

.100" X .100" LATCH/EJECTOR, STRAIGHT AND RIGHT ANGLE



X3XXX-XXXXXX

UL[®]
US
UL FILE NO: E68080

- * MILITARY (WITH 3M'S N3518 POLARIZING KEY) AND CENTERBUMP POLARIZATION.
- * LOW PROFILE.
- * OPTIONAL EJECTOR LATCHES.
- * MOUNTING HOLES FOR SECURING HEADER TO BOARD.
- * THREE WALL SHROUD PROVIDES DESIGN FLEXIBILITY.
- * SOLDER TAIL AND WRAP TAIL OPTIONS.
- * OPTIONAL POLARIZING POSTS AVAILABLE.
- * HIGH TEMPERATURE INSULATOR SUITABLE FOR "NO LEAD" SOLDERING OPERATIONS.
- * TECHNIQUE FOR REFLOW SOLDERING USING "PASTE IN HOLE" TECHNIQUES.

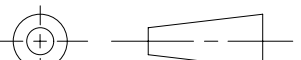
INSULATOR:
MATERIAL: GLASS FILLED POLYESTER (PCT)
FLAMMABILITY: UL94V-0
COLOR: BLACK
CONTACT:
MATERIAL: COPPER ALLOY
PLATING:
UNDER PLATING: 100μ" [2.54μm] NICKEL-OVERALL
WIPING AREA: 30μ" [0.76μm] AVG. GOLD
SOLDER TAILS: 200μ" [5.08μm] TIN LEAD OR MATTE TIN (SEE ORDERING INFORMATION)
MARKINGS: 3M LOGO, PART IDENTIFICATION NUMBER AND ORIENTATION TRIANGLE

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.
ON-STATE RESISTANCE: $>1 \times 10^9 \Omega$ AT 500 V_{DC}
STANDING VOLTAGE: 1,000V_{RMS} AT SEA LEVEL

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
CONTAINED IN 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. MOUNTING HARDWARE:
FROM SOLDER SIDE OF PC BOARD
USE #4-24 THREAD CUTTING SCREW
(3M PART #3341-5) WITH
 $\varnothing .116 [2.95]$ MOUNTING HOLE.
FOR RIGHT ANGLE VERSION ONLY:
#2-56 BOLT AND NUT (3M PART
#3341-6) WITH $\varnothing .106 [2.69]$
MOUNTING HOLE MAY BE USED.
5. THE RECOMMENDED PCB HOLE SIZE
FOR THE KINKED TAIL POSITIONS
ON THE .112 SOLDER TAIL
CONNECTOR IS $\varnothing .035 \pm .002$.
(SEE K2 VERSION).

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACCESS CODES				DRFT	CASTIGLIONE		DATE	MFG	DATE
				CHKD			DATE	APPRV. R. SCHERER	DATE SEP 05, 2014
DIVISION		DIVISION CODE		 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 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.		
Interconnect Solutions		EMSD							
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED INCHES .00 ± .01 .000 ± .005 .0000 ±							
 THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS .0 ± .3 .00 ± .13 .000 ±		TITLE HEADER, 3-WALL, .100 X .100 LATCH/EJECTOR, STRAIGHT & RA			CAGE NUMBER D 78-5100-0771-5		REV. H
MAX SURFACE ROUGHNESS MIN SURFACES ☒ MARKED ONLY		ANGLES		MODEL 3000 SERIES			DET. STS ☐ YES ☒ NO		SHT 1 OF 4

