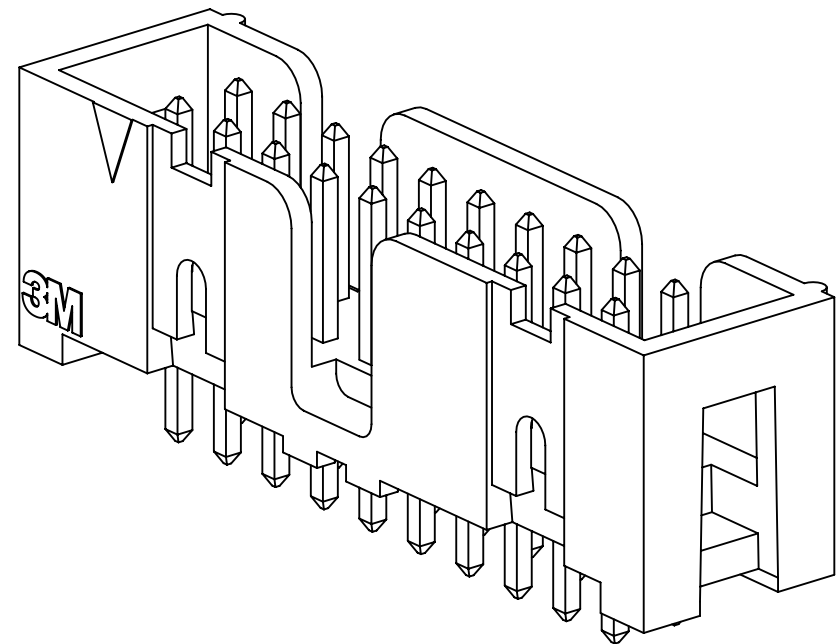


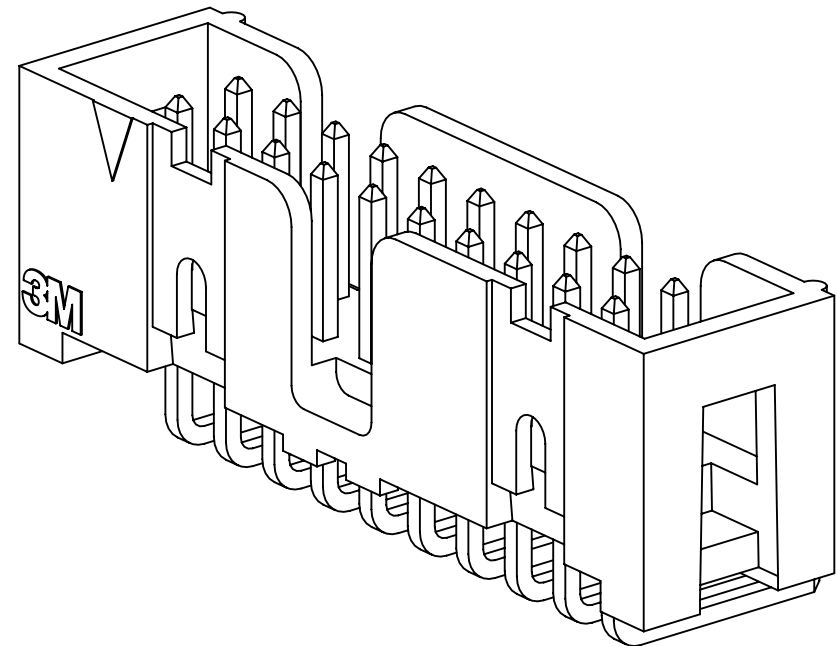
3M™ FOUR-WALL HEADER, 2500 SERIES

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



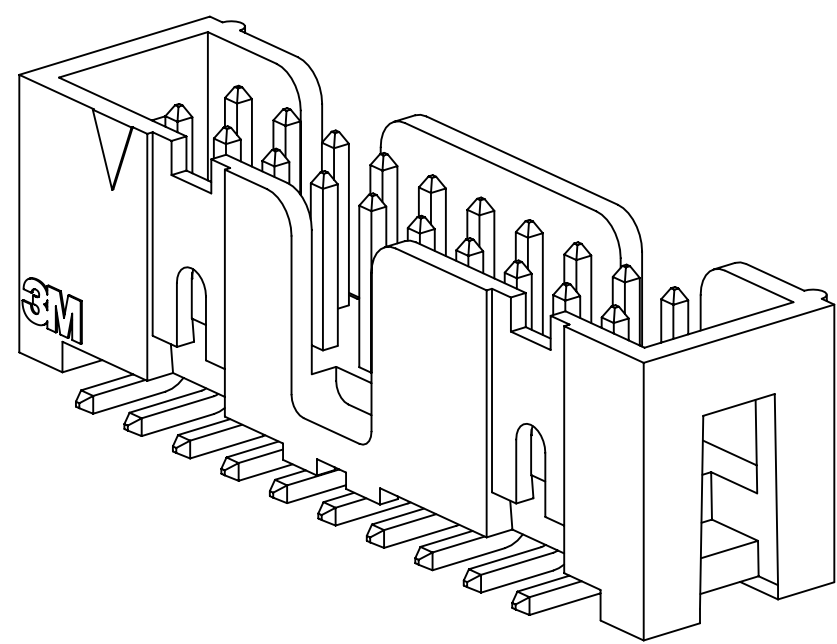
25XX-60XX

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>

3M IS A TRADEMARK OF 3M COMPANY.
FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

UL
UL FILE NO: E68080

DIMENSIONS: INCHES [MM]		REV 56068		AUG 11, 2014		JNC		RS	
[] IS REF. ONLY		M		ECO		REVISED AND REDRAWN			
DESIGN REFERENCE		NEXT ASSEMBLY		DATE		ISSUE DATE AND DESCRIPTION		DRFT CHKD	
ADDRESS CODES		DIVISION CODE		DATE		MFG		DATE	
				AUG 11, 2014					
				CHKD		DATE		APPRVL. DATE	
						R. SCHERER		SEP 05, 2014	
DIVISION		DIVISION CODE				© 3M COPYRIGHT 2015 This document and the information it contains are 3M property and may not be reproduced or further disseminated without the written permission of 3M. All rights reserved.			
Interconnect Scale		EMSD							
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED							
SCALE $\frac{4}{1}$				3M Center St. Paul, MN 55144					
THIRD ANGLE PROJECTION		INCHES		TITLE		HEADER, 4-WALL, LO-PRO, 100 X 100, SMT, STRAIGHT & RA			
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		CAGE NUMBER		DRAWING NO.			
MAX. SURFACE ROUGHNESS		.0 ± .3		SIZE		REV.			
SURFACES		.00 ± .13		D		D78-5100-0770-7			
☐ MARKED ONLY		☐ MARKED ONLY		MODEL		3000 SERIES			
		☐ MARKED ONLY		☐ MARKED ONLY		DET. LISTS ☐ YES ☒ NO			
		☐ MARKED ONLY		☐ MARKED ONLY		SHT 1 OF 5			

