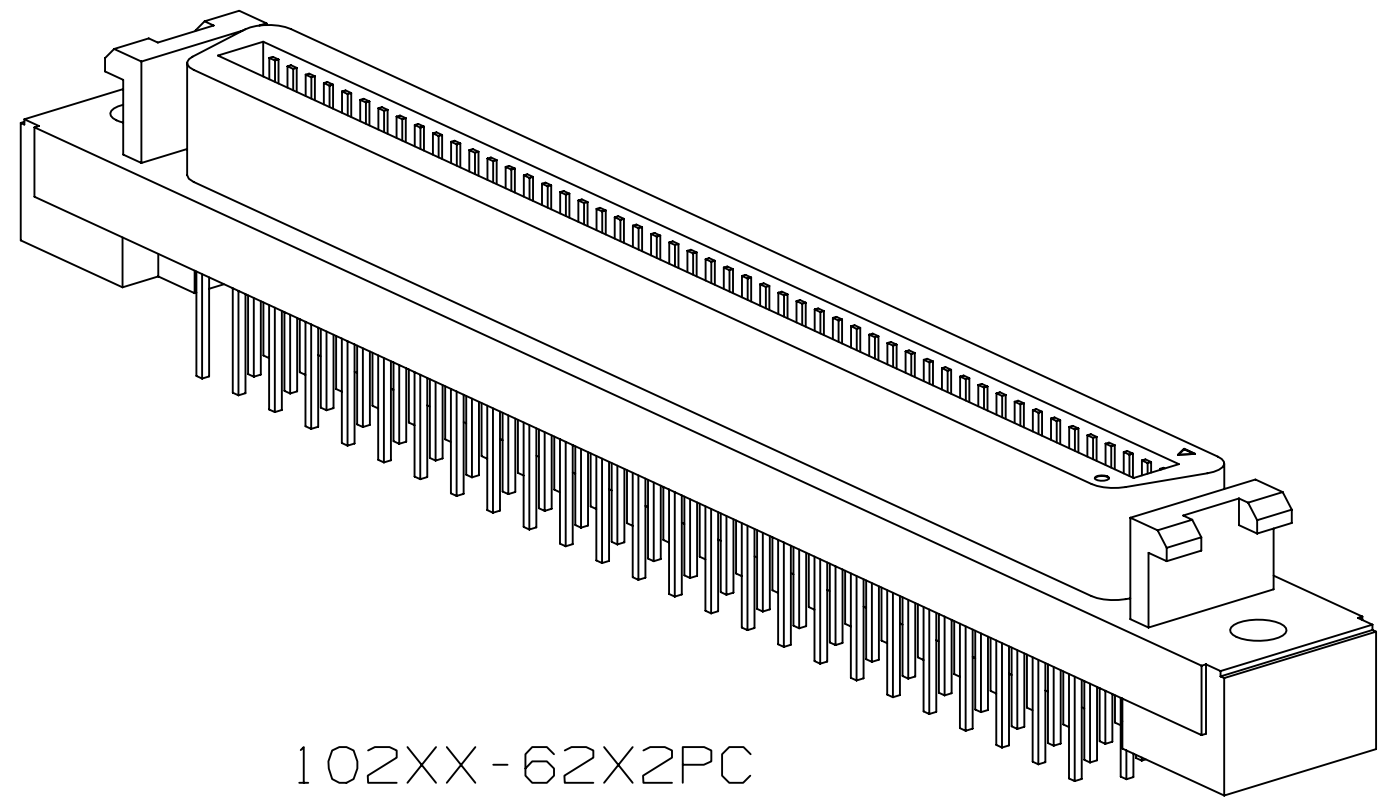


3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED



102XX-62X2PC

2 PHYSICAL :

INSULATOR: MATERIAL: GLASS FILLED POLYESTER (PBT) OR GLASS FILLED POLYESTER (PCT) - HIGH TEMP OPTION - SEE ORDERING INFORMATION
FLAMMABILITY: UL94V-0
COLOR: BLACK (PBT) OR BEIGE (PCT) - HIGH TMP - SEE ORDERING INFO.
CONTACT: MATERIAL: COPPER ALLOY
PLATING:
UNDER PLATING: 100μ" [2,54μm] AVG. NICKEL-OVERALL
WIPING AREA: 30μ" [0,76μm] MIN. GOLD
SOLDER TAILS: GOLD FLASH OVER NICKEL
BODY: MATERIAL: ZINC ALLOY
PLATING: NICKEL
SHROUD & LATCH HOOK: MATERIAL: STEEL
PLATING: NICKEL
MARKINGS: 3M LOGO AND PART NUMBER

