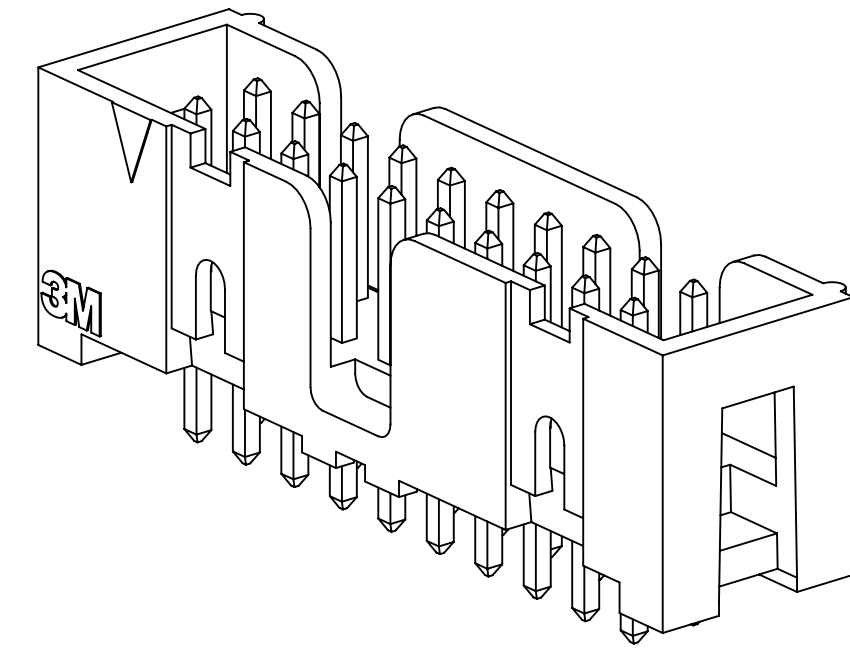
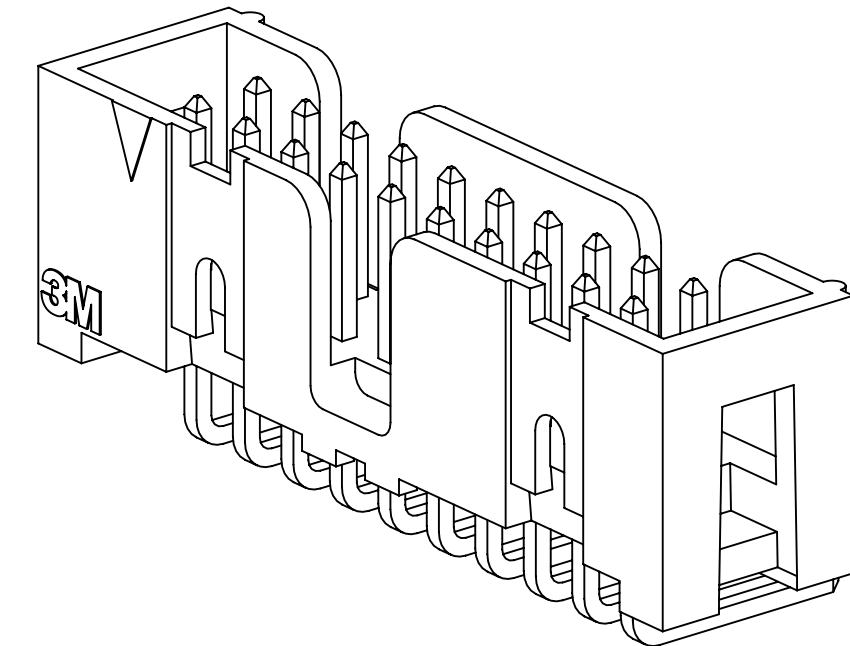


3M™ FOUR-WALL HEADER, 2500 SERIES

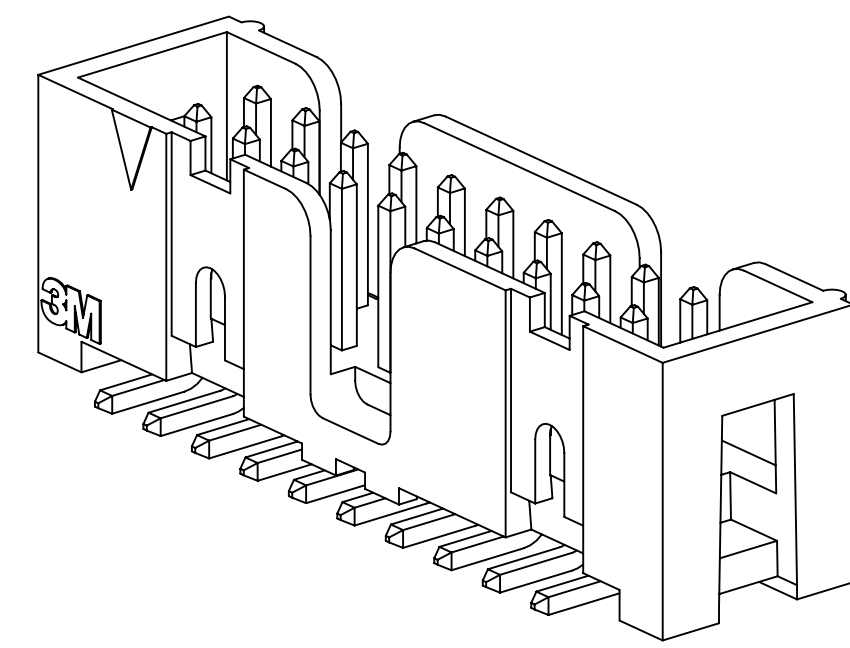
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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

