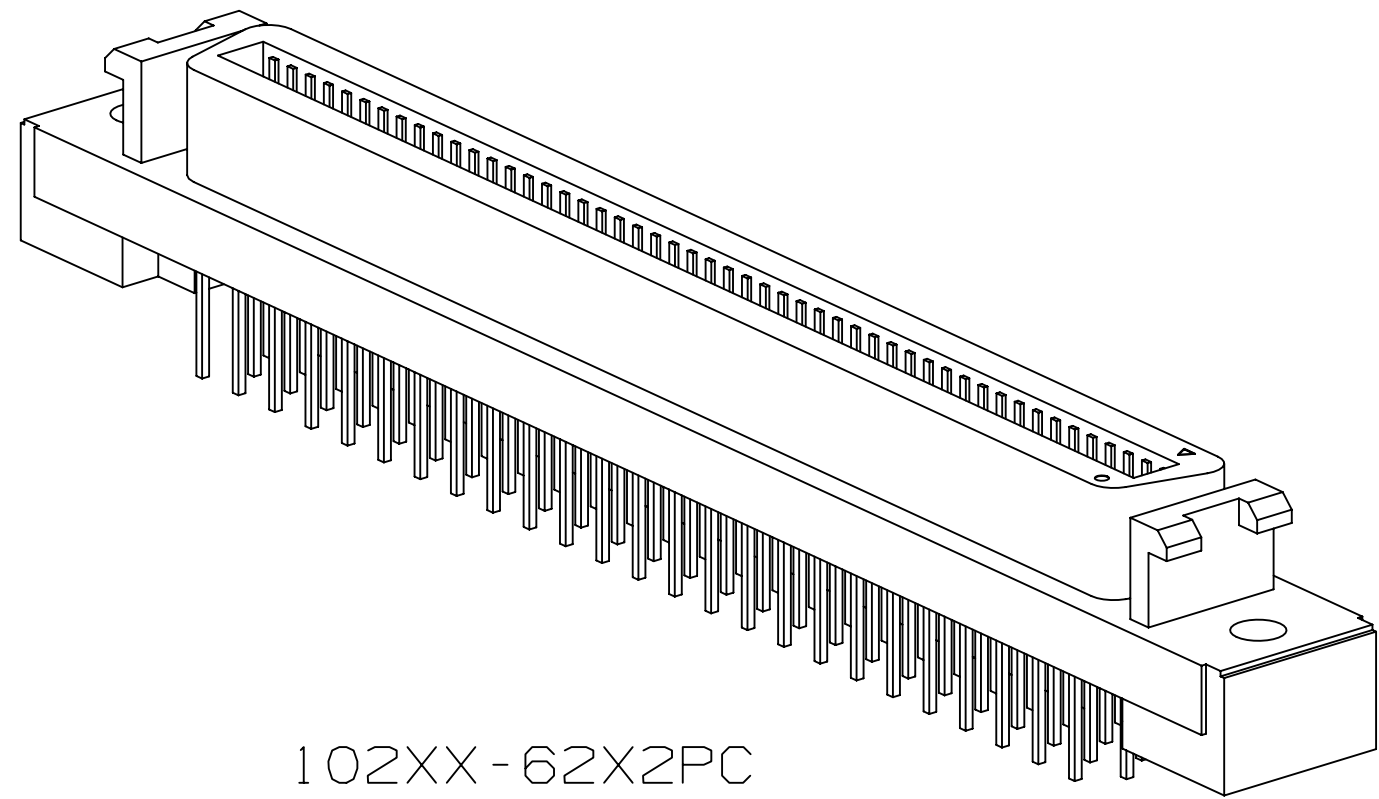


3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGHT-HOLE VERTICAL RECEPTACLE - SHIELDED