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

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

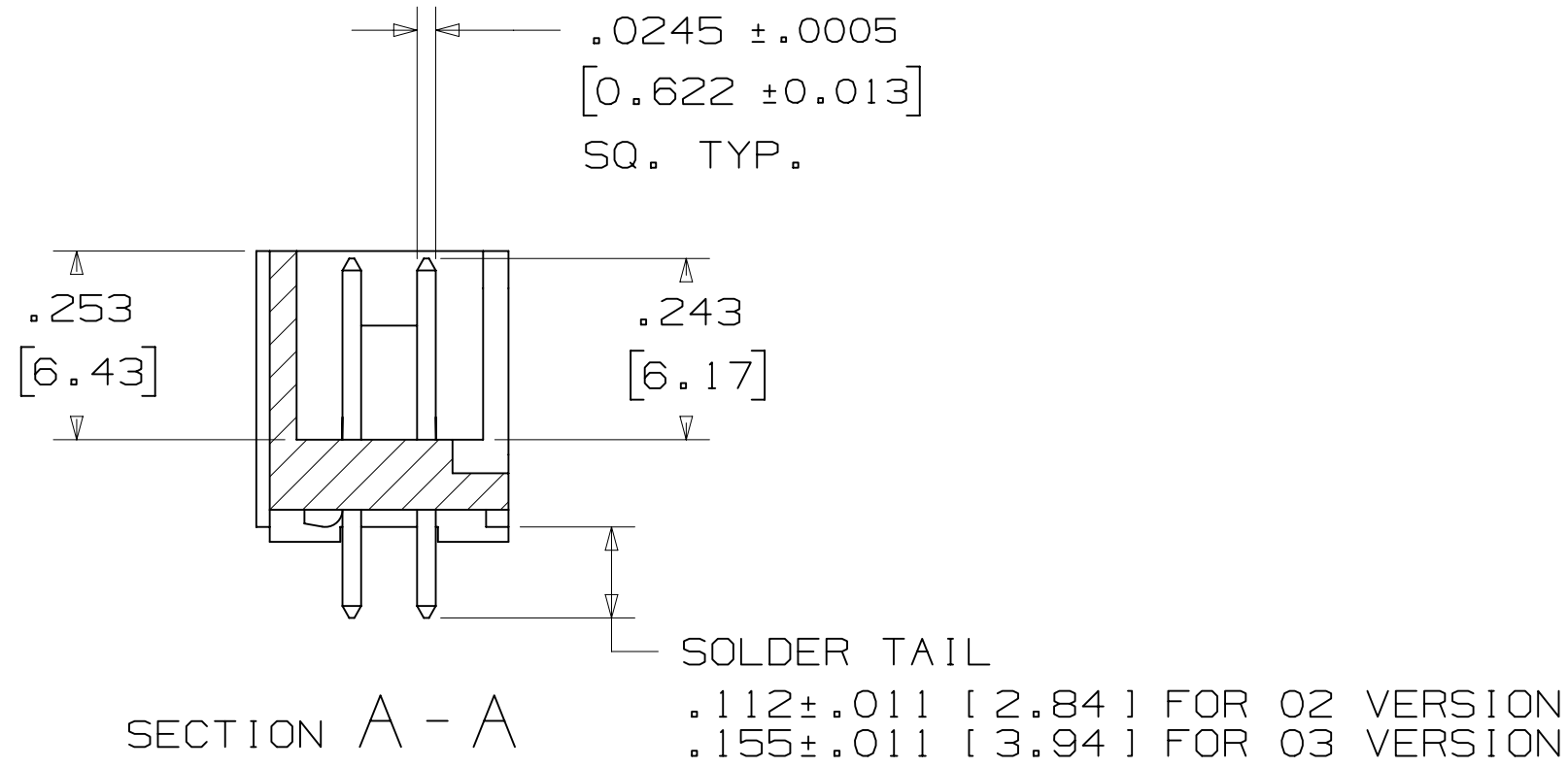