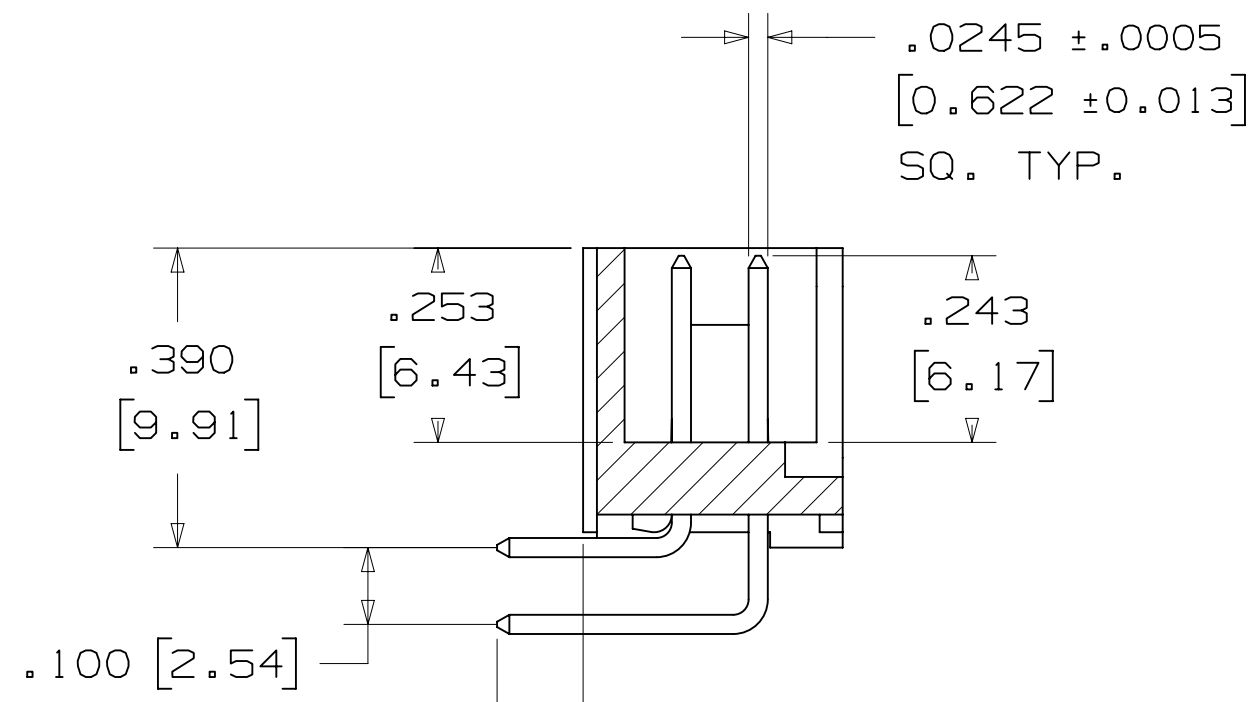
DIMENSIONS: INCHES [MM]
 [MM] IS REF. ONLY

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DATE	DATE	DATE	DATE	DATE	DATE	DATE
AUG 11, 2014	AUG 11, 2014	AUG 11, 2014	AUG 11, 2014	SEP 05, 2014		
CHKD	APPV	DATE	DATE	DATE	DATE	DATE
CASTIGLIONE	R. SCHERER					
DIVISION	DIVISION CODE	© 3M COPYRIGHT 2016				
Interconnect Solutions	EMSD	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				
		.00 ± .01				
		.000 ± .005				
		.0000 ±				
		MILLIMETERS				
		0 ±				
		.0 ± .3				
		.00 ± .13				
		.000 ±				
		ANGLES ±				
		UNLESS OTHERWISE SPECIFIED				
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	CAGE NUMBER D78-5100-0770-7				
		MODEL 2500 SERIES				
		REV. N				
		SHEET 1 OF 5				