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

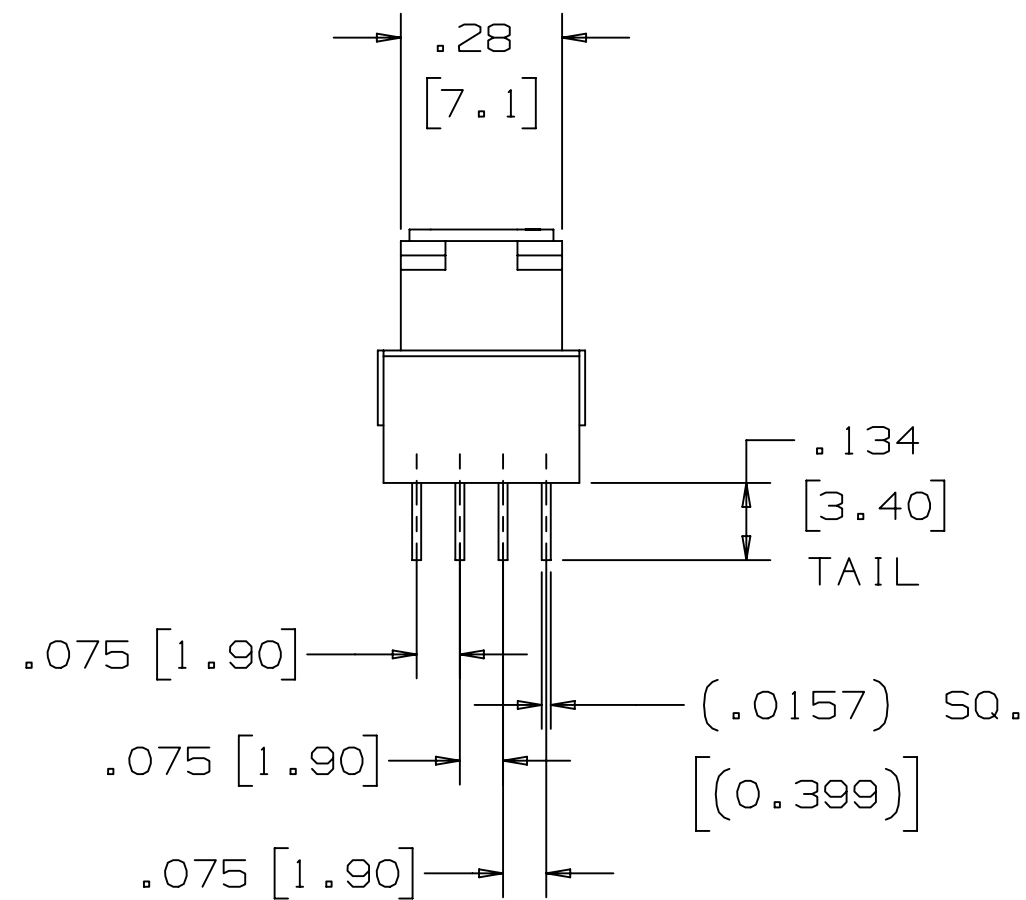
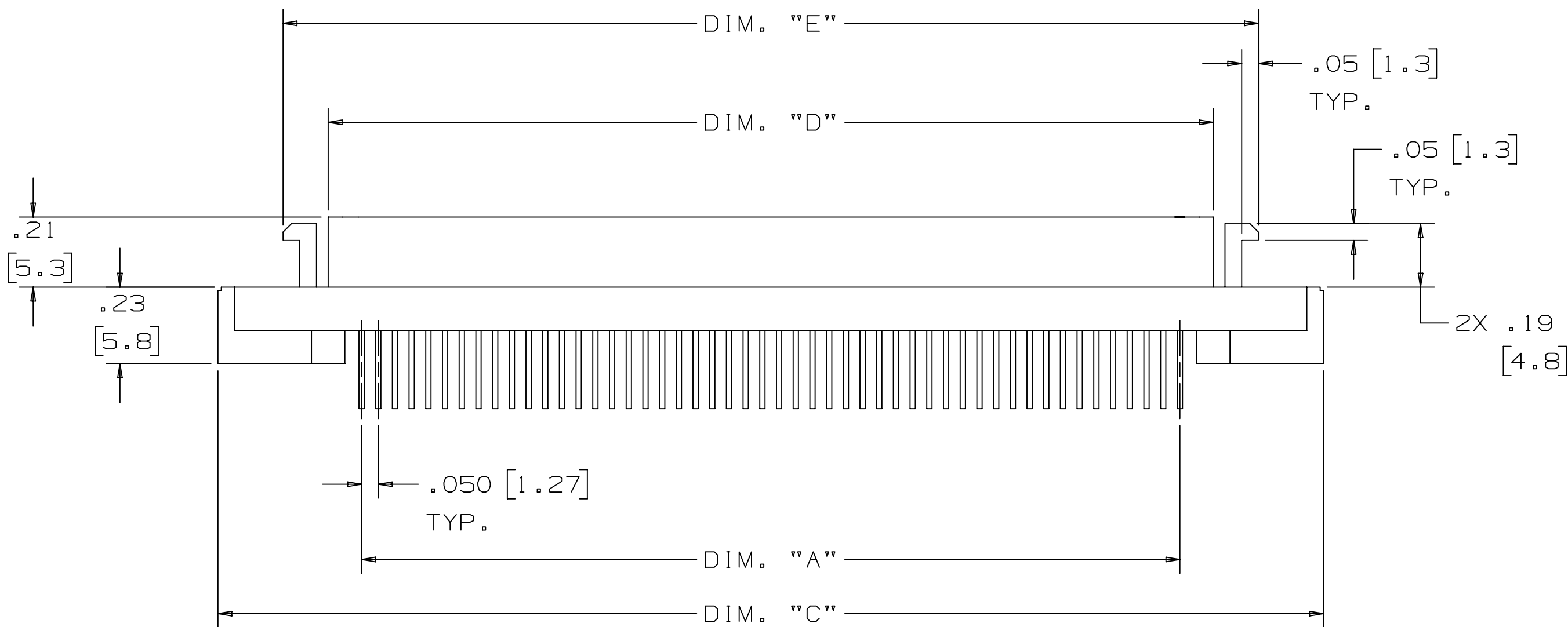