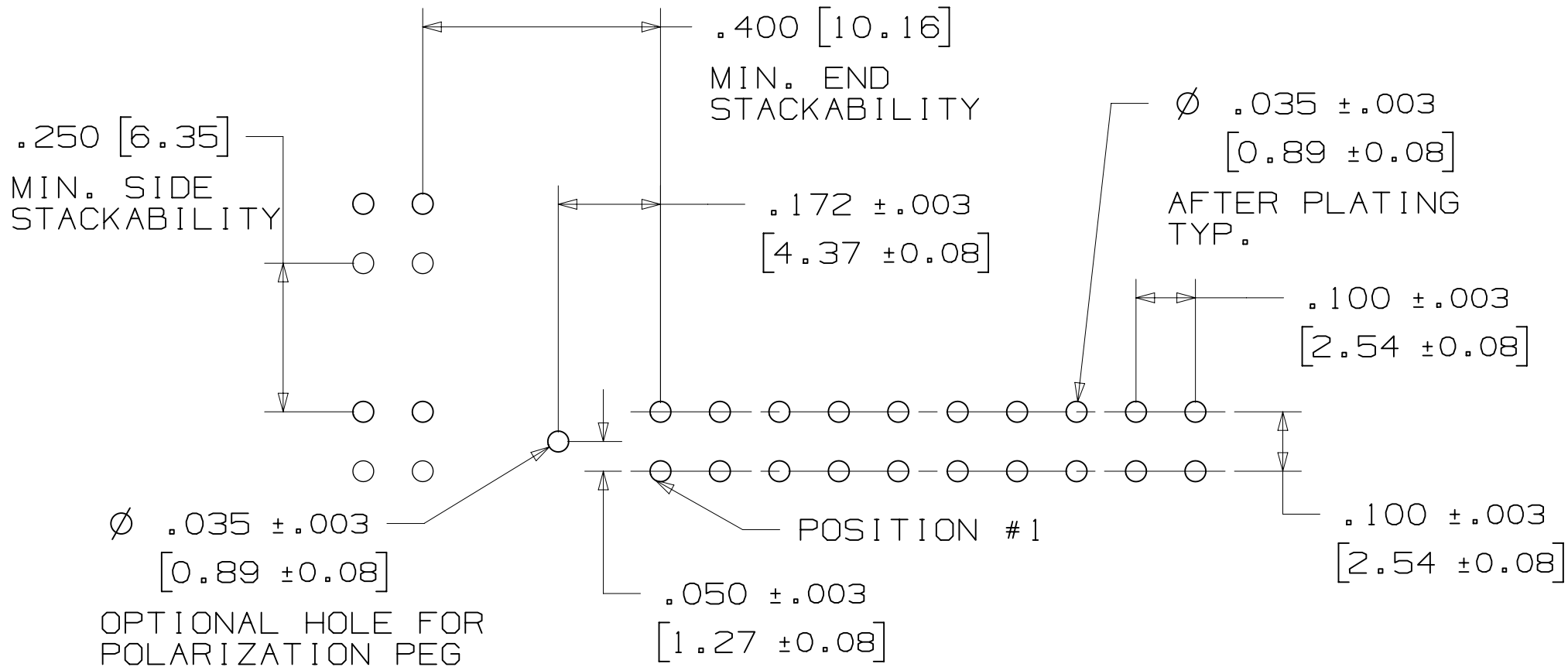
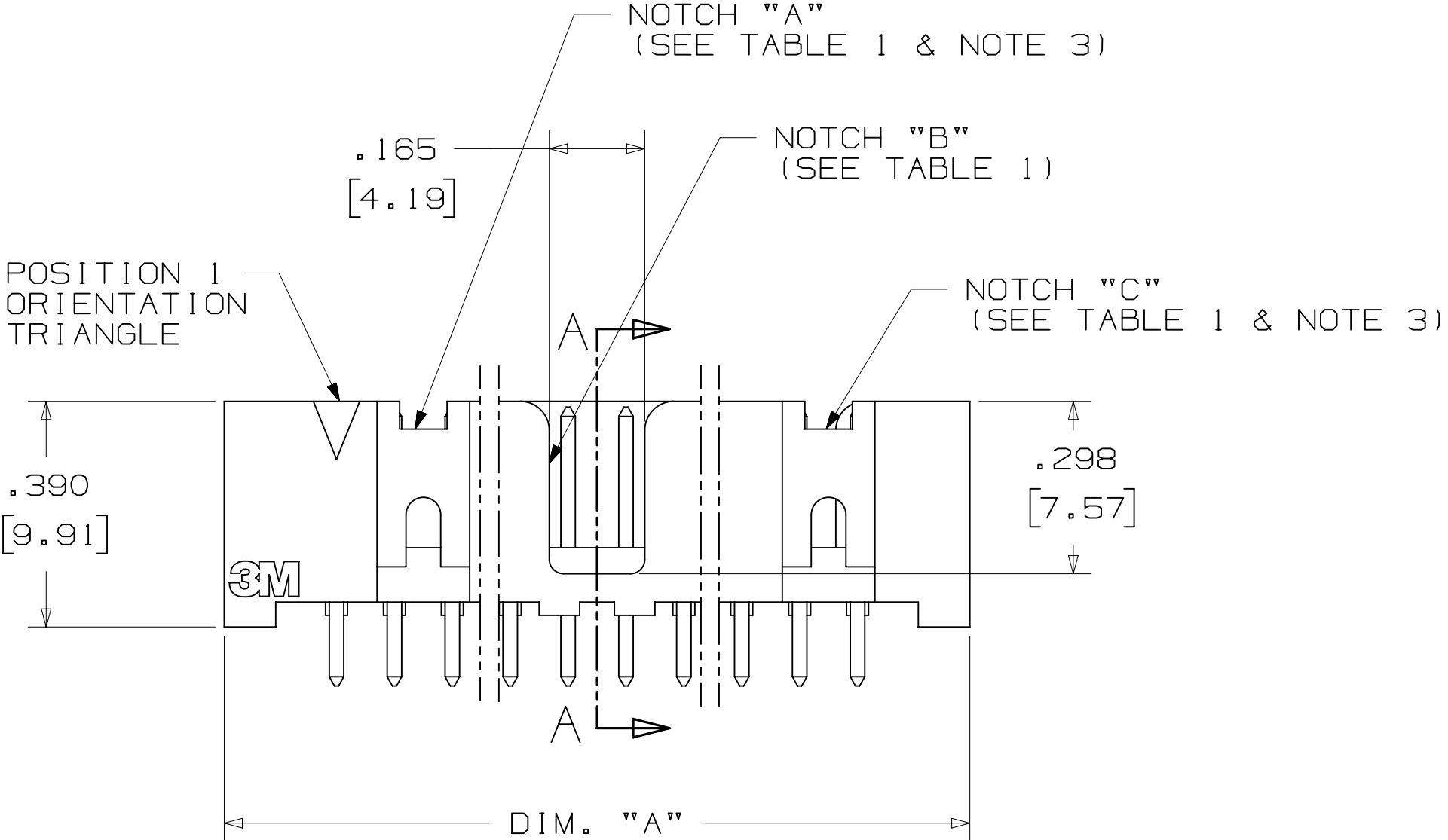
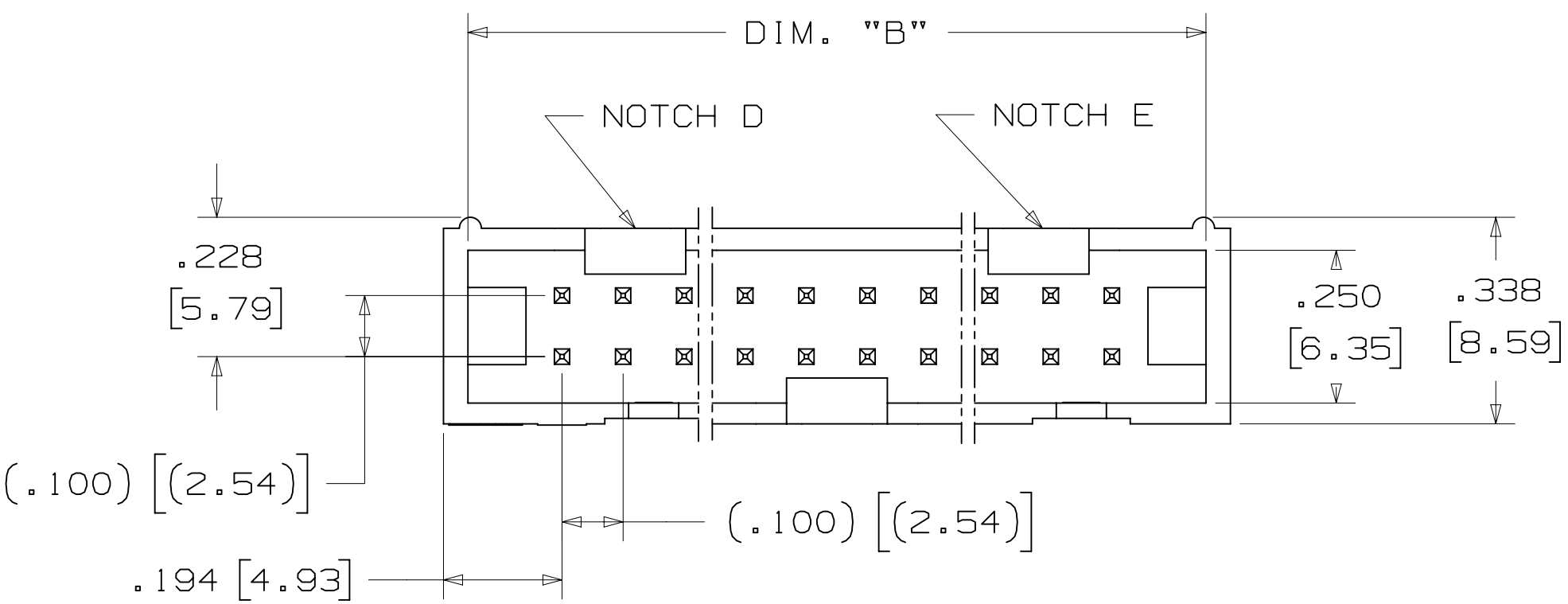