3M **USA**
 UL FILE NO: E68080

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



SOLDER TAIL
 .112±.011 [2.84] FOR 02 VERSION
 .155±.011 [3.94] FOR 03 VERSION

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

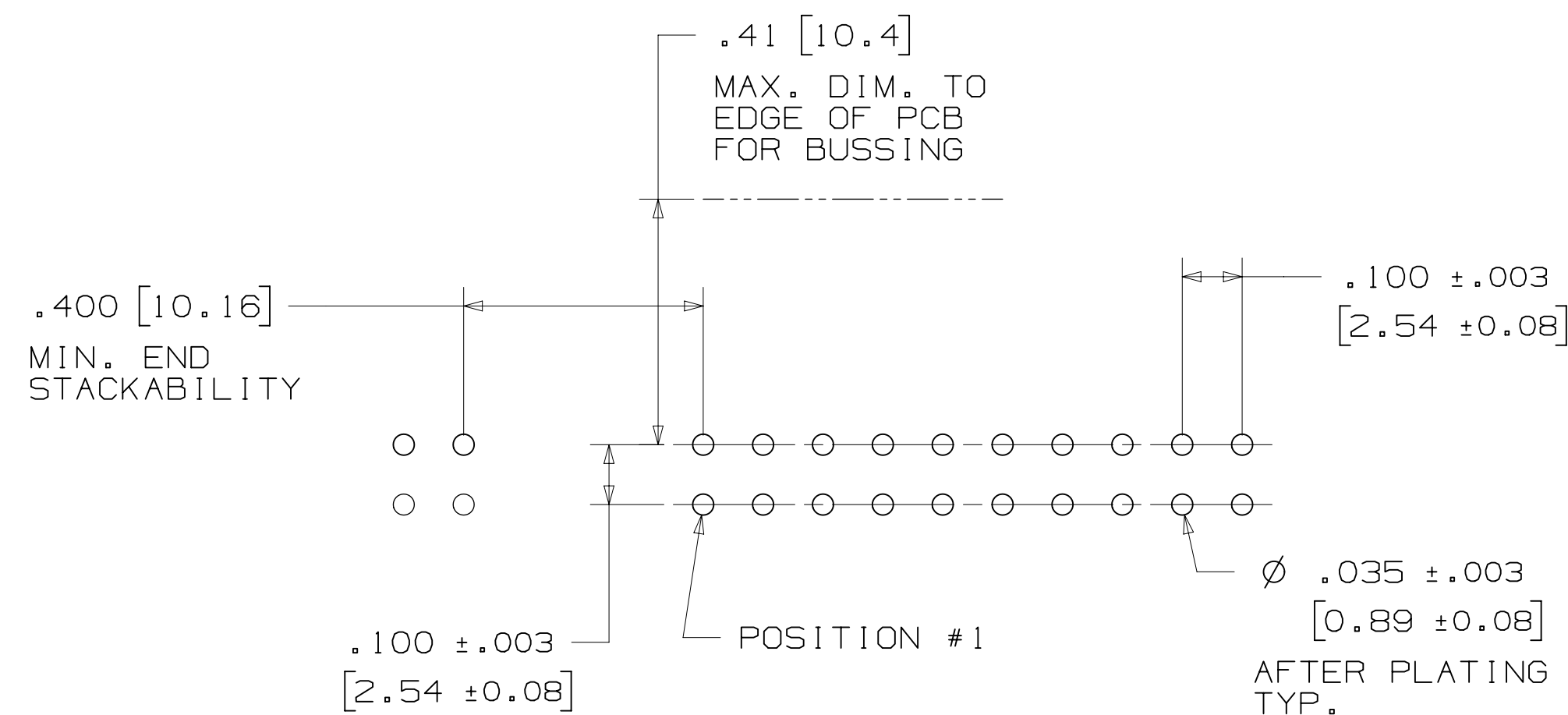
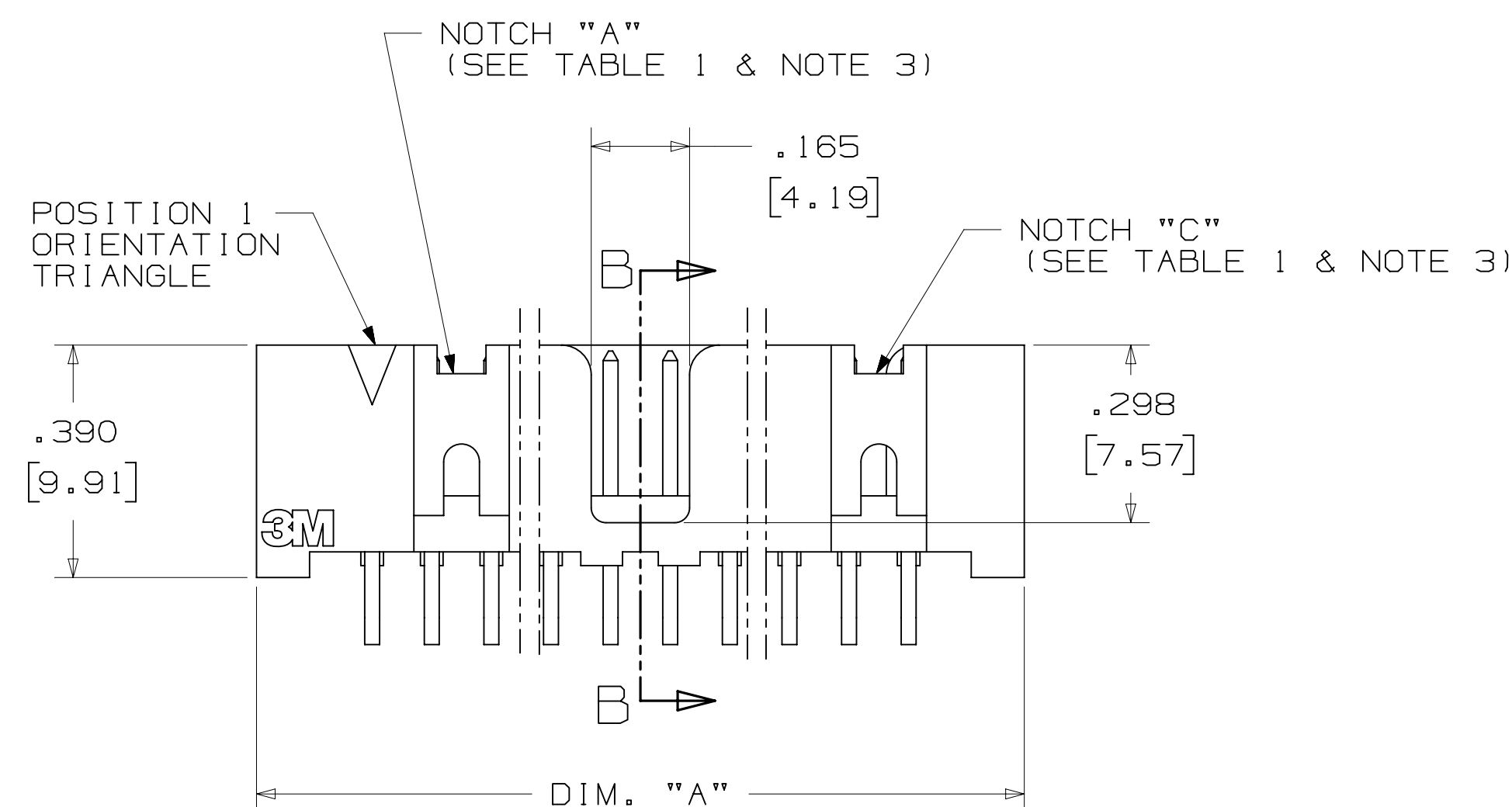
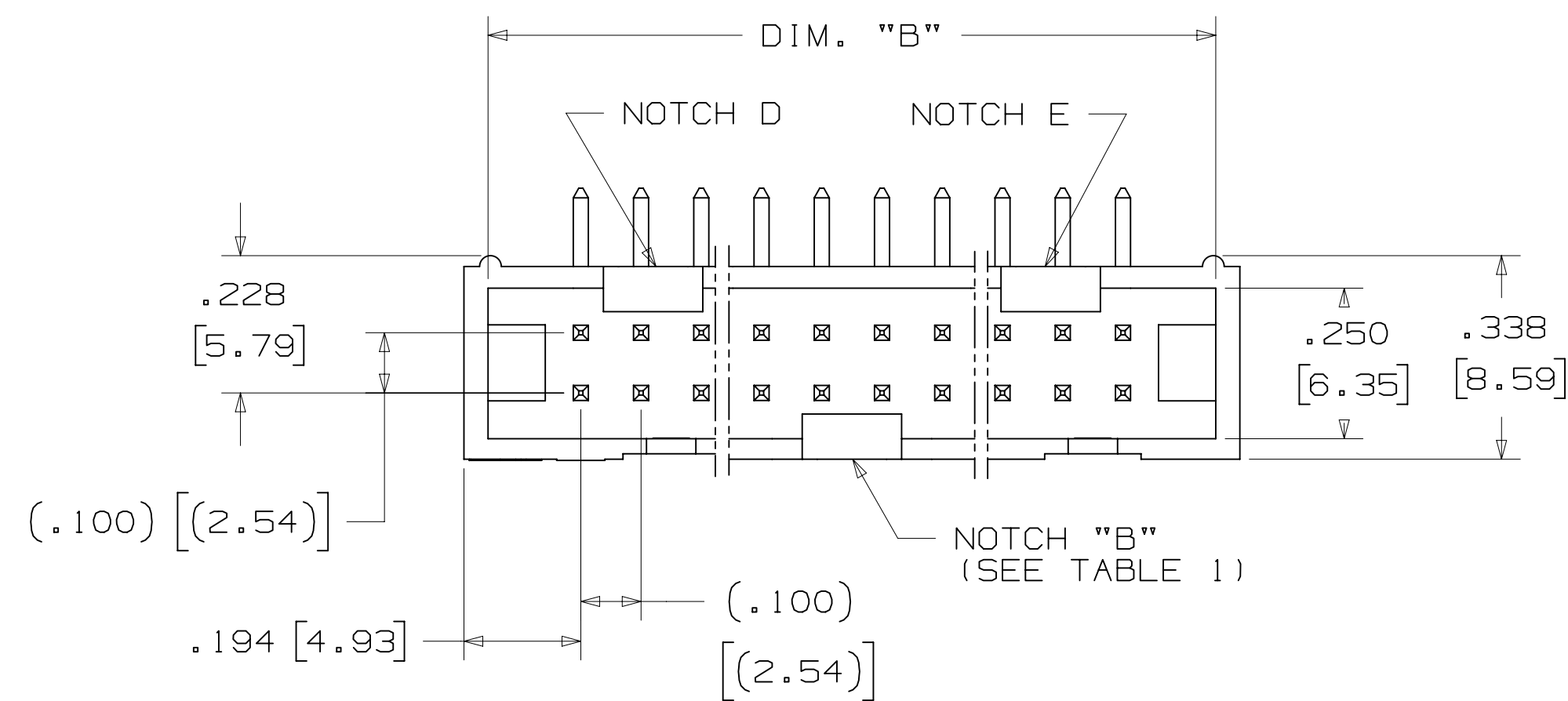
X25XX-50XX-XX

