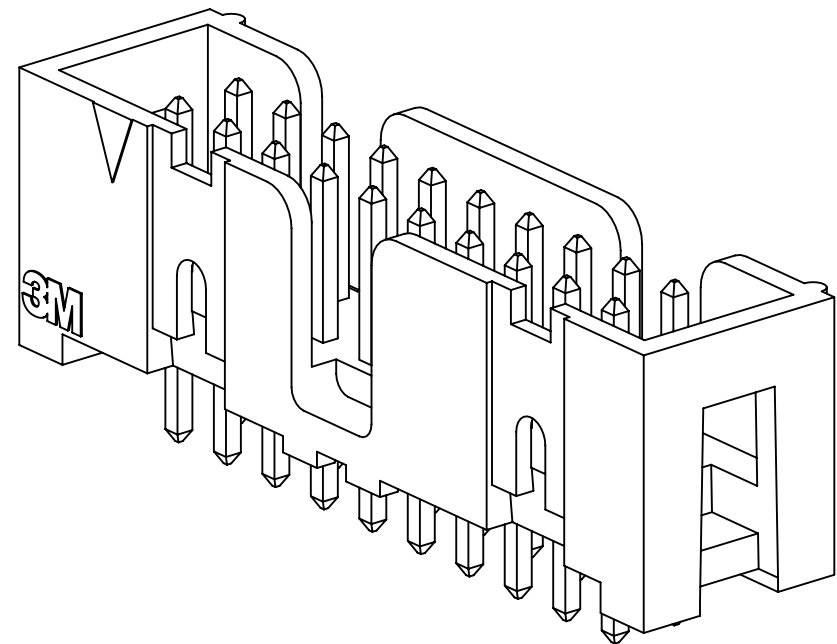


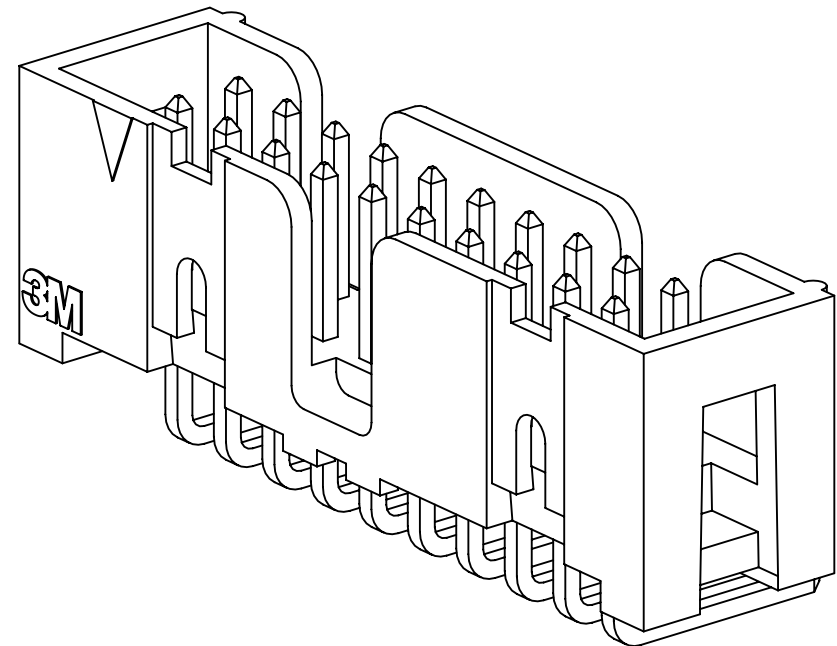
3M™ FOUR-WALL HEADER, 2500 SERIES

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



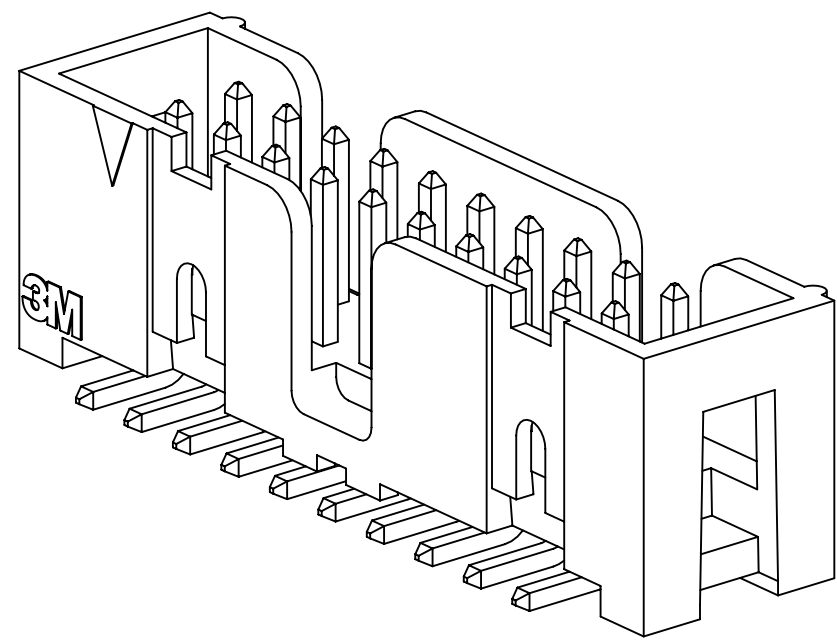
25XX-60XX

STRAIGHT VERSION



25XX-50XX

RIGHT ANGLE VERSION



25XX-6V0C

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: $>1 \times 10^9 \Omega$ 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)

3M ELECTRONIC MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373



UL FILE NO: E68080

EXTENSIONS: INCHES [MM]) IS REF. ONLY		M 5606B		AUG 11, 2014		JNC		RS	
				REVISED AND REDRAWN					
DESIGN REFERENCE		NEXT ASSEMBLY		REV ECO		ISSUE DATE AND DESCRIPTION		DRFT CHKD	
ADDRESS CODES		DRFT CASTIGLIONE		DATE AUG 11, 2014		MFG 		DATE	
				CHKD		DATE		APRVL R. SCHERER	
DIVISION		DIVISION CODE		DATE		DATE		DATE	
Interconnect Solutions		EMSD		DATE		DATE		DATE	
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED		DATE		DATE		DATE	
SCALE 4 1		INCHES		TITLE		DATE		DATE	
		.00 ± .01 .000 ± .005 .0000 ±		3M St. Paul, MN 55144		© 3M COPYRIGHT 2015 This document and the information it contains on 3M property and may not be reproduced or further distributed without permission, or used for any other purpose than for 3M authorized purposes. All rights reserved.		DATE	
THIRD ANGLE PROJECTION		MILLIMETERS		.0 ± .3 .00 ± .13 .000 ±		HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		DATE	
INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS ☒ UNFINISHED SURFACES ☐ MARKED ONLY		CAGE NUMBER		SIZE DRAWING NO.		REV.	
		ANGLE		MODEL		DET.		SHT 1 OF 5	
		3000 SERIES		D 78-5100-0770-7		YES X NO		DATE	

