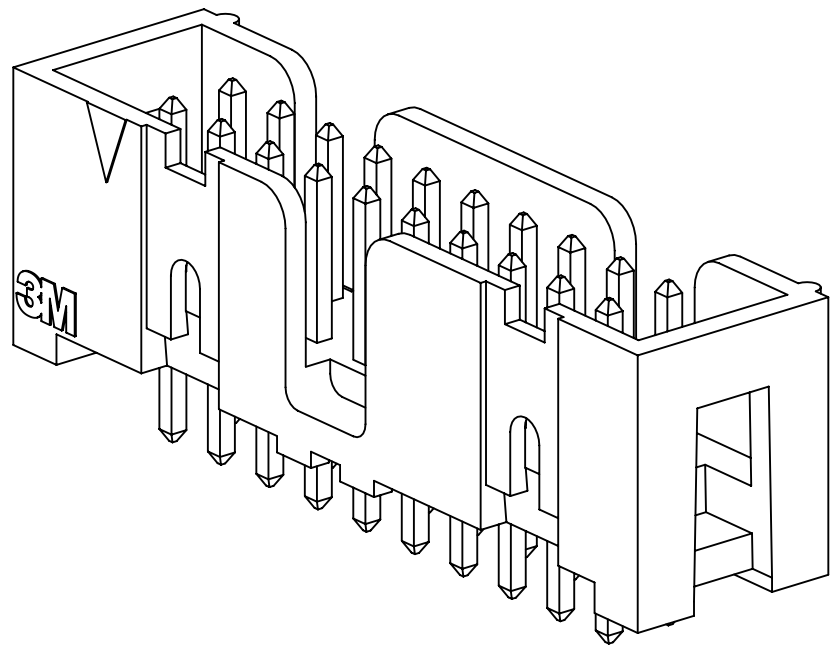
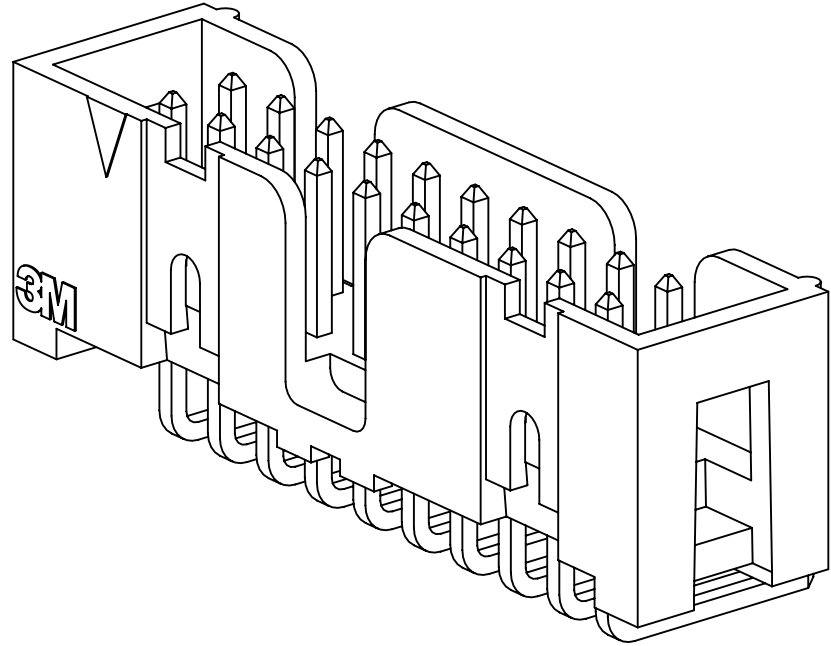


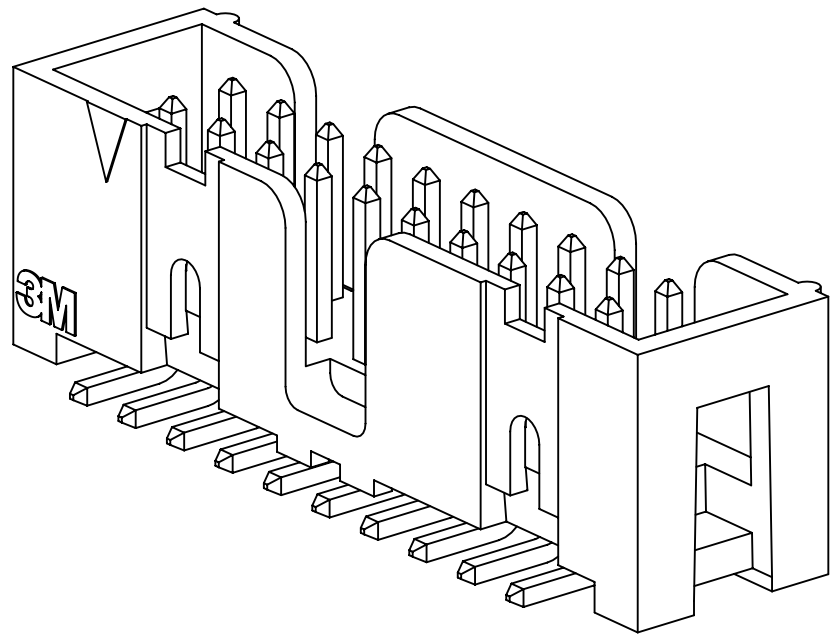
3M™ FOUR-WALL HEADER, 2500 SERIES
.100" X .100" LOW PROFILE, SURFACE MOUNT, STRAIGHT AND RIGHT ANGLE THROUGH-HOLE



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 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

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

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XREF CODES				CHKD		DATE	DATE		
						AUG 11, 2014			
DIVISION		DIVISION CODE		APPROV		DATE	DATE		
Interconnect Solutions		EMSD		R. SCHERER		SEP 05, 2014			
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED					
				INCHES					
				THIRD ANGLE PROJECTION					
				INTERPRET PER ASME Y14.5 - 2009					
				MAX SURFACE ROUGHNESS					
				DET SURFACES					
				MARKED ONLY					
				ANGLES					