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.	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		N		68908 AUG 02,2016	JNC	SC
		M		56068 AUG 11,2014	JNC	RS
				REVISED AND REDRAWN		
				ISSUE DATE AND DESCRIPTION		
		CHKD	DATE	APPRV	DATE	
				R. SCHERER	SEP 05,2014	

DIVISION	SCALE	TOLERANCES EXCEPT AS NOTED
Interconnect Solutions	4	
	1	

INCHES	MILLIMETERS
.00 ± .01	0 ±
.000 ± .005	.00 ± .13
.0000 ±	.00 ± .3
	.00 ±
	.000 ±
	ANGLES ±

3M	TITLE
3M Center St. Paul, MN 55144	HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA
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CAGE NUMBER	D 78-5100-0770-7
SIZE	N
DRAWING NO.	
REV.	
MODEL	2500 SERIES
DET	IS1s YES NO SHT 3 OF 5

78-5100-0770-7
 N
 REVISION
 DRAWING NUMBER
 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



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 ± .03		
INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS: .00 ± .13		CAGE NUMBER: D78-5100-0770-7		
MARKED ONLY		ANGLES		MODEL: 2500 SERIES		
				REV. N		

N	68908	AUG 02, 2016	JNC	SC
M	56068	AUG 11, 2014	JNC	RS

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3M Center St. Paul, MN 55144

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

REV. N

SHT 4 OF 5

78-5100-0770-7
 N
 REV. N
 DATE: SEP 05, 2014
 APPR. R. SCHERER
 DATE: AUG 11, 2014
 DRFT: CASTIGLIONE
 CHKD: CASTIGLIONE
 DIVISION: Interconnect Solutions
 DIVISION CODE: EMSD
 SCALE: 4/1
 TOLERANCES EXCEPT AS NOTED
 INCHES: .00 ± .01
 MILLIMETERS: 0 ± .03
 MAX SURFACE ROUGHNESS: .00 ± .13
 MARKED ONLY
 ANGLES
 CAGE NUMBER: D78-5100-0770-7
 MODEL: 2500 SERIES
 REV. N
 SHT 4 OF 5