3M™ THREE-WALL HEADER, 3000 SERIES

.100" X .100" LATCH/EJECTOR, STRAIGHT AND RIGHT ANGLE

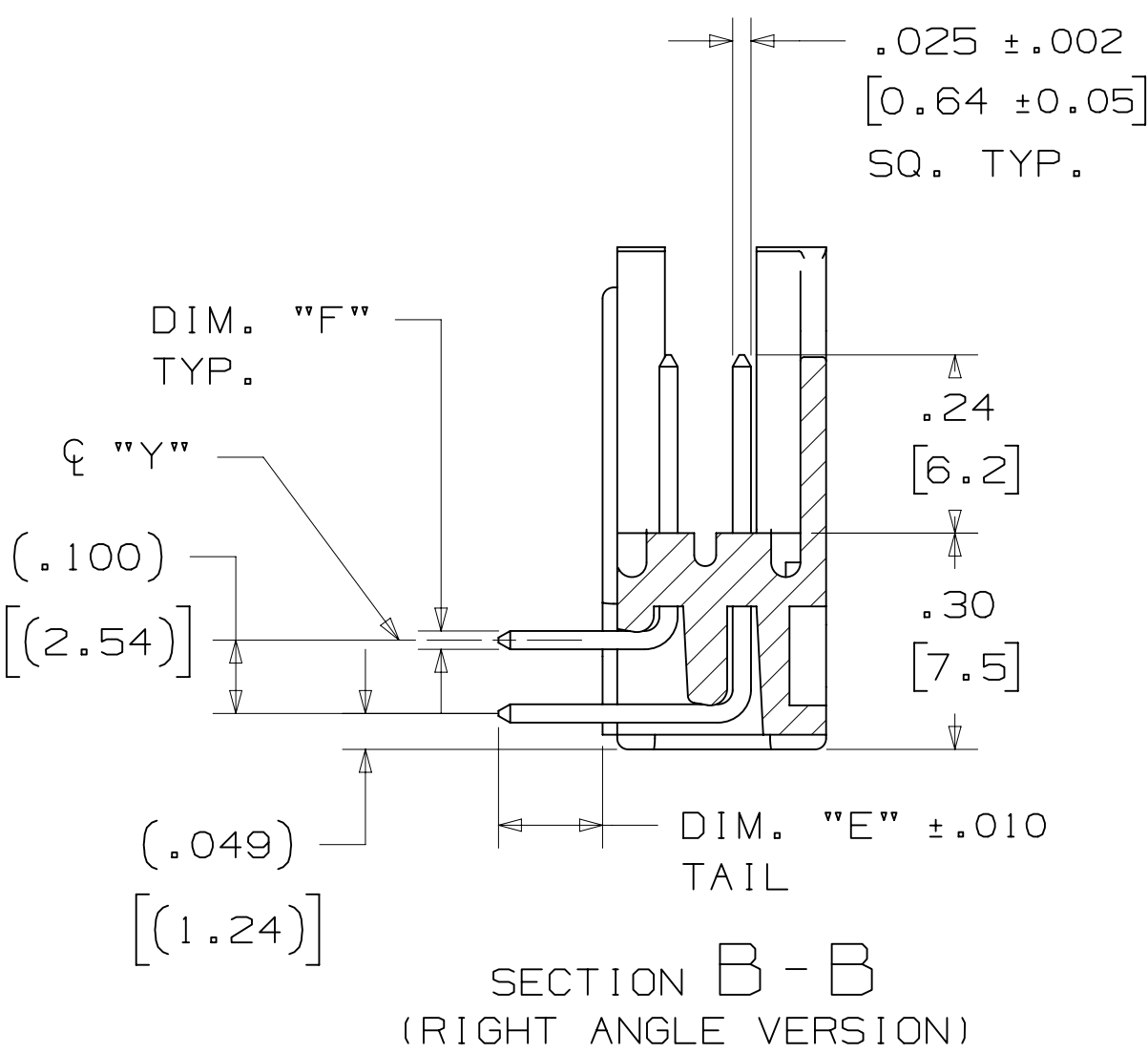