Imaged: M.3 2/10/2015 8:32 AM UTC-06:00

78-5100-0770-7
DRAWING NUMBER

C

D

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

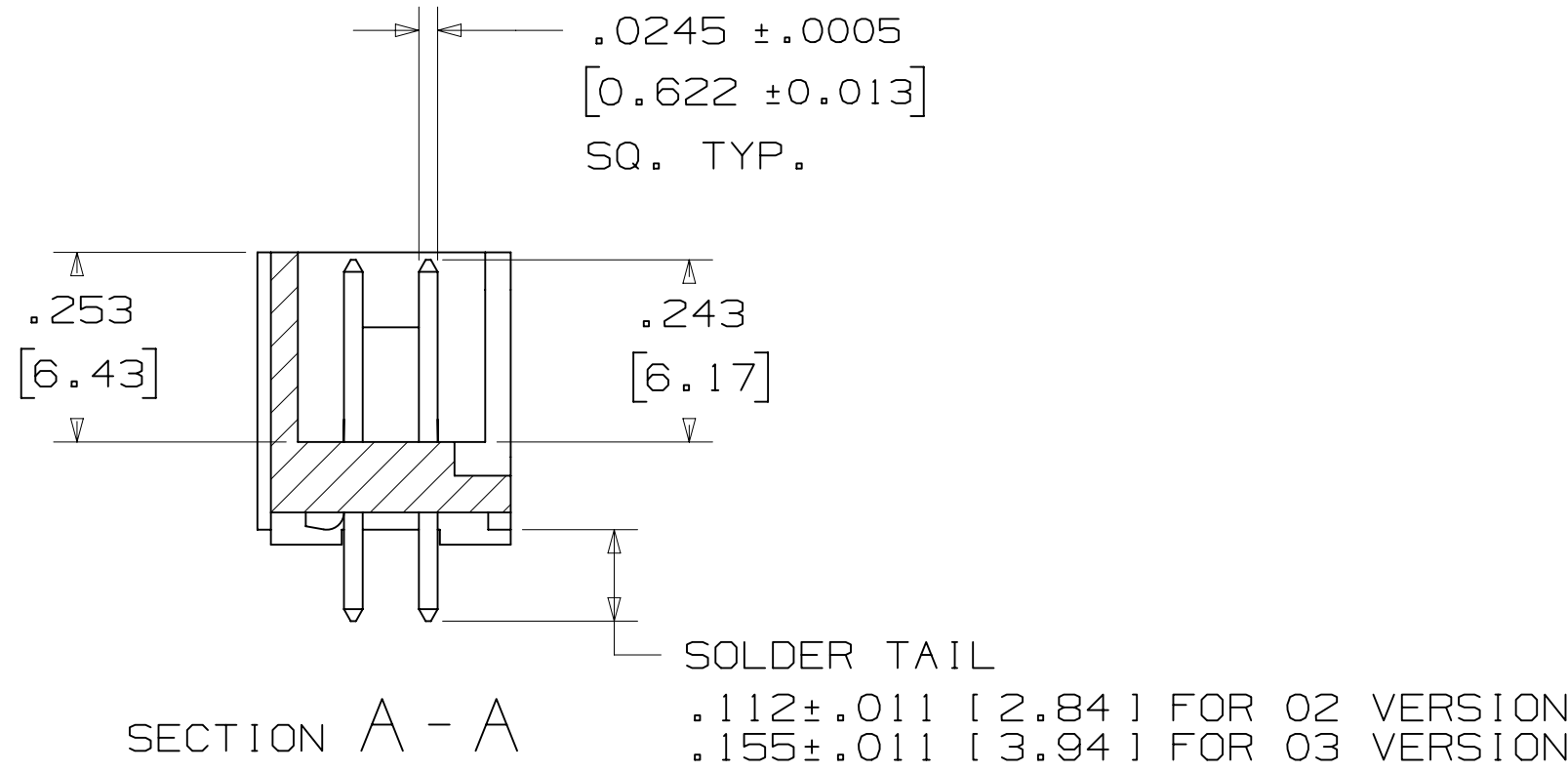
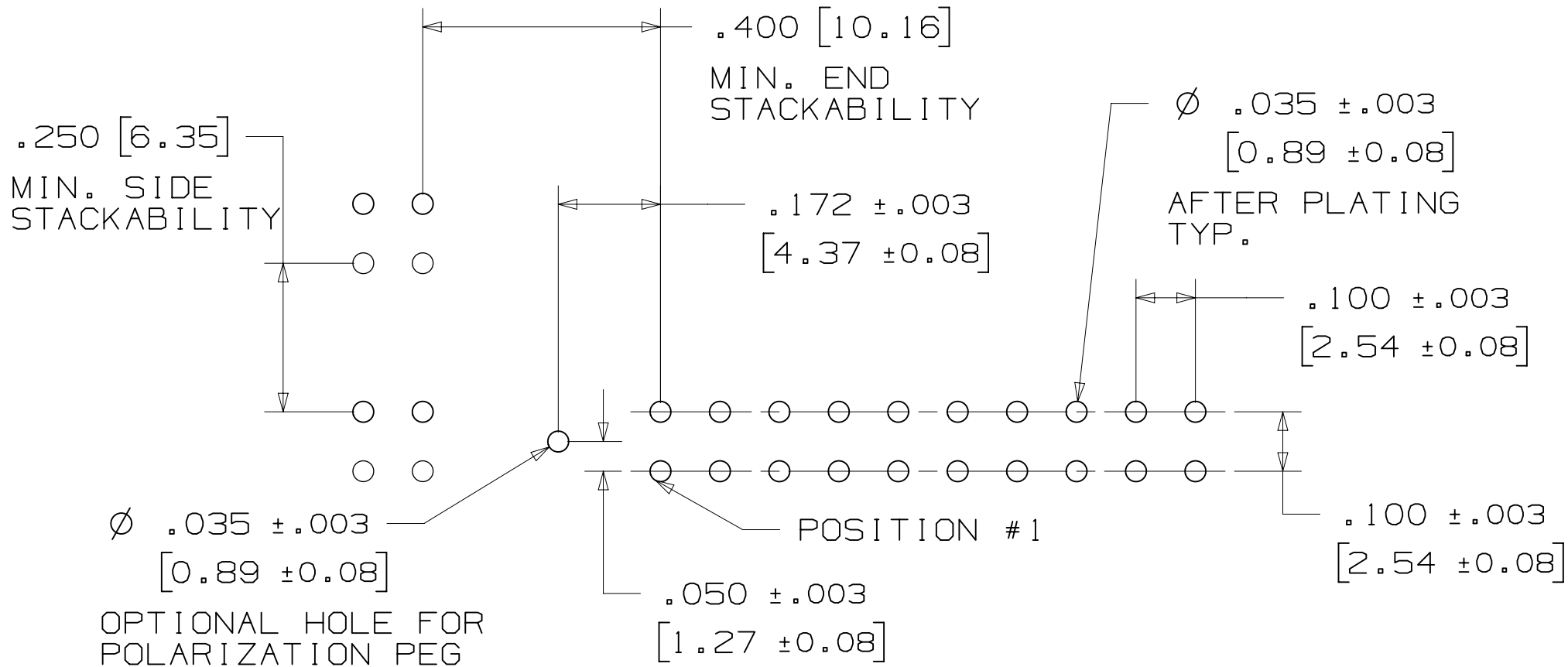
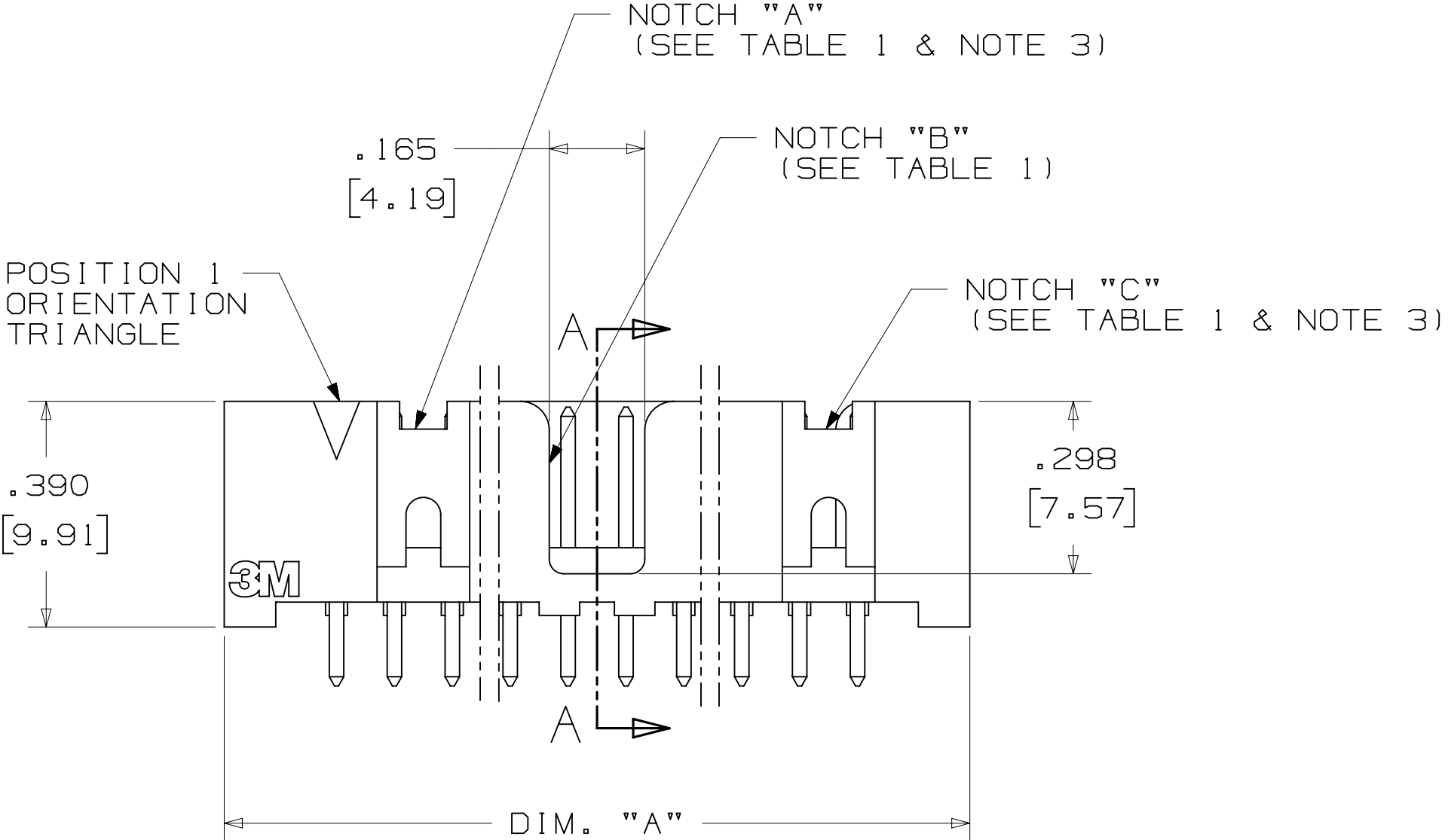
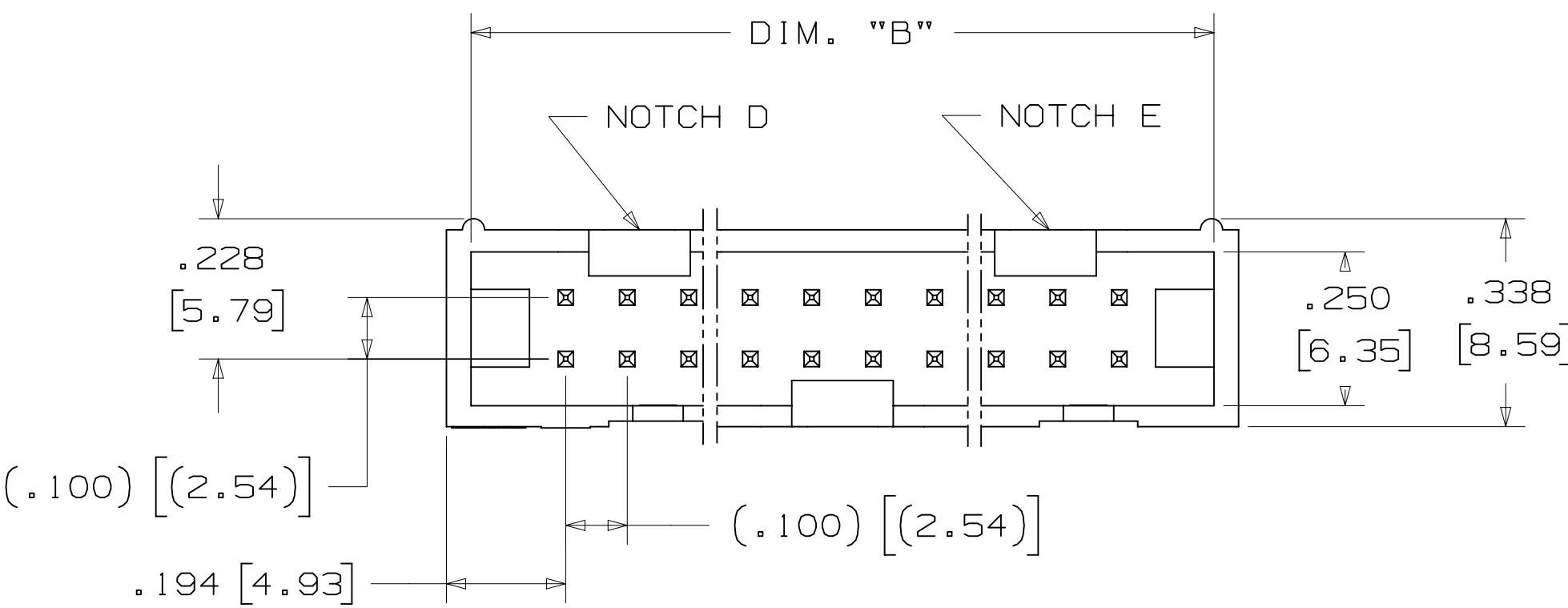