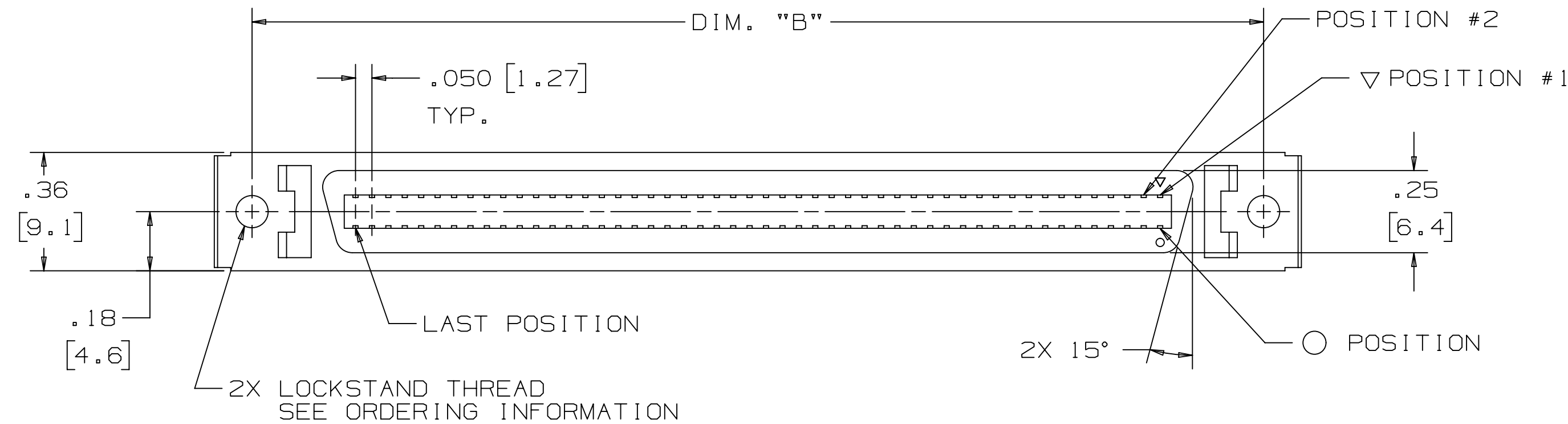
DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY