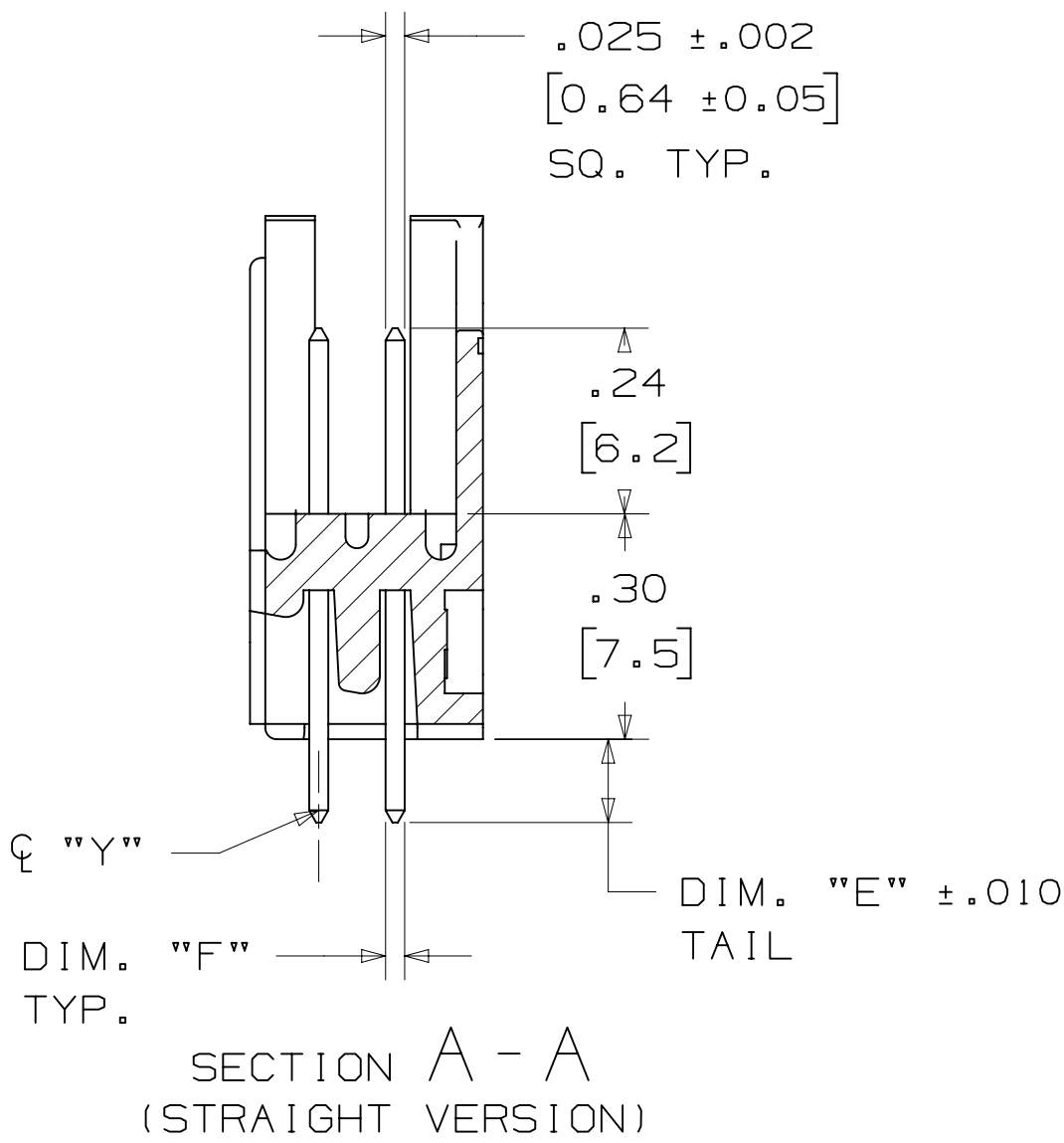
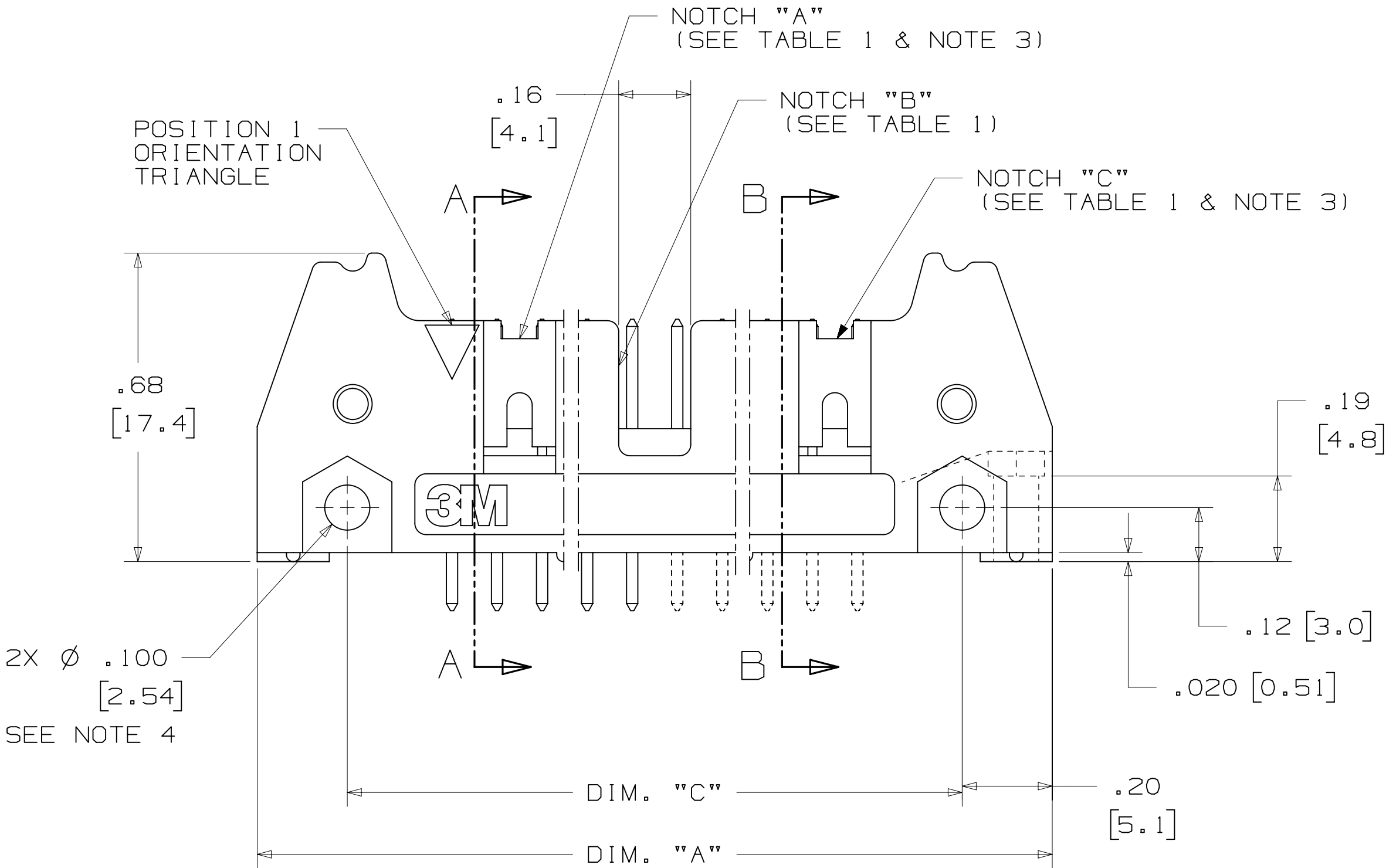
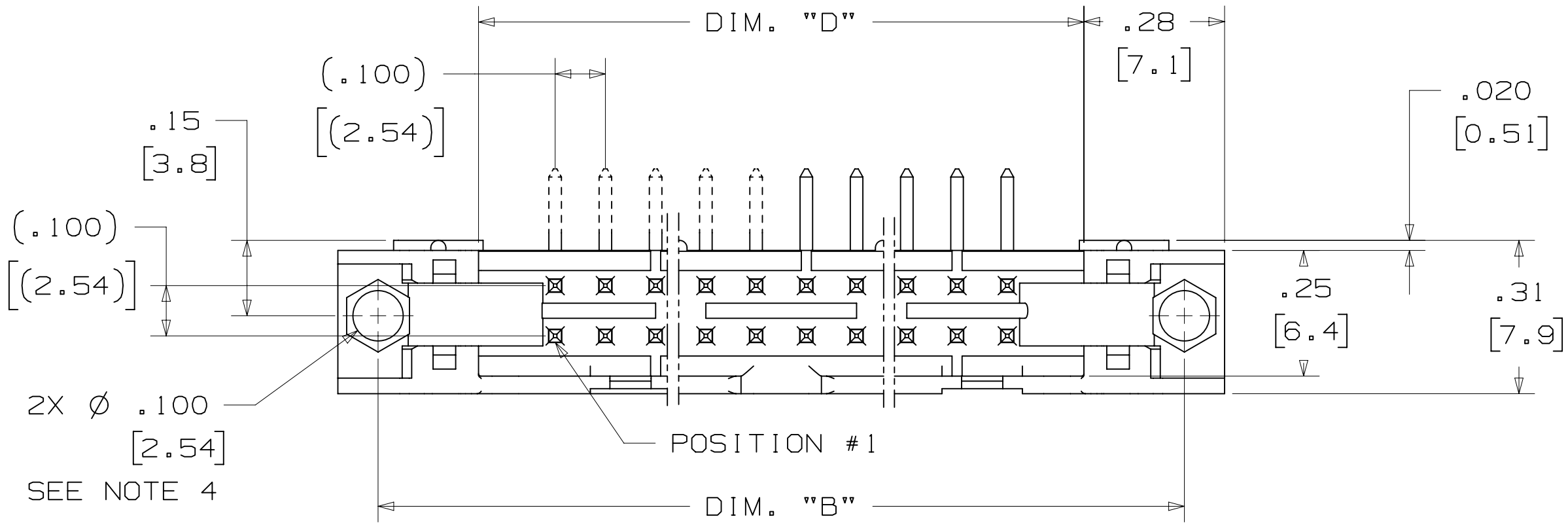