2 ELECTRICAL :

CURRENT RATING: 1A
INSULATION RESISTANCE: >5 X 10⁹Ω AT 500 V_{DC}
WITHSTANDING VOLTAGE: 500V_{RMS} FOR 1 MINUTE

2 ENVIRONMENTAL :

TEMPERATURE RATING: -55°C TO +85°C
PBT INSULATOR PROCESS RATING: SOLDER DIP TEST -260°C FOR 10 SEC., 2 TIMES AFTER 100°C MAX. PREHEAT, 60 SEC. MAX. DURATION.
PCT INSULATOR PROCESS RATING: HIGH TEMP. OPTION: 260°C (PROFILE PER J-STD-020C)

ORDERING INFORMATION

X 102XX-62X2PC

BLANK = STAND, PBT INSULATOR
N = HIGH TEMP. OPTION, PCT INSULATOR

CONTACT QTY.
A0 = 100 POS.
(SEE TABLE)

LOCKSTAND THREAD
0 = M2.6 (SPECIAL)
1 = M2.5 (STANDARD)

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UL
UL FILE NO: E68080

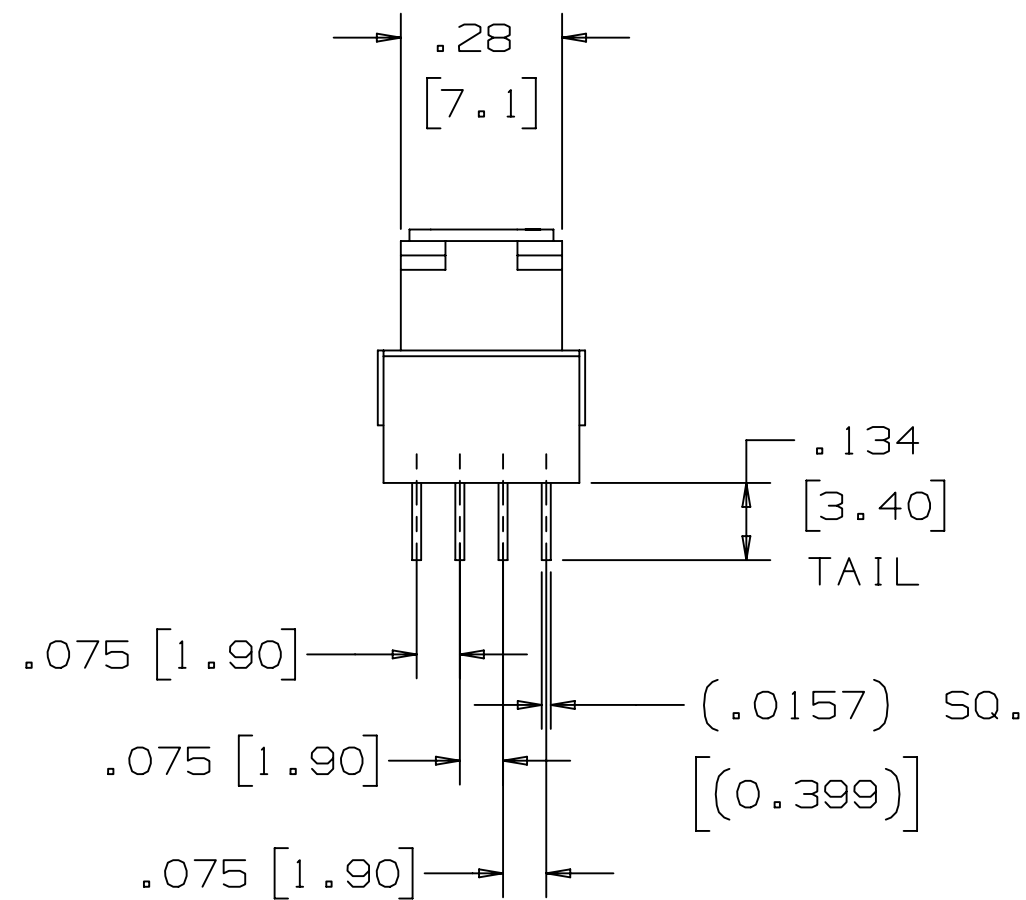
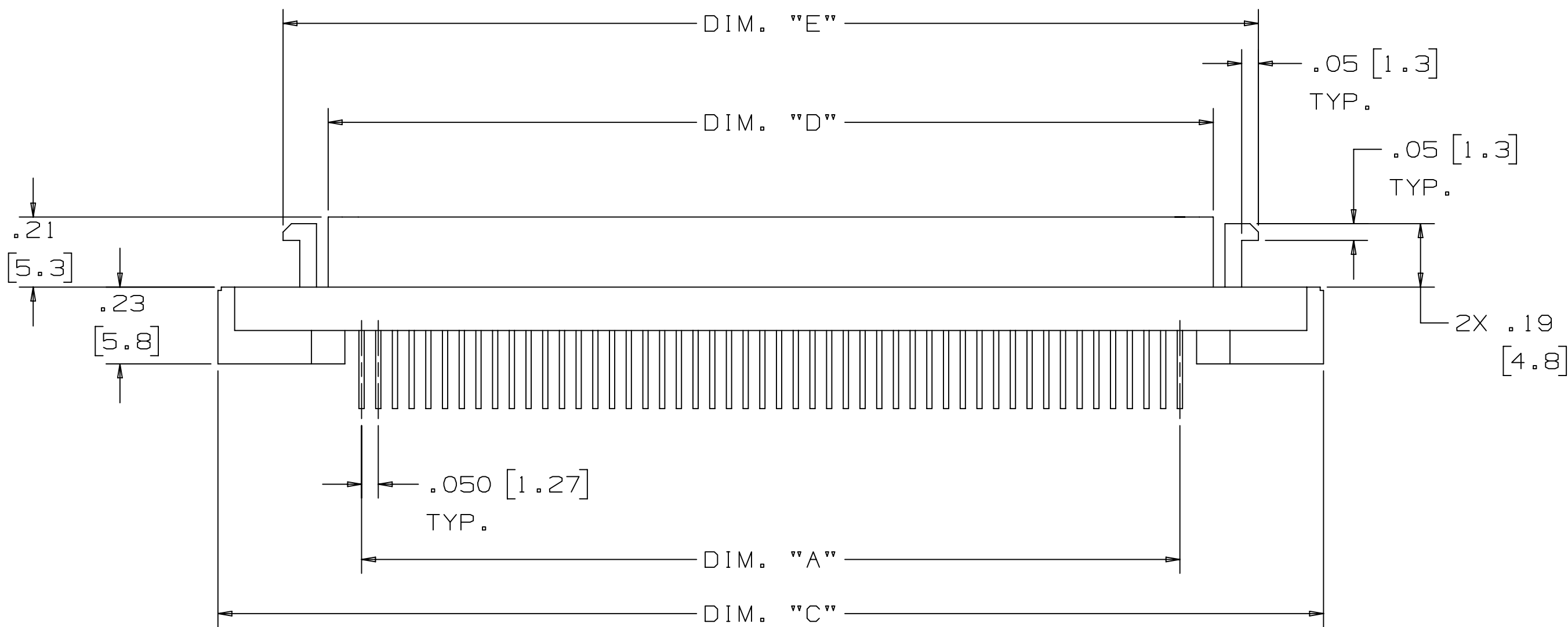
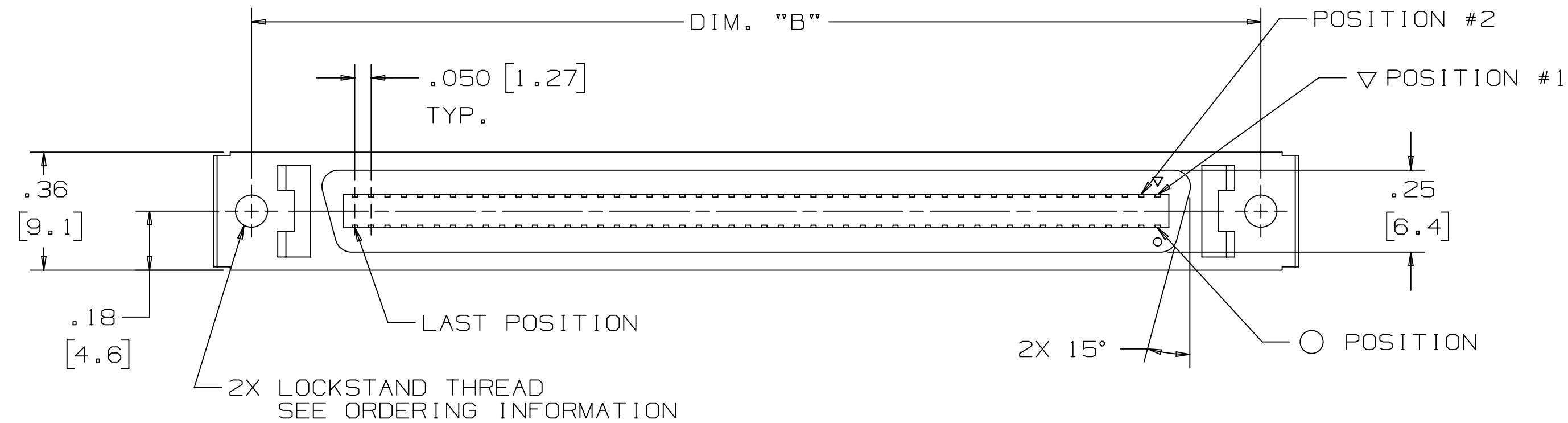
NOTES
1. REGULATORY INFORMATION:
VISIT 3M.com/regs
2. IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND THAT
CONTAINED IN THE PRODUCT
SPECIFICATION, THE PRODUCT
SPECIFICATION TAKES PRECEDENT.