3M™ FOUR-WALL HEADER, 2500 SERIES

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

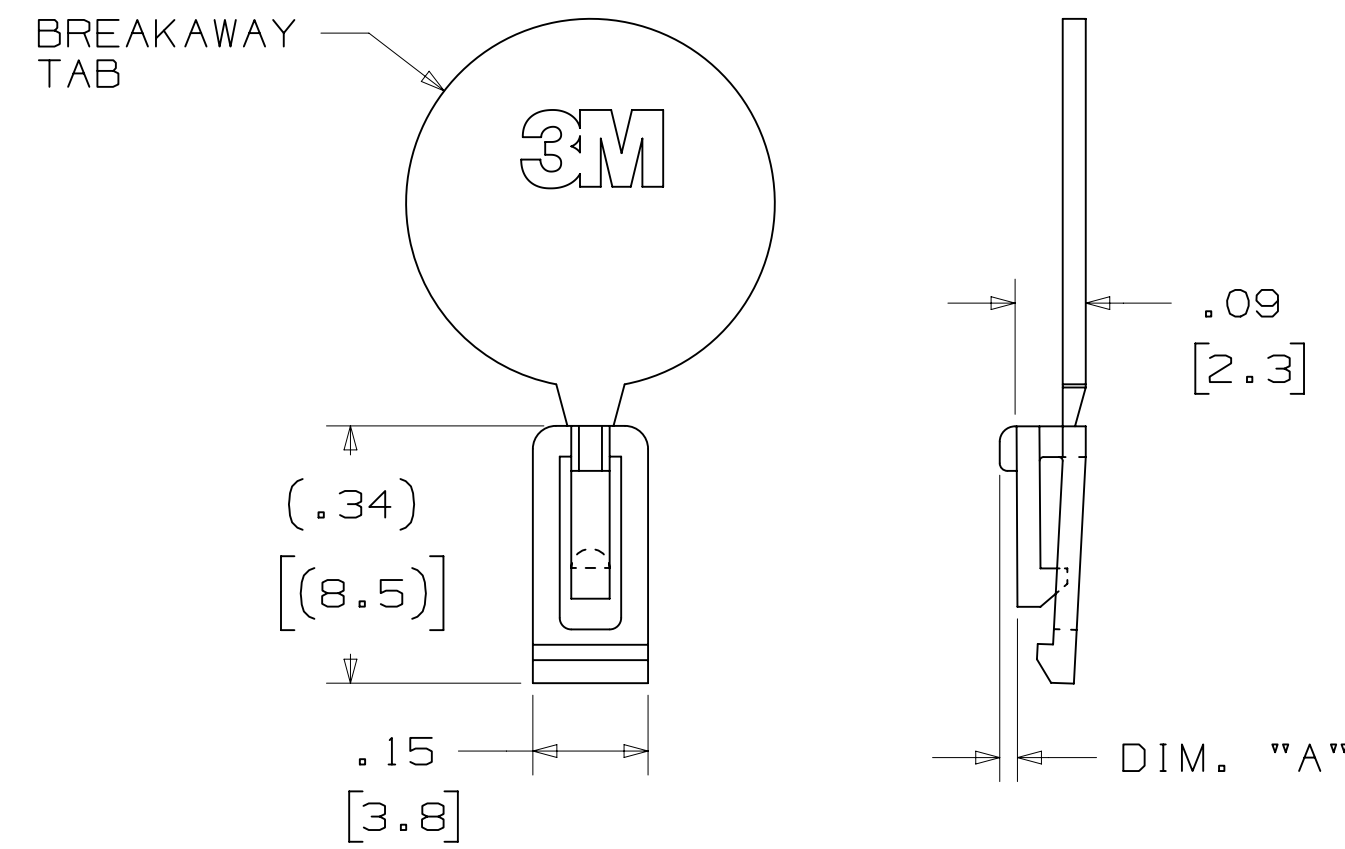
PART CUSTOMIZATION

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.

