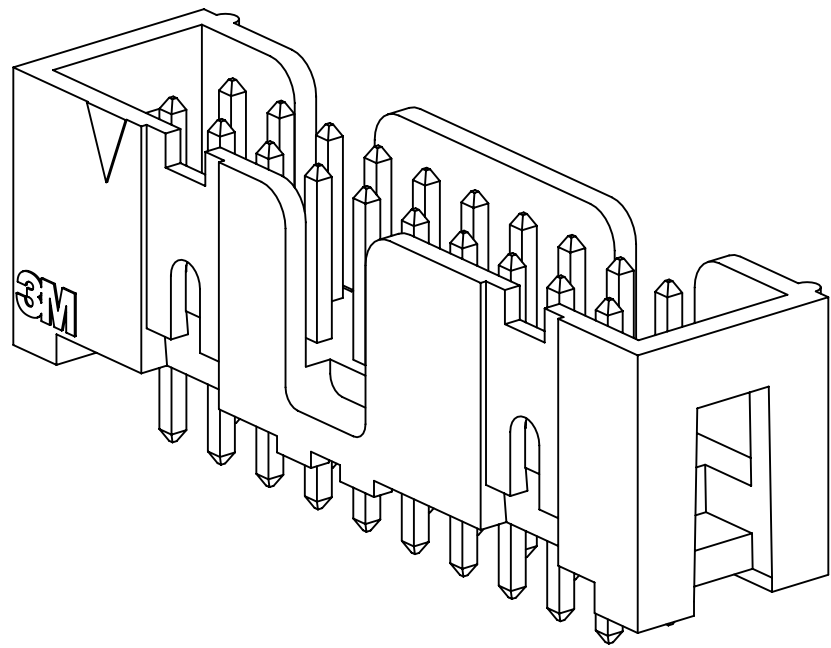


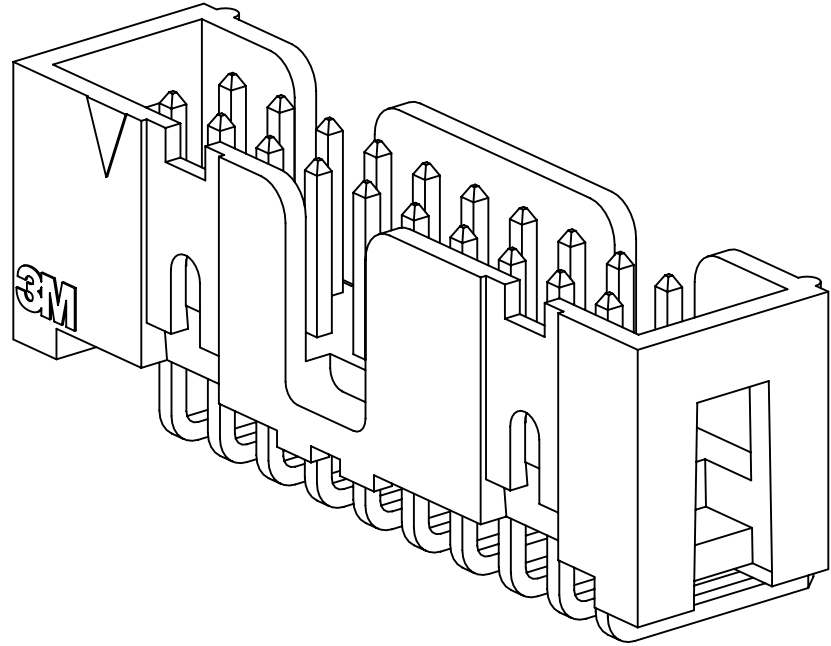
3M™ FOUR-WALL HEADER, 2500 SERIES

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



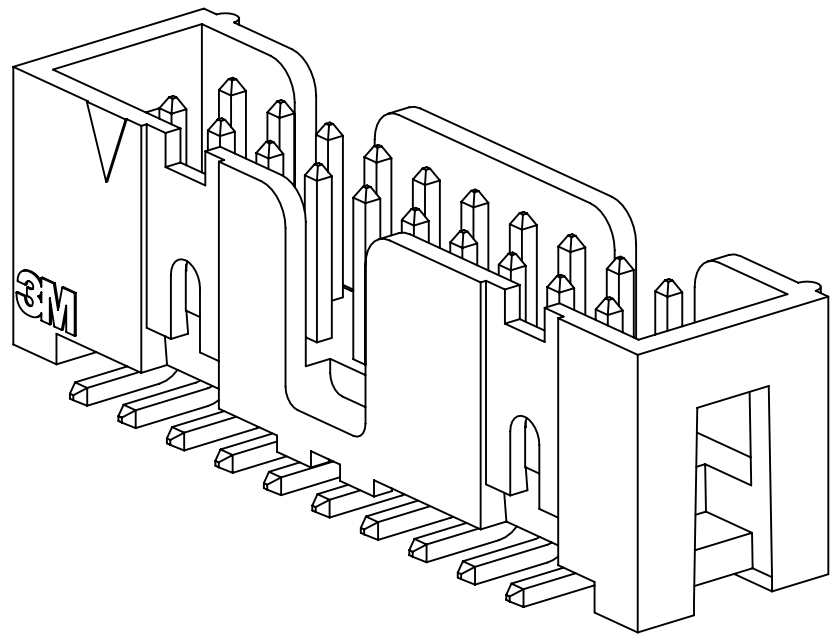
25XX-60XX

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 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 ACCOMODATE 3M POLARIZING KEY: N3518.
 4. CONTACT TAILS .0245 (.622) WIRE WITH .0075 (.191) CORNER WIRE AND .028 (.072) DIAGONAL.
 5. SOLDER STANDOFFS FACILITATE .01 (.3) CLEARANCE ABOVE BOARD FOR REFLOW SOLDERING.

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

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XREF CODES		CATTIGLIONE		DATE	DATE	AUG 11, 2014		DATE	DATE
DIVISION		DIVISION CODE		CHKD	DATE	R. SCHERER		DATE	DATE
Interconnect Solutions		EMSD		© 3M COPYRIGHT 2015		3M Center		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		TITLE	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		0 ± .01		HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA	
MAX SURFACE ROUGHNESS		SURFACES		0 ± .03		.000 ± .005		CAGE NUMBER	
MARKED ONLY		ANGLES		.000 ± .000		D 78-5100-0770-7		REV. M	
MODEL		3000 SERIES		DET		YES		SHT 1 OF 5	