DESIGN REFERENCE		NEXT ASSEMBLY	
XXXXXX	CODES		
DIVISION		DIVISION CODE	
DO NOT SCALE DRAWING		DEPP	
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED	
INTERPRET PER ASME Y14.5 - 2018		INCHES	
MAX. SURFACE ROUGHNESS		MILLIMETERS	
ALL SURFACES		ANGLES	
MARKED ONLY			

D	123358	JUN 03,2025	JNC	FJR
C	105842	REVISION 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	CAS	DATE	DATE	DATE
CHKD	GL	JUL 13,2022	APPR	JUL 13,2022
		F. RODRIGUEZ		
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		MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE		
		CAGE NUMBER D 78-5100-0427-4		
		MODEL 102		
		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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DESIGN REFERENCE		NEXT ASSEMBLY	
XXXXXX	XXXXXX	XXXXXX	XXXXXX
DIVISION		DIVISION CODE	
DO NOT SCALE DRAWING		DEPP	
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED	
INTERPRET PER ASME Y14.5 - 2018		INCHES	
MAX. SURFACE ROUGHNESS		MILLIMETERS	
ALL SURFACES		ANGLES	
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CAGE NUMBER		DRAWING NO.	
102		D78-5100-0427-4	
REV.		REV.	
D		D	

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]

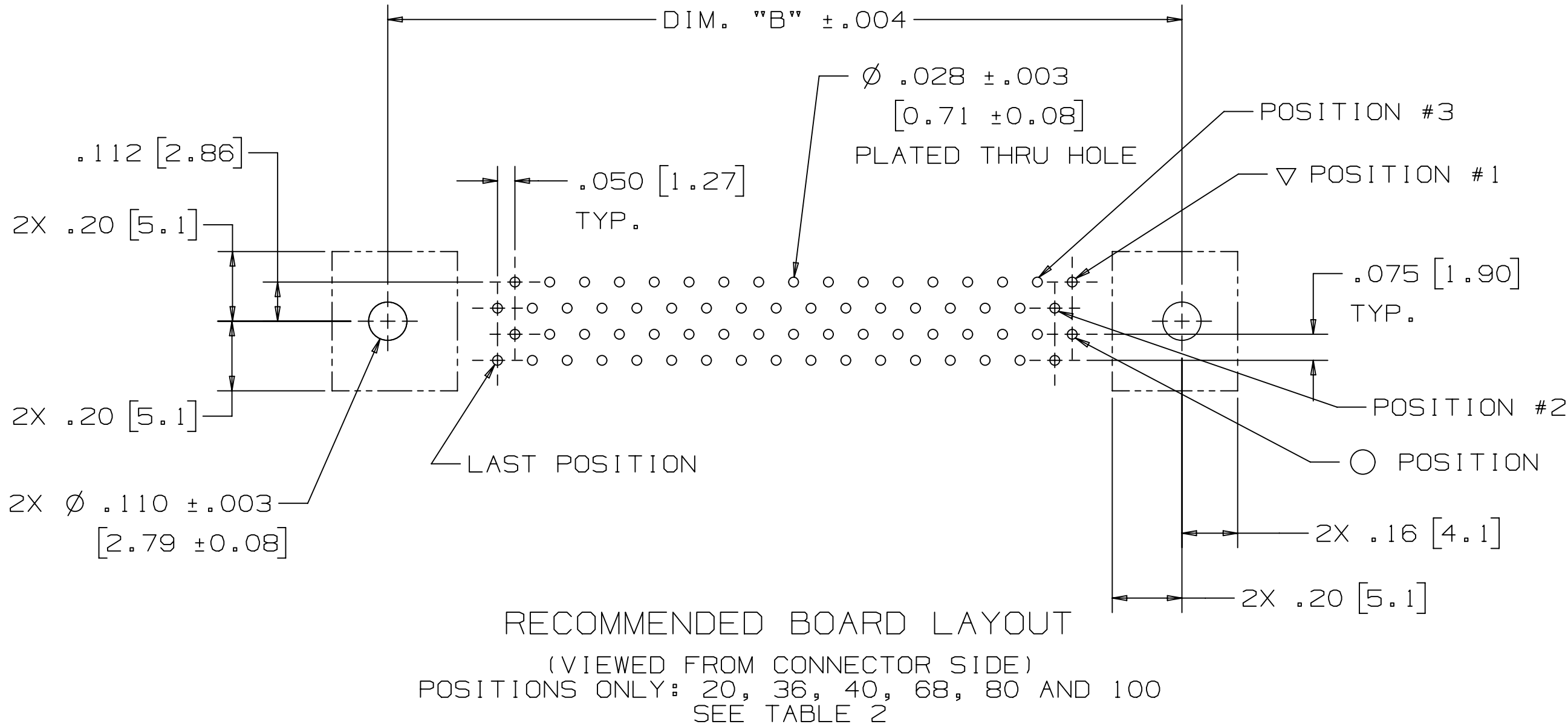


TABLE 3		
CONTACT QTY.	DIM. "A"	DIM. "B"
14	.300 [7.62]	.931 [23.64]
26	.600 [15.24]	1.231 [31.26]
50	1.200 [30.48]	1.831 [46.50]