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
AXXSSP CODES		DRFT CASTIGLIONE	DATE JUL 13,2022	MFG	DATE	
		CHKD	DATE	APPRV F. RODRIGUEZ	DATE JUL 13,2022	
DIVISION	DIVISION CODE DEPP	3M 3M Center St. Paul, MN 55144 © 3M COPYRIGHT 2025 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	TOLERANCES EXCEPT AS NOTED				
		INCHES 0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0002				
THIRD ANGLE PROJECTION		MILLIMETERS 0 ± .0 ± .00 ± .000 ±				
INTERPRET PER ASME Y14.5 - 2018		ANGLES ±				
MAX. SURFACE ROUGHNESS ALL SURFACES		CAGE NUMBER D78-5100-0427-4				
MARKED ONLY		MODEL 102	SIZE 102	DRAWING NO. D78-5100-0427-4	REV. D	
		DET LISTS YES NO SHT 1 OF 4				

3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED

TABLE 1					
CONTACT QTY.	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"
14	.300 [7.62]	.93 [23.6]	1.16 [29.5]	.50 [12.6]	.77 [19.5]
20	.450 [11.43]	1.08 [27.5]	1.31 [33.4]	.65 [16.4]	.92 [23.4]
26	.600 [15.24]	1.23 [31.3]	1.46 [37.2]	.80 [20.2]	1.07 [27.2]
36	.850 [21.59]	1.48 [37.6]	1.71 [43.5]	1.05 [26.6]	1.32 [33.5]
40	.950 [24.13]	1.58 [40.2]	1.81 [46.1]	1.15 [29.1]	1.42 [36.1]
50	1.200 [30.48]	1.83 [46.5]	2.06 [52.4]	1.40 [35.5]	1.67 [42.4]
68	1.650 [41.91]	2.28 [57.9]	2.51 [63.8]	1.85 [46.9]	2.12 [53.8]
80	1.950 [49.53]	2.58 [65.6]	2.81 [71.5]	2.15 [54.5]	2.42 [61.5]
100	2.540 [62.23]	3.08 [78.3]	3.31 [84.2]	2.65 [67.2]	2.92 [74.2]



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XREFS		XREFS		DRFT		DATE		DATE		DATE	
DIVISION		DIVISION CODE		DEPT		DATE		DATE		DATE	
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS		ANGLES	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2018		MAX. SURFACE ROUGHNESS		ALL SURFACES		MARKED ONLY		CAGE NUMBER	
3M		3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2025		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.		TITLE		CAGE NUMBER	
MDR CONN, SHIELDED, .050" BMT THRU-HOLE VERT RECEPTACLE		DRAWING NO.		REV.		MODEL		LISTS		YES	
102		D		78-5100-0427-4		SHT 2 OF 4					

