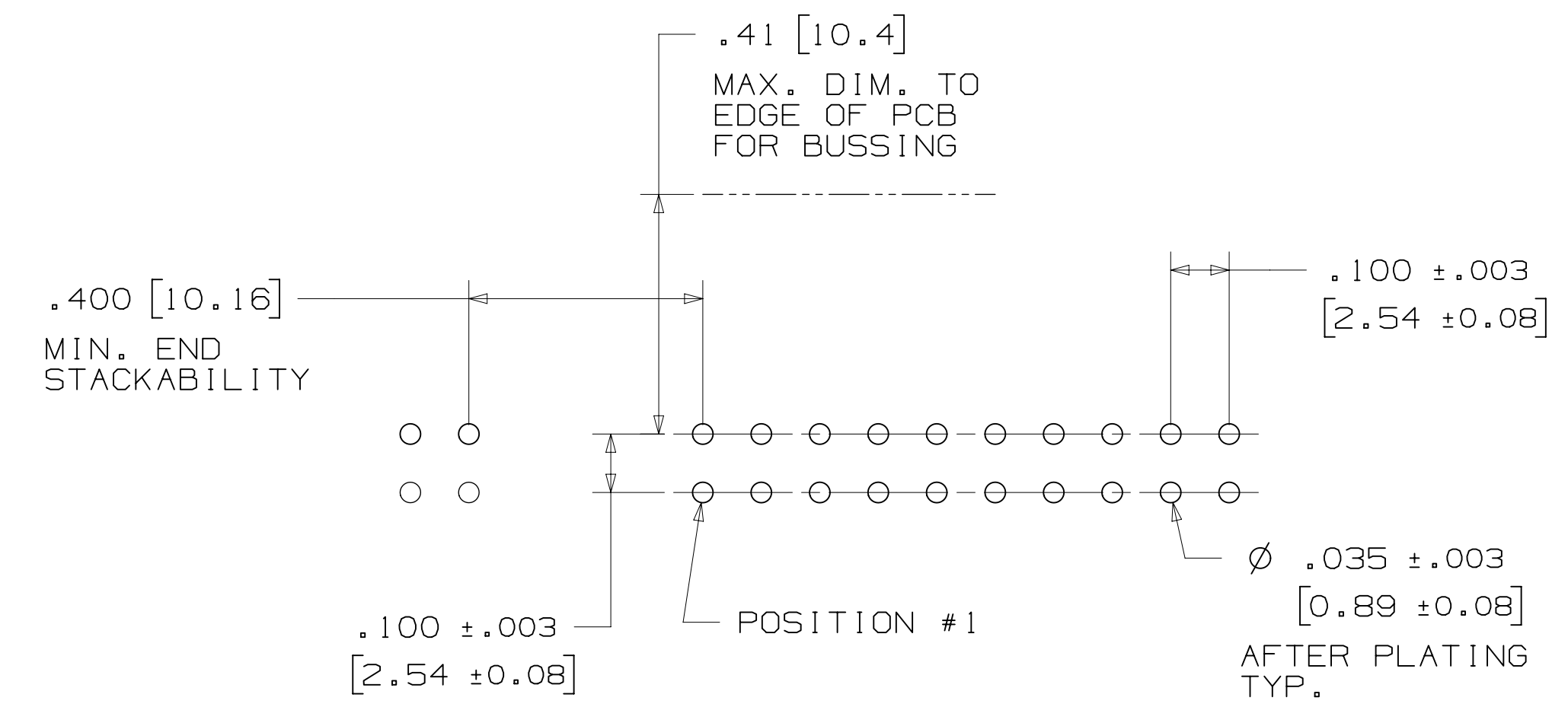
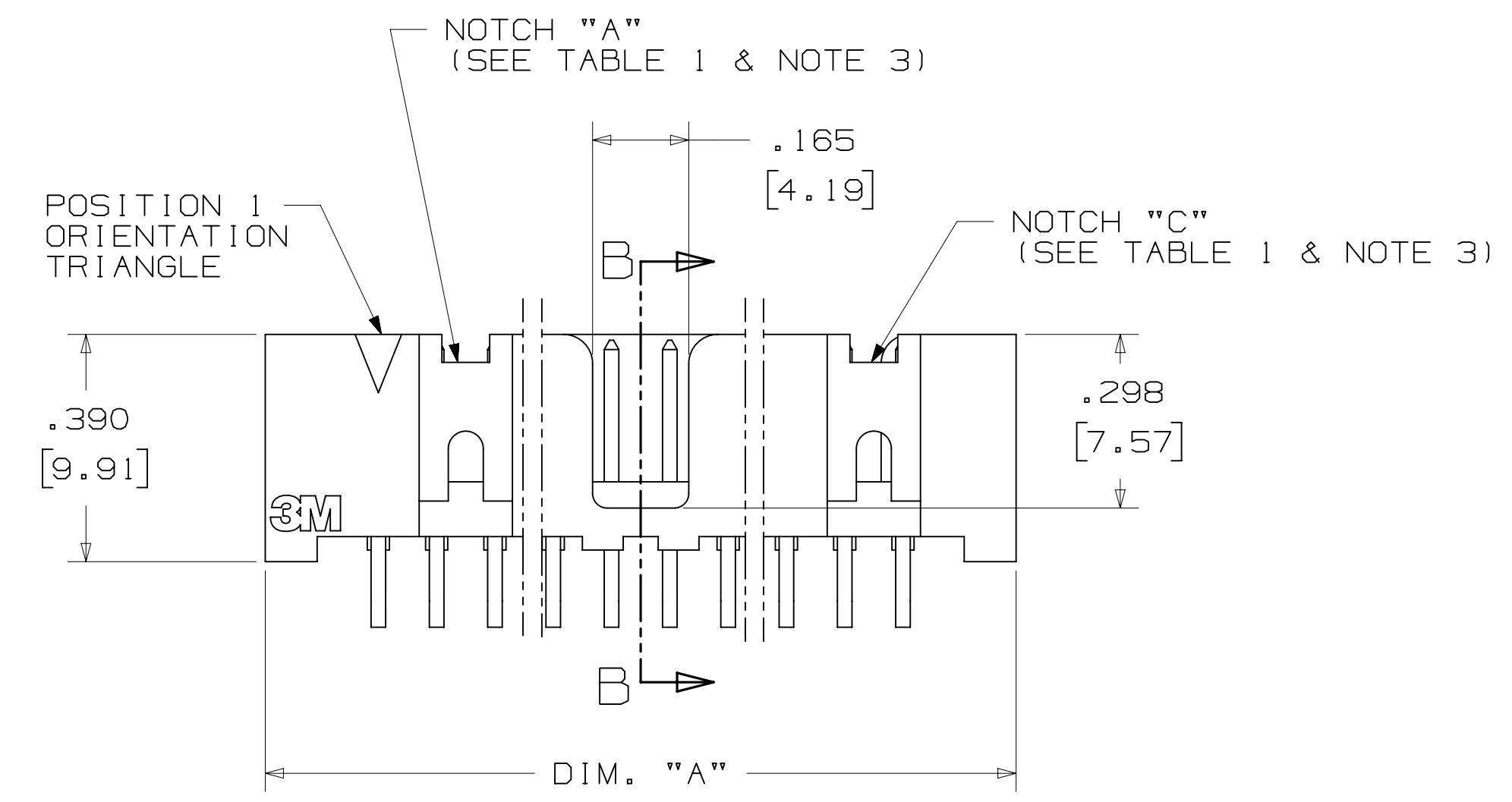
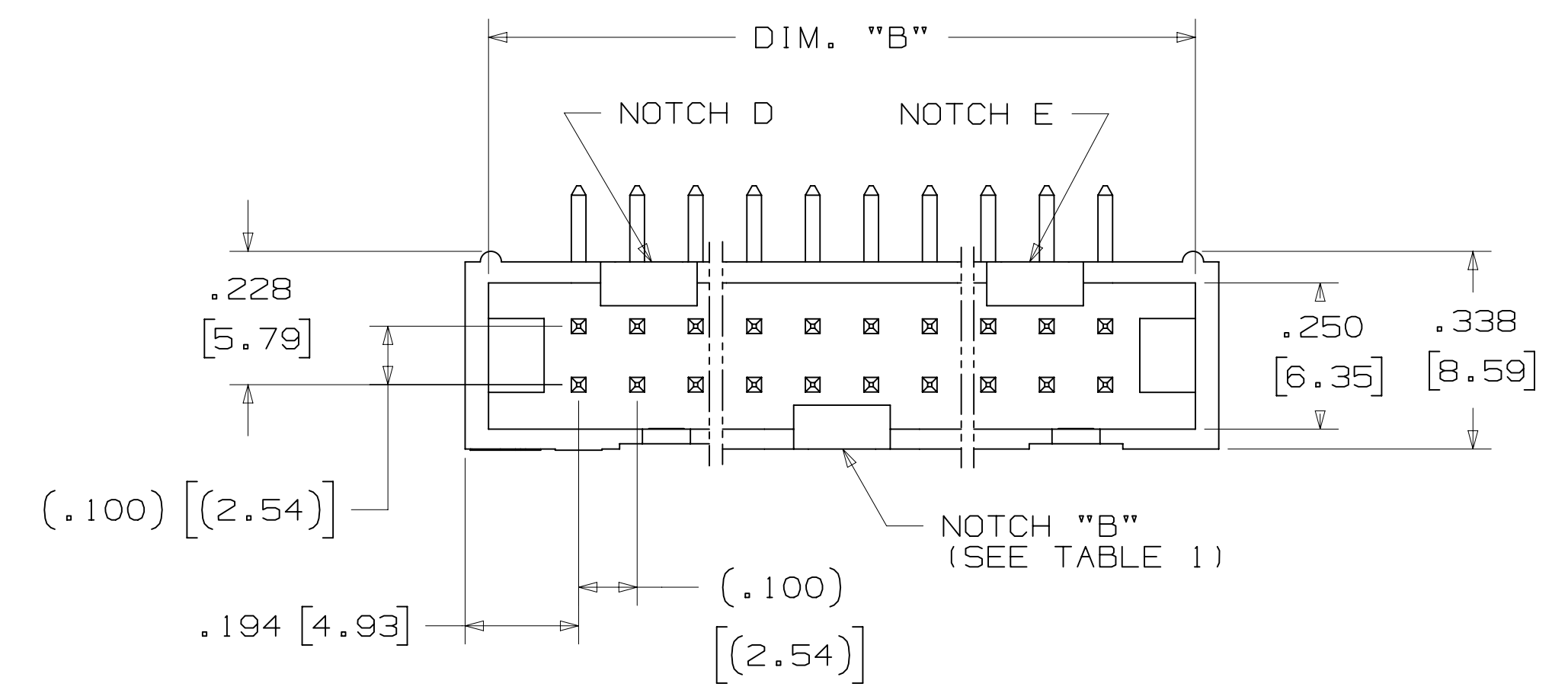


TABLE 1

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
Interconnect Solutions	EMSD	CASTIGLIONE	AUG 11, 2014	DATE	DATE
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED	INCHES .00 ±.01 .000 ±.005 .0000 ±	MILLIMETERS 0 ± .0 ±.03 .00 ±.13 .000 ±	ANGLES
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	MAX SURFACE ROUGHNESS	DT SURFACES	MARKED ONLY	
DIVISION		3M Center St. Paul, MN 55144	© 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.		
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	IS1s YES XNO SHT 3 OF 5	

78-5100-0770-7 DRAWING NUMBER
 REV. 1
 N
 11:10 AM UTC-05:00
 Imaged: N.1 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: SEP 05, 2014		
DO NOT SCALE DRAWING	SCALE: 4/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION		INCHES: .00 ± .01, .000 ± .005, .0000 ±		TITLE: HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS: 0 ±, .0 ± .3, .00 ± .13, .000 ±		CAGE NUMBER: D78-5100-0770-7 N		
MAX SURFACE ROUGHNESS: SURFACES		ANGLES: 45°		MODEL: 2500 SERIES		

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 APPR: R. SCHERER DATE: SEP 05, 2014		
MAX SURFACE ROUGHNESS: 12.5 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. N		

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