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

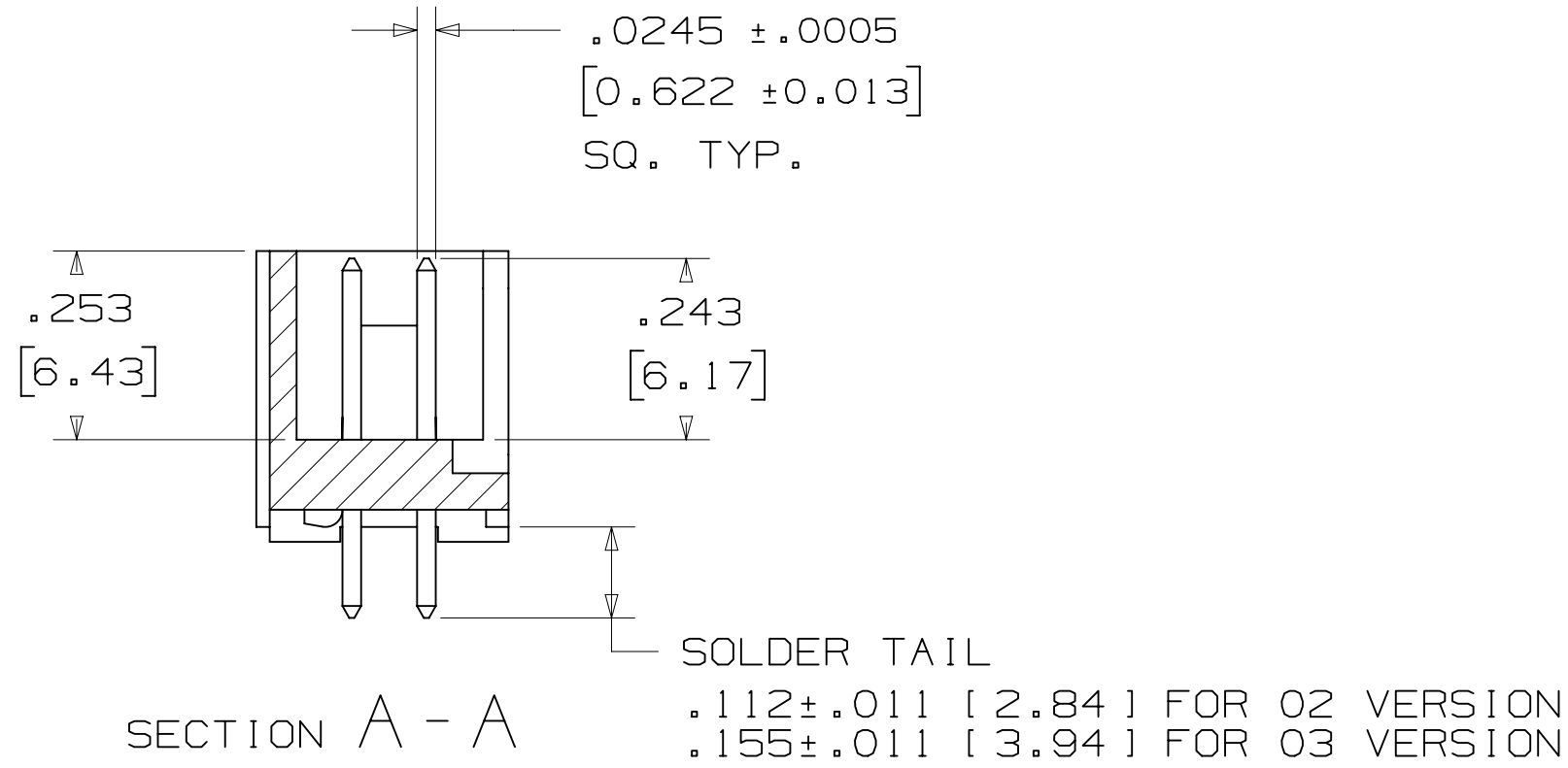