3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED

TABLE 2		
CONTACT QTY.	DIM. "A"	DIM. "B"
20	.450 [11.43]	1.081 [27.45]
36	.850 [21.59]	1.481 [37.61]
40	.950 [24.13]	1.581 [40.15]
68	1.650 [41.91]	2.281 [57.93]
80	1.950 [49.53]	2.581 [65.55]
100	2.450 [62.23]	3.081 [78.25]

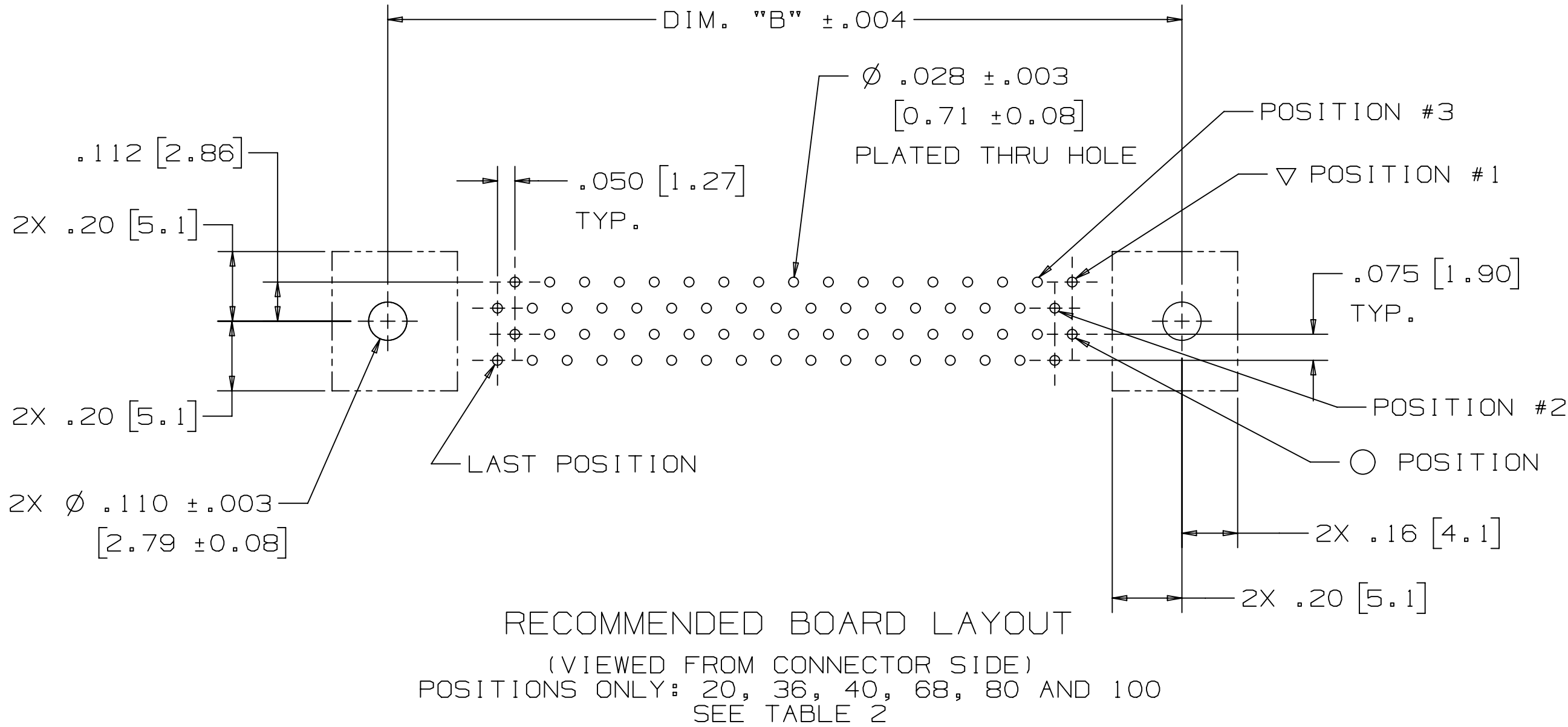


TABLE 3		
CONTACT QTY.	DIM. "A"	DIM. "B"
14	.300 [7.62]	.931 [23.64]
26	.600 [15.24]	1.231 [31.26]
50	1.200 [30.48]	1.831 [46.50]