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]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

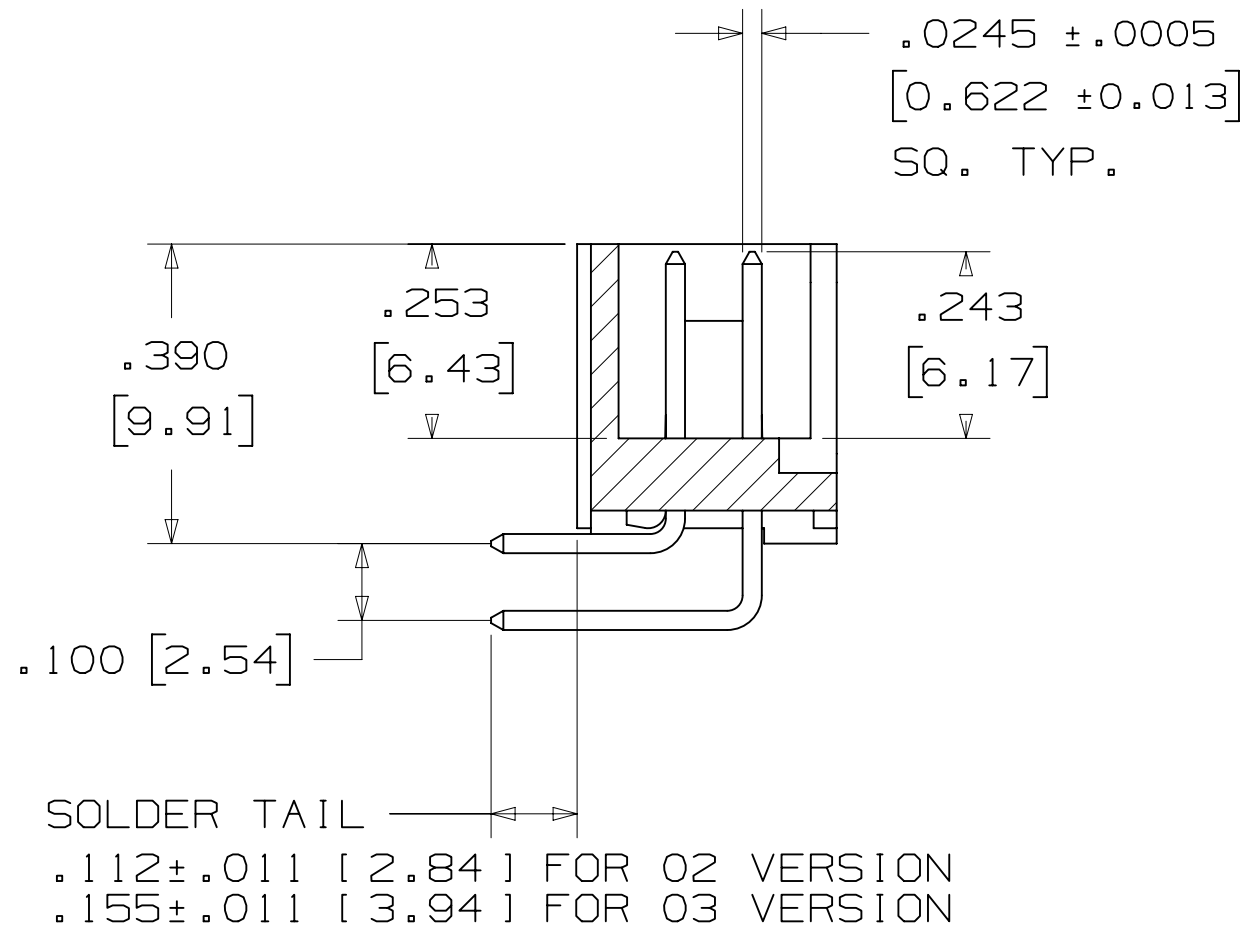
N= HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK= (UB OR UG PLATING)
PIN QUANTITY:
(SEE TABLE 1)
SOLDER TAIL:
02 = FOR .062 [1.57] THICK BOARD
03 = FOR .094 TO .125 [2.39 TO 3.18]
THICK BOARD

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		M	56068	AUG 11, 2014		JNC	RS
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD					
DRP	CASTIGLIONE	DATE	AUG 11, 2014	MFG					
CHKD		DATE		APPR	R. SCHERER	DATE	SEP 05, 2014		
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2015					
Interconnect Solutions		EMSD		3M Center St. Paul, MN 55144 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 .00 ±.01 .000 ±.005 .0000 ±		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		DRAWING NO.		REV.	
MAX SURFACE ROUGHNESS		DET SURFACES		D78-5100-0770-7		M			
MARKED ONLY		ANGLES		MODEL		3000 SERIES		DET LISTS YES NO SHT 2 OF 5	