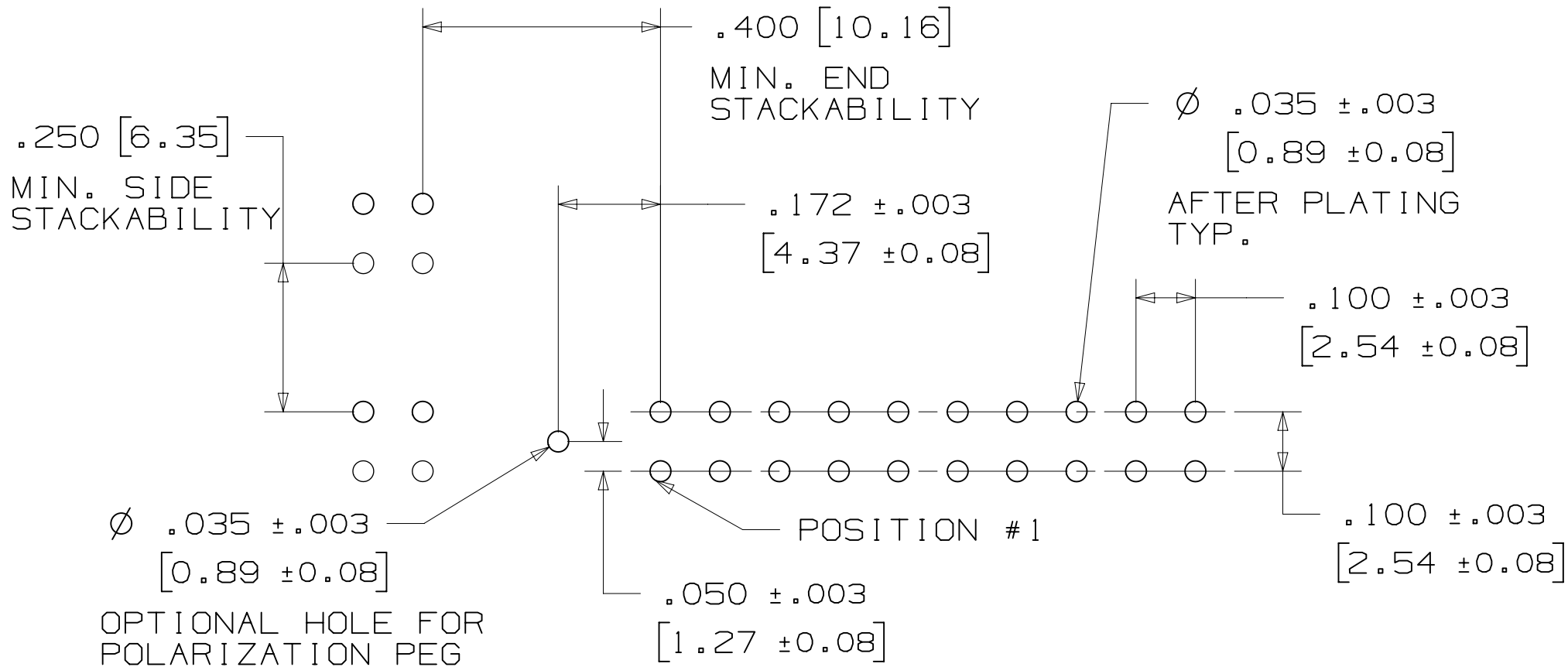
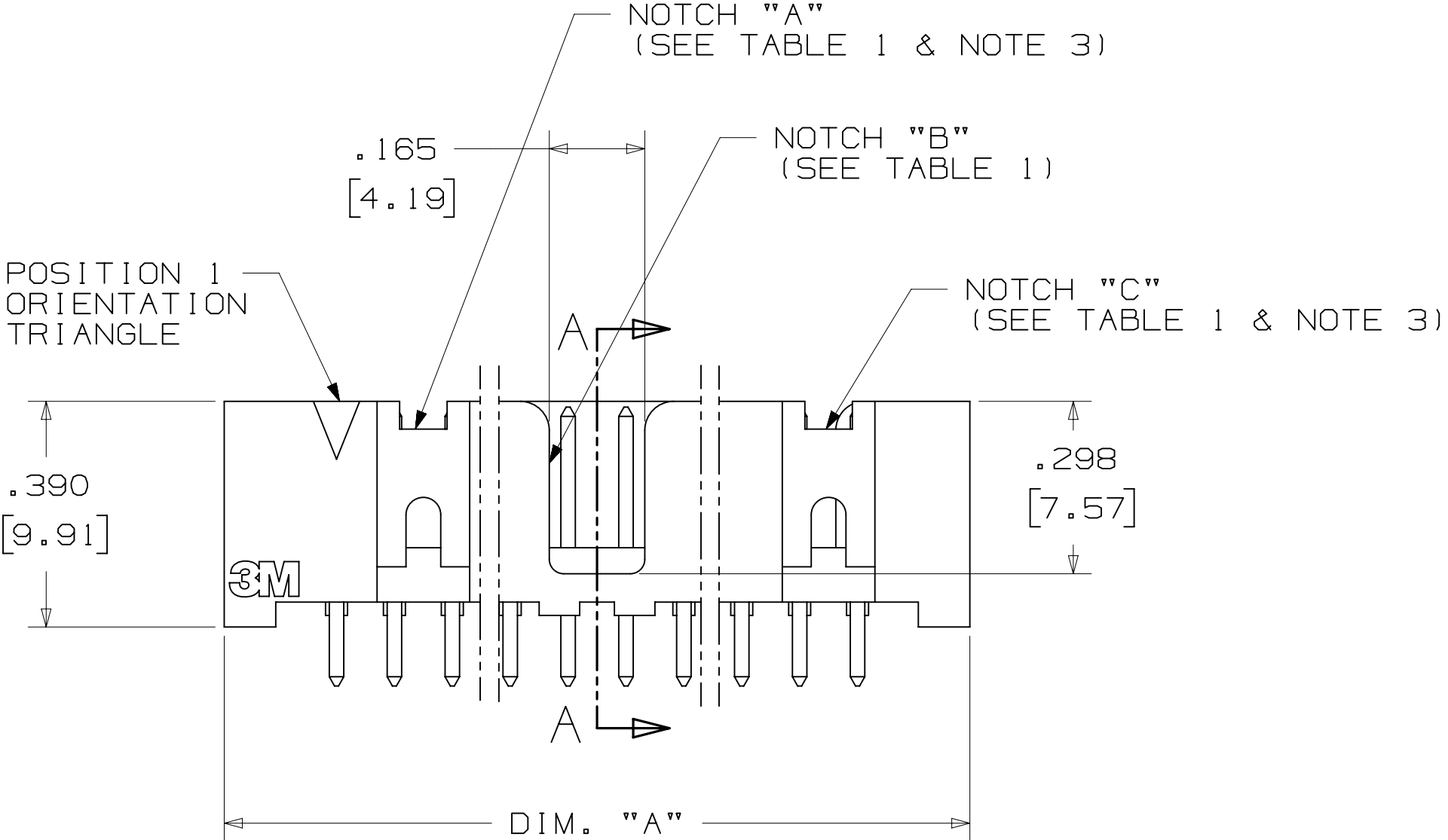
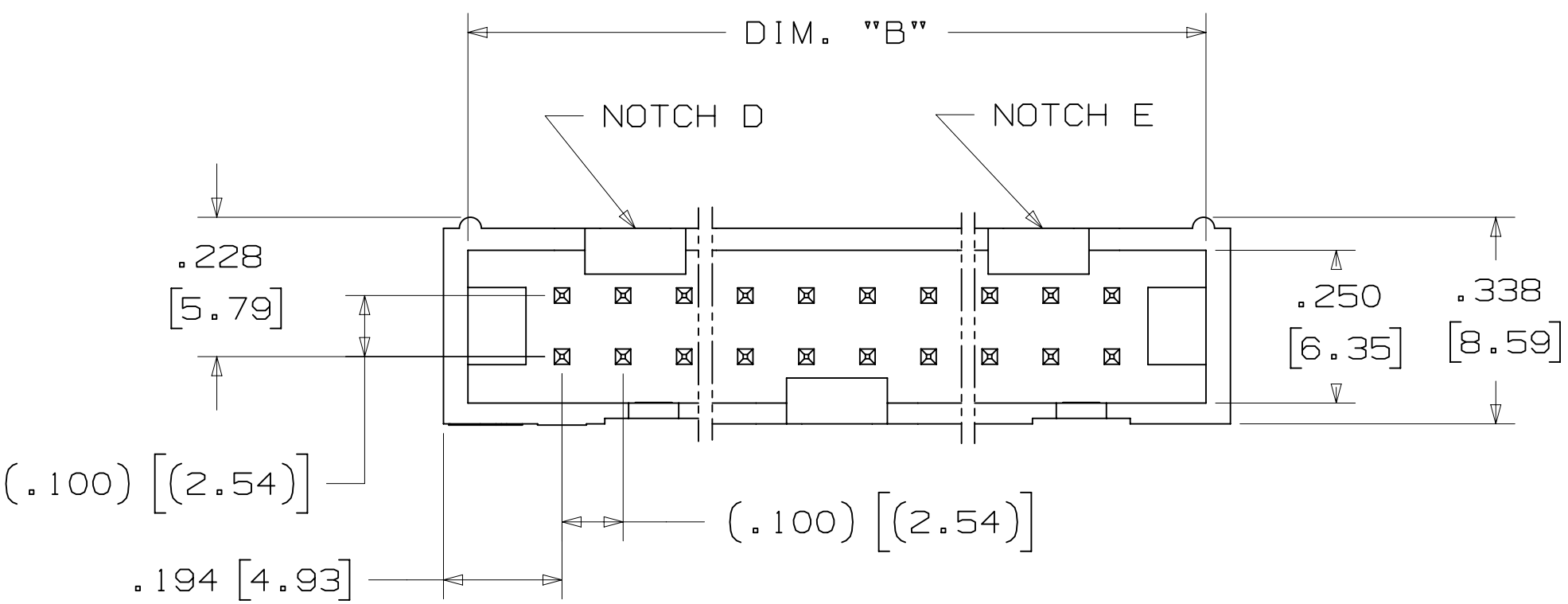