TABLE 1							
PIN QTY.	3M PART NUMBER	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	POLARIZING NOTCHES	PIN QTY.
10	3793	1.26 [32.1]	1.105 [28.04]	.865 [21.97]	.71 [18.0]	BC	10
14	3314	1.46 [37.2]	1.305 [33.12]	1.065 [27.05]	.91 [23.1]	BC	14
16	3408	1.56 [39.7]	1.405 [35.66]	1.165 [29.59]	1.01 [25.6]	ABC	16
20	3428	1.76 [44.8]	1.604 [40.74]	1.365 [34.67]	1.21 [30.7]	ABC	20
26	3429	2.06 [52.4]	1.905 [48.36]	1.665 [42.29]	1.51 [38.3]	ABC	26
34	3431	2.46 [62.6]	2.305 [58.52]	2.065 [52.45]	1.91 [48.5]	ABC	34
40	3432	2.76 [70.2]	2.605 [66.14]	2.365 [60.07]	2.21 [56.1]	ABC	40
50	3433	3.26 [82.9]	3.105 [78.84]	2.865 [72.77]	2.71 [68.8]	ABC	50
60	3372	3.76 [95.6]	3.605 [91.54]	3.365 [85.47]	3.21 [81.5]	ABC	60
64	3764	3.96 [100.7]	3.805 [96.62]	3.565 [90.55]	3.41 [86.6]	ABC	64