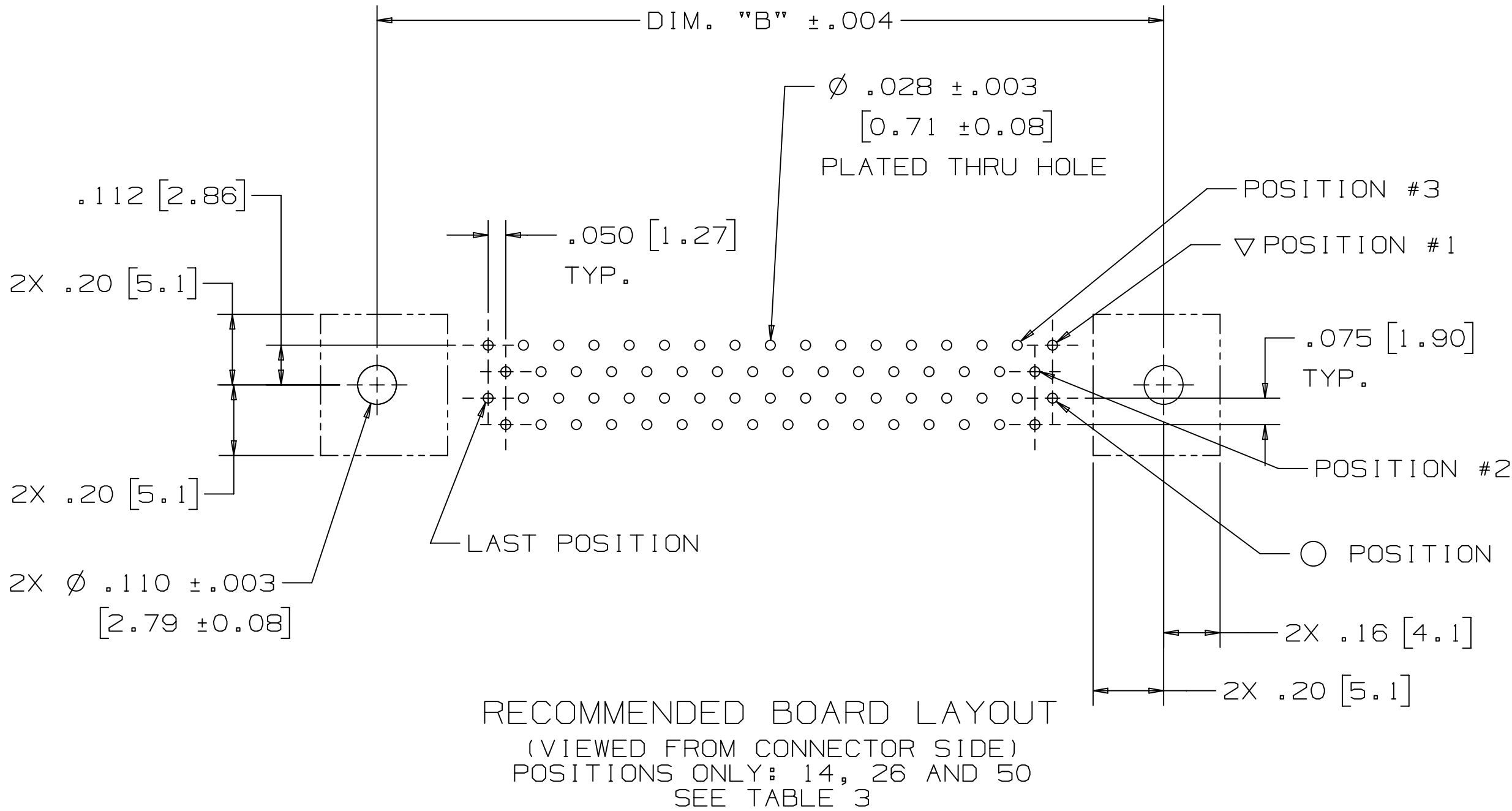
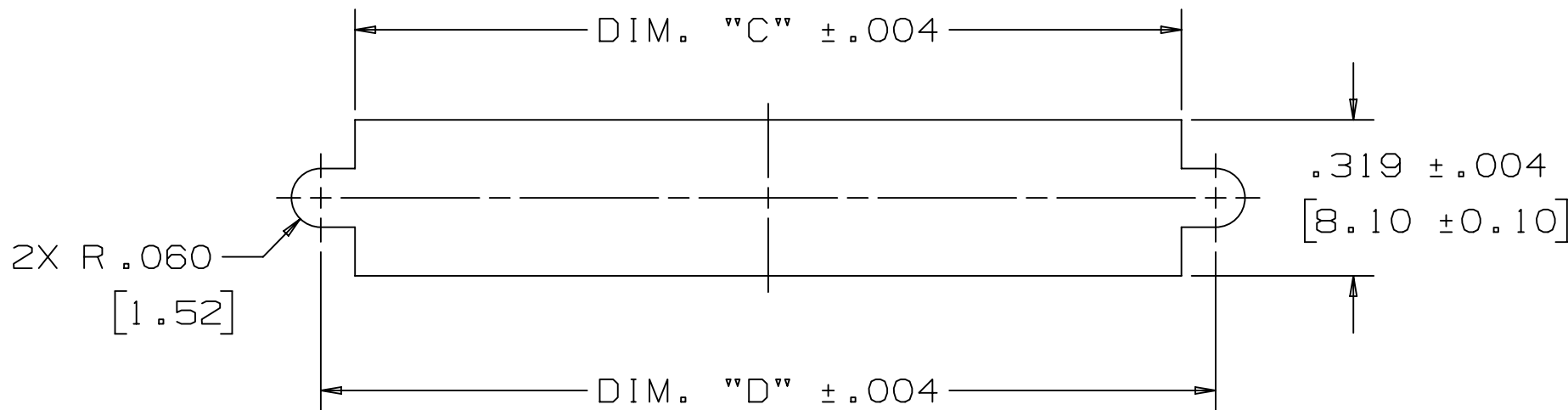


