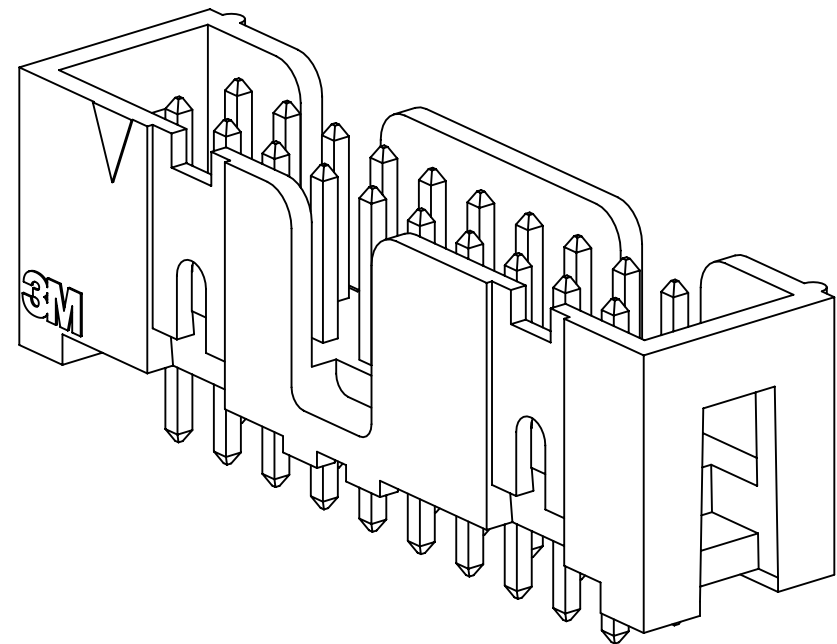


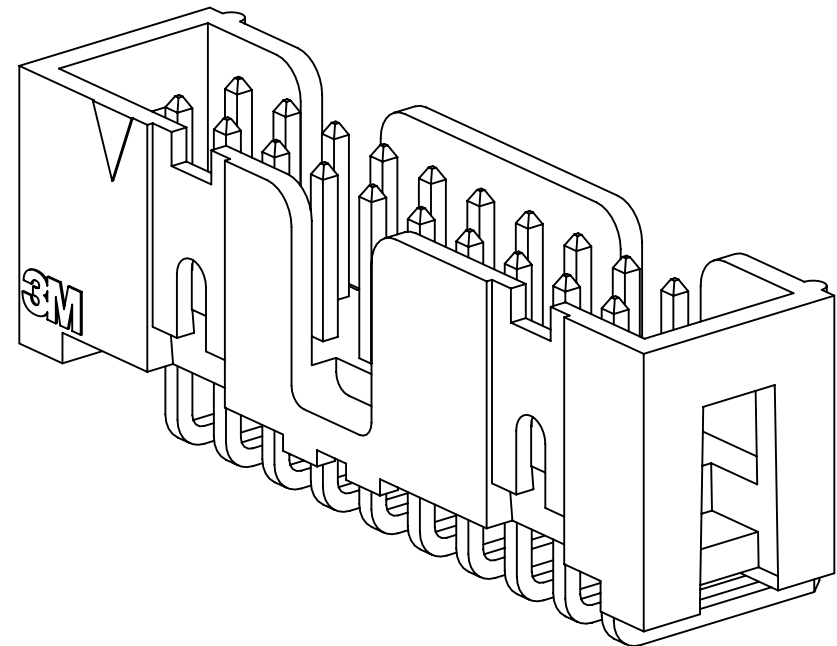
3M™ FOUR-WALL HEADER, 2500 SERIES

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



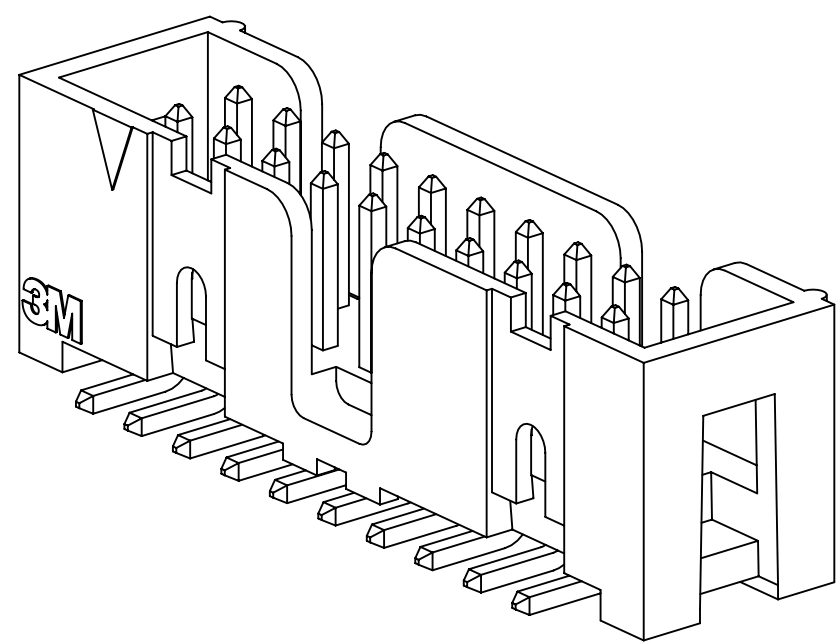
25XX - 60XX

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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INFORMATION CALL 800-225-5373

UL[®]
US
UL FILE NO: E68080

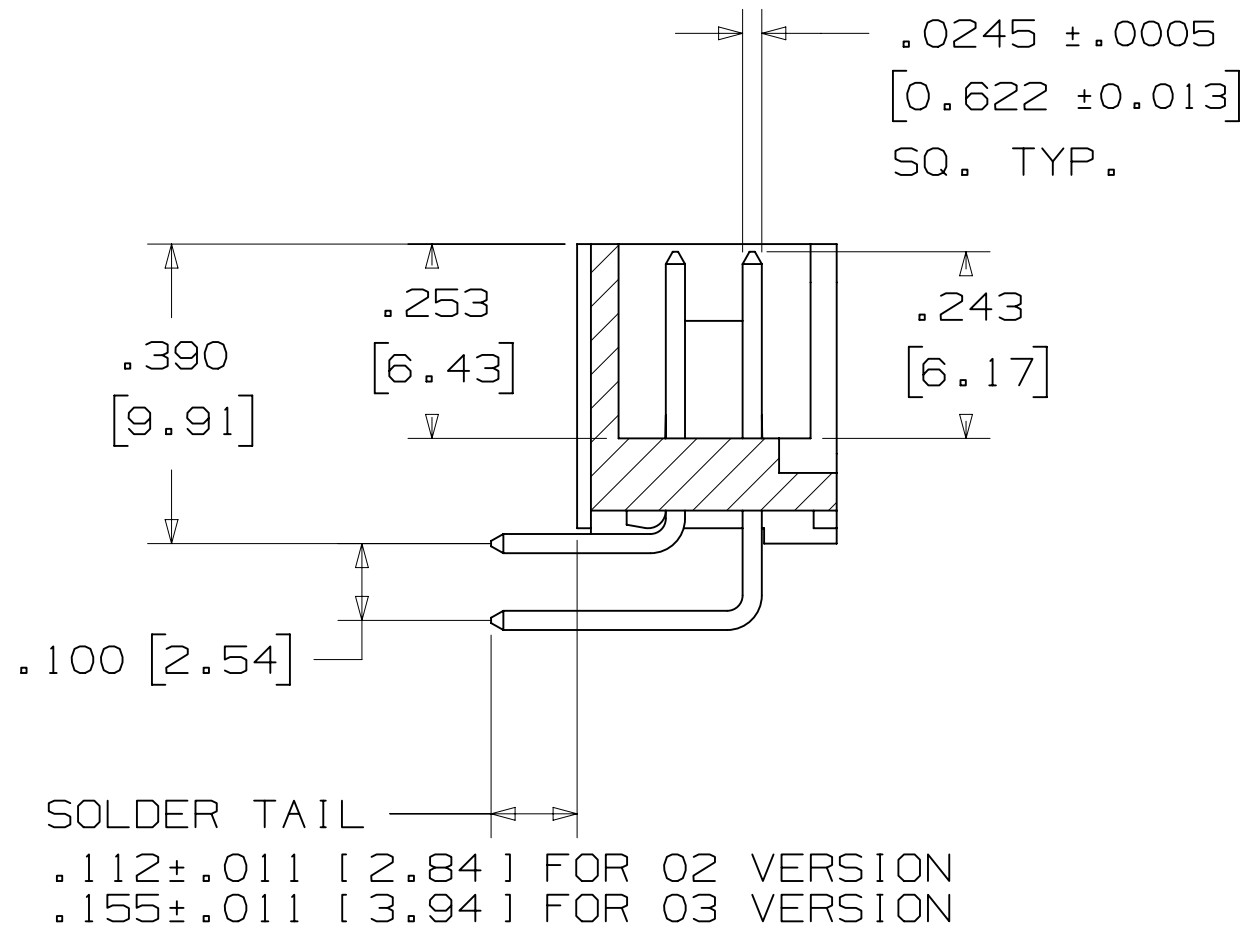
DIMENSIONS: INCHES [MM]) IS REF. ONLY		M 5606B		AUG 11, 2014		JNC		RS	
				REVISED AND REDRAWN					
DESIGN REFERENCE		NEXT ASSEMBLY		REV ECO		ISSUE DATE AND DESCRIPTION		DRFT CHKD	
ADDRESS CODES		DRFT CASTIGLIONE		DATE AUG 11, 2014		MFG		DATE	
		CHKD		DATE		APPVL R. SCHERER		DATE SEP 05, 2014	
DIVISION 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 be used, disclosed other than for 3M authorized purposes. All rights reserved.			
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED SCALE 4/1							
		INCHES .0 ± .01 .000 ± .005 .0000 ±		TITLE HEADER, 4-WALL, LO-PRO, .100 X .100, SMT, STRAIGHT & RA		NUMBER SIZE DRAWING NO. D 78-5100-0770-7			
THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS 0 ± .0 ± .3 .00 ± .13 .000 ±							
MAX SURFACE ROUGHNESS ✓ ☐ MARKED ONLY		ANGLES ±		MODEL 3000 SERIES		DET. LISTS ☒ YES ☐ NO		REV. SHT 1 OF 5	