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



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

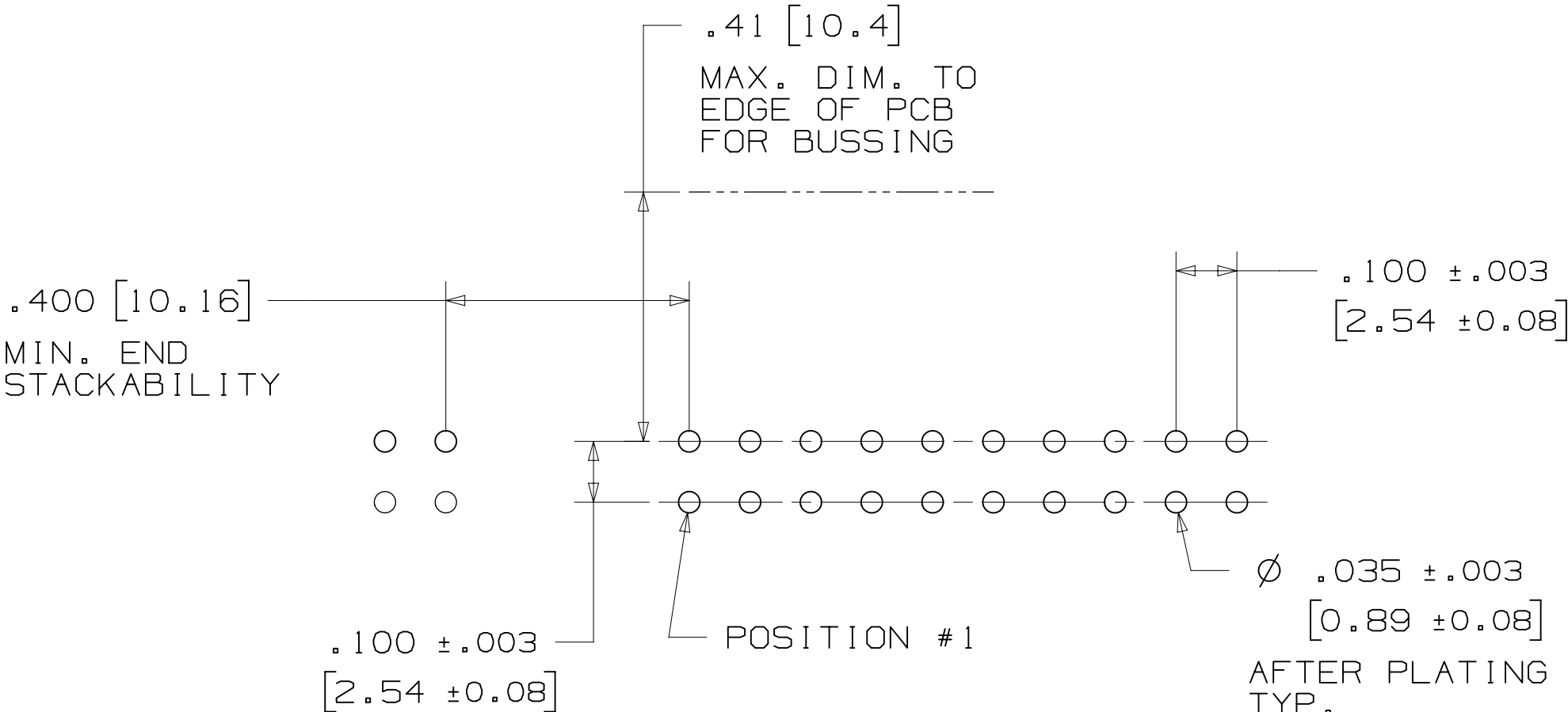
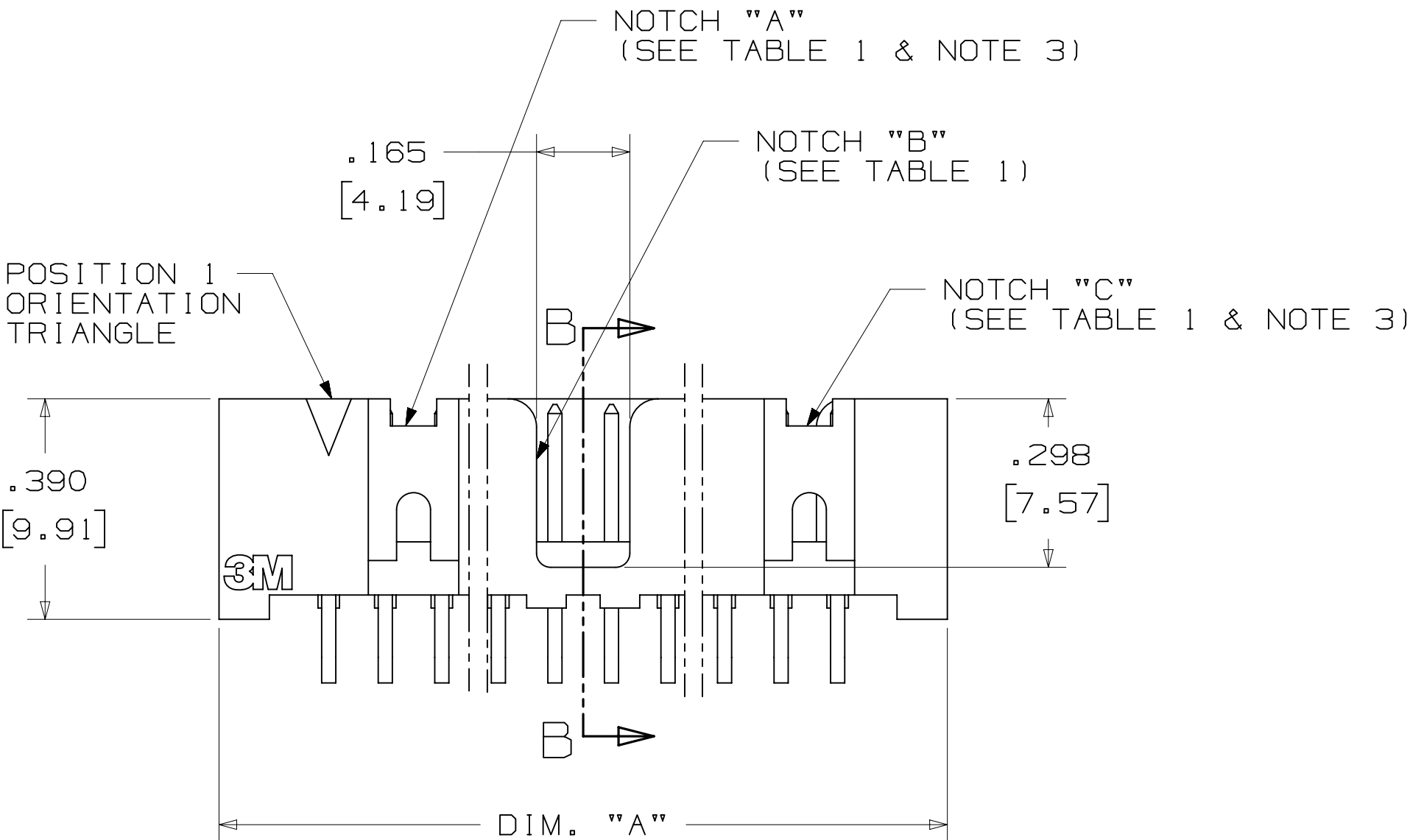
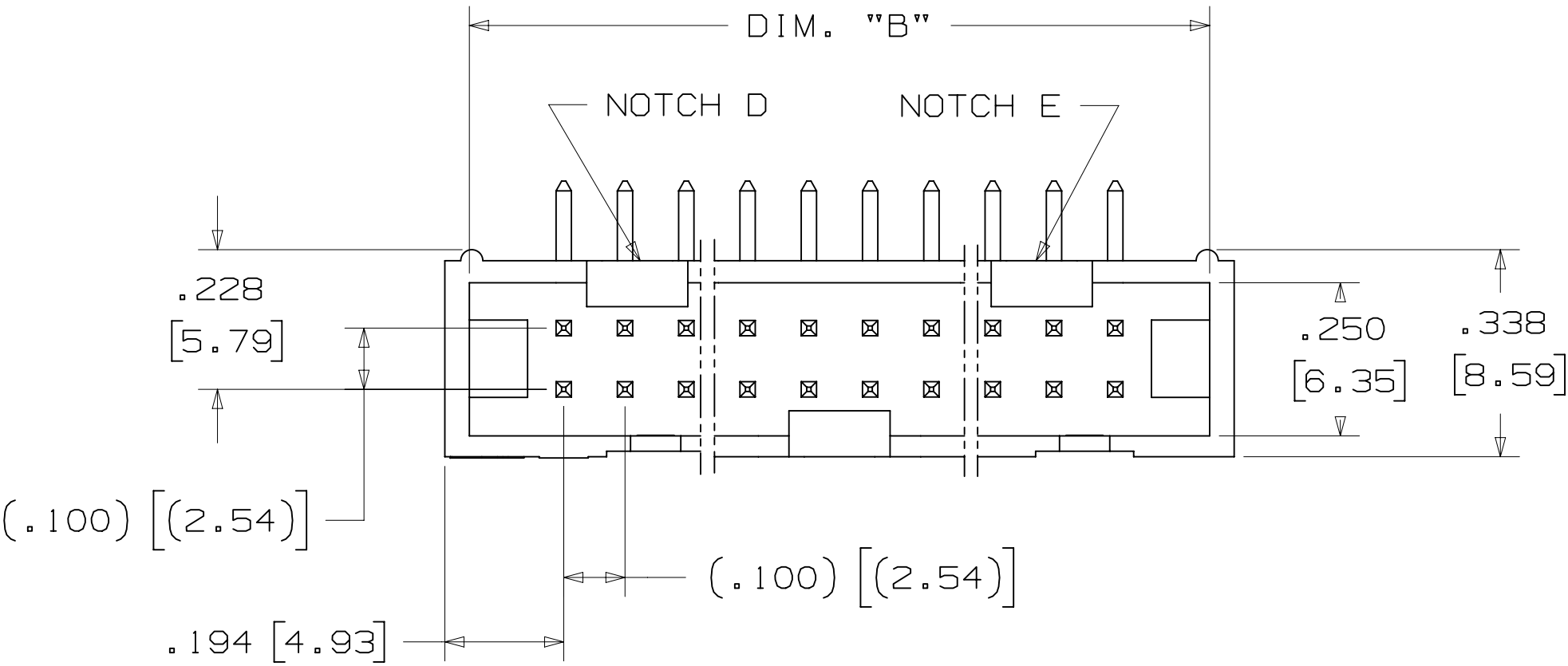
X25XX-50XX-XX