UL FILE NO: E68080

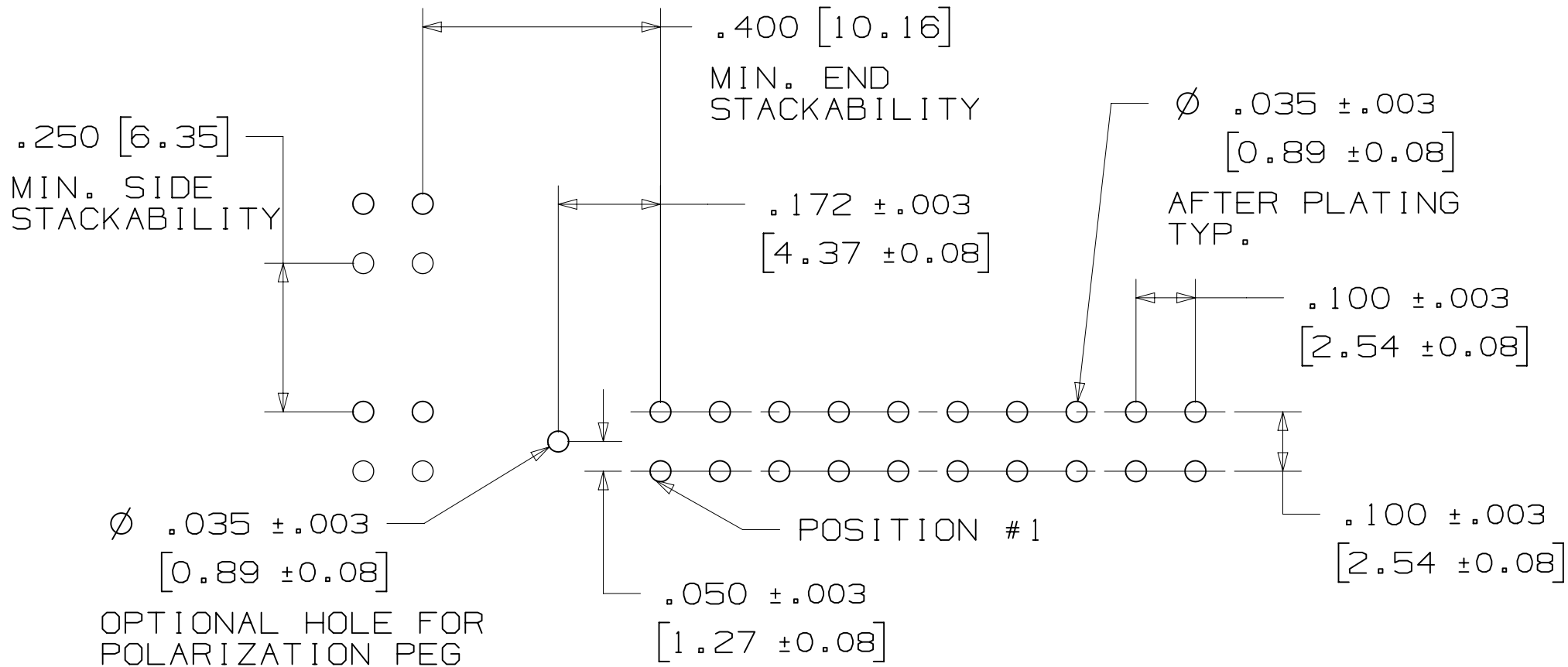
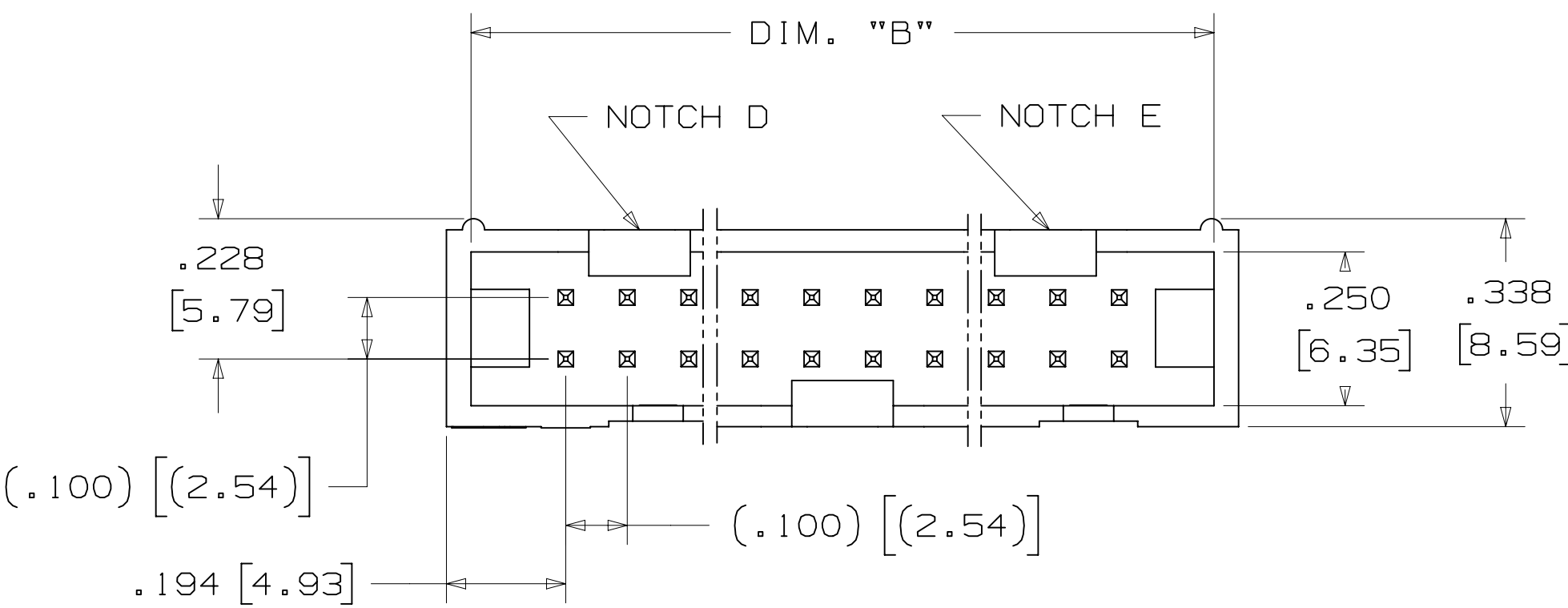
3M ELECTRONIC MATERIALS SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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