C

A

Accepted: M 3 2/10/2015 8:32 AM ITC-06:00

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

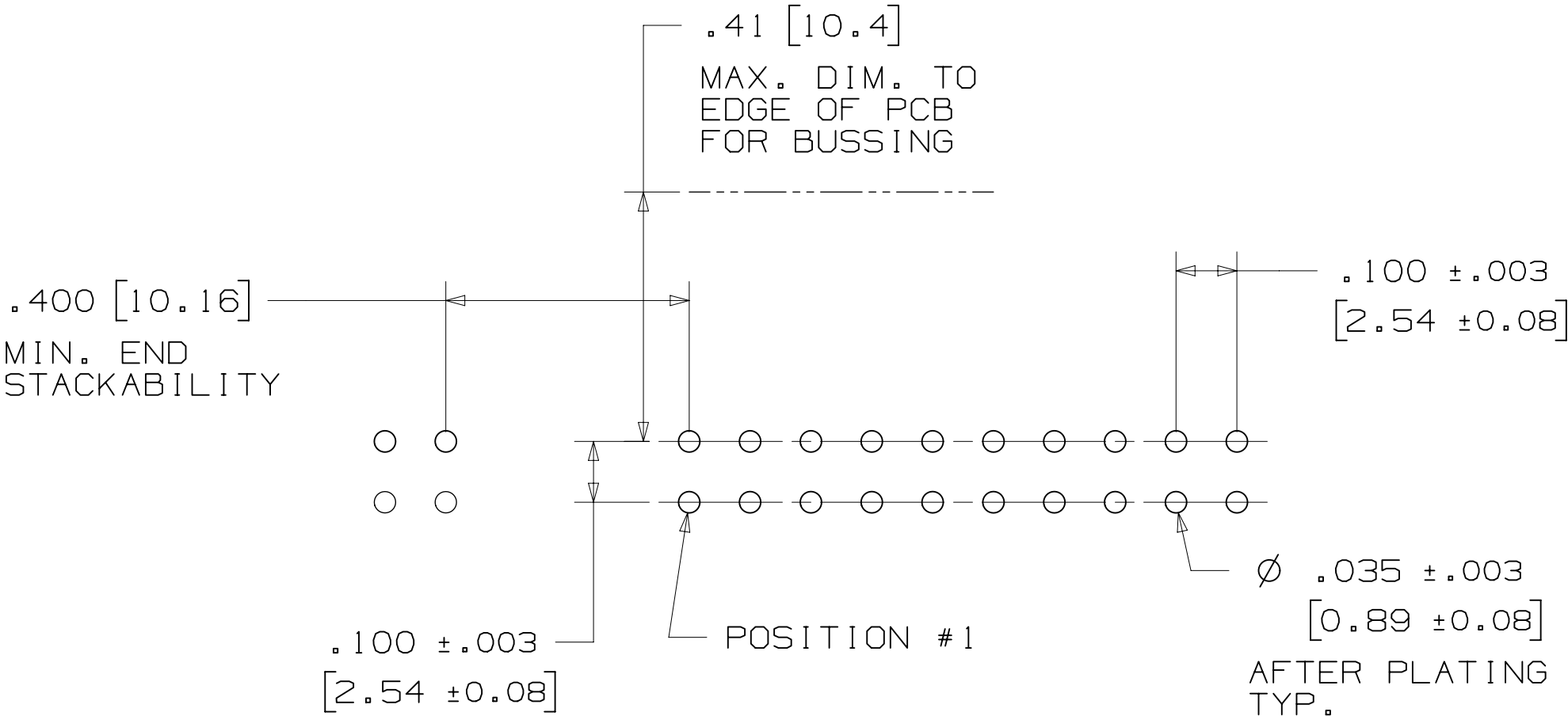