TABLE 2						
3M PART NUMBER SUFFIX	CONTACT TAIL	DIM. "E"	PIN CROSS SECTION			DIM. "G"
-1XX2 -2XX2	.062 [1.57] THICK PC BOARD	.112 [2.84]	DIM. "F" .0245+/- .0005 [.622]	DIAGONALS .028+/- .001 [.71]	CORNER RADIUS .0075 REF. [.191]	.035+/- .003 [.89] SEE NOTE 5
-1X03 -2X03	.094 [2.39] TO .125 [3.18] THICK PC BOARD	.155 [3.94]	.0245+/- .0005 [.622]	.028+/- .001 [.71]	.0075 REF. [.191]	.035+/- .003 [.89]



DESIGN REFERENCE
NEXT ASSEMBLY

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

MAX SURFACE ROUGHNESS
LISTED SURFACES
MARKED ONLY

INTERCONNECT SOLUTIONS

SCALE 4/1

INTERPRET PER ASME Y14.5 - 2009

TOLERANCES EXCEPT AS NOTED

INCHES
0 ± .01
.000 ± .005
.0000 ±

MILLIMETERS
0 ± .3
.00 ± .13
.000 ±

ANGLES

3M

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TITLE
HEADER, 3-WALL, .100 X .100 LATCH/EJECTOR, STRAIGHT & RA

CAGE NUMBER
D78-5100-0771-5

MODEL
3000 SERIES

REV. ECO
DATE
AUG 05, 2014

ISSUE DATE AND DESCRIPTION
REVISED AND REDRAWN

DATE
AUG 05, 2014

DATE
SEP 05, 2014

DRFT
DATE

CHKD
DATE

APPR
R. SCHERER

DATE
SEP 05, 2014

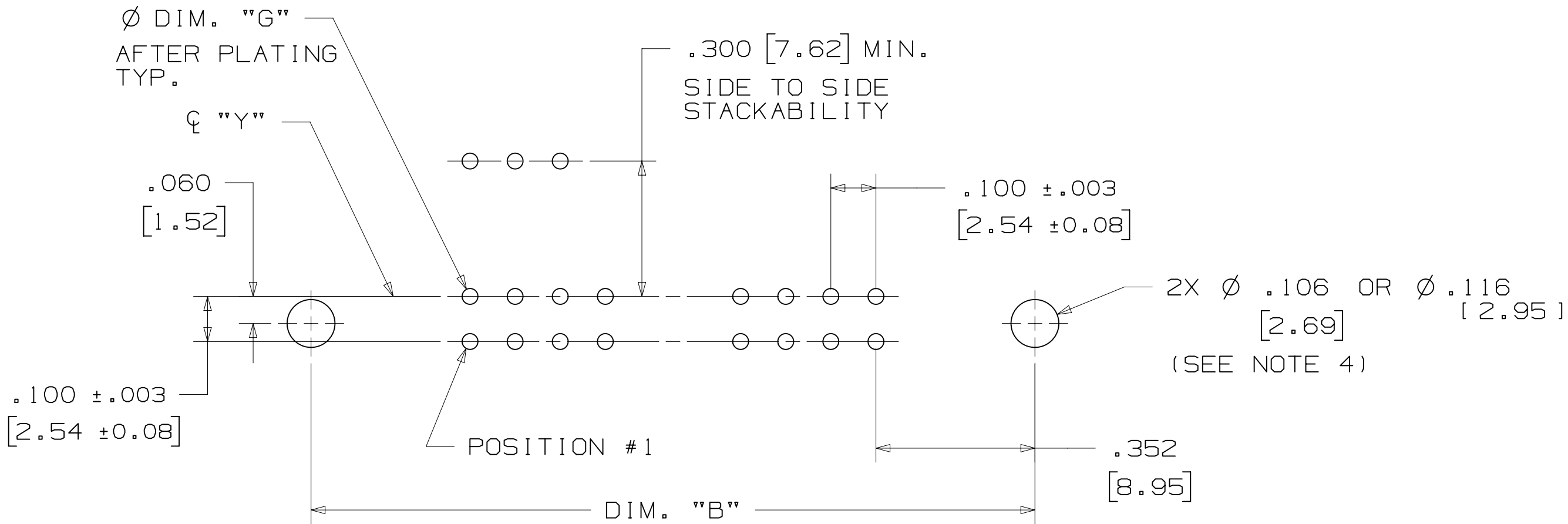
H 60056
MAR 06, 2015
REVISE ORDERING NUMBER

G 56068
AUG 05, 2014
REVISED AND REDRAWN

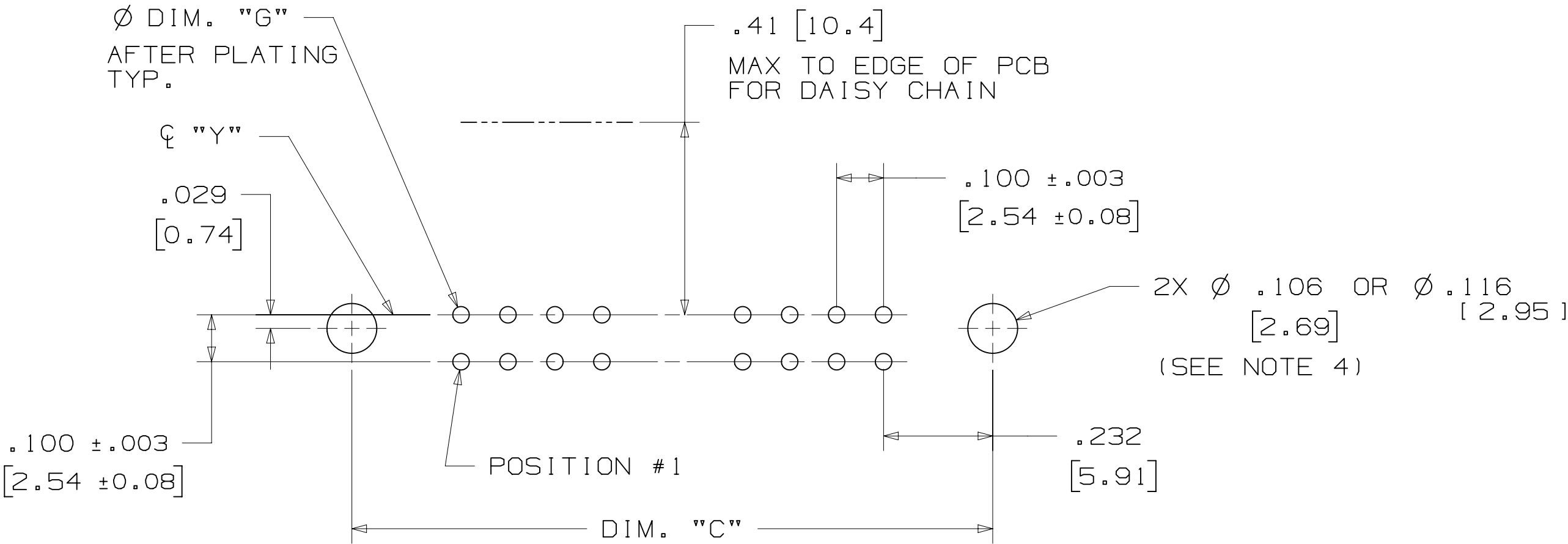
JNC
DATE

RS
DATE

3M™ THREE-WALL HEADER, 3000 SERIES
.100" X .100" LATCH/EJECTOR, STRAIGHT AND RIGHT ANGLE



RECOMMENDED MOUNTING HOLE PATTERN
(STRAIGHT VERSION)



RECOMMENDED MOUNTING HOLE PATTERN
(RIGHT ANGLE VERSION)

PART CUSTOMIZATION

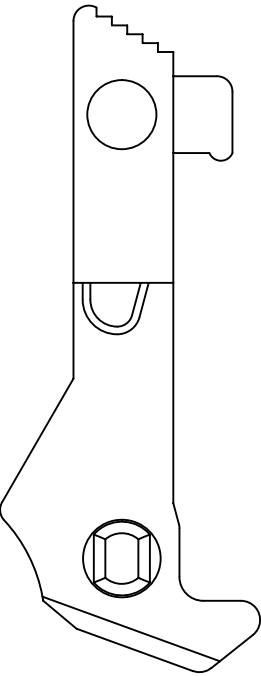
THIS SPEC SHEET DETAILS OUR STANDARD OFFERING.

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.