TABLE 1				
PIN QTY.	DIM. "A"	DIM. "B"	POLARIZING NOTCHES	PIN QTY.
06	.588 [14.94]	.508 [12.90]	B	06
08	.688 [17.48]	.608 [15.44]	B	08
10	.788 [20.02]	.708 [17.98]	BC	10
14	.988 [25.10]	.908 [23.06]	BCDE	14
16	1.088 [27.64]	1.008 [25.60]	ABCDE	16
20	1.288 [32.72]	1.208 [30.68]	ABCDE	20
24	1.488 [37.80]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

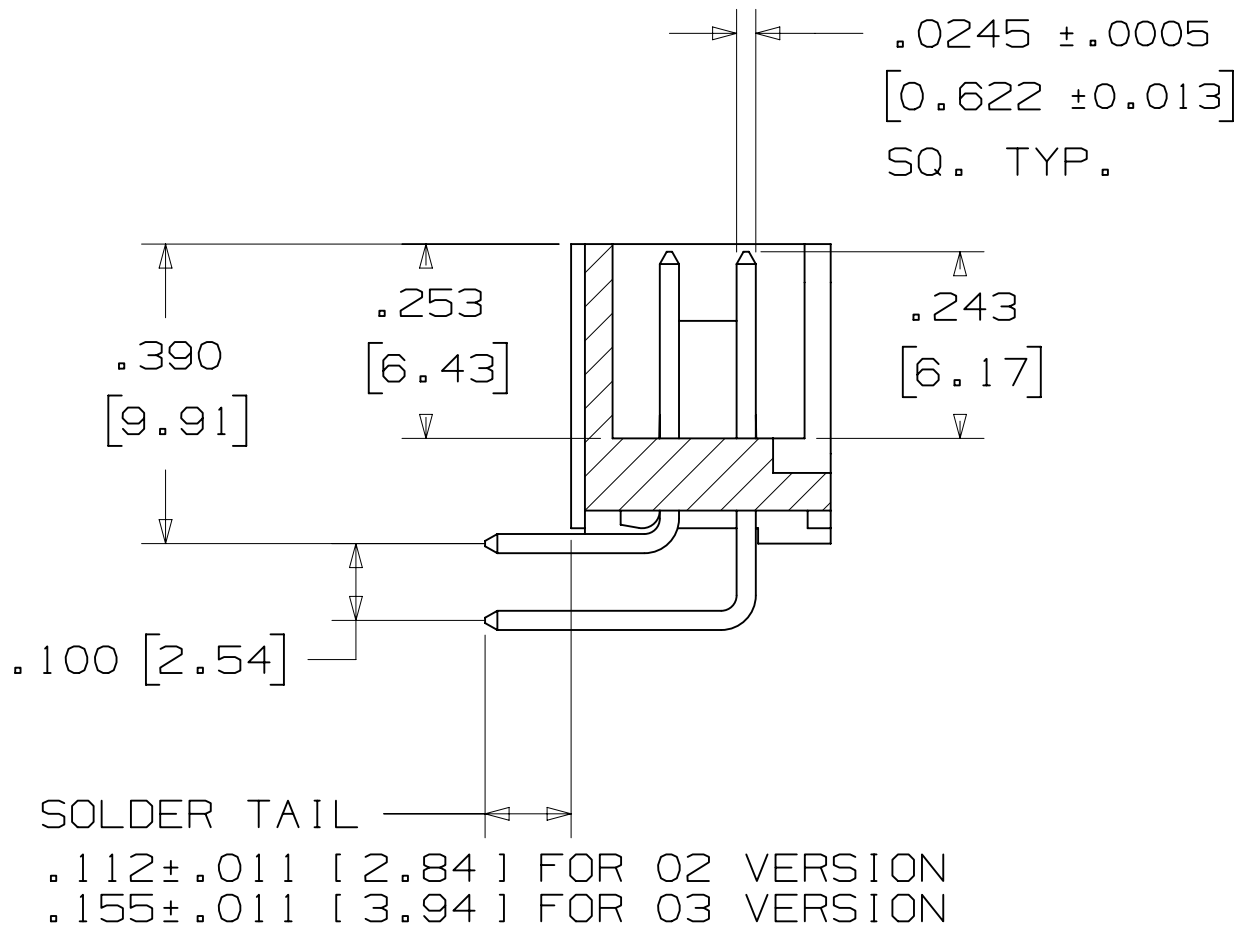
N= HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK= (UB OR UG PLATING)
PIN QUANTITY:
(SEE TABLE 1)
SOLDER TAIL:
02 = FOR .062 [1.57] THICK BOARD
03 = FOR .094 TO .125 [2.39 TO 3.18]
THICK BOARD