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]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

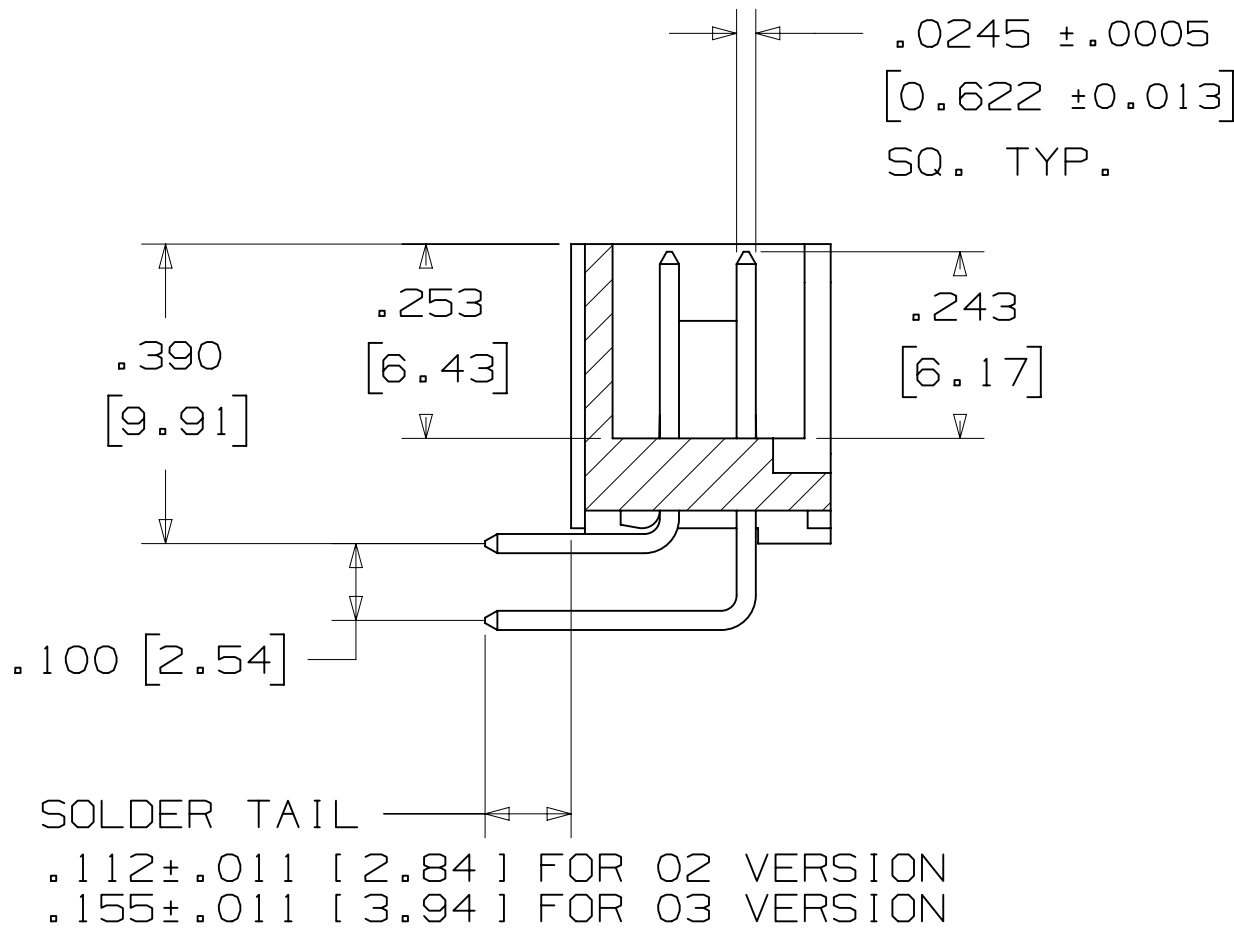
N= HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK= (UB OR UG PLATING)
PIN QUANTITY:
(SEE TABLE 1)
SOLDER TAIL:
02 = FOR .062 [1.57] THICK BOARD
03 = FOR .094 TO .125 [2.39 TO 3.18]
THICK BOARD