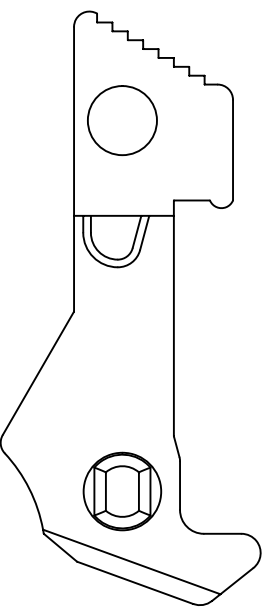
BOTH SNAP-IN AND ROLL PIN LATCHES MAY BE ORDERED SEPARATELY. SNAP-IN AND ROLL PIN STYLE LATCHES ARE DIMENSIONALLY AND FUNCTIONALLY EQUIVALENT. IF ORDERING SNAP-IN OR ROLL PIN STYLE LATCHES SEPARATELY, PLEASE USE THE BELOW CHART.

MATERIAL	SHORT LATCH	LONG LATCH	LATCH STYLE	COLOR
HIGH TEMP. (PCT)	N3505-2B	N3505-3B	ROLL PIN	BLACK
HIGH TEMP (PPA)	N3505-30B	N3505-31B	SNAP-IN	BLACK

- * SELECTIVE PIN REMOVAL (ATA OR OTHER COMPATABILITY)
- * WIRE WRAP TAILS STYLE



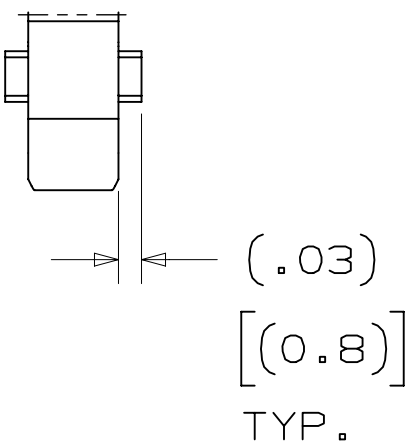
LONG



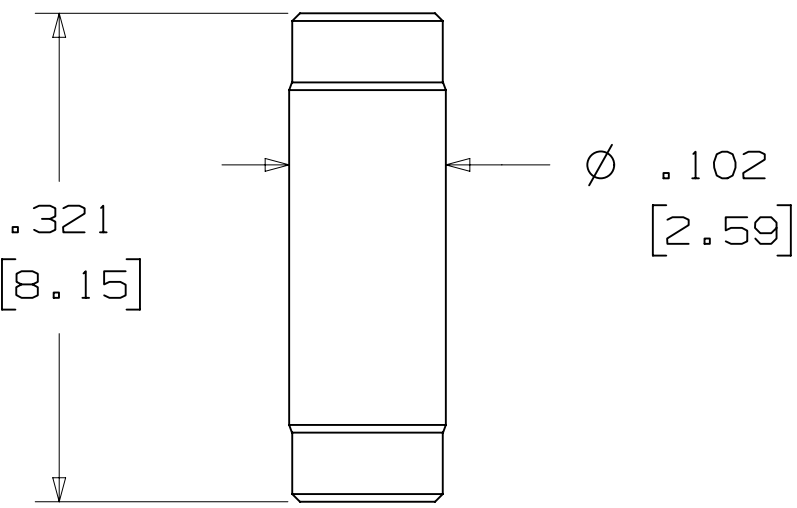
SHORT

SNAP-IN LATCHES

NOTE:
SNAP-IN LATCHES CAN ONLY BE ORDERED SEPARATELY AND ARE THE CUSTOMERS RESPONSIBILITY TO INSTALL.



POLARIZING POST



3M PART NO.	MATERIAL	COLOR
3201-4	LCP	BLACK

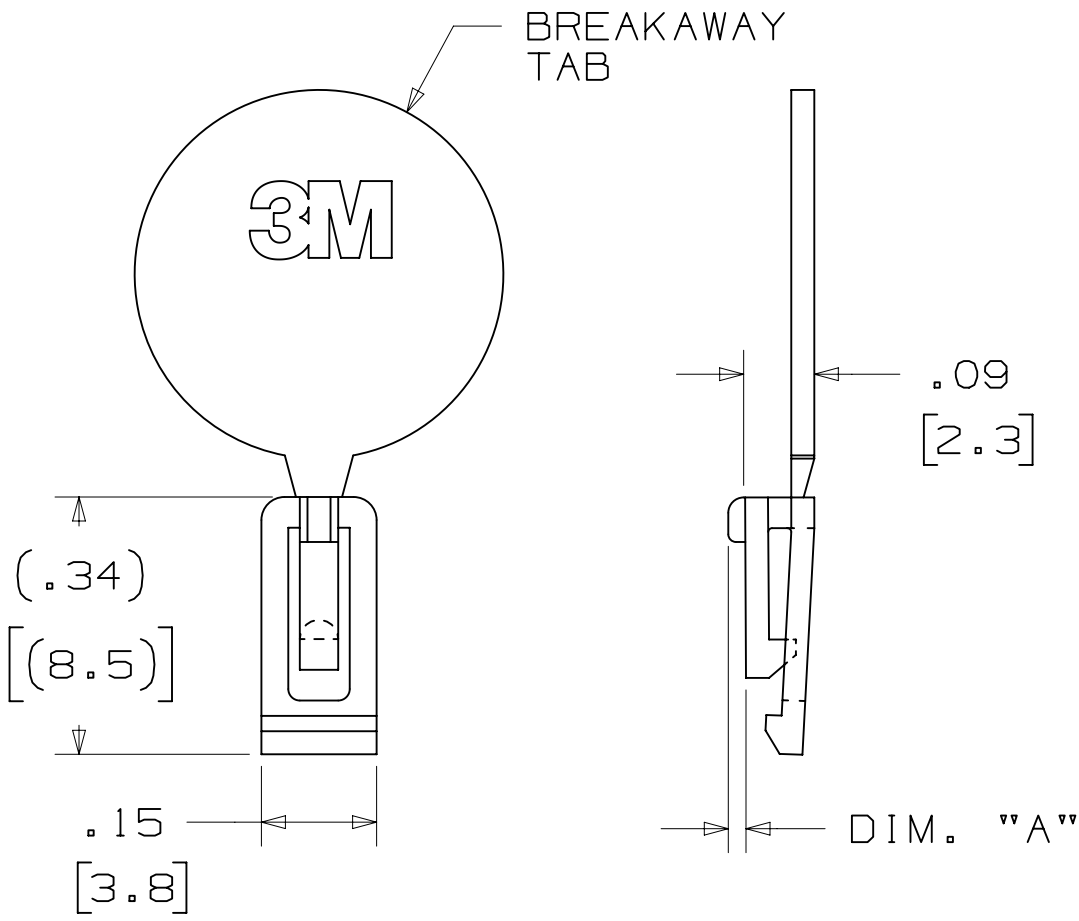
NOTE:
INSERT POST INTO ONE MOUNTING HARDWARE HOLE ON BOTTOM OF HEADER. SET POST TO PROTRUDE .115 [2.92]