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

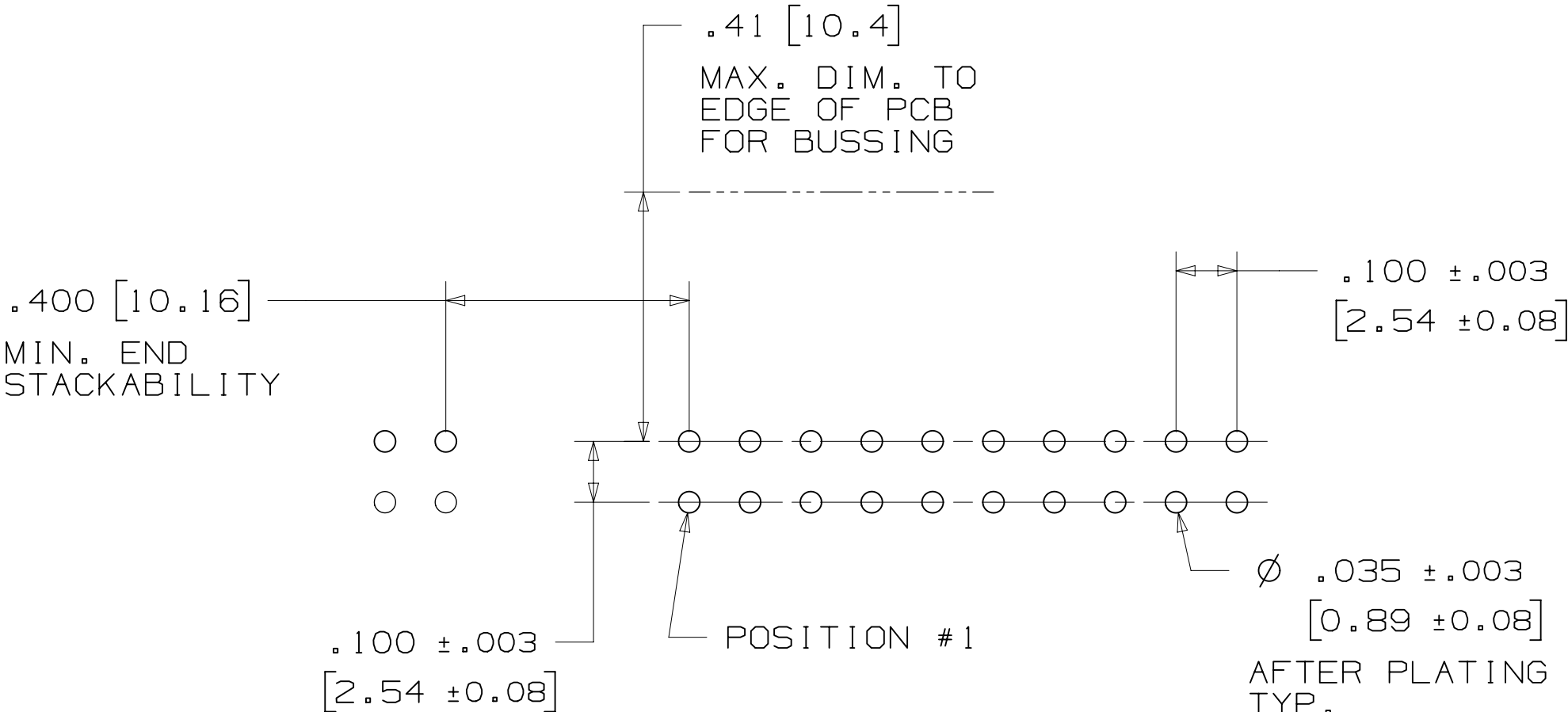
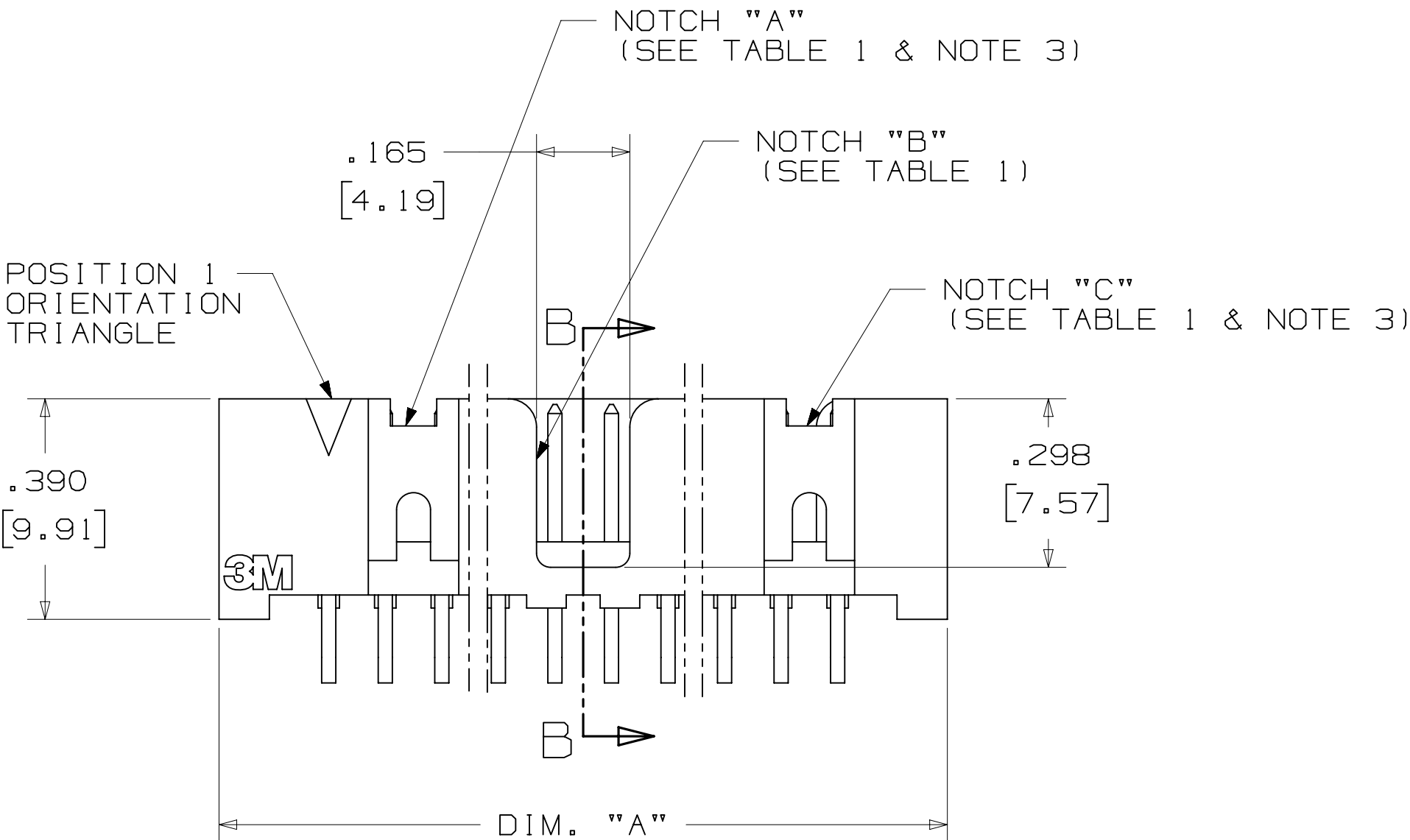
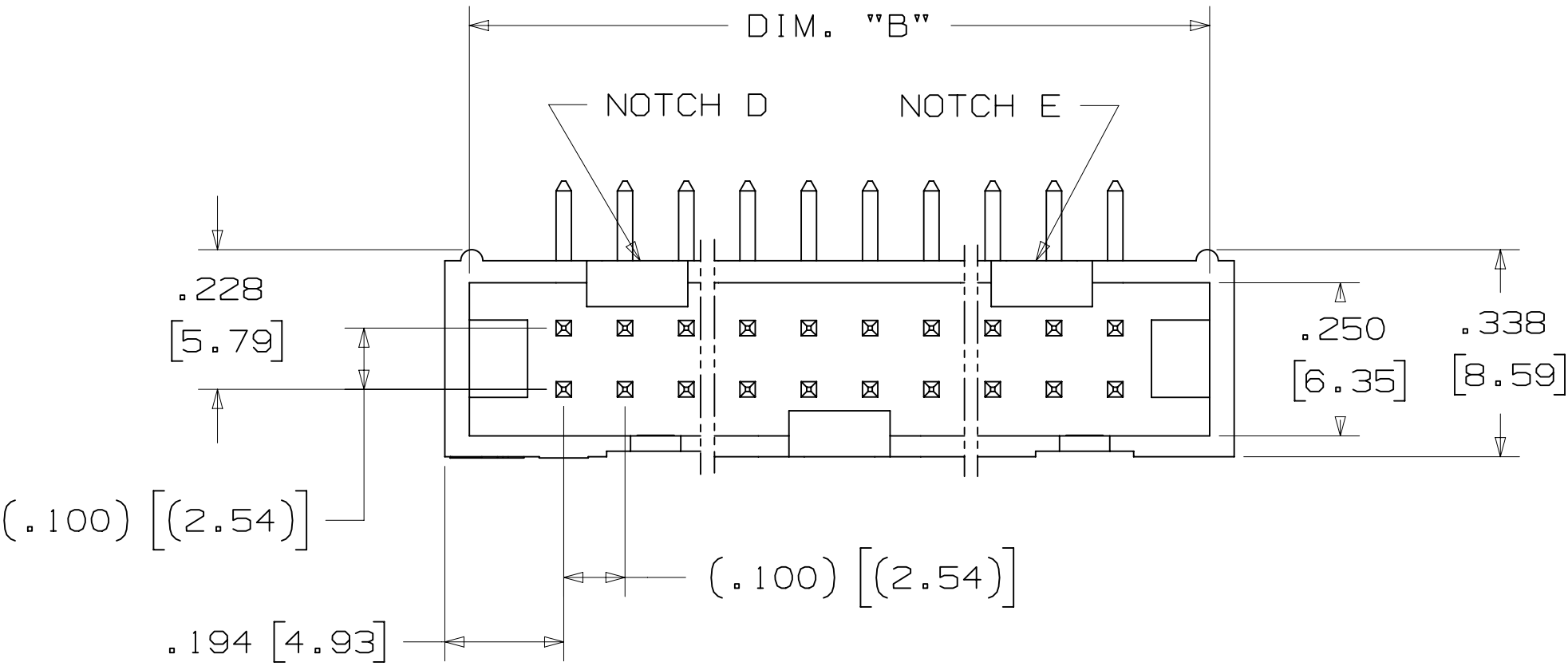
X25XX-50XX-XX