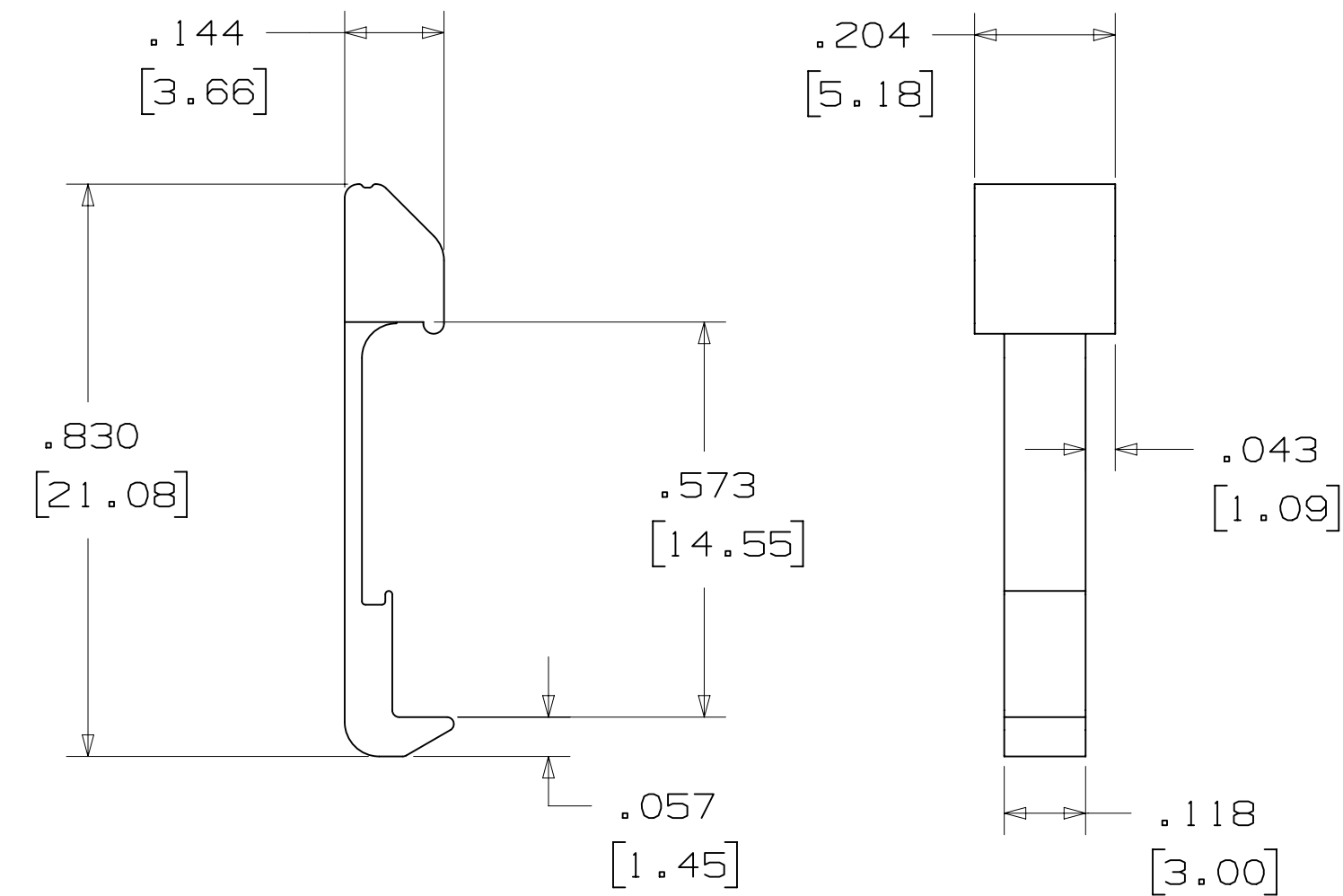
POLARIZING KEY



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

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

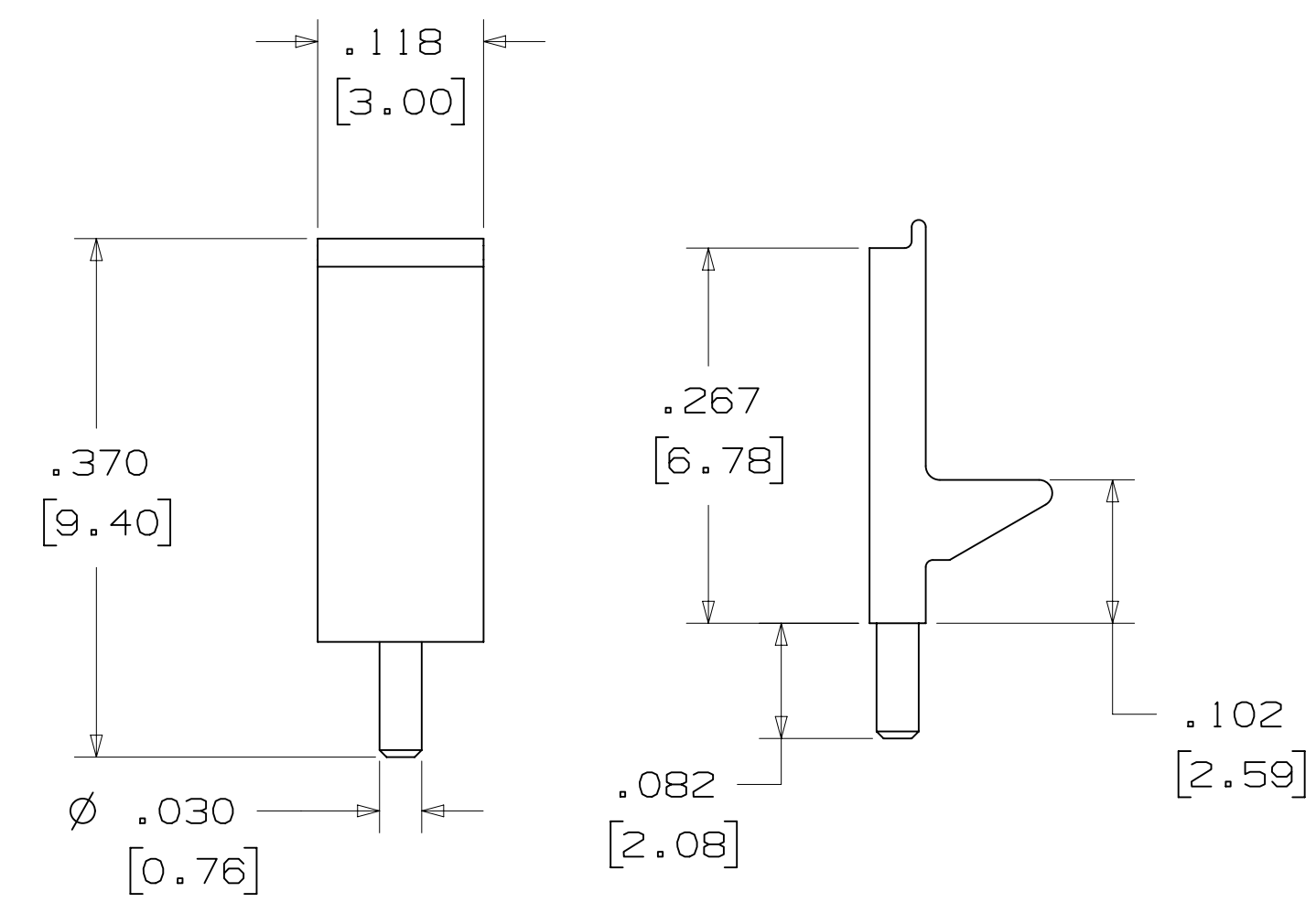
LOW PROFILE LATCH



PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

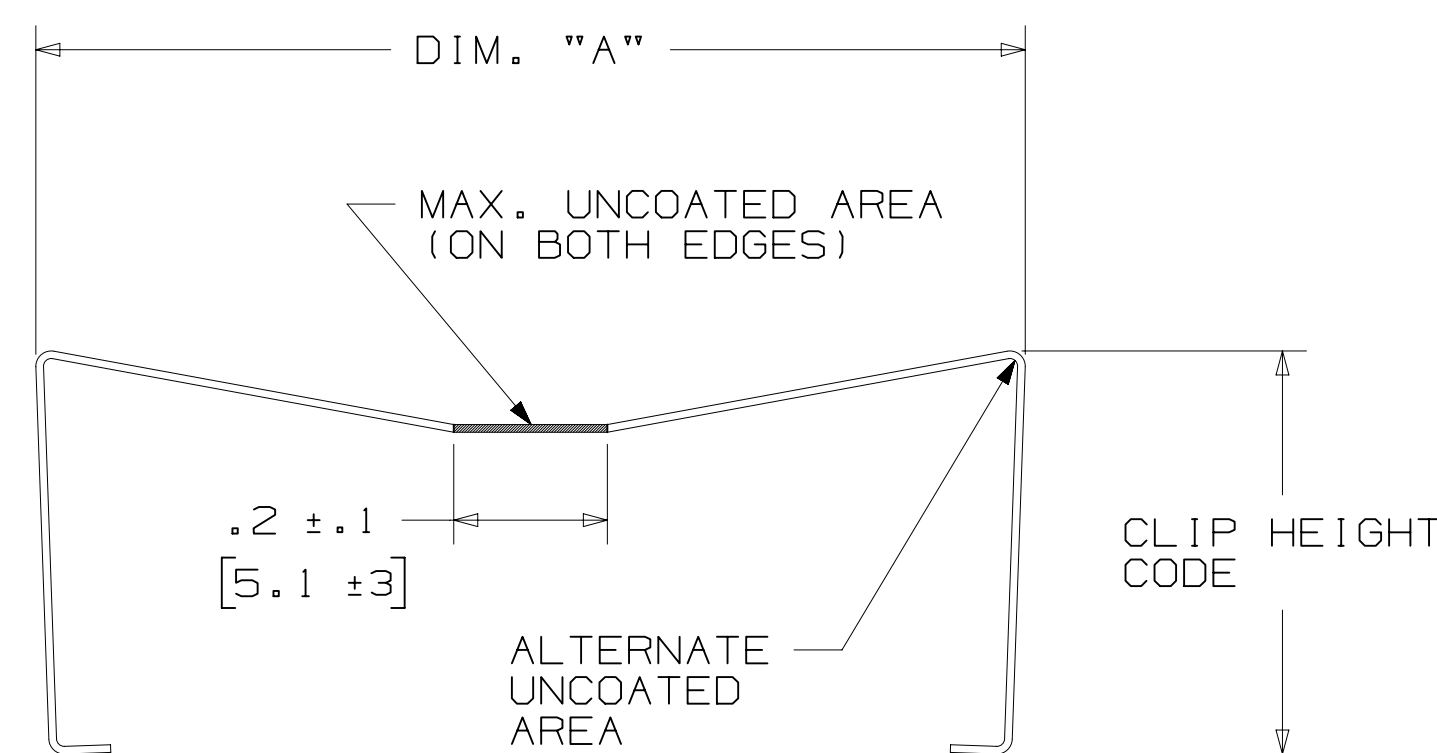
NOTE:
LATCHES NOT COMPATIBLE WITH REFLOW SOLDERING.
ATTACH LATCHES AFTER SOLDERING.

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

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
ACROSS CODES		CASTIGLIONE	AUG 11, 2014	MFG		
DIVISION	DIVISION CODE	APPRV	DATE	DATE		
Interconnect Solutions	EMSD	R. SCHERER	SEP 05, 2014			
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 ±		TITLE HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		
MAX SURFACE ROUGHNESS	MARKED ONLY	MILLIMETERS 0 ± .00 ± .13		CAGE NUMBER D78-5100-0770-7 N		
		ANGLES		MODEL 2500 SERIES		

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