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

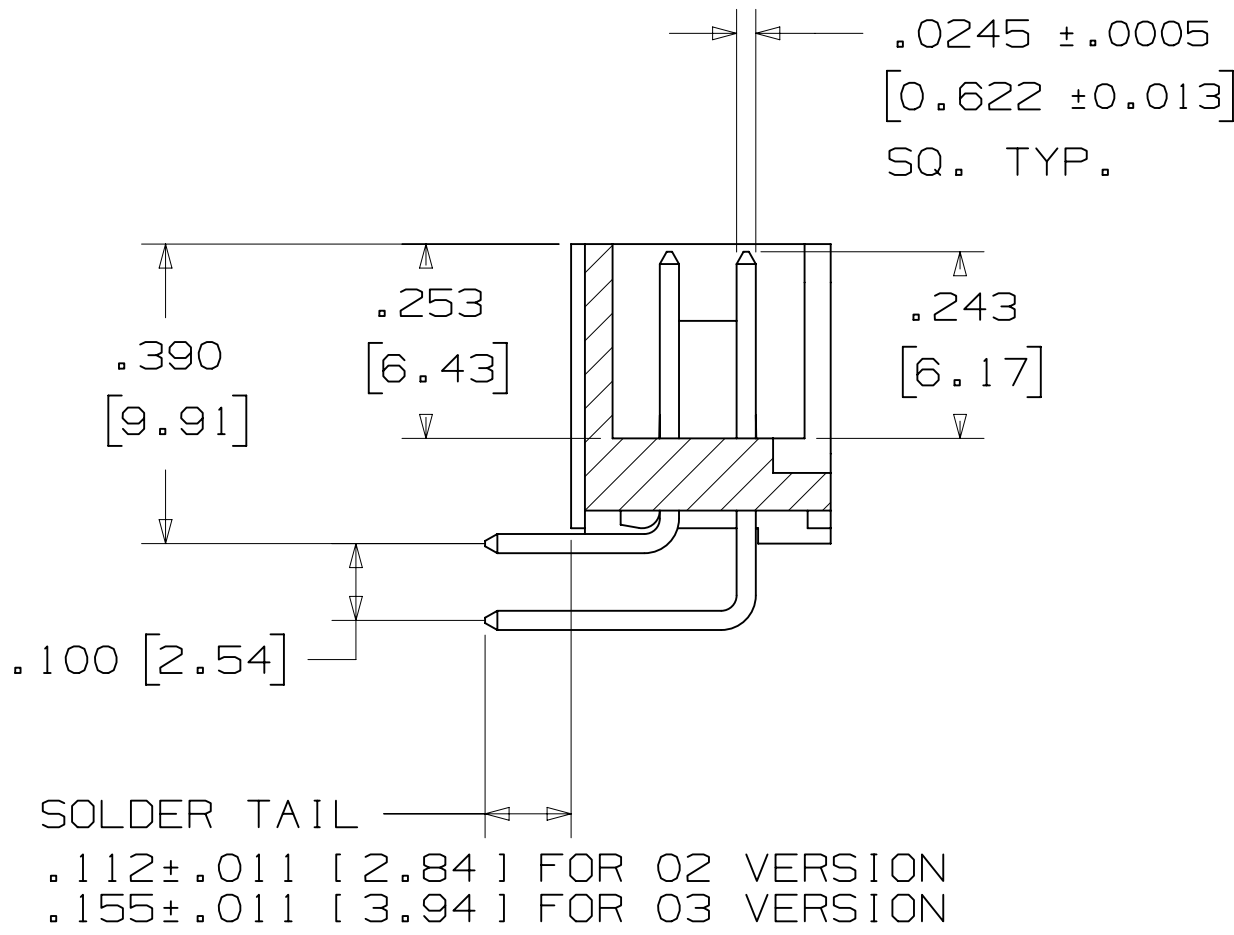
N= HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK= (UB OR UG PLATING)
PIN QUANTITY:
(SEE TABLE 1)
SOLDER TAIL:
02 = FOR .062 [1.57] THICK BOARD
03 = FOR .094 TO .125 [2.39 TO 3.18]
THICK BOARD

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 ±.3 .00 ±.13 .000 ±	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS		DET SURFACES		MARKED ONLY	
CAGE NUMBER		SIZE		DRAWING NO.		REV.		REV.	
D		78-5100-0770-7		M		M		M	
MODEL		3000 SERIES		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