(K2) OPTION

2500 & 3000 SERIES SHROUDED HEADER					
TOTAL NO. OF PINS	NO. OF TAILS KINKED	POSITIONS KINKED			
10	4	3	4	7	8
14	4	3	4	11	12
16	4	3	4	13	14
20	4	3	4	17	18
26	4	3	4	23	24
34	4	7	8	27	28
40	4	7	8	33	34
50	4	7	8	43	44
60	4	11	12	49	50
64	4	11	12	53	54

KINKED TAIL DETAIL:
- KINK IS LOCATED .05" BELOW BOTTOM SURFACE OF PLASTIC.
- EXTERNAL RADIUS OF KINK TOWARD PART CENTERLINE.

POLARIZING KEY



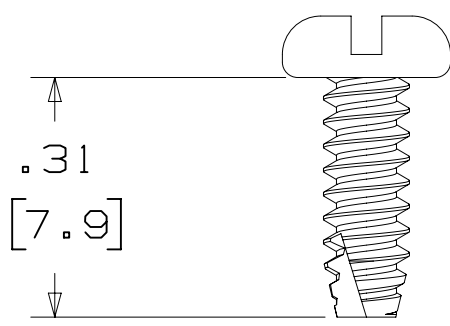
3M PART NO.	MATERIAL	COLOR	DIM. "A"
N3518	LCP	BLACK	.02

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

DESIGN REFERENCE		NEXT ASSEMBLY		H	60056	MAR 06,2015	REVISE ORDERING NUMBER	JNC	RS
REV		ECO		G	56068	AUG 05,2014	REVISED AND REDRAWN	JNC	RS
DIVISION		DIVISION CODE		DATE		DATE		DATE	
Interconnect Solutions		EMSD		AUG 05,2014		MFG		SEP 05,2014	
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .000 ±.0005 .0000 ±		MILLIMETERS 0 ±.3 .00 ±.13 .000 ±	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MAX SURFACE ROUGHNESS 12.5 SURFACES		MARKED ONLY		CAGE NUMBER D78-5100-0771-5	
MODEL 3000 SERIES		LISTS		YES		NO		SHT 3 OF 4	

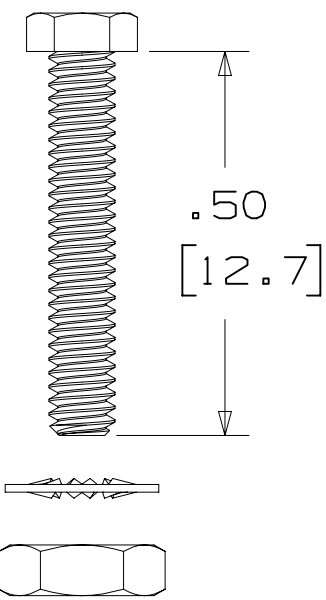
3M™ THREE-WALL HEADER, 3000 SERIES
.100" X .100" LATCH/EJECTOR, STRAIGHT AND RIGHT ANGLE