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		M	56068	AUG 11, 2014		JNC	RS
REV		ECO		REVISED AND REDRAWN		DATE		DRFT	CHKD
CUST CODES		CUST CODES		DATE		DATE		DATE	
DIVISION		DIVISION CODE		DATE		DATE		DATE	
Interconnect Solutions		EMSD		DATE		DATE		DATE	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .000 ±.005 .0000 ±		MILLIMETERS 0 ± .0 ±.13 .000 ±	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		CAGE NUMBER		DRAWING NO.		REV.	
MAX SURFACE ROUGHNESS		SURFACES		D		78-5100-0770-7		M	
MARKED ONLY		ANGLES		MODEL		3000 SERIES		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

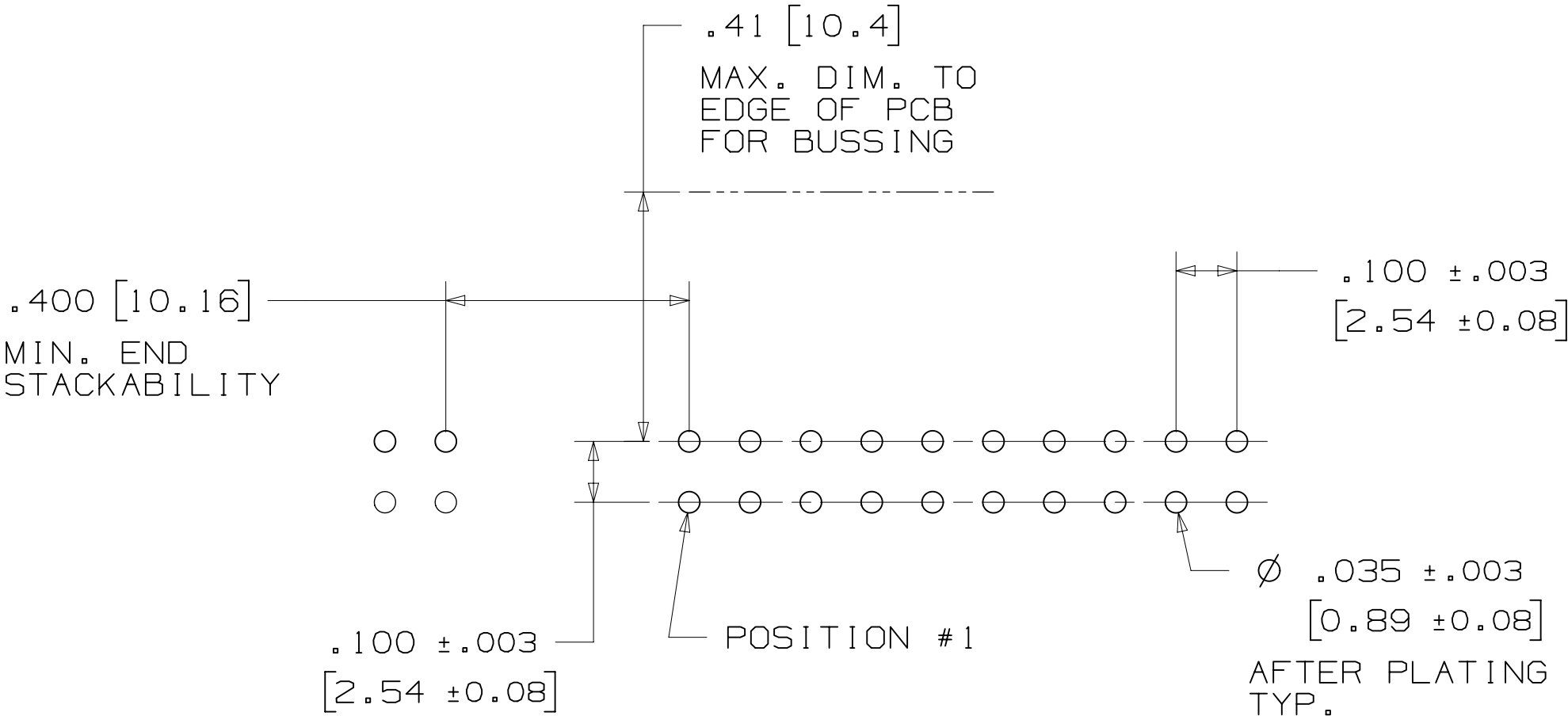
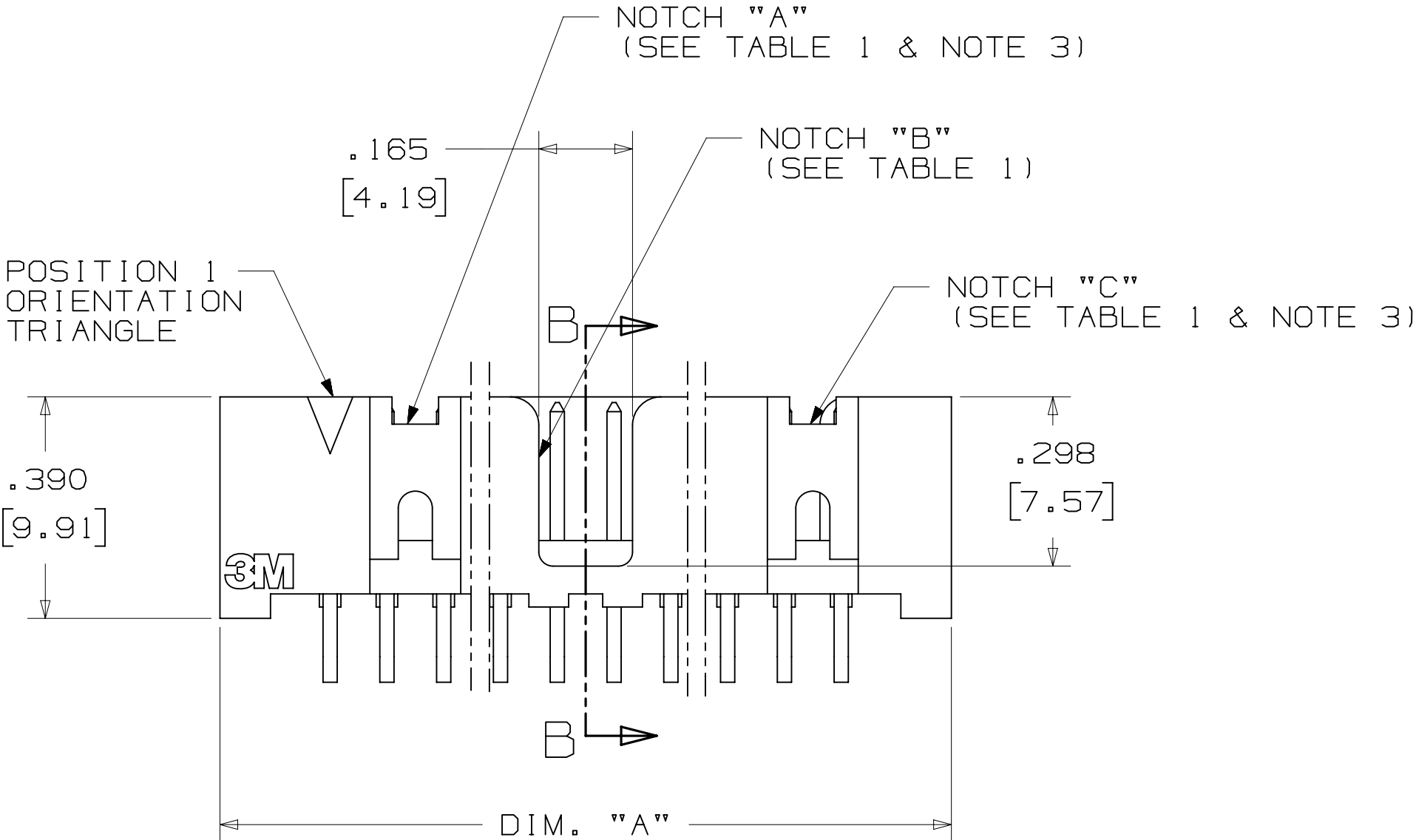
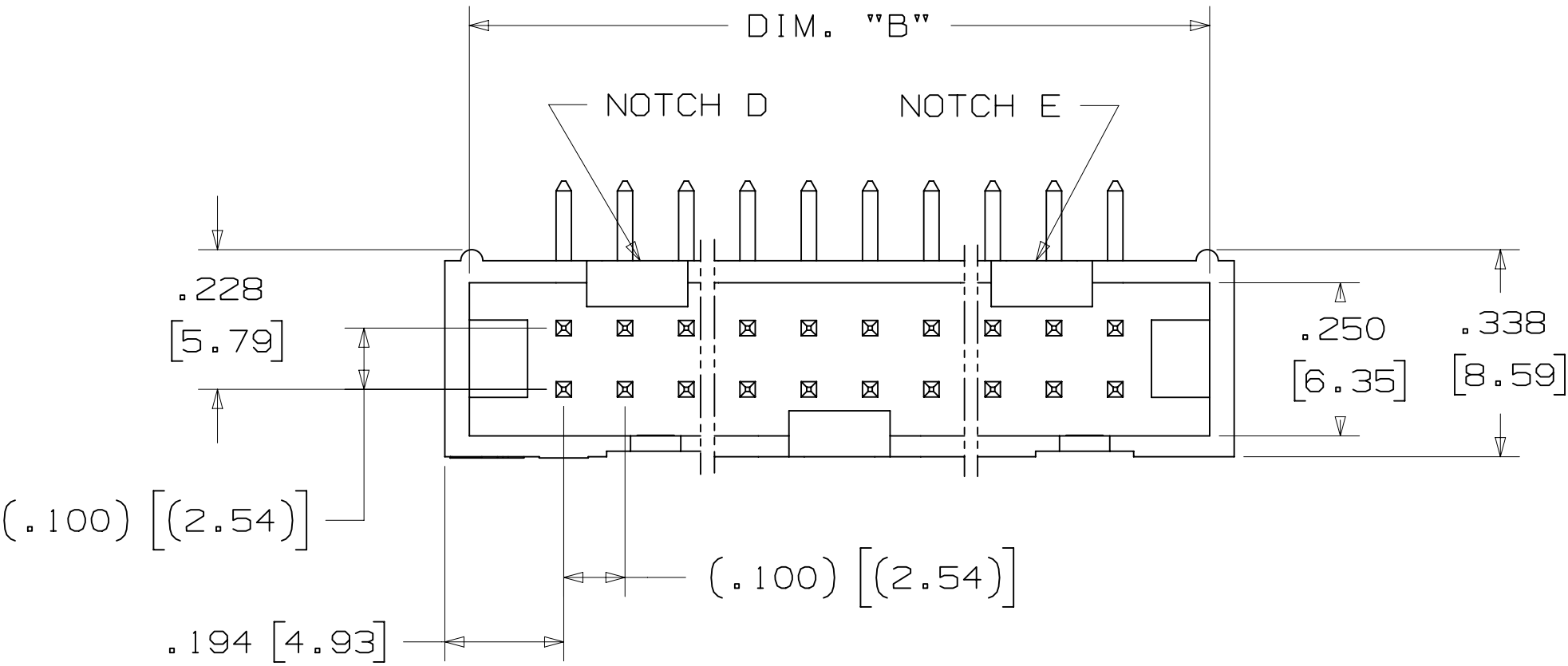
X25XX-50XX-XX

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	
X25XX-50XX-XX		X25XX-50XX-XX		ECO		AUG 11, 2014		DATE	
DIVISION		DIVISION CODE		CHKD		DATE		DATE	
Interconnect Solutions		EMSD		R. SCHERER		SEP 05, 2014		DATE	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .000 ±.005 .0000 ±		MILLIMETERS 0 ±.3 .00 ±.13 .000 ±	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS		DET SURFACES		MARKED ONLY	
TITLE		HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		CAGE NUMBER		DRAWING NO. D78-5100-0770-7		REV. M	
MODEL		3000 SERIES		LISTS		YES NO		SHT 3 OF 5	