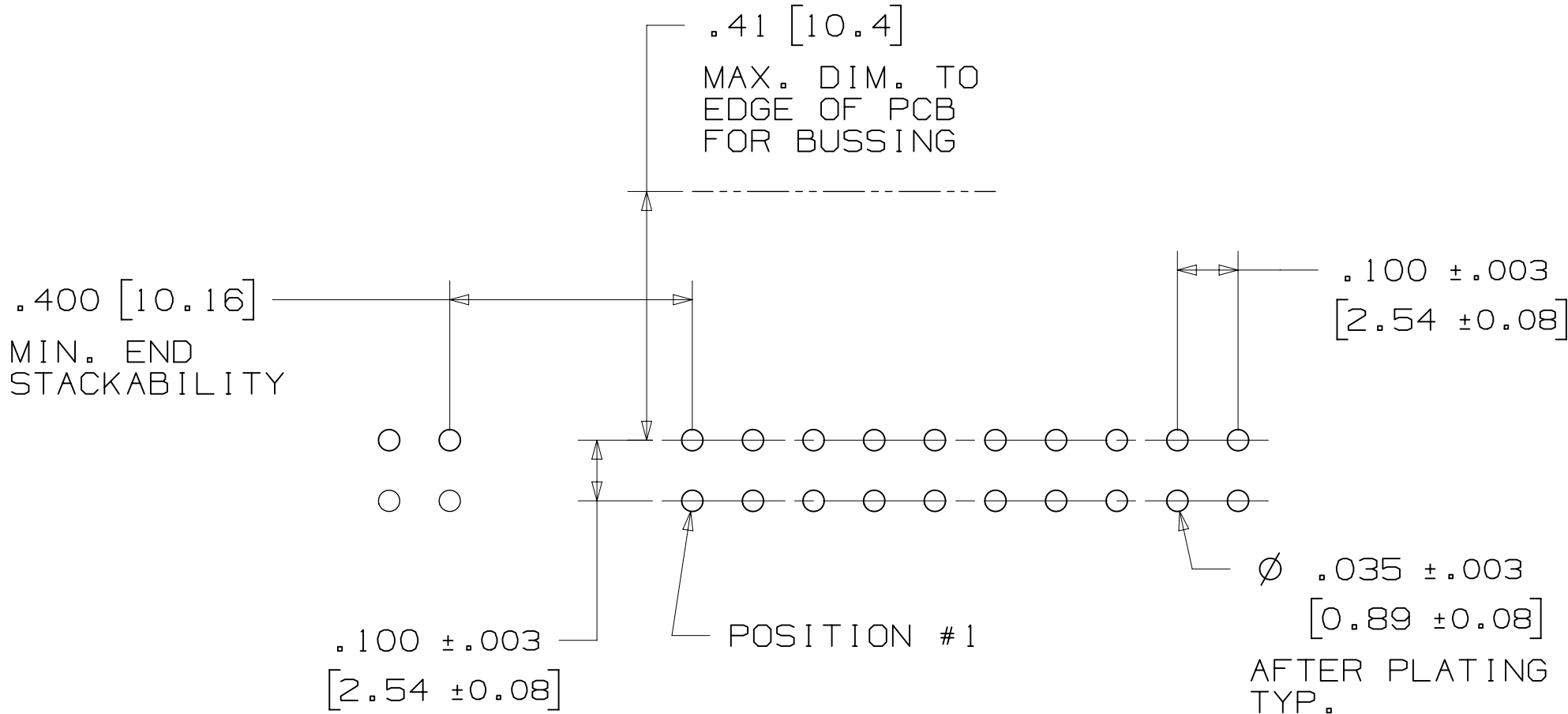
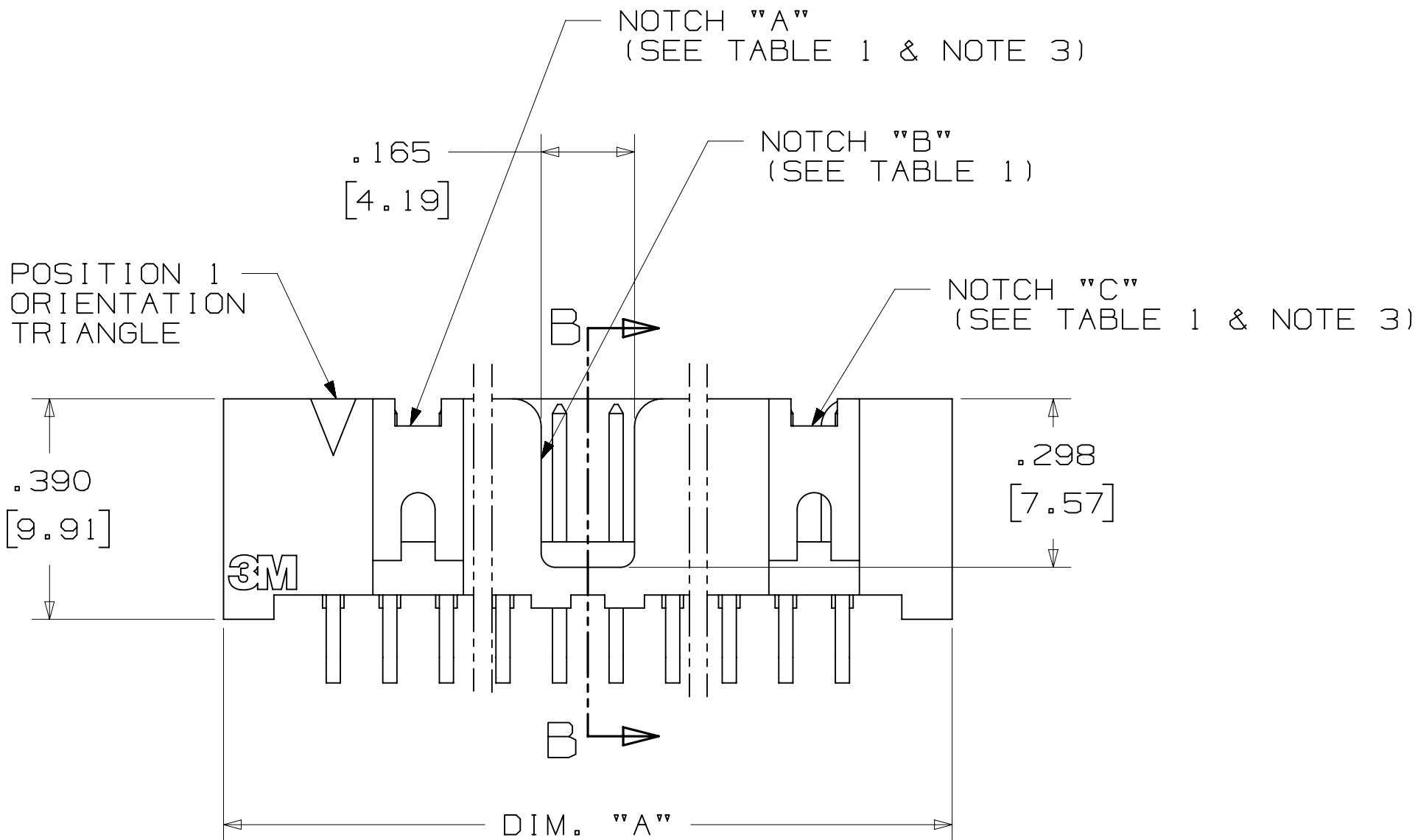
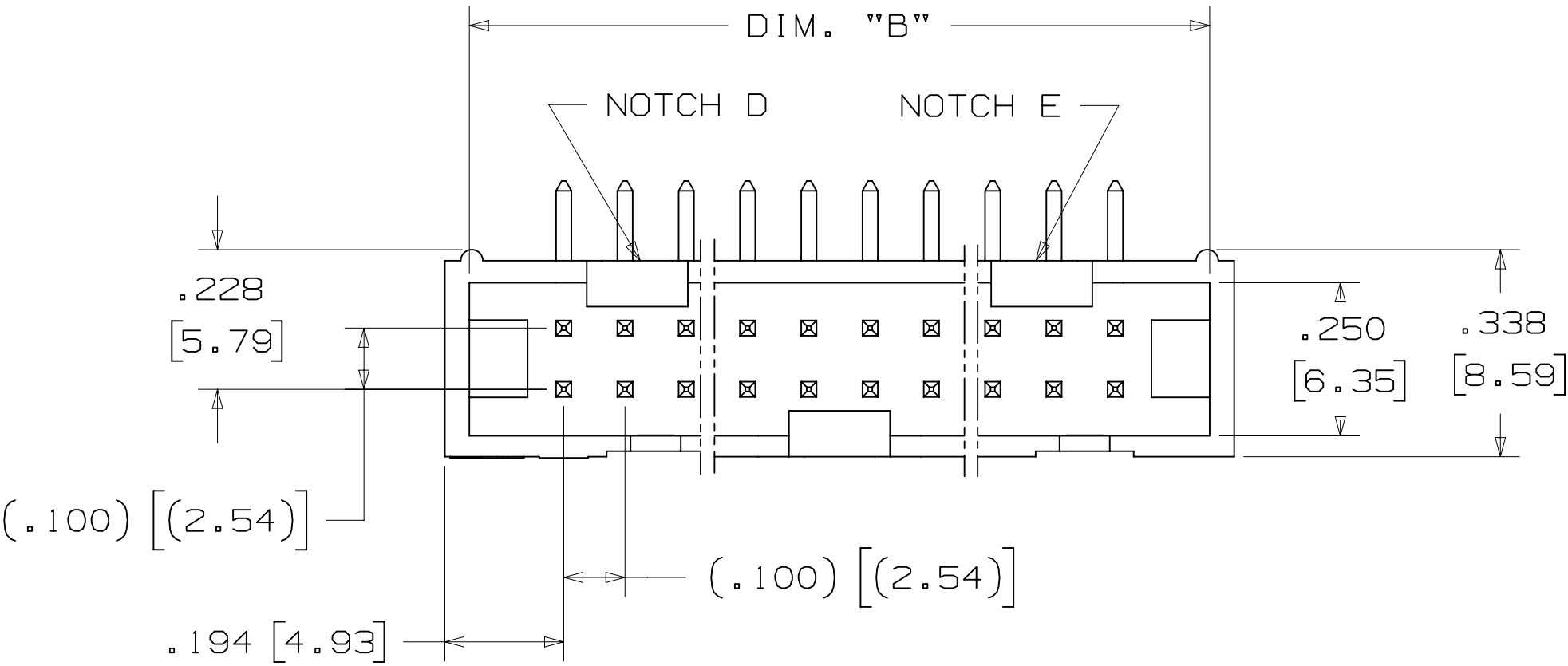
X25XX-50XX-XX