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	
KODER CODES		CASTIGLIONE		AUG 11, 2014		MFG		DATE		DATE		DATE	
DIVISION		Interconnect Solutions		EMSD		3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2015		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.	
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THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS		SURFACES		MARKED ONLY		MODEL 3000 SERIES		DET LISTS	
M 56068		AUG 11, 2014		JNC		RS		REVISED AND REDRAWN		DATE		DATE	
R. SCHERER		SEP 05, 2014		DATE		DATE		DATE		DATE		DATE	
SHT 3		OF 5		SHT 3		OF 5		SHT 3		OF 5		SHT 3	

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

ORDERING INFORMATION
SURFACE MOUNT VERSION

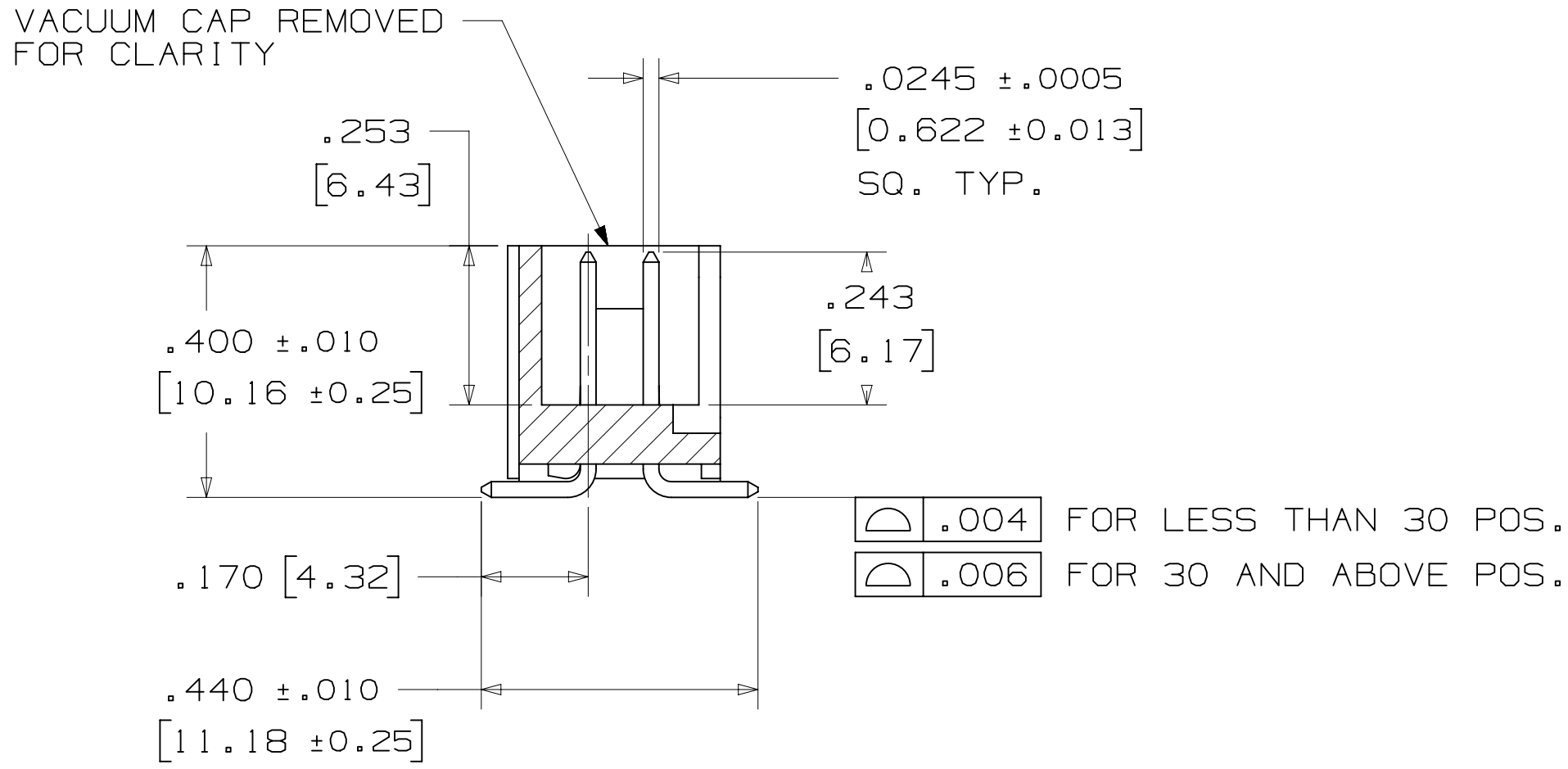
N25XX-6VOC-XX-XX

N = HIGH TEMP BLACK (PCT)
(RB PLATING REQ'D)