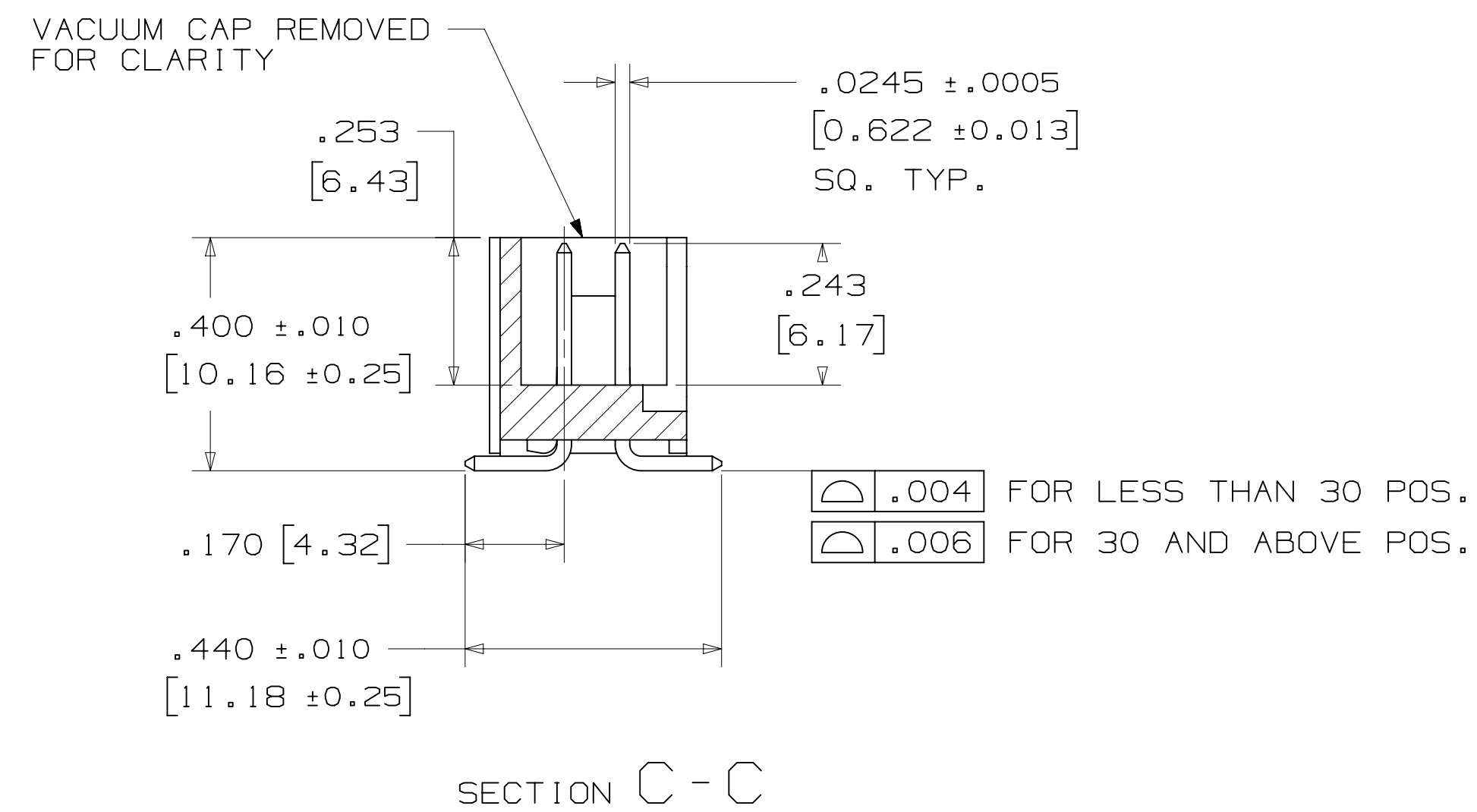


TABLE 1					
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	TAPE AND REEL PKG CODE	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	WD (44 MM)	06
08	.688 [17.48]	.608 [15.44]	B	WD (44 MM)	08
10	.788 [20.02]	.708 [17.98]	BC	WD (44 MM)	10
14	.988 [25.10]	.908 [23.06]	BCDE	WD (44 MM)	14
16	1.088 [27.64]	1.008 [25.60]	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

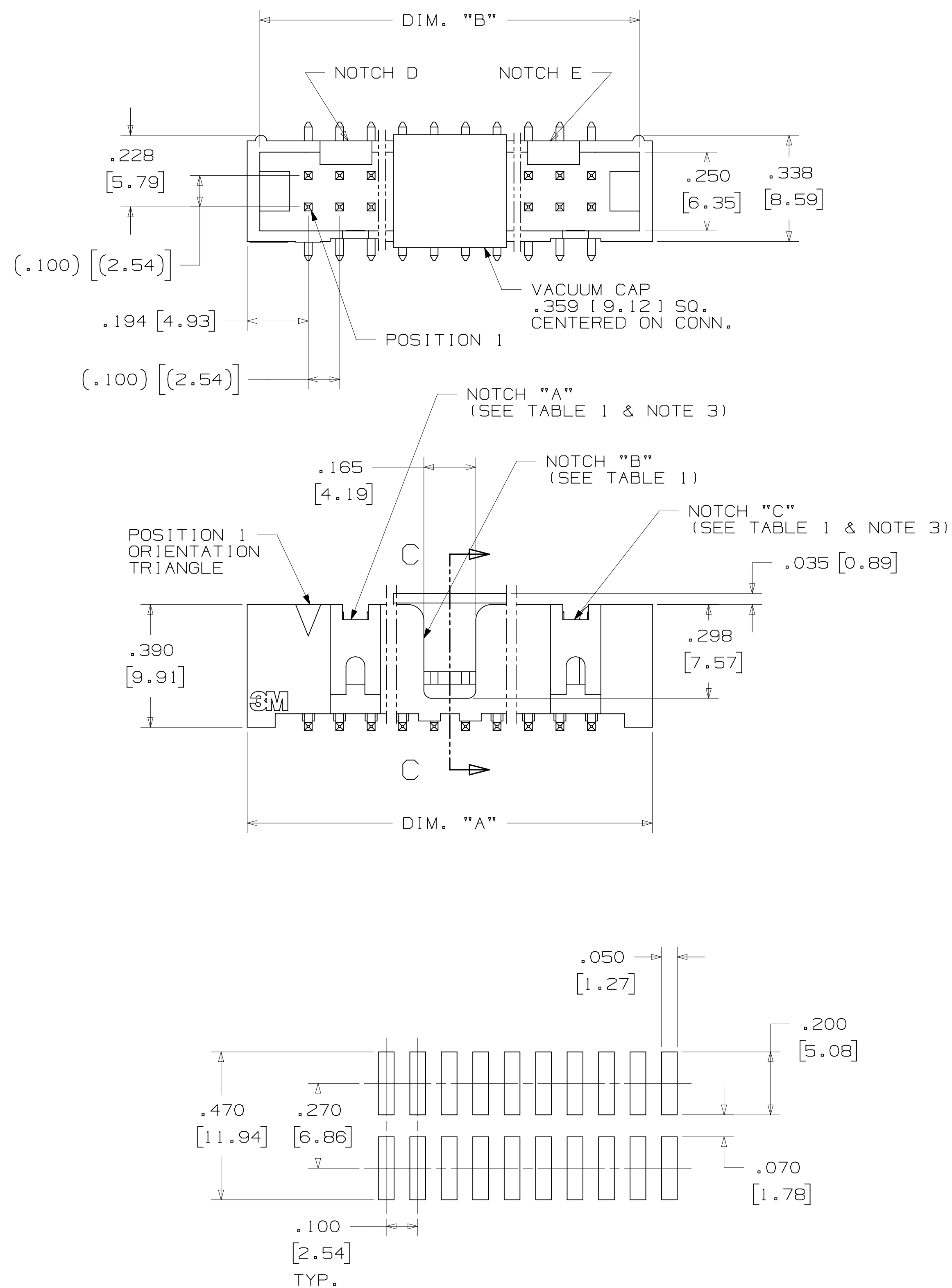
N25XX-6VOC-XX-XX

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)



RECOMMENDED PAD LAYOUT

		M	5608H	AUG 11, 2014		JNC	RS
		REVISED AND REDRAWN					
DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
KCORN CODES		DATE	CAST16L1ONE	AUG 11, 2014		MFG	DATE
		CHKD		DATE	APPRV.	R. SCHERER	DATE SEP 05, 2014
DIVISION Interconnect Solutions		DIVISION CODE EMSD		© 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 otherwise 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			
THIRD ANGLE PROJECTION		INCHES .0 ± .00 ± .01 ± .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 ±		CASE NUMBER SIZE DRAWING NO. D78-5100-0770-7		REV. M	
MAX SURFACE ROUGHNESS Rz 1.6 SURFACES ☒ MARKED ONLY		ANGLES		MODEL 3000 SERIES		DET. LISTS ☒ YES ☒ NO SHT 4 OF 5	