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

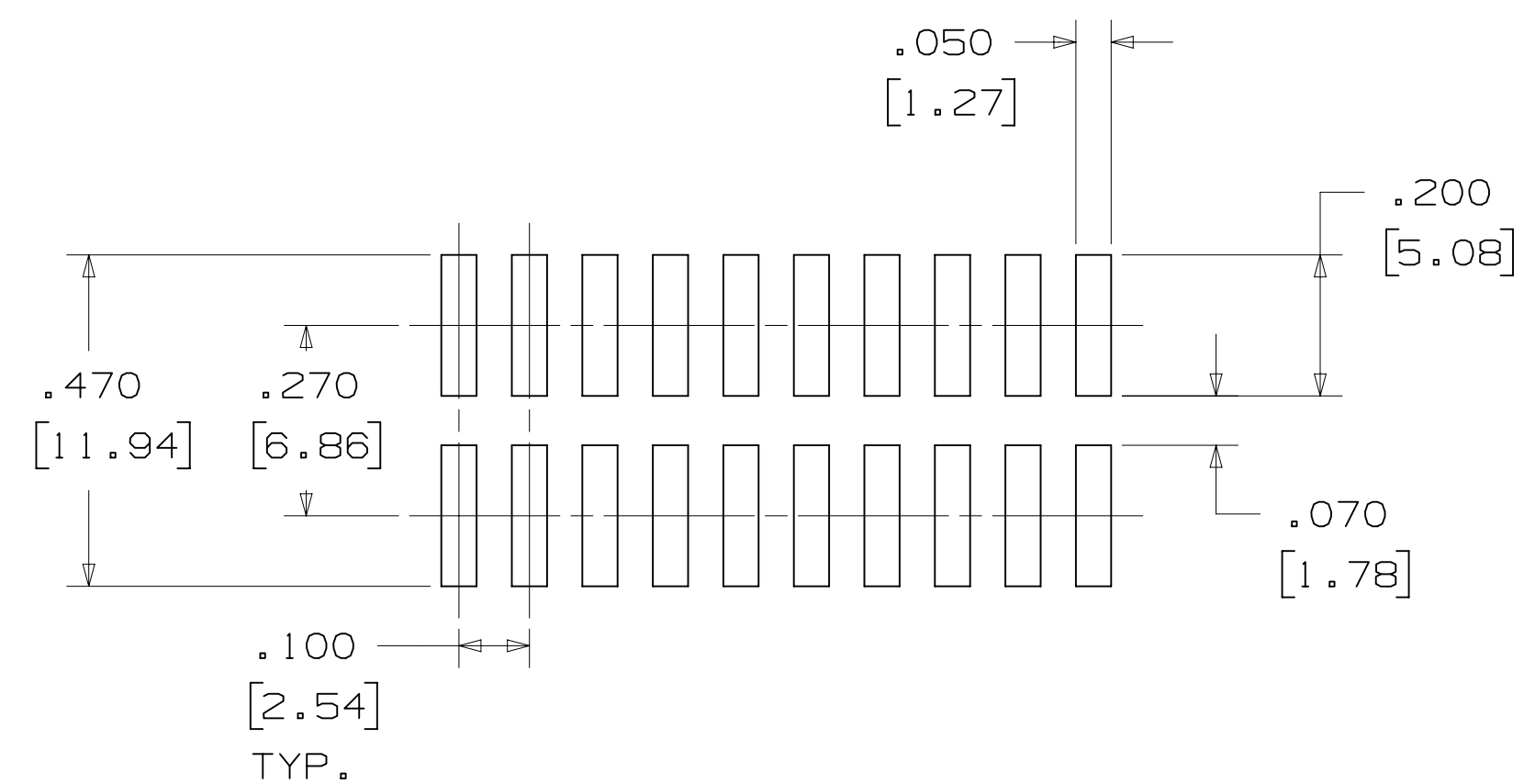