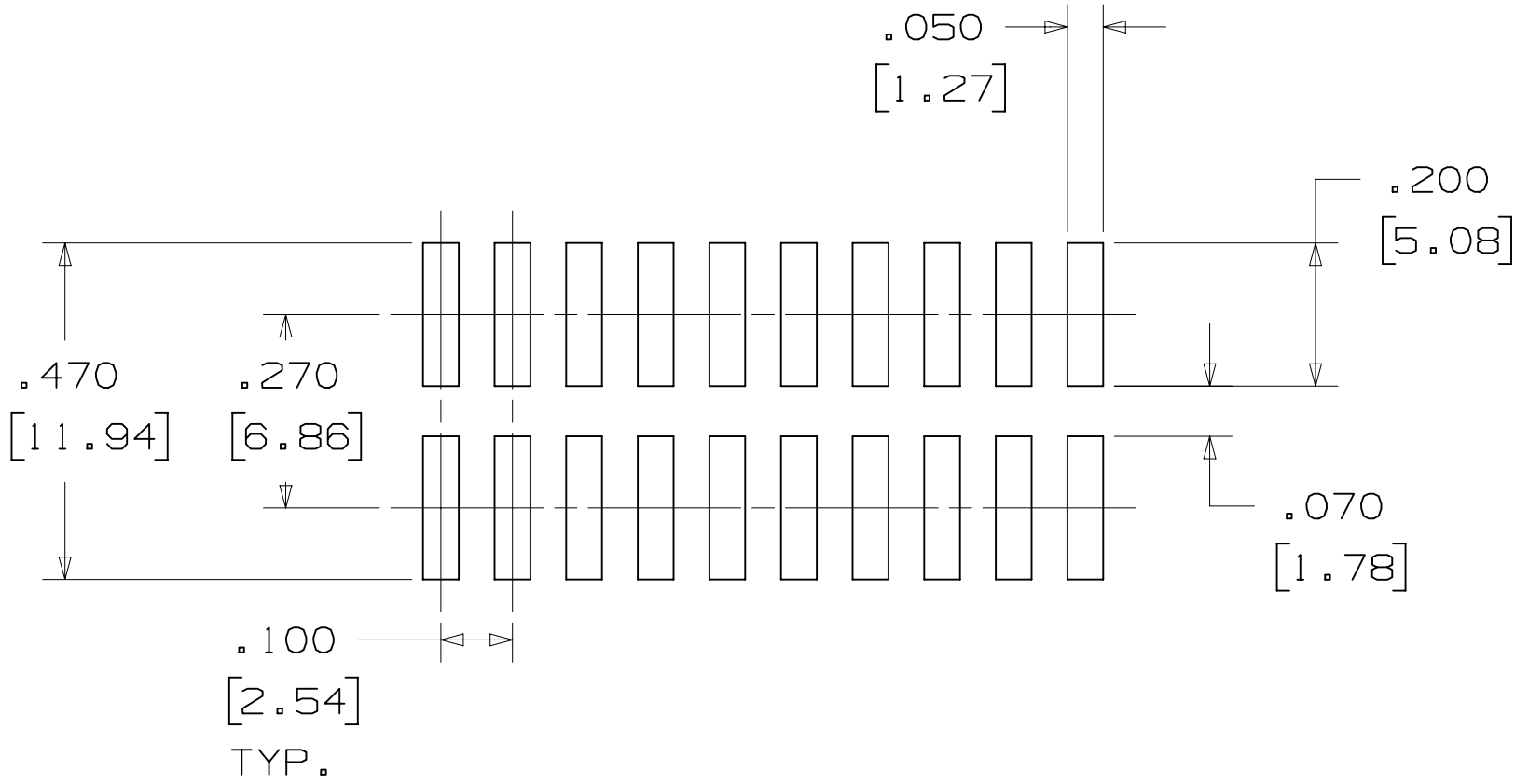
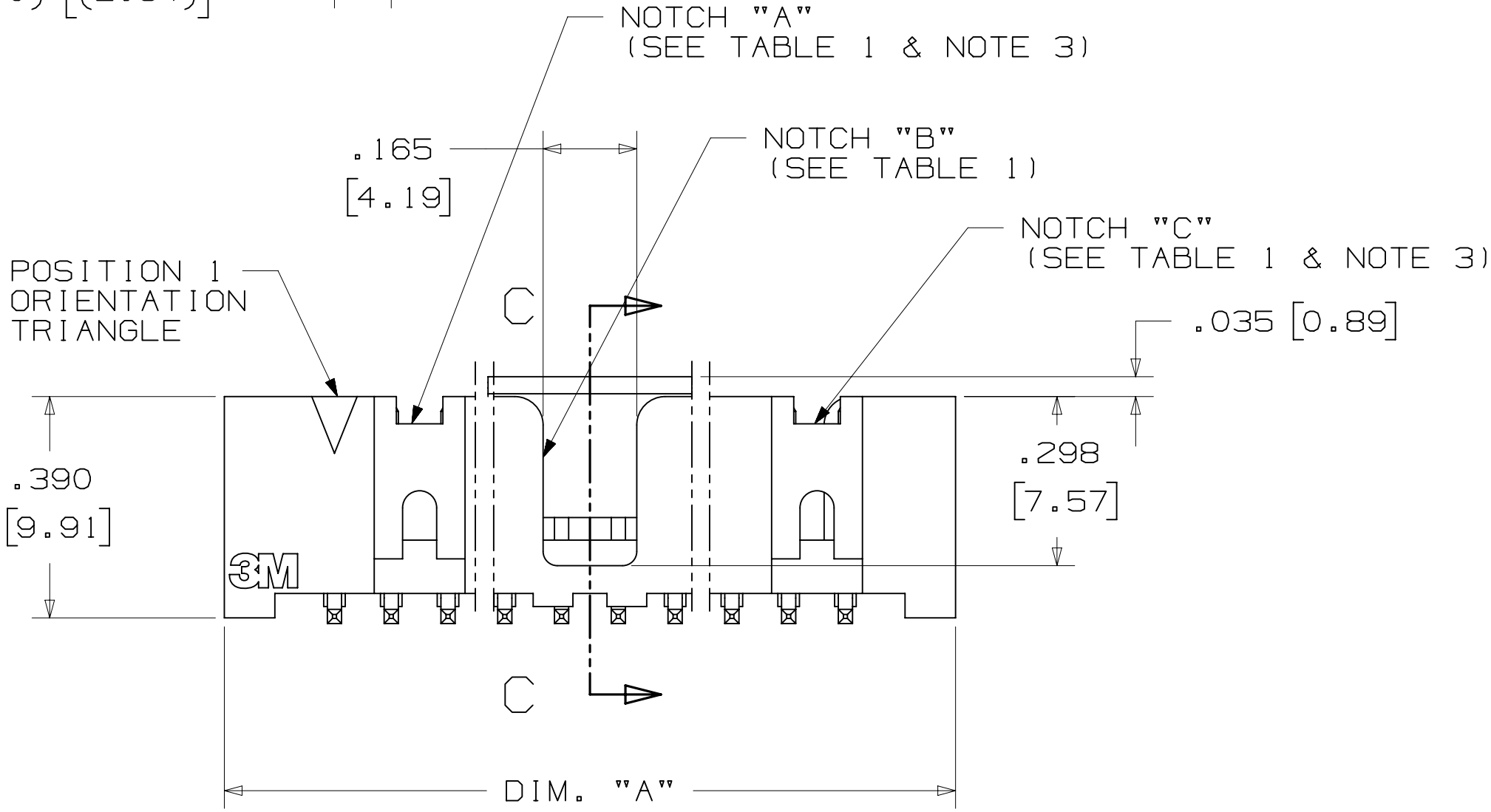
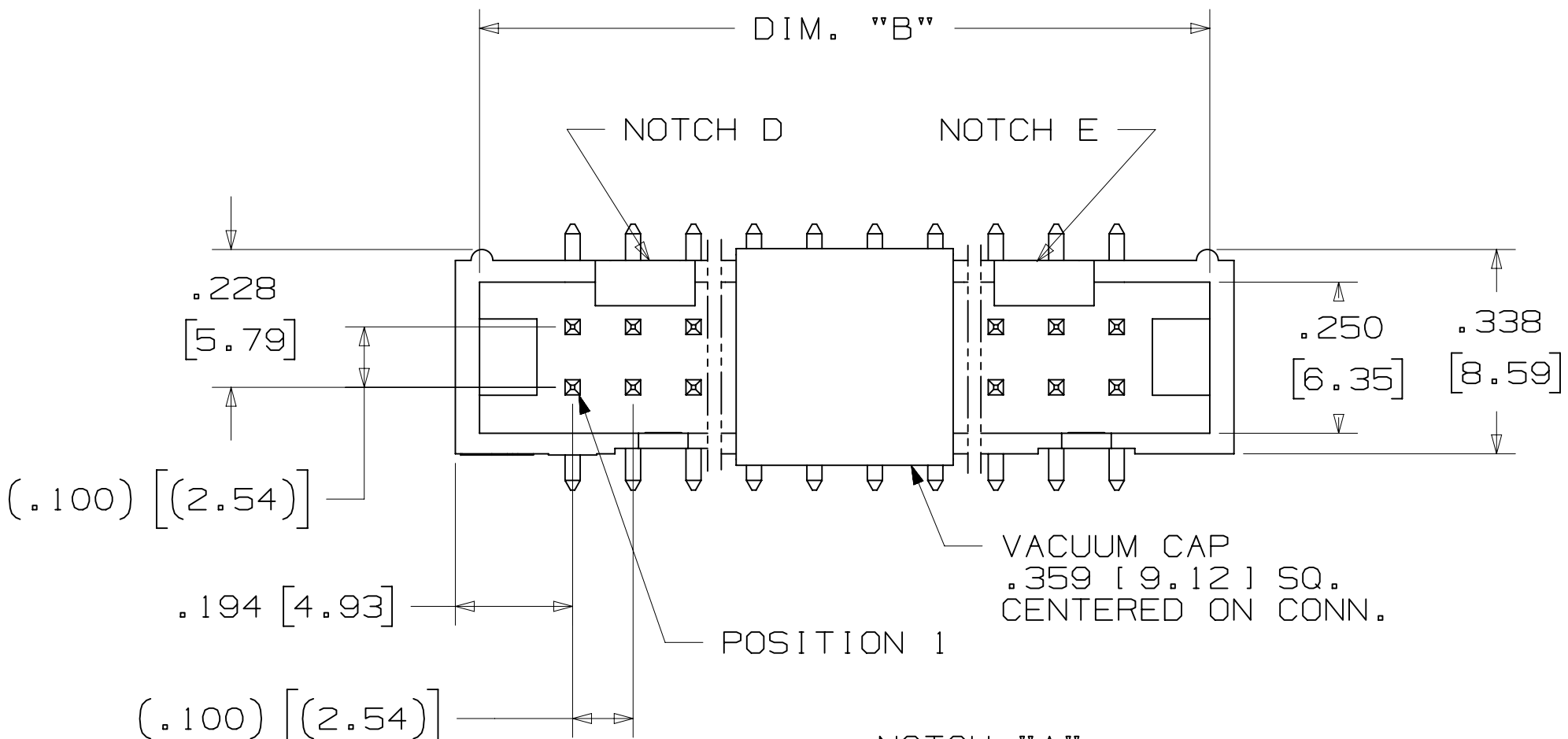
PIN QUANTITY:
(SEE TABLE 1)