N= HIGH TEMP BLACK (PCT)
(RB, UB OR UG PLATING REQ'D)
BLANK= (UB OR UG PLATING)

PIN QUANTITY:
(SEE TABLE 1)

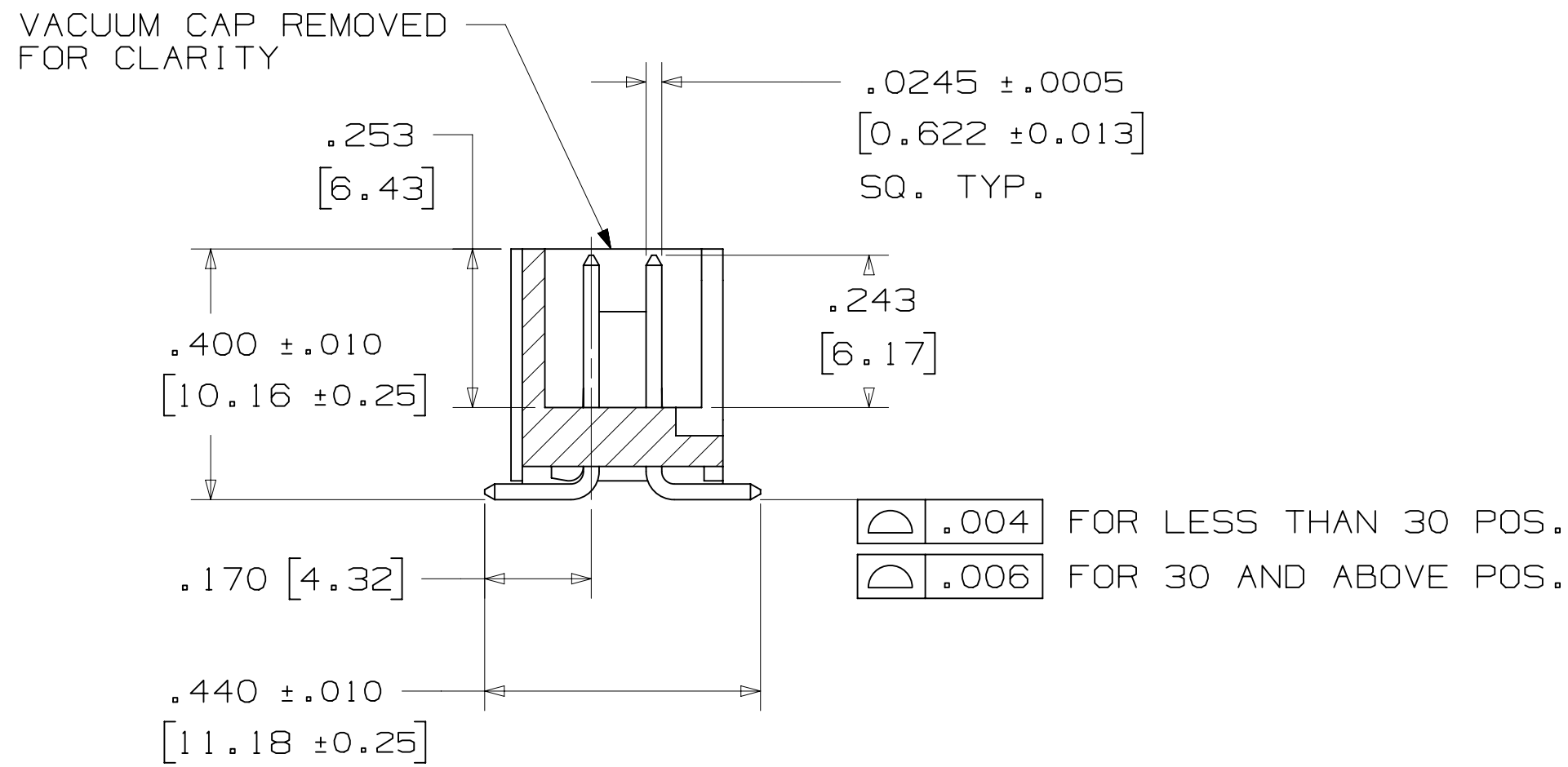
SOLDER TAIL:
02 = FOR .062 [1.57] THICK BOARD
03 = FOR .094 TO .125 [2.39 TO 3.18] THICK BOARD

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		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											