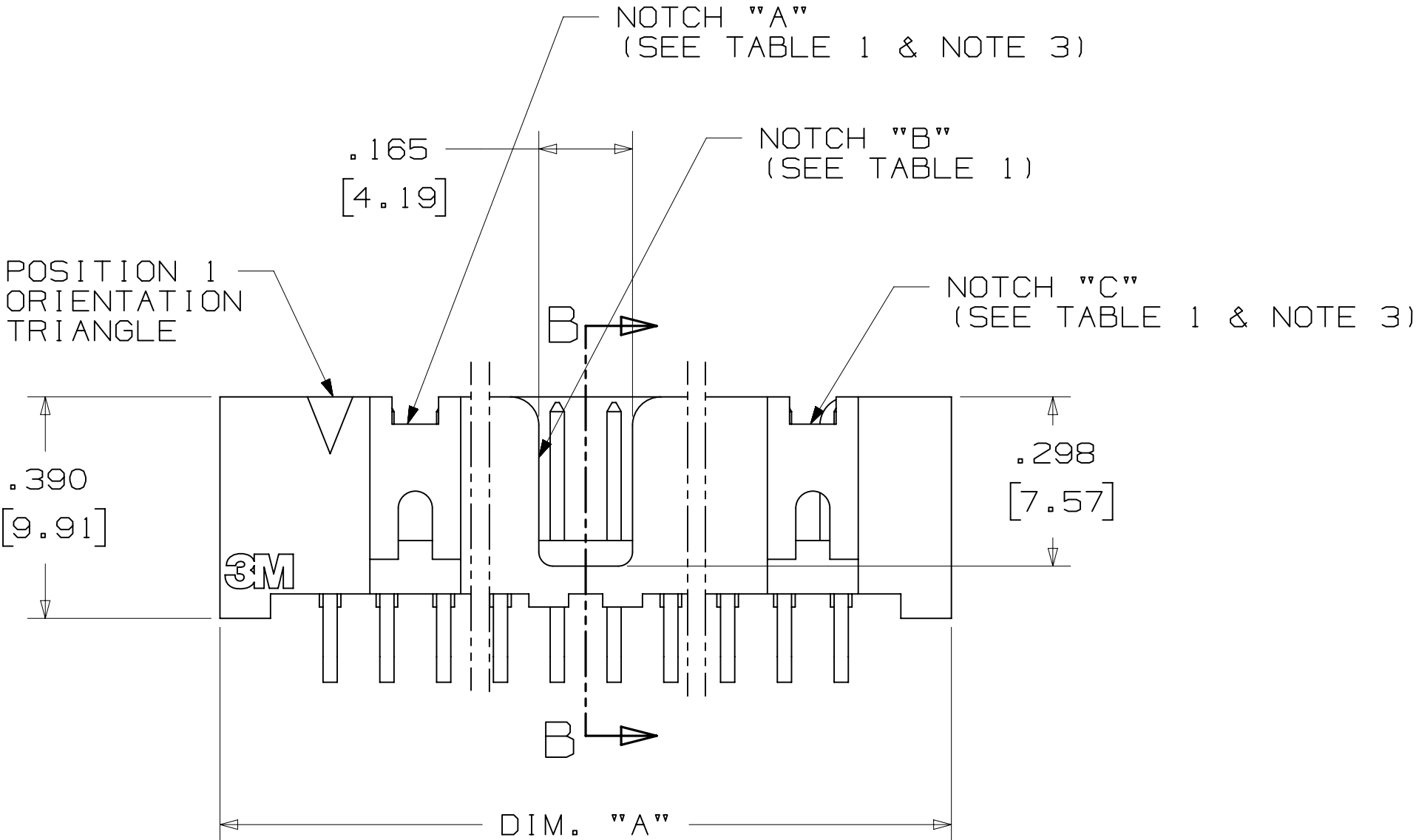
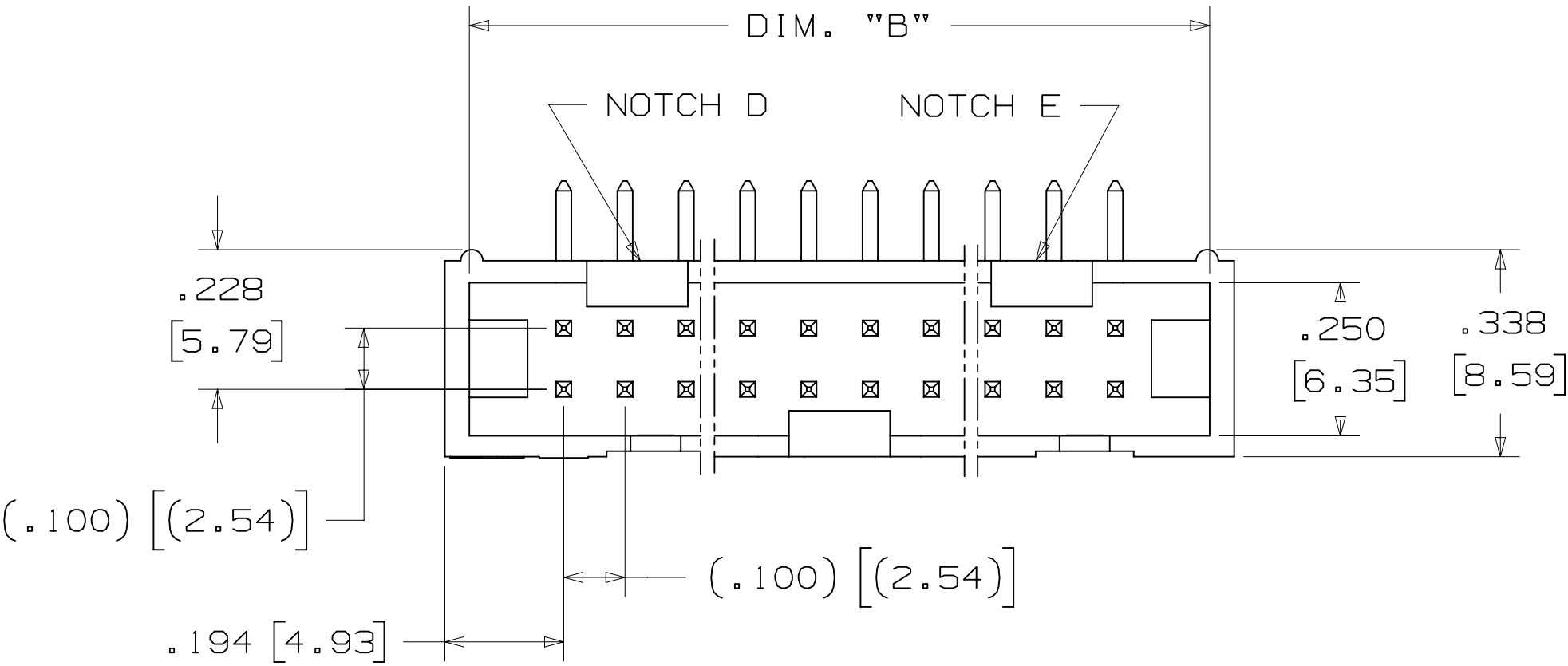
X25XX-50XX-XX