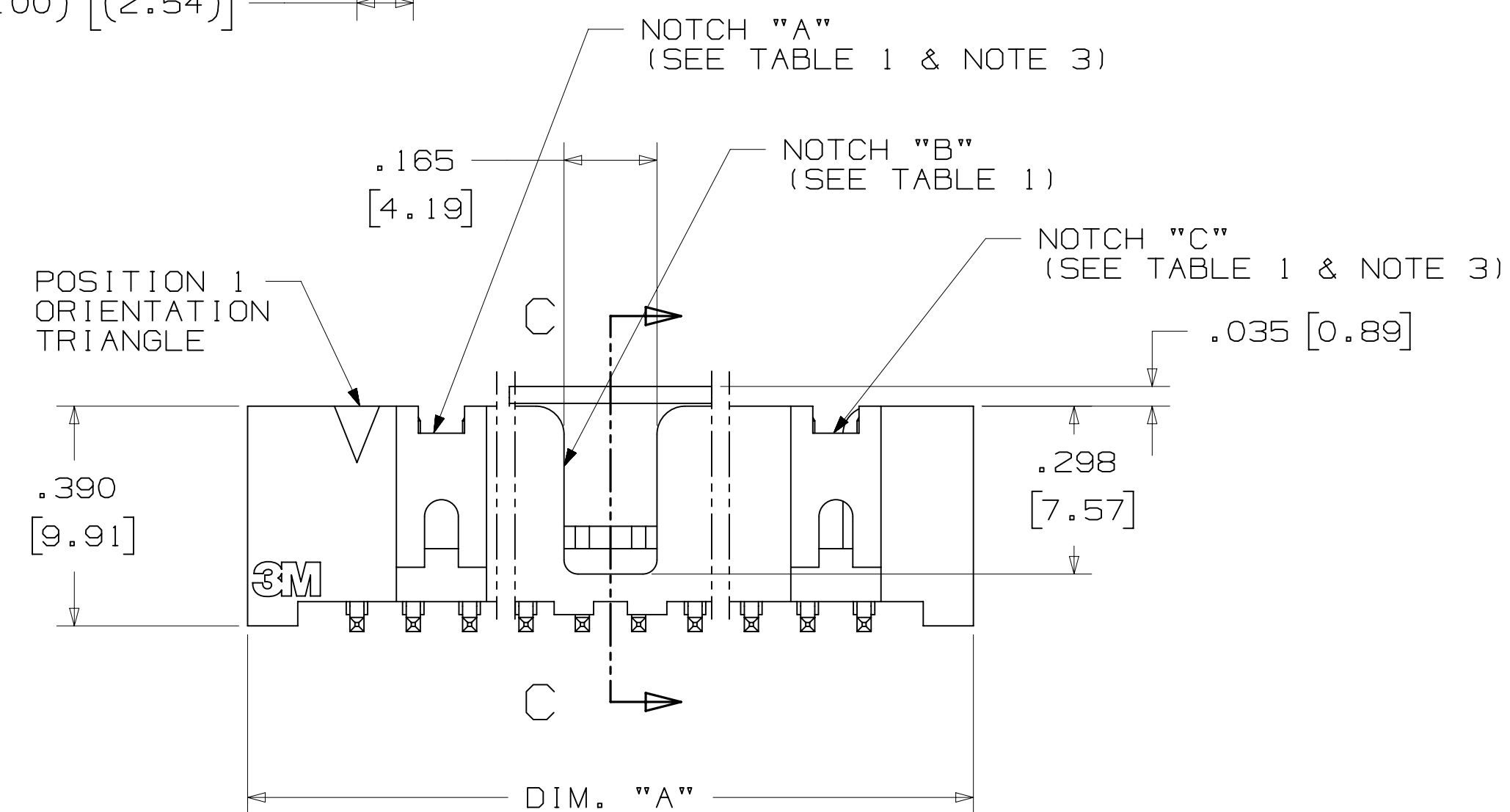
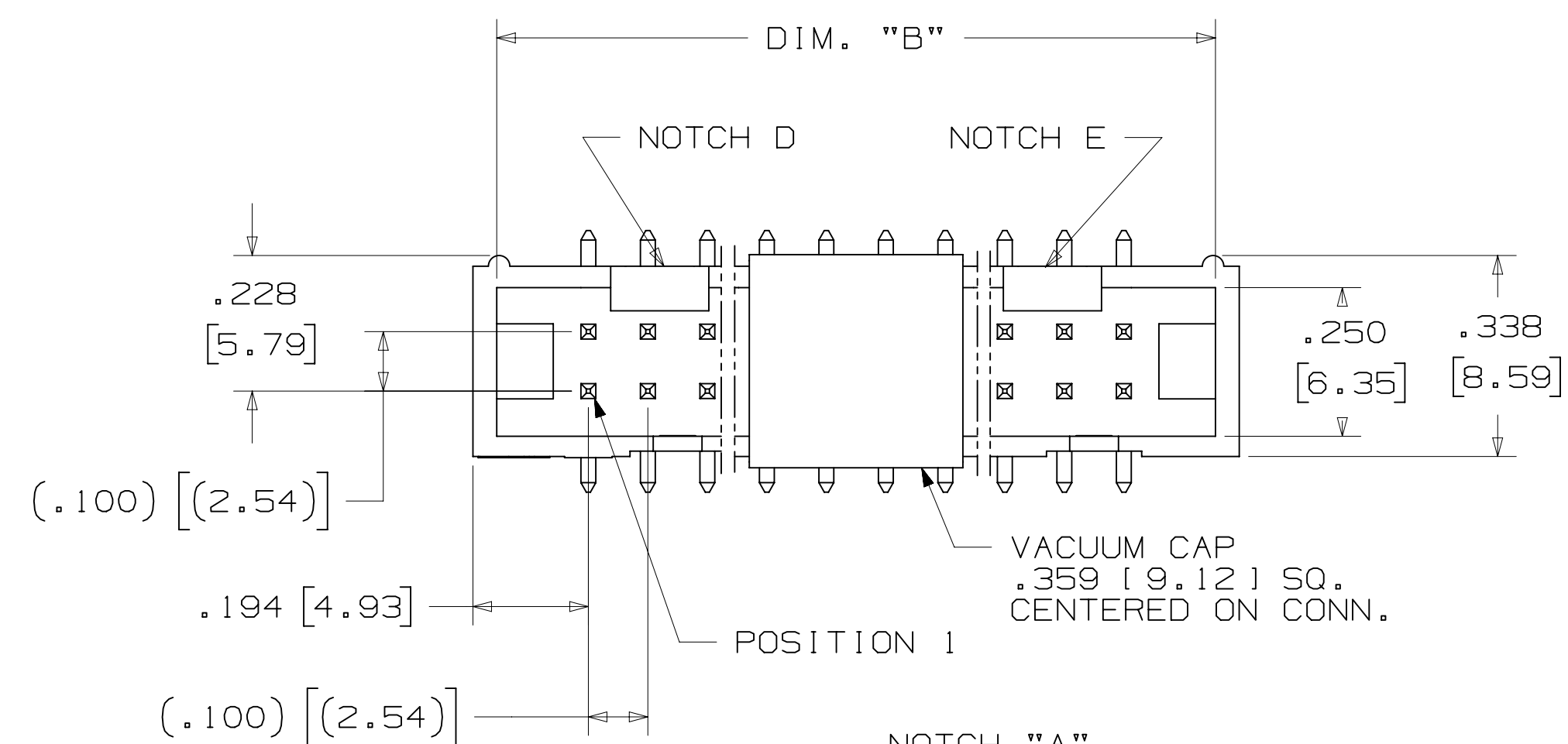
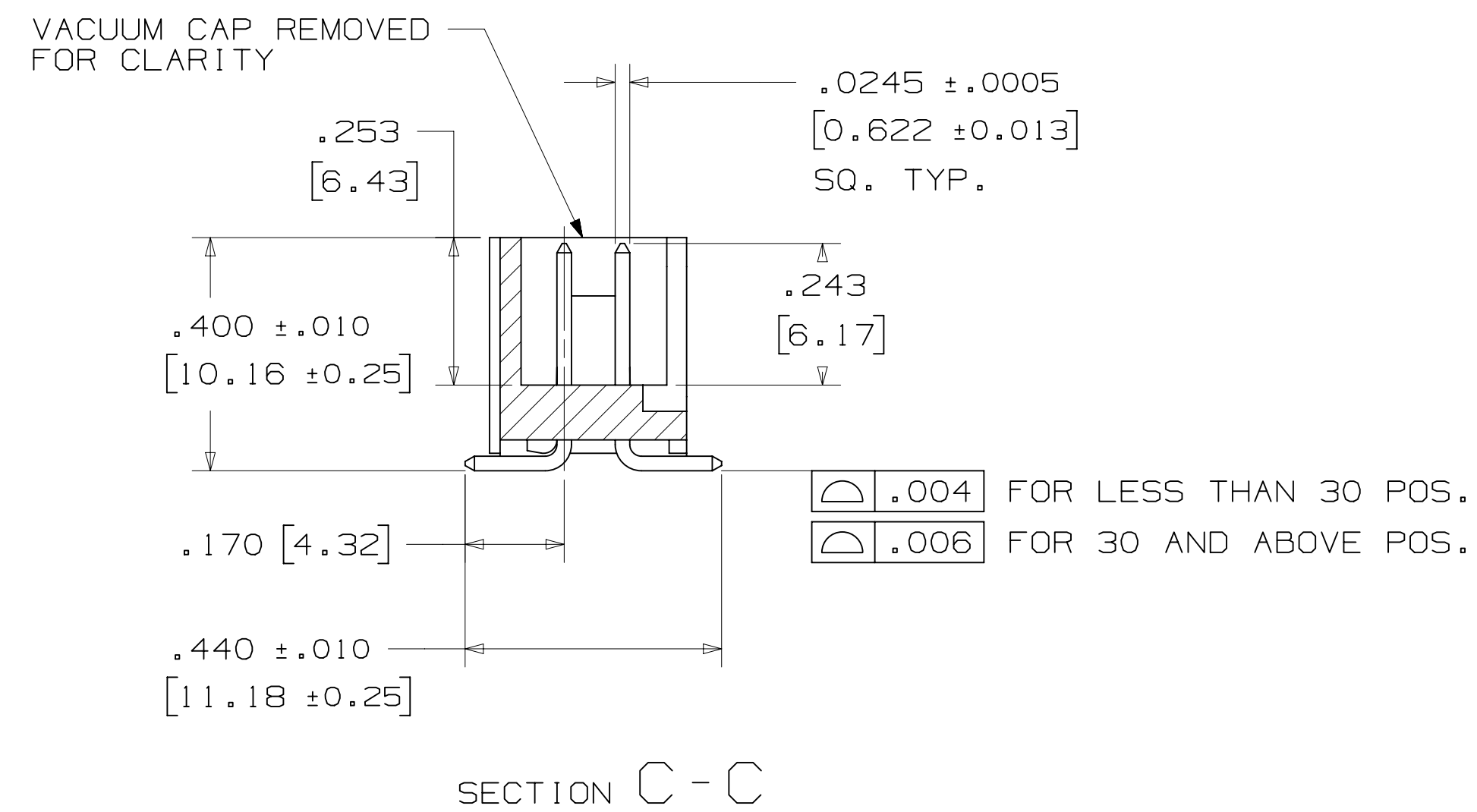