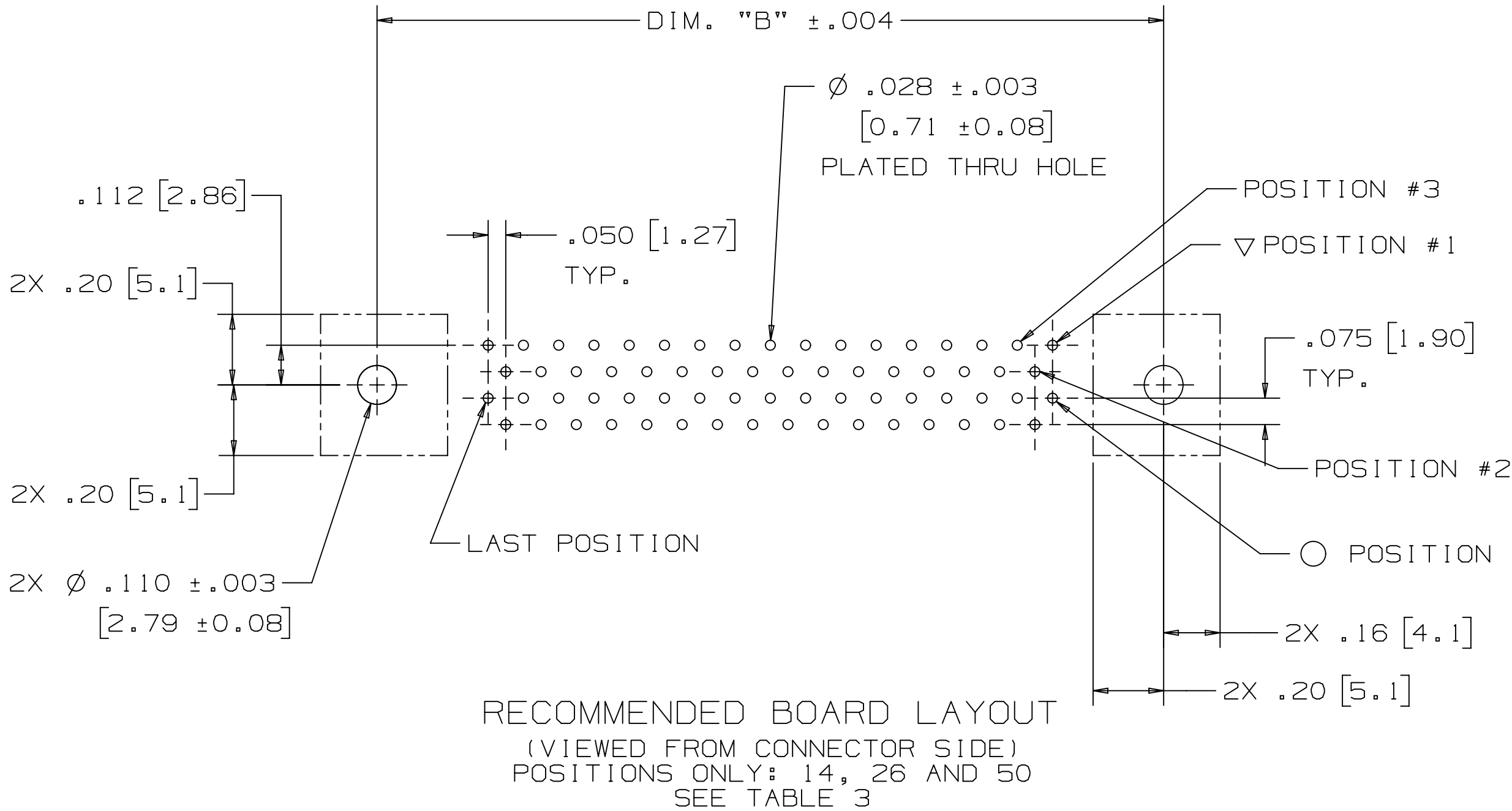
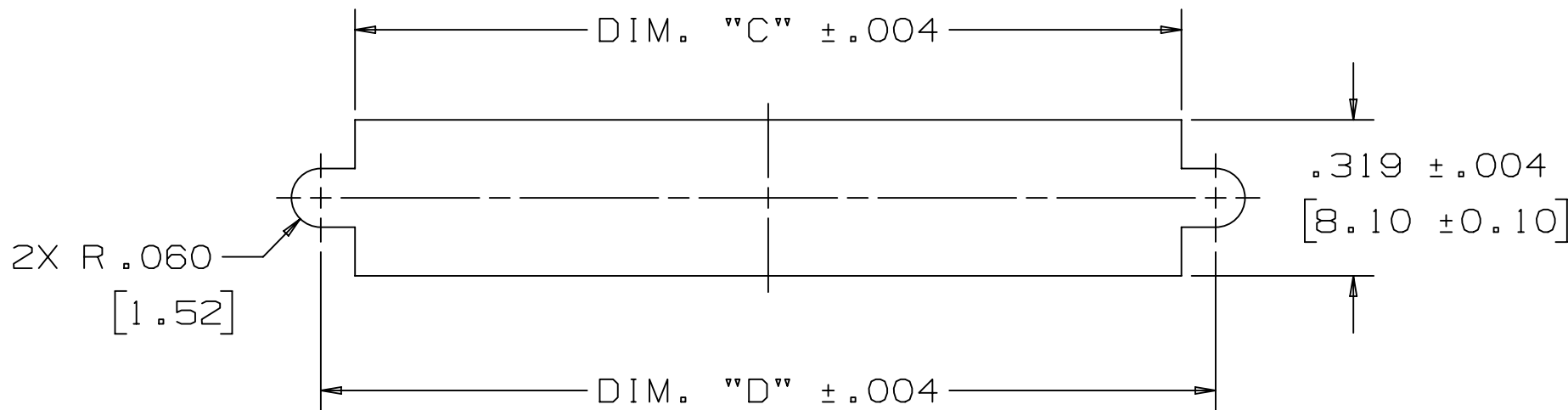