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)



SECTION C - C



RECOMMENDED PAD LAYOUT

DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DIVISION		SCALE		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS		CAGE NUMBER		REV.	
DO NOT SCALE DRAWING		4 1		.0 ±.01 .00 ±.005 .0000 ±.0000		0 ±.3 .00 ±.13 .000 ±.000		0 ±.3 .00 ±.13 .000 ±.000		D78-5100-0770-7		M	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS		DET		YES		NO		SHT 4 OF 5	
MARKED ONLY		ANGLES		MODEL		3000 SERIES		LISTS		YES		NO	
M 56068		AUG 11, 2014		JNC		RS		REVISED AND REDRAWN		DATE		REV.	
ECO		AUG 11, 2014		MFG		DATE		SEP 05, 2014		DATE		REV.	
DIVISION		SCALE		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS		CAGE NUMBER		REV.	
Interconnect Solutions		EMSD		.0 ±.01 .00 ±.005 .0000 ±.0000		0 ±.3 .00 ±.13 .000 ±.000		0 ±.3 .00 ±.13 .000 ±.000		D78-5100-0770-7		M	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS		DET		YES		NO		SHT 4 OF 5	
MARKED ONLY		ANGLES		MODEL		3000 SERIES		LISTS		YES		NO	



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St. Paul,
MN 55144

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

CAGE NUMBER
D78-5100-0770-7

MODEL
3000 SERIES

LISTS
YES

NO

SHT 4 OF 5

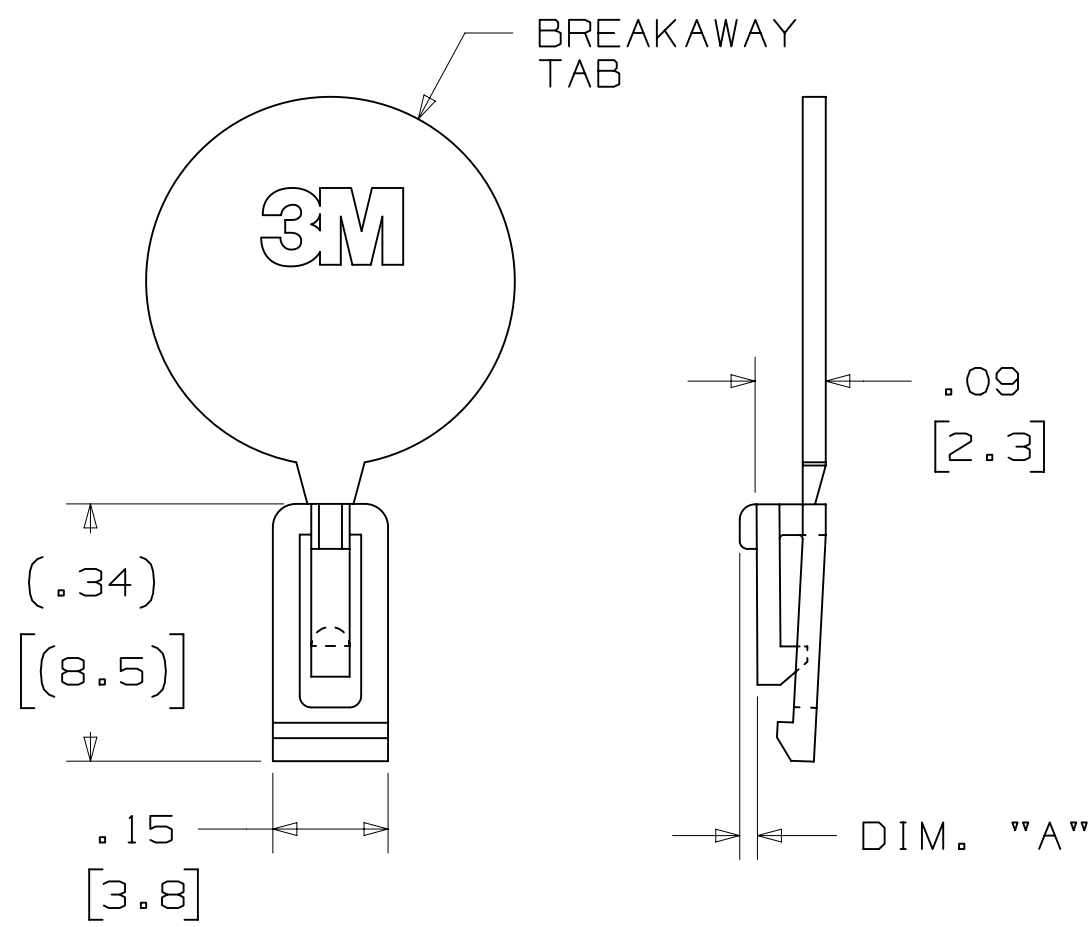
PART CUSTOMIZATION

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.

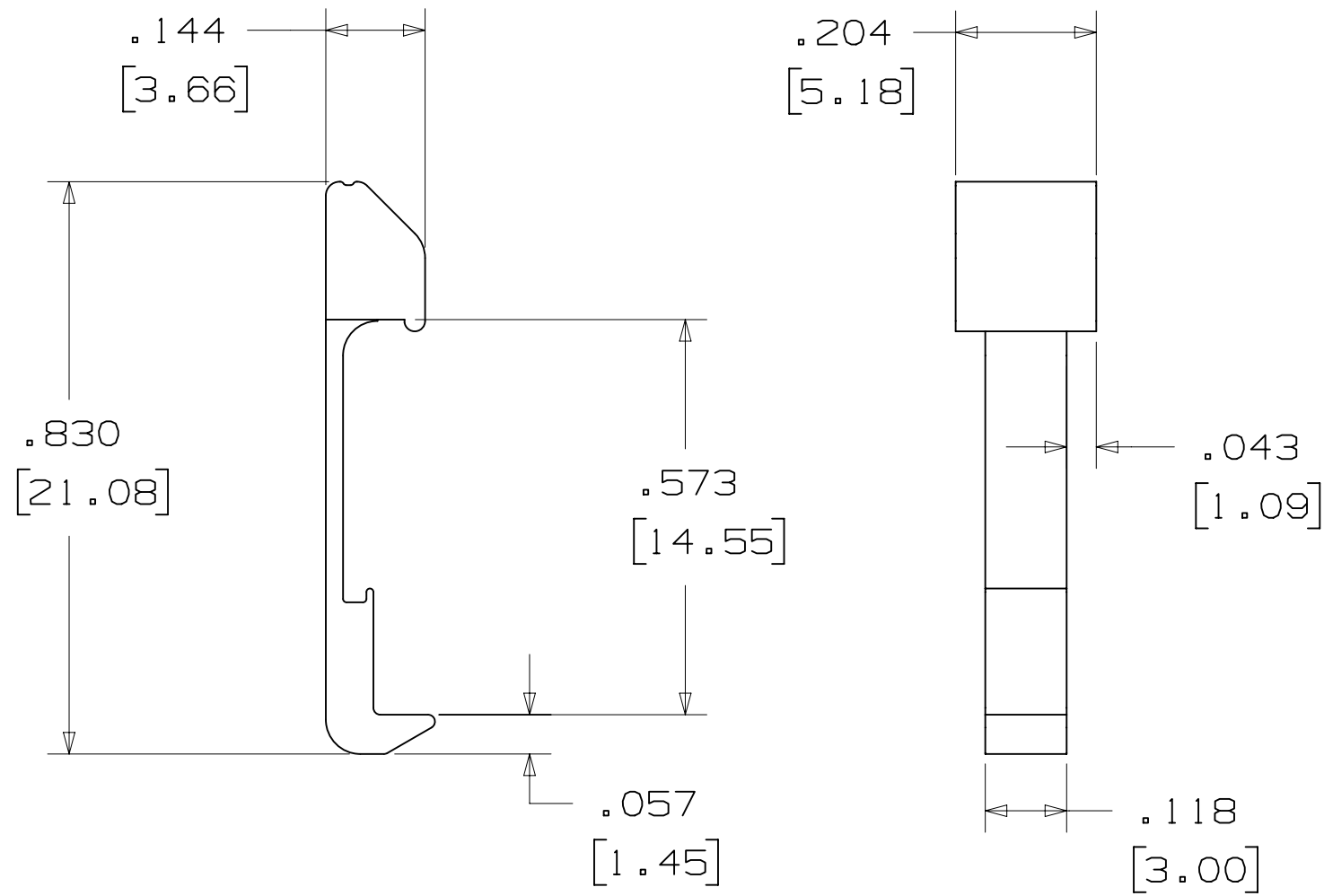
POLARIZING KEY



3M PART NO.	MATERIAL	COLOR	DIM. "A"
N3518	LCP	BLACK	.02

NOTE:
#2216 B/A SCOTCHWELD CAN BE USED TO ADHERE KEYS.