TABLE 1					
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	TAPE AND REEL PKG CODE	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	WD (44 MM)	06
08	.688 [17.48]	.608 [15.44]	B	WD (44 MM)	08
10	.788 [20.02]	.708 [17.98]	BC	WD (44 MM)	10
14	.988 [25.10]	.908 [23.06]	BCDE	WD (44 MM)	14
16	1.088 [27.64]	1.008 [25.60]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

DESIGN REFERENCE		NEXT ASSEMBLY		M 56088		AUG 11, 2014		JNC		RS	
REV ECO				ISSUE DATE AND DESCRIPTION				DATE		CHKD	
REV				ECO				DATE		DATE	
CHKD				DATE				APPR. R. SCHERER		DATE SEP 05, 2014	
DIVISION				DIVISION CODE				DIVISION			
Interconnect Solutions				EMSD				© 3M COPYRIGHT 2015			
DO NOT SCALE				TOLERANCES EXCEPT AS NOTED				This document and the information it contains on 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed otherwise for 3M authorized purposes. All rights reserved.			
DRAWING				3M				St. Paul, MN 55144			
THIRD ANGLE PROJECTION				TITLE				HEADER, 4-WALL, LO-PRO, 100 X 100, SMT, STRAIGHT & RA			
INTERPRET PER ASME Y14.5 - 2009				CASE NUMBER				SIZE DRAWING NO.			
MAX. SURFACE ROUGHNESS				D				D78-5100-0770-7			
MIN. SURFACES				MODEL				3000 SERIES			
MARKED ONLY				DET. LISTS				YES X NO			
ANGLES				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.