TABLE 4		
CONTACT QTY.	DIM. "C"	DIM. "D"
14	.78 [20.0]	.93 [23.64]
20	.94 [23.8]	1.08 [27.45]
26	1.09 [27.6]	1.23 [31.26]
36	1.33 [33.9]	1.48 [37.61]
40	1.44 [36.5]	1.58 [40.15]
50	1.69 [42.8]	1.83 [46.50]
68	2.13 [54.2]	2.28 [57.93]
80	2.44 [61.9]	2.58 [65.55]
100	2.94 [74.6]	3.08 [78.25]



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

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

DESIGN REFERENCE		NEXT ASSEMBLY	
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	±
CAGE NUMBER		SIZE	DRAWING NO.
D		102	78-5100-0427-4
MODEL		LISTS	YES ☒ NO ☐ SHT 3 OF 4

D	123358	JUN 03,2025	JNC	FJR
C	105842	REVISION 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	DATE	DATE
CHKD		DATE JUL 13,2022	DATE	DATE

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TITLE		MDR CONN, SHIELDED, .050" BMT THRU-HOLE VERT RECEPTACLE	
CAGE NUMBER		DRAWING NO.	
D		78-5100-0427-4	
MODEL		LISTS	
102		YES ☒ NO ☐ SHT 3 OF 4	

3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES

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D	123598	JUN 03,2025	JNC	FJR
C	105842	JUL 13,2022	JNC	FJR
B	16859	NOV 26,2022	BAC	ARM
A	16859	MAR 05,2007	BAC	DFC
		PRODUCTION RELEASE		
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DFT	CASTIGLIONE		DATE	JUL 13,2022
CHKD	DATE		APPR	RODRIGUEZ
		DATE		JUL 13,2022
DIVISION		DIVISION CODE		DEPP
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED
		INCHES		-0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0002
THIRD ANGLE PROJECTION		MILLIMETERS		0 ± .0 ± .000 ±
INTERPRET PER ASME Y14.5 - 2018		MARKED SURFACES		UNLESS OTHERWISE SPECIFIED
MAX SURFACE ROUGHNESS		MARKED ONLY		ANGLES ±
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MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE				
CAGE NUMBER	SIZE	DRAWING NO.		REV.
D	1	78-5100-0427-4		D
MODEL	102	DET. LISTS		YES YES NO SHT 4 OF 4

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