TABLE 4		
CONTACT QTY.	DIM. "C"	DIM. "D"
14	.78 [20.0]	.93 [23.64]
20	.94 [23.8]	1.08 [27.45]
26	1.09 [27.6]	1.23 [31.26]
36	1.33 [33.9]	1.48 [37.61]
40	1.44 [36.5]	1.58 [40.15]
50	1.69 [42.8]	1.83 [46.50]
68	2.13 [54.2]	2.28 [57.93]
80	2.44 [61.9]	2.58 [65.55]
100	2.94 [74.6]	3.08 [78.25]



RECOMMENDED PANEL CUT-OUT
NOTE: PANEL THICKNESS: .079 [2.00] MAX.
SEE TABLE 4

NOTES	
1.	RECOMMENDED PC BOARD THICKNESS OF .062".

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DESIGN CODES		DIVISION CODE	DEPP
DIVISION		TOLERANCES EXCEPT AS NOTED	
DO NOT SCALE DRAWING		INCHES	.0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0002
THIRD ANGLE PROJECTION		MILLIMETERS	0 ± .0 ± .00 ± .000 ±
MAX. SURFACE ROUGHNESS		ALL SURFACES	0.00 ±
MARKED ONLY		ANGLES	±
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT CHKD
DRFT	CASTIGLIONE	DATE	JUL 13, 2022
CHKD		DATE	JUL 13, 2022
APPR	F. RODRIGUEZ	DATE	JUL 13, 2022
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TITLE			
MDR CONN, SHIELDED, .050" BMT THRU-HOLE VERT RECEPTACLE			
CAGE NUMBER	SIZE	DRAWING NO.	REV.
D	102	78-5100-0427-4	D
MODEL		LISTS	YES NO
		SHT	3 OF 4

3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES .050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED

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D	12358H	JUN 03,2025	JNC	FJR
C	10584Z	JUL 13,2022 REDRAWN REVISE TEMP RATING	JNC	FJR
B	16859	NOV 26,2022 REMOVE NON-ROHS	BAC	ARM
A	16859	MAR 05,2007 PRODUCTION RELEASE	BAC	DFC
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	CASTIGLIONE	DATE JUL 13,2022	MFG	DATE
CHKD		DATE	APPR F. RODRIGUEZ	DATE JUL 13,2022
DIVISION		DIVISION CODE DEPP		
		TOLERANCES EXCEPT AS NOTED		
		INCHES .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002		
THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS 0 ± .00 ± .000 ± .0000 ±		
MAX SURFACE ROUGHNESS ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		CAGE NUMBER D DRAWING NO. 78-5100-0427-4 REV. D		
		MODEL 102 DET. LISTS <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 4 OF 4		

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