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

ORDERING INFORMATION
SURFACE MOUNT VERSION

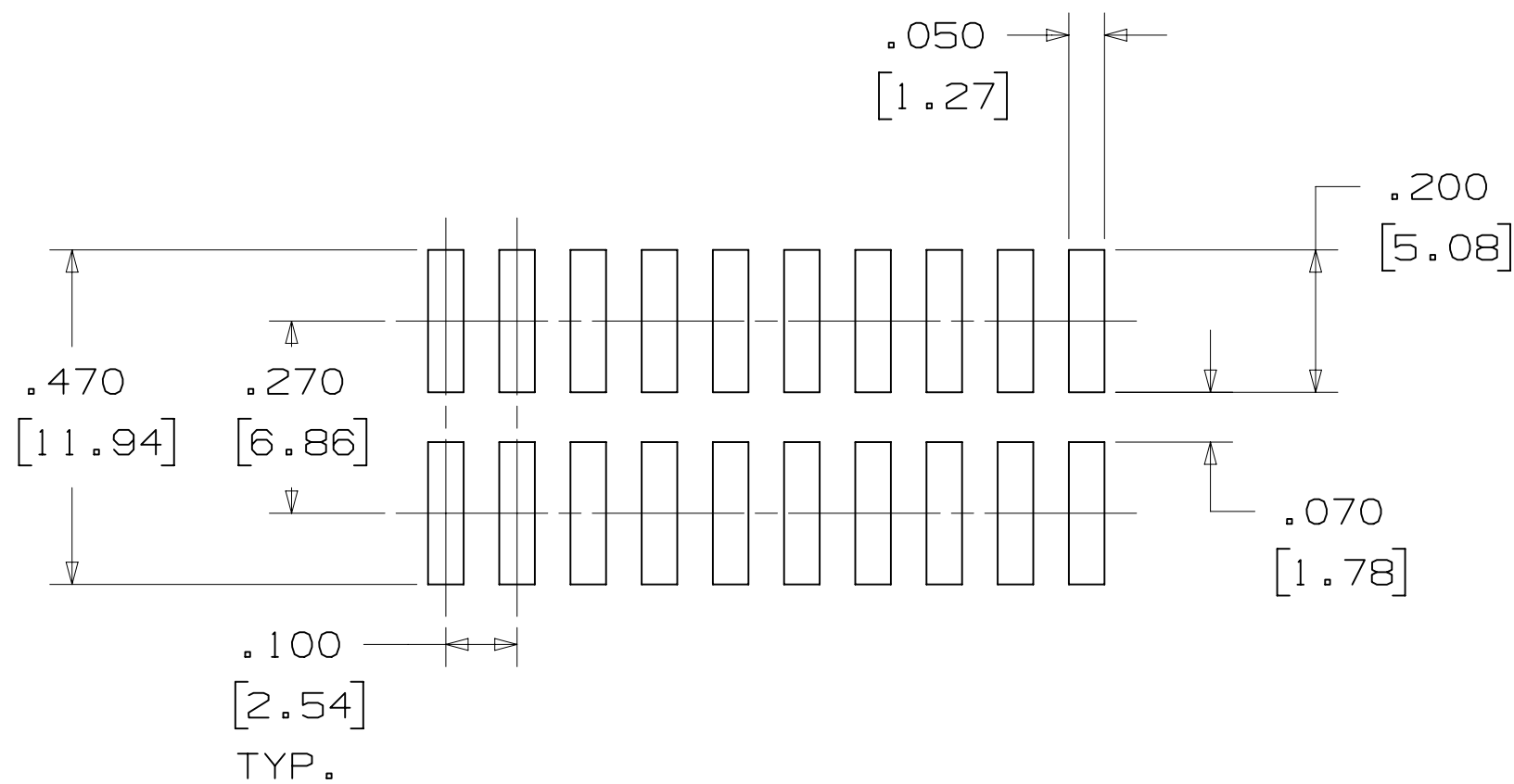
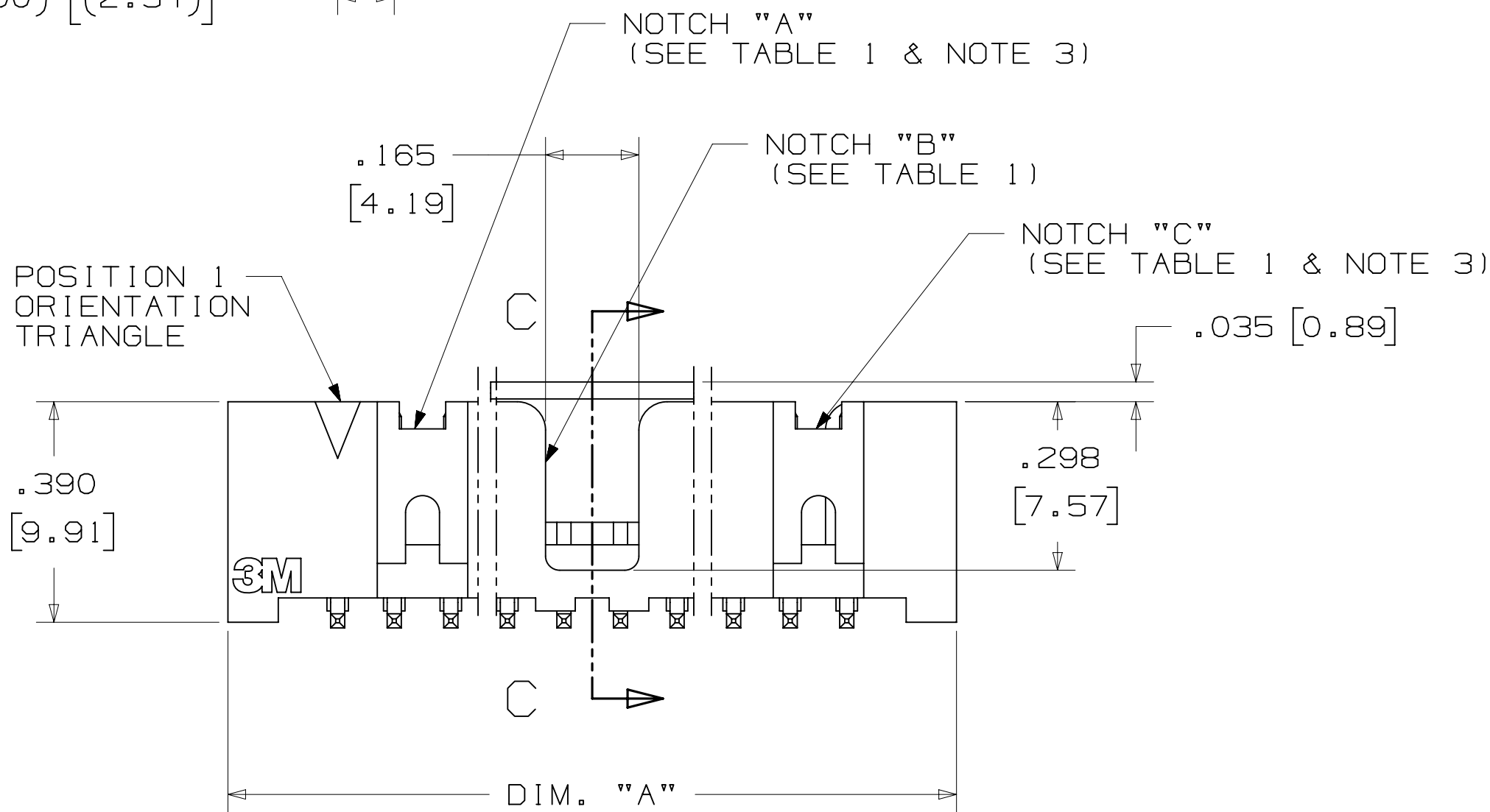
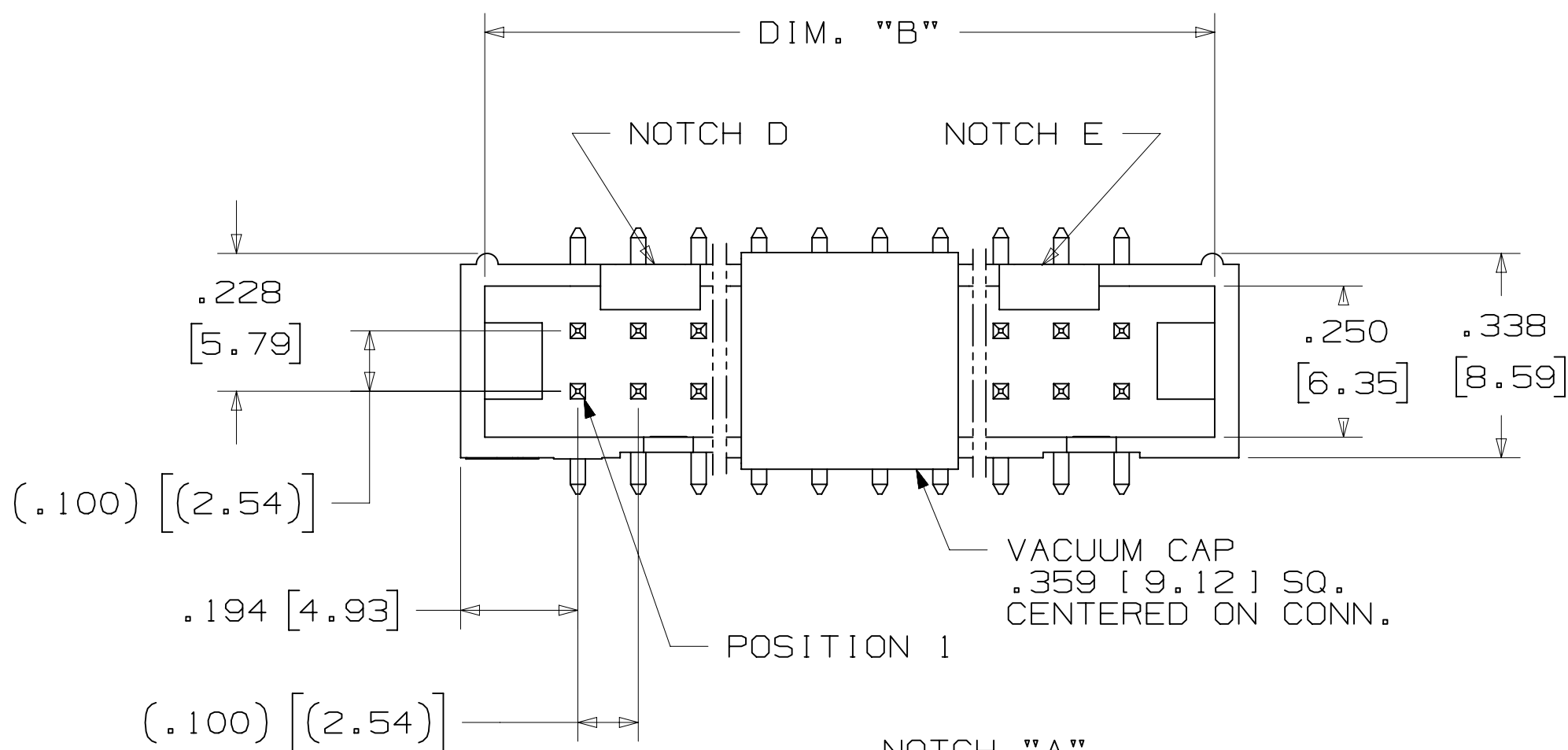
N25XX-6VOC-XX-XX