MOUNTING HARDWARE



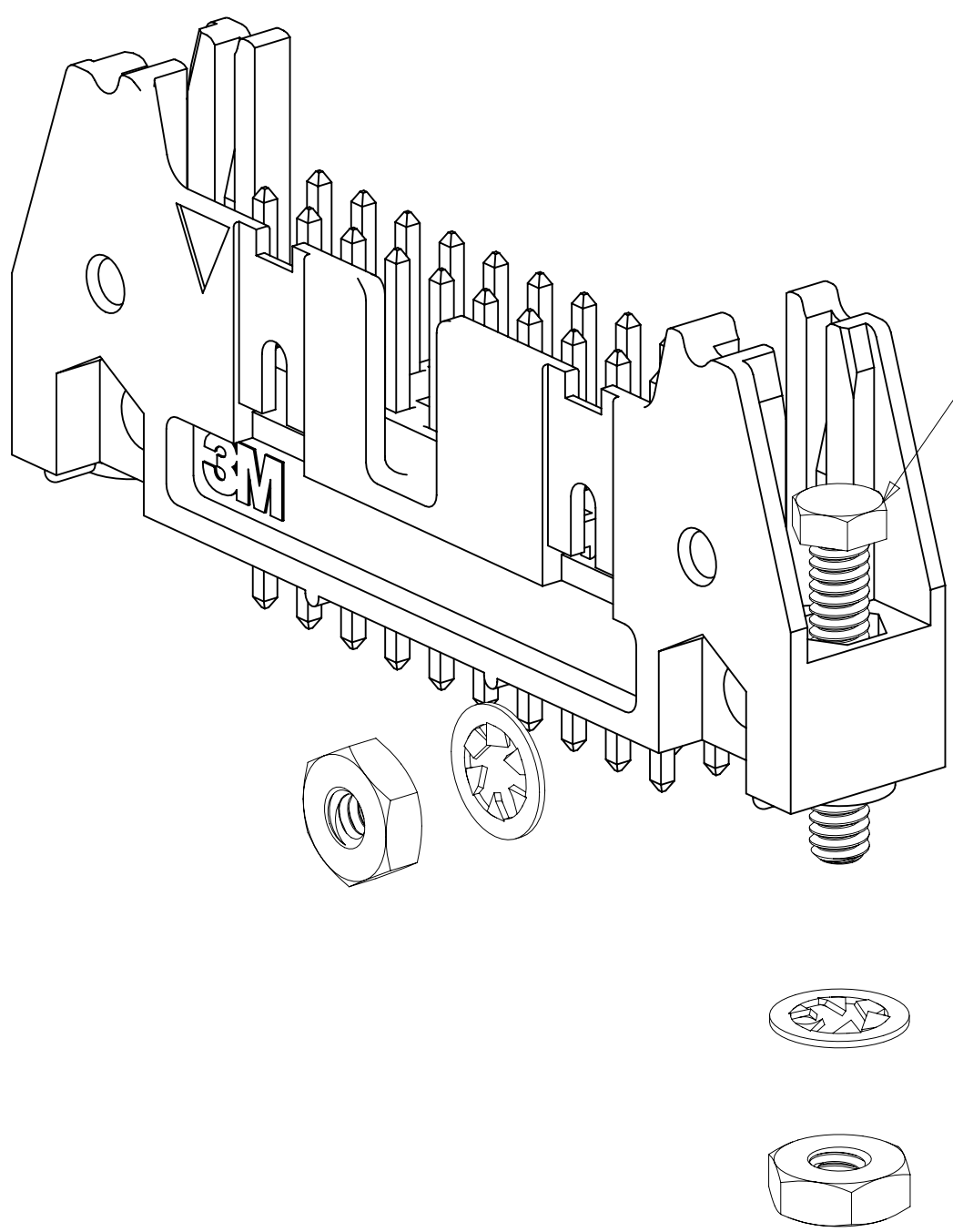
3341-5

(INSTALL FROM BOTTOM OF BOARD)
PANHEAD THREAD CUTTING SCREW:
#4-24 X 5/16"
TYPE: USA STD BT, FEDERAL B6
MATERIAL: STAINLESS STEEL



3341-6

HEX HEAD BOLT, NUT AND WASHER:
BOLT - #2-56 X 1/2"
MATERIAL: STAINLESS STEEL

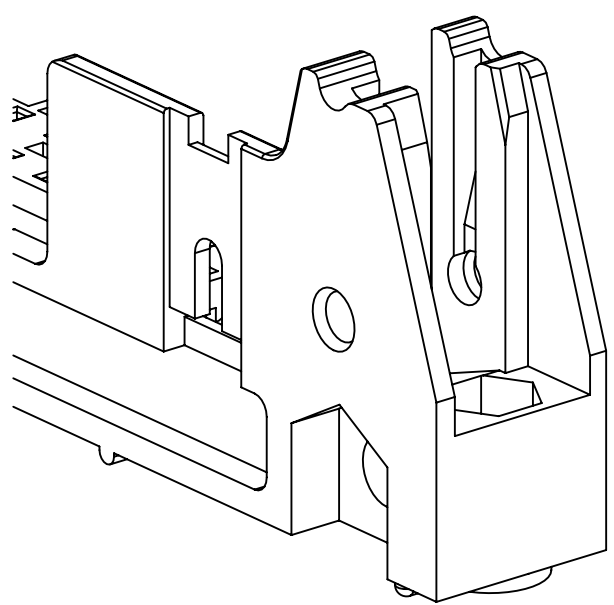


STRAIGHT VERSION INSTALL
(MUST BE INSERTED PRIOR TO
LATCH INSTALL)

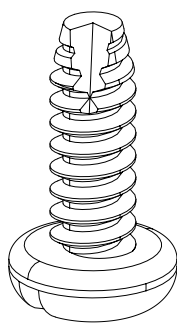
RIGHT ANGLE VERSION INSTALL

3341-6

#2-56 NUT AND BOLT
TORQUE FOR EACH BOLT: 1.25 - 3.125 INCH LBS.



#4-24 TYPE BT SELF THREADING SCREW
WHEN USING LATCHES, MAXIMUM LENGTH
OF SCREW IS .250 INCHES PLUS
THICKNESS OF THE BOARD.
TORQUE FOR EACH SCREW IS 3-5 INCH LBS.



3341-5

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XREF		XREF		DR	CHKD	DATE	DATE	DATE	DATE
				CASTIGLIONE		AUG 05, 2014	MFG		
							R. SCHERER	SEP 05, 2014	
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2015					
Interconnect Solutions		EMSD		3M Center St. Paul, MN 55144					
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED		TITLE			
						HEADER, 3-WALL, .100 X .100 LATCH/EJECTOR, STRAIGHT & RA			