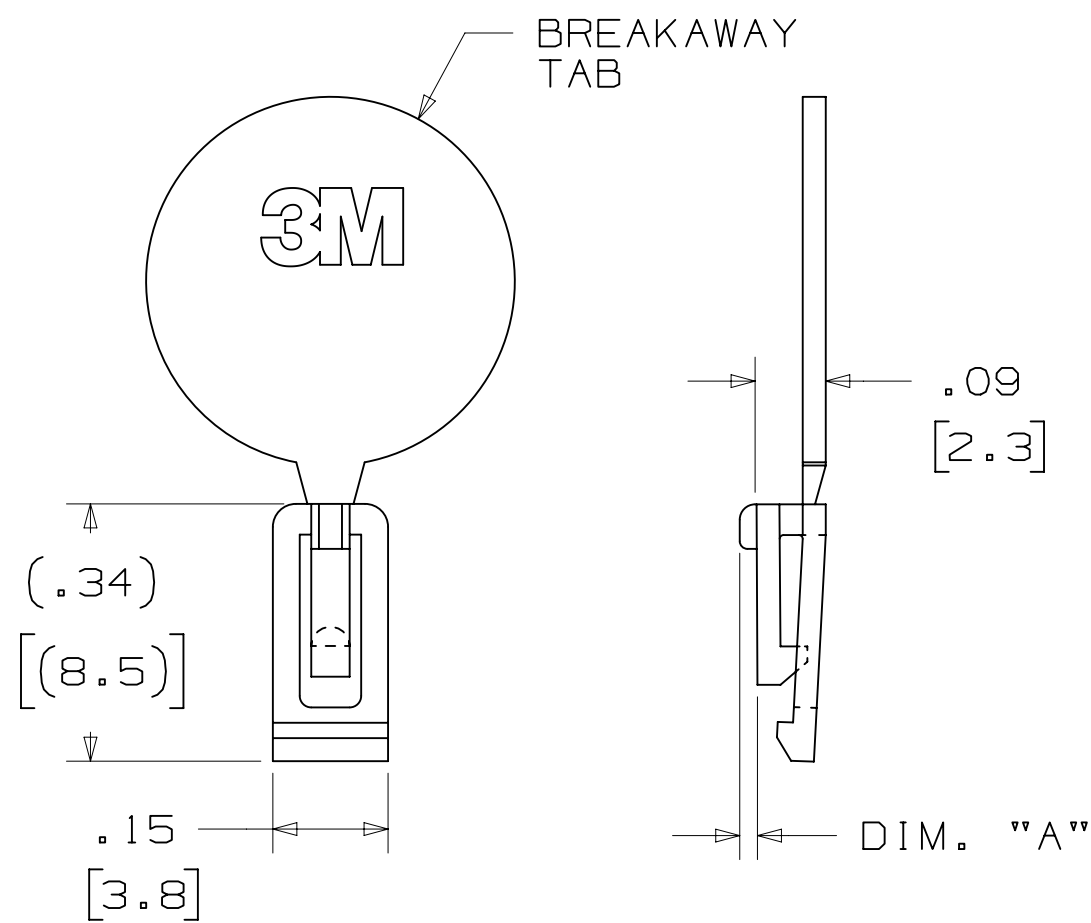
PART CUSTOMIZATION

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.