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 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		AUG 11, 2014		AUG 11, 2014		SEP 05, 2014			
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		3M		© 3M COPYRIGHT 2015			
THIRD ANGLE PROJECTION		INCHES .00 ±.01 .000 ±.005 .0000 ±		MILLIMETERS 0 ±.3 .00 ±.13 .000 ±		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.			
MAX SURFACE ROUGHNESS		SURFACES		CAGE NUMBER		SIZE		DRAWING NO.		REV.	
MARKED ONLY		ANGLES		D 78-5100-0770-7		M		MODEL		REV.	
				3000 SERIES		DET		YES		NO	
				SHT 4 OF 5							

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.

Technical drawing of a 3M Breakaway Tab. The drawing includes a top view and a side view.

Top View:

- Callout bubble: 3M
- Dimension: (.34) [8.5] (Total height)
- Dimension: .15 [3.8] (Width of base)

Side View:

- Callout: BREAKAWAY TAB
- Dimension: .09 [2.3] (Thickness)
- Dimension: DIM. "A" (Length)

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

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

PART NO.	MATERIAL	COLOR
3505-33B	NYLON	BLACK

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

PART NO.	MATERIAL	COLOR
3201-3	PCT	BLACK

Diagram illustrating the dimensions and features of a clip:

- DIM. "A"**: Overall length of the clip.
- MAX. UNCOATED AREA (ON BOTH EDGES)**: Indicated by arrows pointing to the uncoated regions on the top and bottom edges.
- .2 ± .1**: Dimension of the uncoated area on the top edge.
- [5.1 ± 3]**: Dimension of the uncoated area on the bottom edge.
- ALTERNATE UNCOATED AREA**: Indicated by an arrow pointing to the uncoated region on the side edge.
- CLIP HEIGHT**: Indicated by an arrow pointing to the vertical dimension of the clip.
- CLIP CODE**: Indicated by an arrow pointing to the vertical dimension of the clip.

NOTE:
STAINLESS STEEL WITH GRAY POLYURETHANE COATING.

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]

3505-8XXX

CLIP HEIGHT CODE _____ PIN COUNT
0 = .31 [7.9] FOR SOCKETS (SEE TABLE)
WITHOUT STRAIN RELIEF
1 = .53 [13.5] FOR SOCKETS
WITH STRAIN RELIEF

DESIGN REFERENCE NEXT ASSEMBLY		M 56068 REV ECO		AUG 11, 2014 REVISED AND REDRAWN		JNC DRFT		RS CHKD	
ADDRESS CODES		QTY CAST 1 LGT ONE		DATE AUG 11, 2014		MFG DATE		DATE SEP 05, 2014	
DIVISION Interconnect Solutions		DIVISION CODE EMSD		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 the 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 HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA			
THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2009		INCHES .0 .001 .000 .0000		MILLIMETERS 0 .1 .00 .000		CAGE NUMBER D 78-5100-0770-7			
MAX SURFACE ROUGHNESS UNFINISHED SURFACES		.0 .1 .00 .000		SIZE DRAWINGS NO.		REV. M			
☒ MARKED ONLY		ANGLE		MODEL 3000 SERIES		DET. STS YES YES NO SHT 5 OF 5			