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

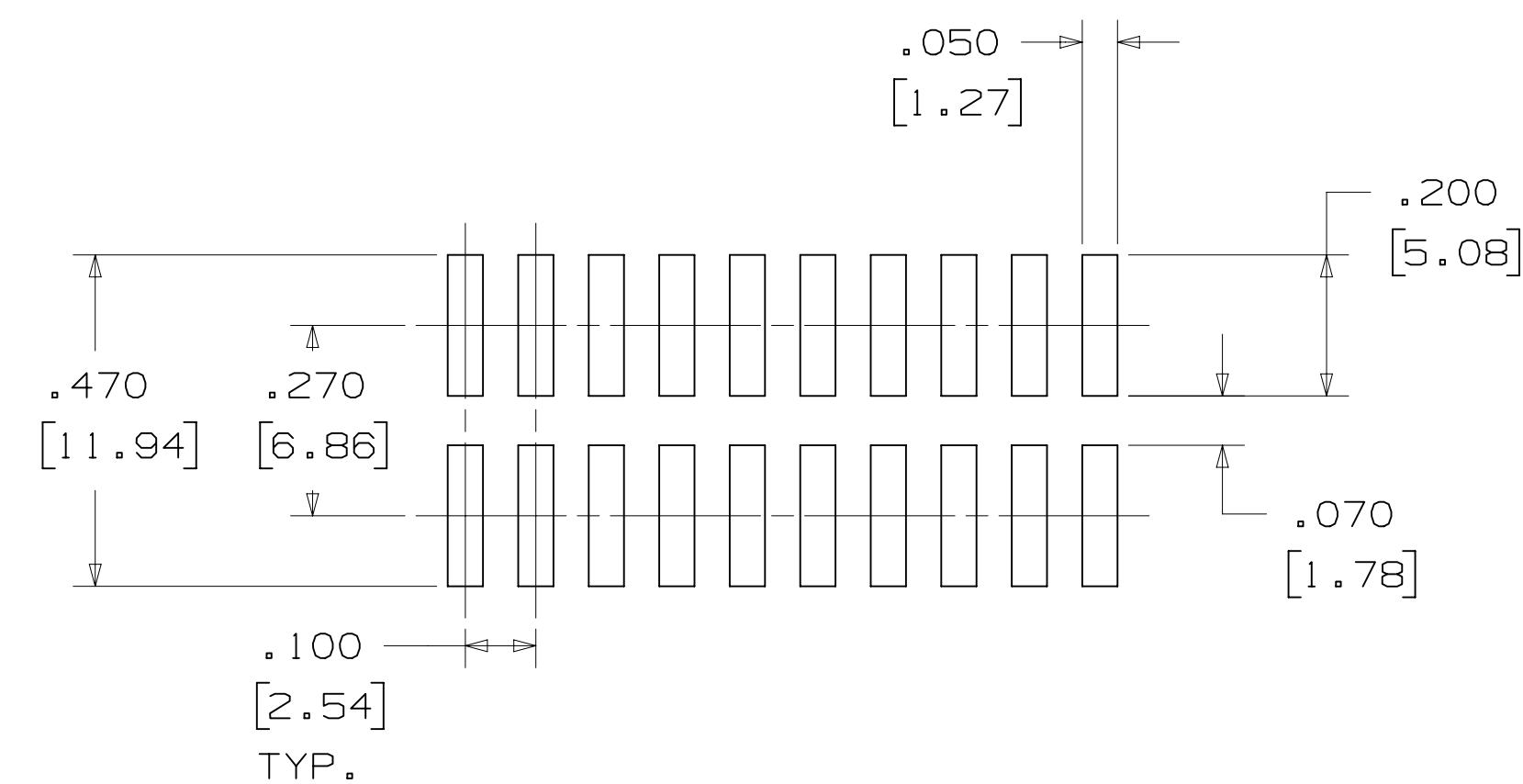
DESIGN REFERENCE		NEXT ASSEMBLY		M 56068		AUG 11, 2014		JNC		RS	
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD			
CUST CODES		CUST CODES		DATE		DATE		DATE		DATE	
DIVISION		DIVISION CODE		DATE		DATE		DATE		DATE	
Interconnect Solutions		EMSD		DATE		DATE		DATE		DATE	
DO NOT SCALE DRAWING		SCALE 4/1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .000 ±.005 .0000 ±		MILLIMETERS 0 ± .0 ±.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											