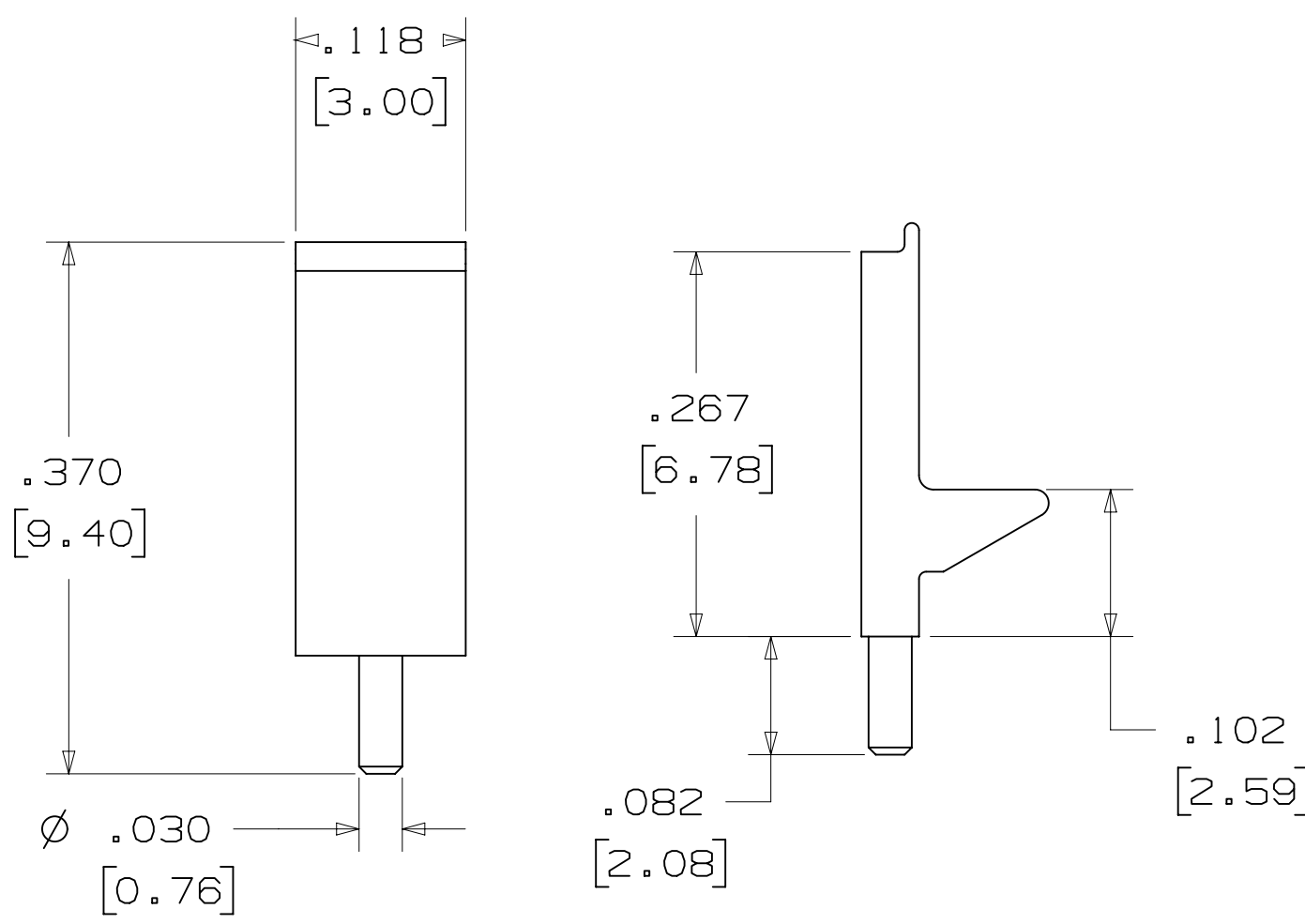
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

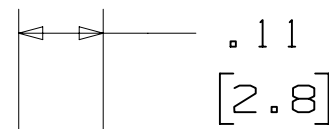
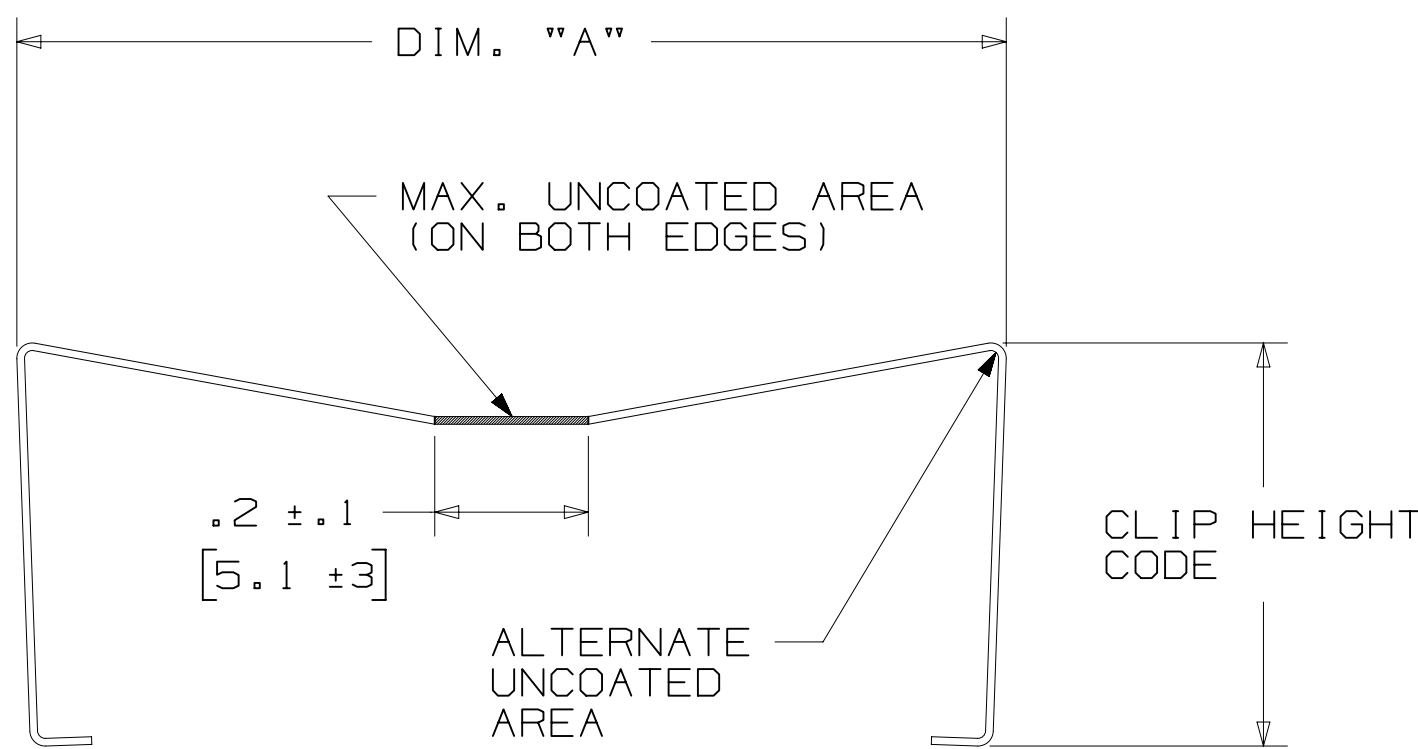
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

POLARIZING POST



PART NO.	MATERIAL	COLOR
3201-3	PCT	BLACK

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

DESIGN REFERENCE		NEXT ASSEMBLY		M 56068		AUG 11, 2014		JNC		RS	
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD			
CSTIGLIONE		AUG 11, 2014		MFG		DATE					
CHKD		DATE		APPR		DATE		SEP 05, 2014			
DIVISION		DIVISION CODE		3M Center		St. Paul, MN 55144		© 3M COPYRIGHT 2015		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							
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED							
THIRD ANGLE PROJECTION				INCHES							
INTERPRET PER ASME Y14.5 - 2009				MILLIMETERS							
MAX SURFACE ROUGHNESS				.0		.01					
SURFACES				.000		.005					
MARKED ONLY				.0000		.000					
CAGE NUMBER		SIZE		DRAWING NO.		REV.					
D		78-5100-0770-7		M							
MODEL		3000 SERIES		DET		YES		NO		SHT 5 OF 5	