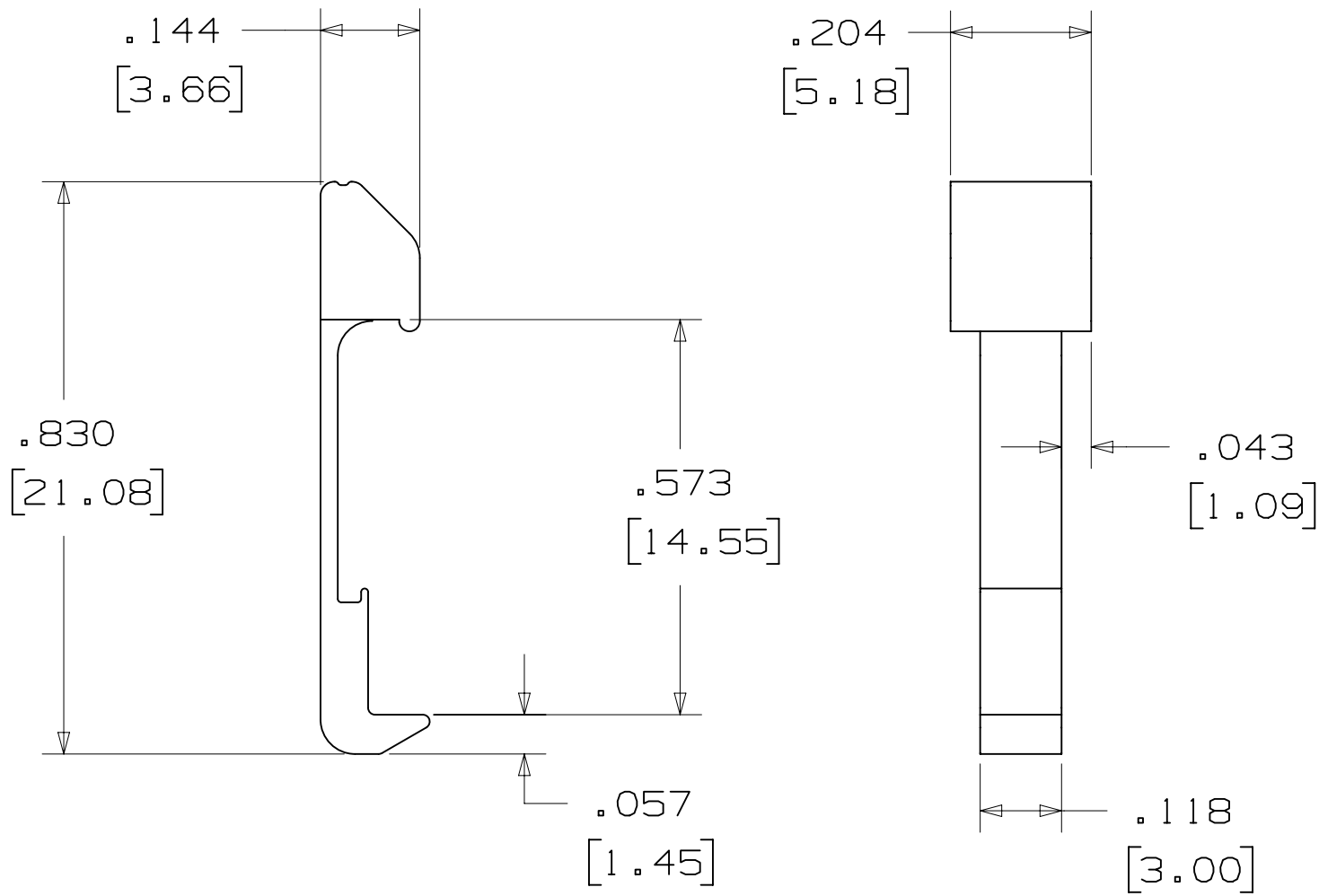
POLARIZING KEY



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

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

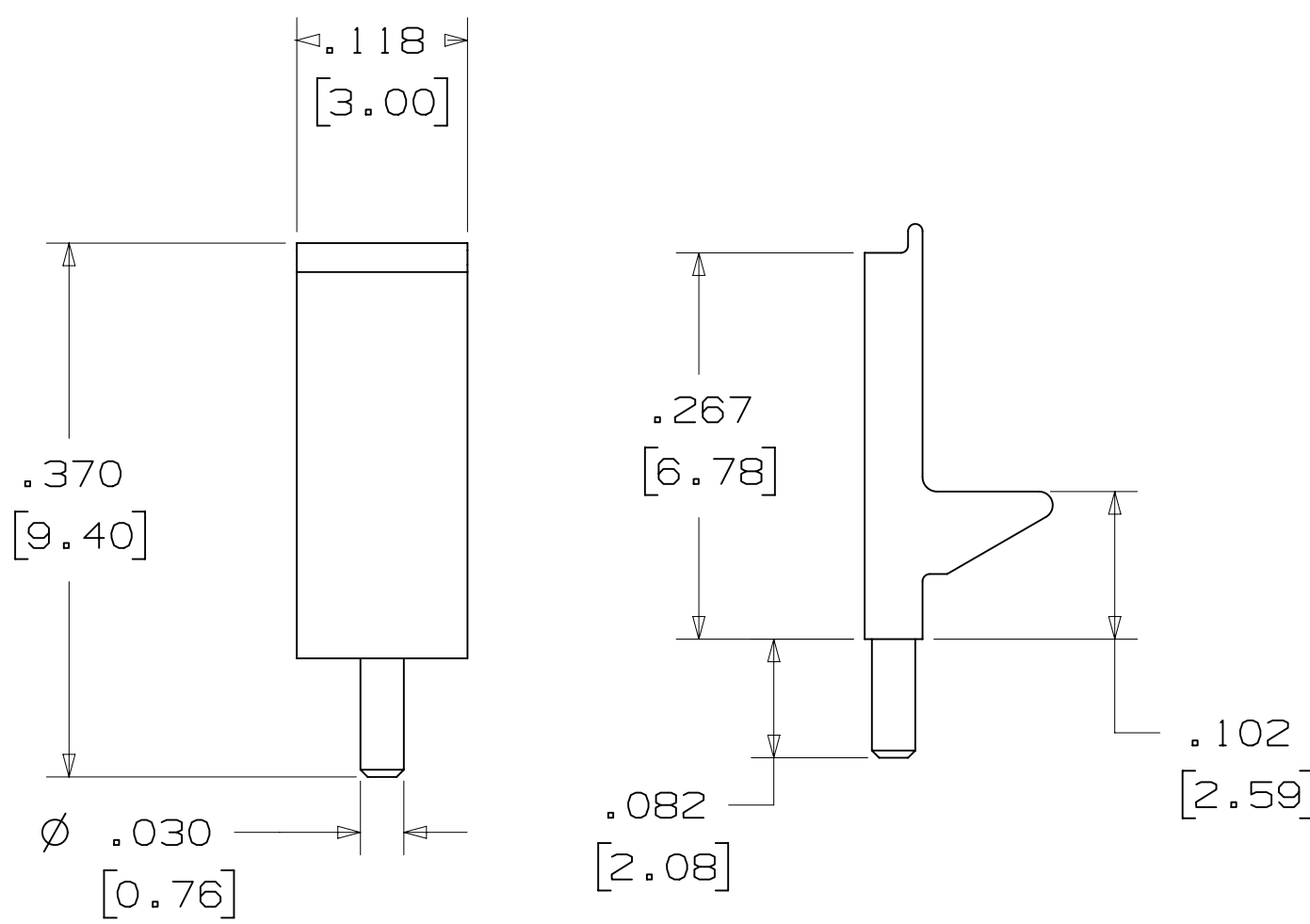
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

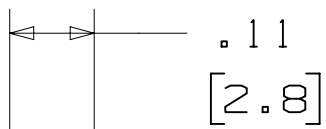
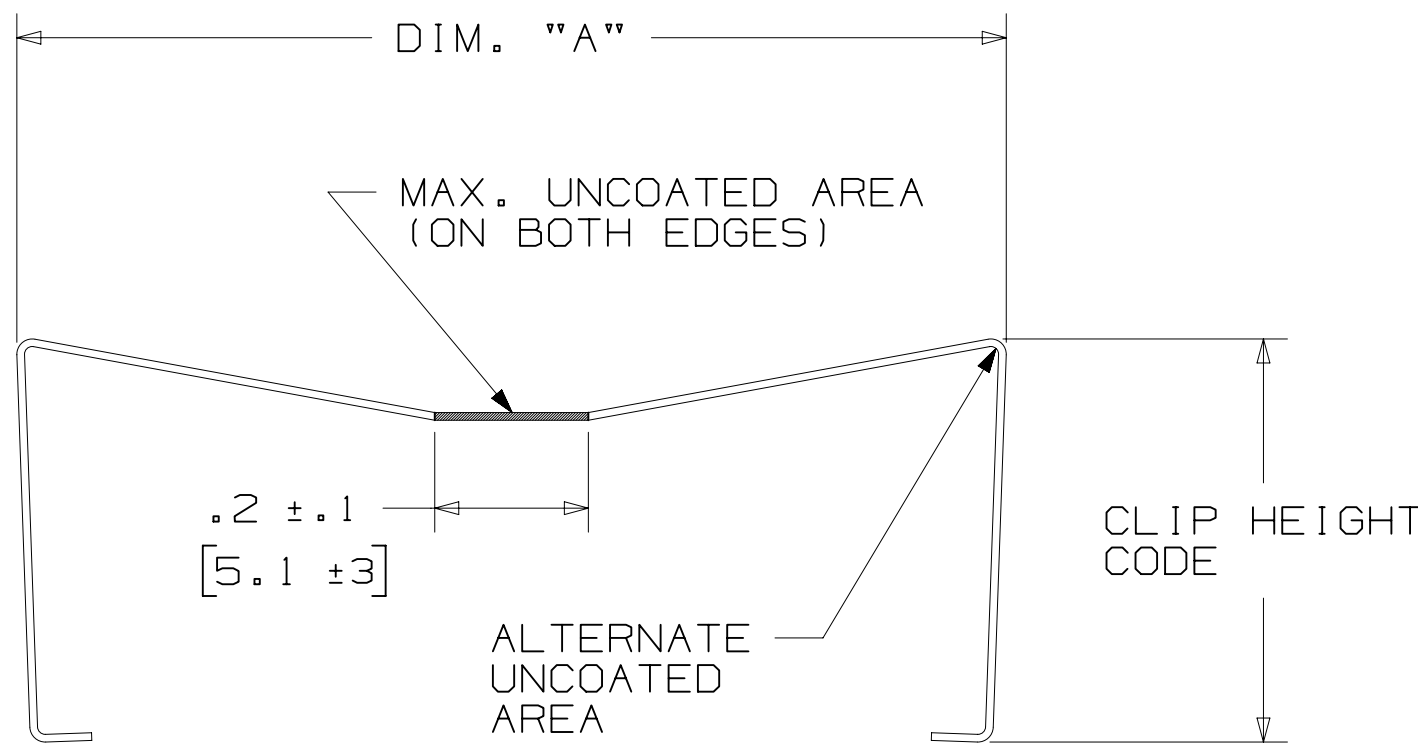
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

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 COPYRIGHT 2015		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.	
Interconnect Solutions		EMSD		DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED			
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		INCHES		.00 ± .01		.000 ± .005		.0000 ±	
MAX SURFACE ROUGHNESS		SURFACES		MILLIMETERS		0 ± .3		.00 ± .13		.000 ±	
MARKED ONLY		ANGLES		CAGE NUMBER		SIZE		DRAWING NO.		REV.	
				D 78-5100-0770-7		M					
MODEL		3000 SERIES		DET		YES		NO		SHT 5 OF 5	