ORDERING INFORMATION

SURFACE MOUNT VERSION

- PLATING:
RB = 30 μ " [0.76 μ m] AVG. GOLD
200 μ " [5.08 μ m] 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				DRFT		CHKD	
REV				ECO				DATE		DATE	
CHKD				DATE				APPR.		DATE	
CHKD				DATE				APPR. R. SCHERER		DATE SEP 05, 2014	
DIVISION				DIVISION CODE				DIVISION			
Interconnect Solutions				EMSD				© 3M COPYRIGHT 2015			
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DRAWING				3M				3M Center 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				M				REV.			
MARKED ONLY				MODEL				3000 SERIES			
ANGLES				DET. LISTS				YES X NO			
ANGLES				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 Dimensions:

- Slot Width: (.34)
- Slot Length: [(8.5)]
- Base Width: .15 [(3.8)]

Side View Dimensions:

- Tab Thickness: .09 [2.3]
- Total Height: DIM. "A"

A leader line points to the top edge of the tab, labeled **BREAKAWAY TAB**.

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

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

Technical drawing of a mechanical part, showing two views: a front view (left) and a side view (right). Dimensions are provided in inches and millimeters.

Front View (Left):

- Top horizontal dimension: .144 [3.66]
- Left vertical dimension: .830 [21.08]
- Right vertical dimension: .573 [14.55]
- Bottom horizontal dimension: .057 [1.45]

Side View (Right):

- Top horizontal dimension: .204 [5.18]
- Right vertical dimension: .043 [1.09]
- Bottom horizontal dimension: .118 [3.00]

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

The diagram illustrates a U-channel cross-section with the following labeled dimensions and features:

- DIM. "A"**: The total width of the channel at the top flange.
- MAX. UNCOATED AREA (ON BOTH EDGES)**: Points to the top edges of the channel flange.
- CLIP HEIGHT**: The vertical height of the channel leg.
- CLIP CODE**: A label for the clip height dimension.
- ALTERNATE UNCOATED AREA**: Points to the bottom edge of the channel leg.
- Dimensions for the bottom edge**:
 - $.2 \pm .1$: A small offset dimension.
 - $[5.1 \pm .3]$: The width of the bottom edge of the channel leg.

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	56088	AUG 11, 2014		JNC	RS
REV				ECO	REVISED AND REDRAWN				
APPROVAL		DATE		APPROVAL		DATE		DATE	
CASTIGLIONE		AUG 11, 2014		SCHERER		SEP 05, 2014			
DIVISION				DIVISION CODE		DATE			
Interconnect Solutions				ENSD					
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 .00		0 .3					
ON ALL SURFACES		0 .00		0 .13					
☒ MARKED ONLY		ANGLE		B					
3M				3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2015			
TITLE				LO-PRO, 4-WALL, SMT, STRAIGHT & RA		This document and information it contains are 3M property and may not be reproduced or further distributed without the express written consent of 3M. All rights reserved.			
CAGE NUMBER		SIZE		DRAWING NO.		REV.			
D		78-5100-0770-7		M					
MODEL		3000 SERIES		DET		YES		NO	