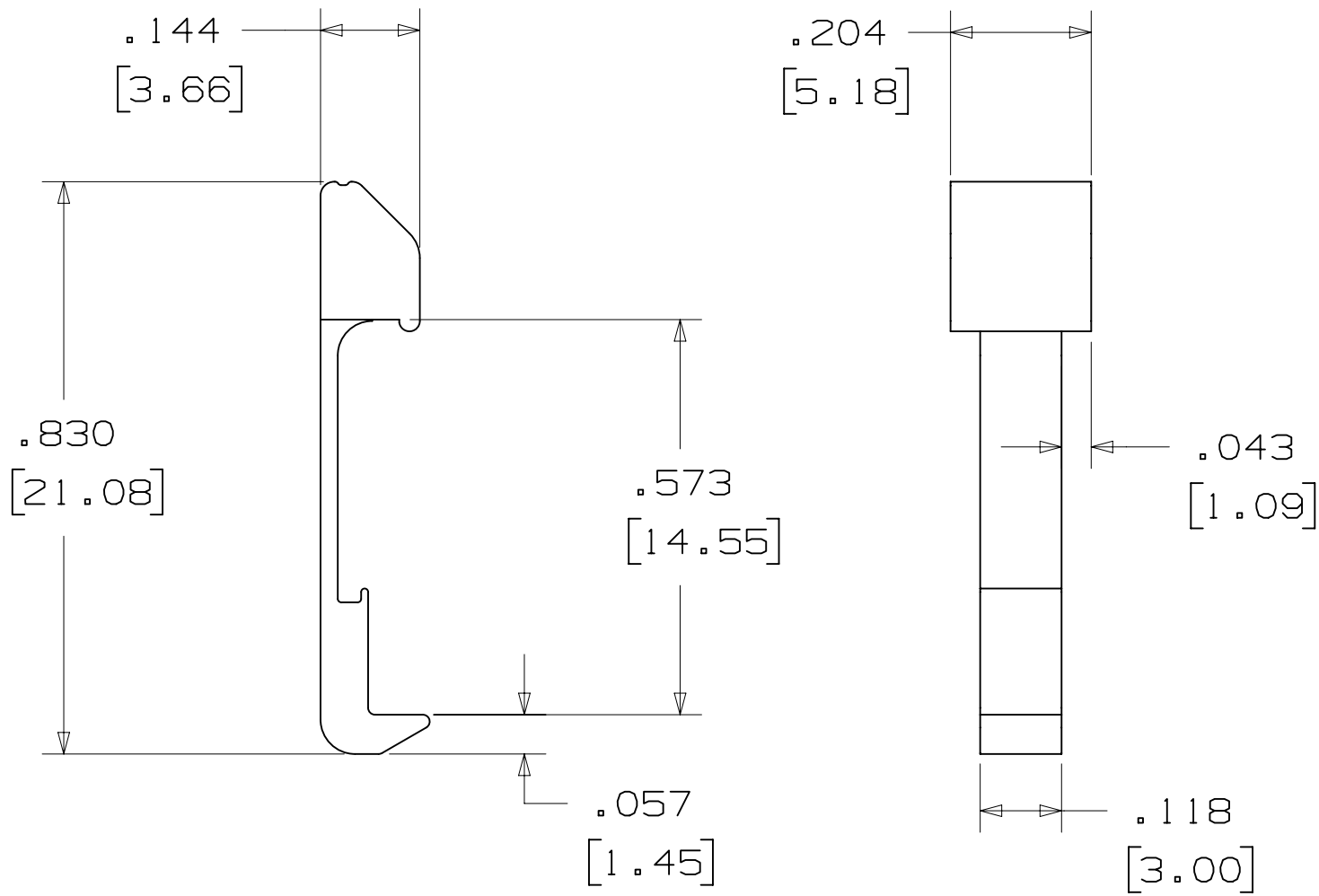
POLARIZING KEY



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

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

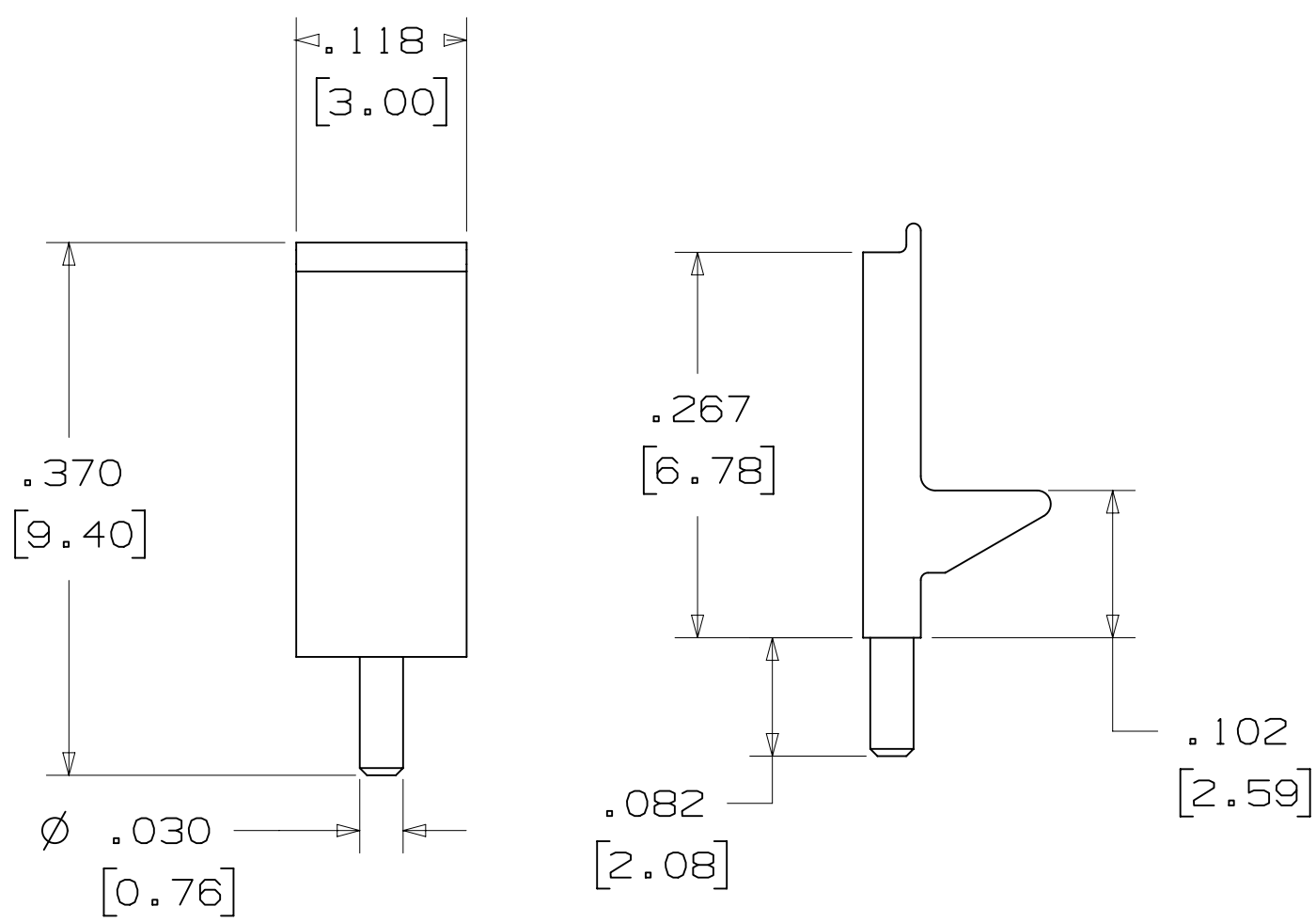
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

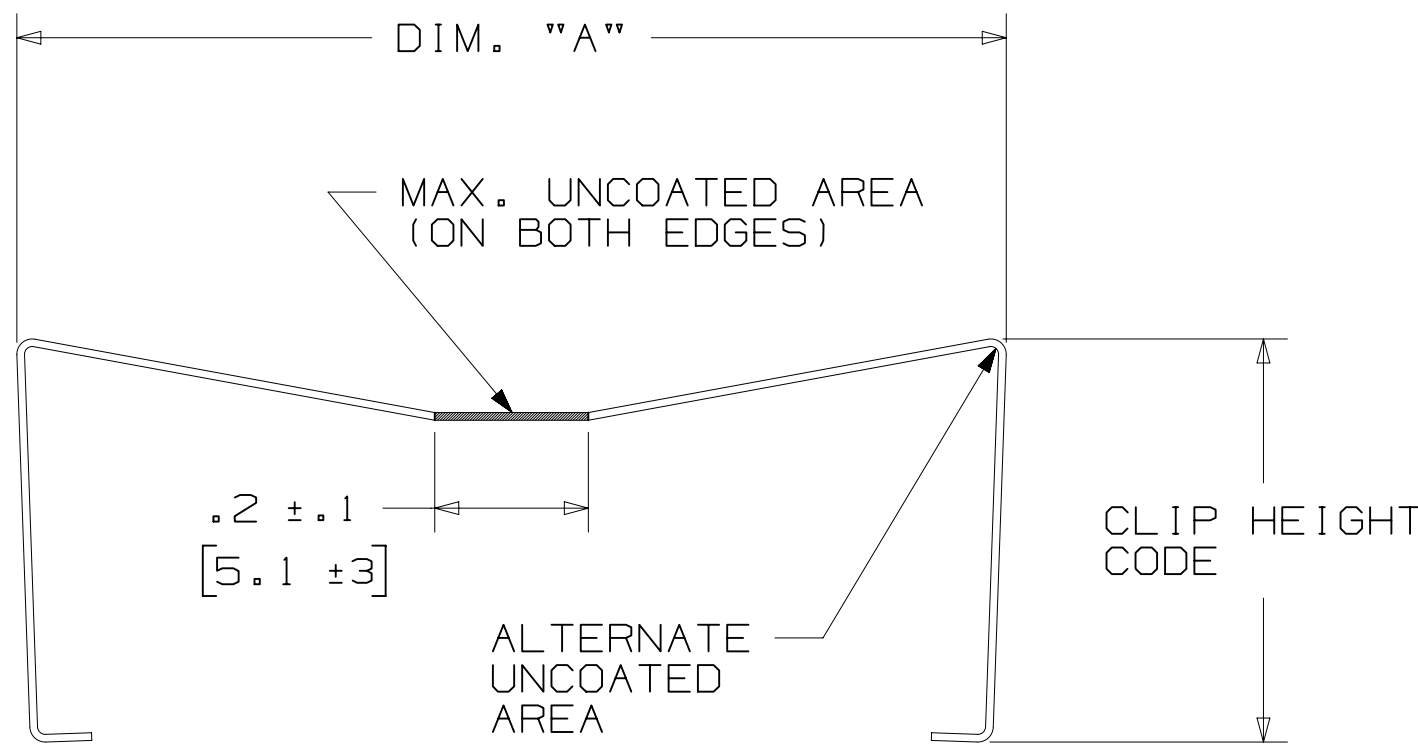
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

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			
CUST CODES		CUST CODES		CUST CODES		CUST CODES		CUST CODES			
DIVISION		DIVISION		DIVISION		DIVISION		DIVISION			
Interconnect Solutions		EMSD		EMSD		EMSD		EMSD			
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED		TOLERANCES EXCEPT AS NOTED		TOLERANCES EXCEPT AS NOTED			
THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION			
INTERPRET PER ASME Y14.5 - 2009		INTERPRET PER ASME Y14.5 - 2009		INTERPRET PER ASME Y14.5 - 2009		INTERPRET PER ASME Y14.5 - 2009		INTERPRET PER ASME Y14.5 - 2009			
MAX SURFACE ROUGHNESS		MAX SURFACE ROUGHNESS		MAX SURFACE ROUGHNESS		MAX SURFACE ROUGHNESS		MAX SURFACE ROUGHNESS			
MARKED ONLY		MARKED ONLY		MARKED ONLY		MARKED ONLY		MARKED ONLY			
CAGE NUMBER		CAGE NUMBER		CAGE NUMBER		CAGE NUMBER		CAGE NUMBER			
D 78-5100-0770-7		D 78-5100-0770-7		D 78-5100-0770-7		D 78-5100-0770-7		D 78-5100-0770-7			
MODEL		MODEL		MODEL		MODEL		MODEL			
3000 SERIES		3000 SERIES		3000 SERIES		3000 SERIES		3000 SERIES			
DET		DET		DET		DET		DET			
YES		YES		YES		YES		YES			
SHT 5 OF 5		SHT 5 OF 5		SHT 5 OF 5		SHT 5 OF 5		SHT 5 OF 5			