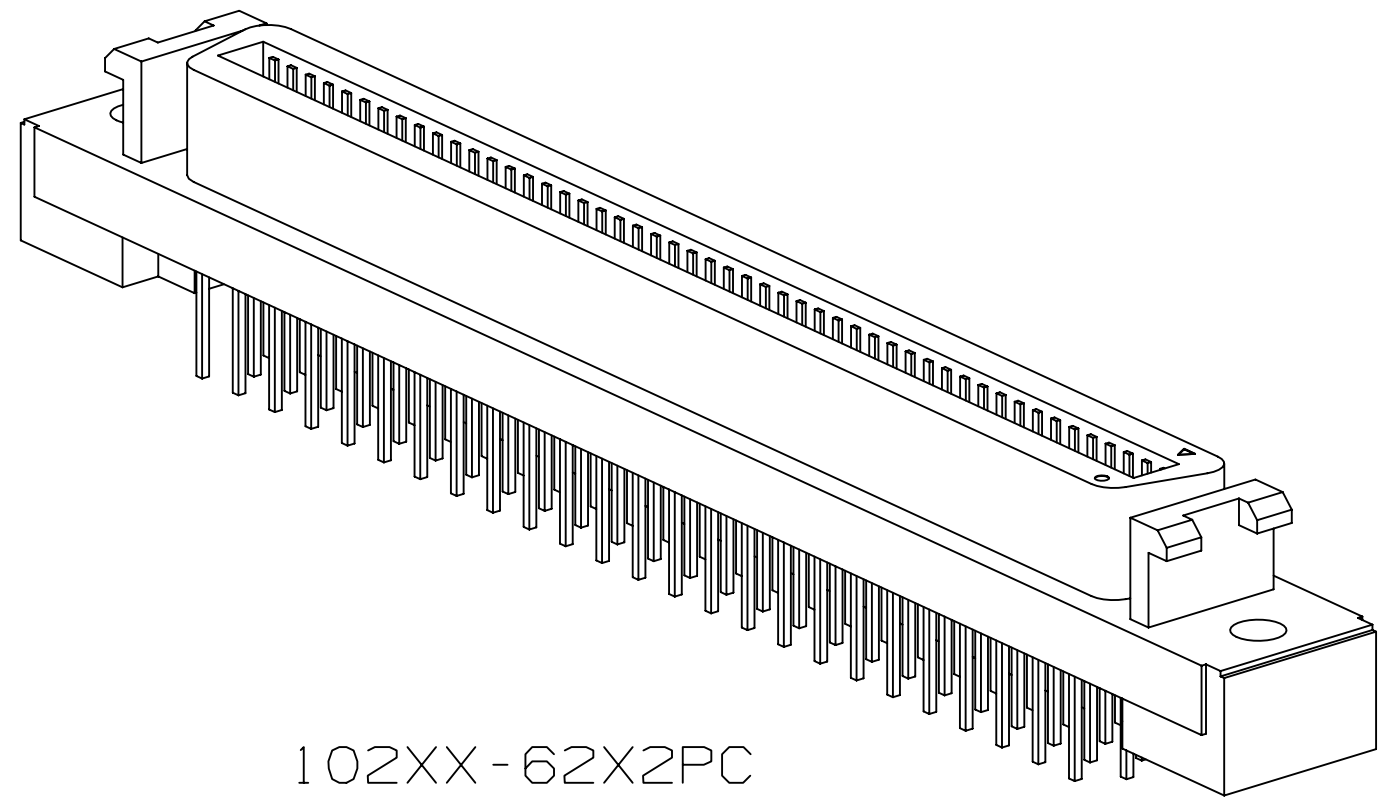


3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGHT-HOLE VERTICAL RECEPTACLE - SHIELDED



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

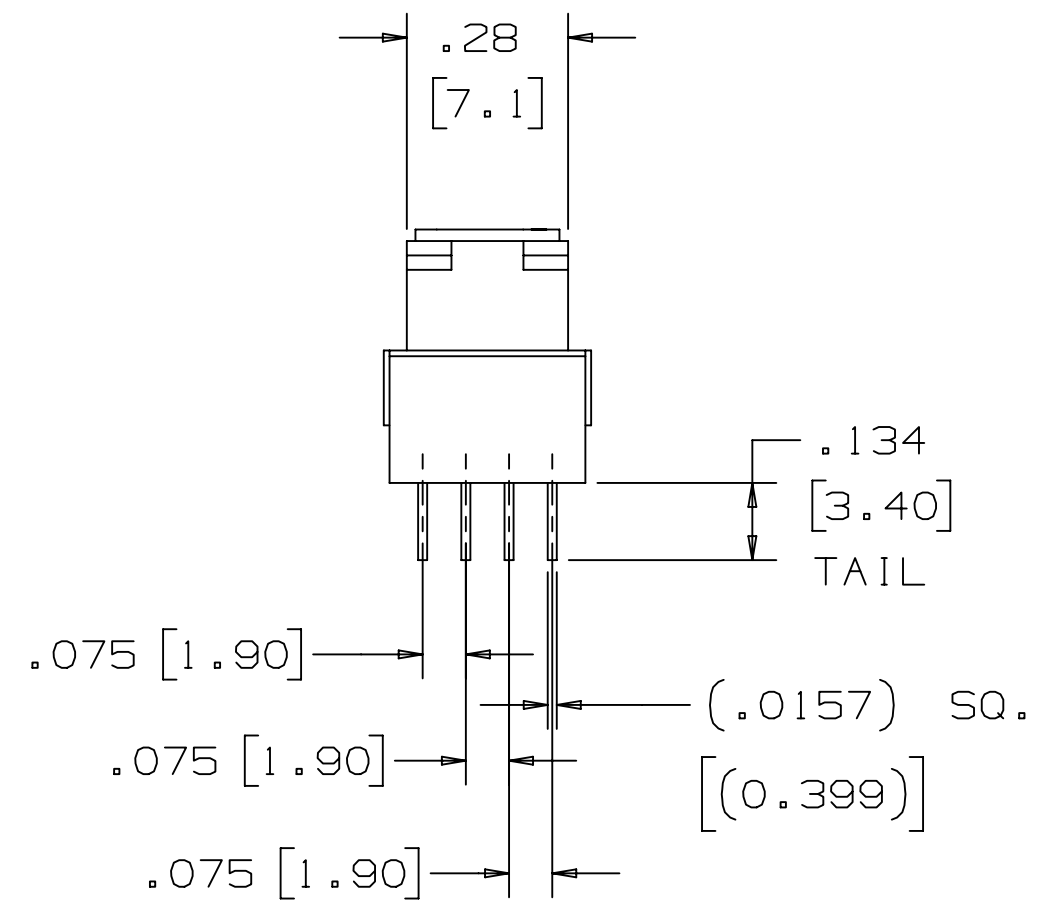
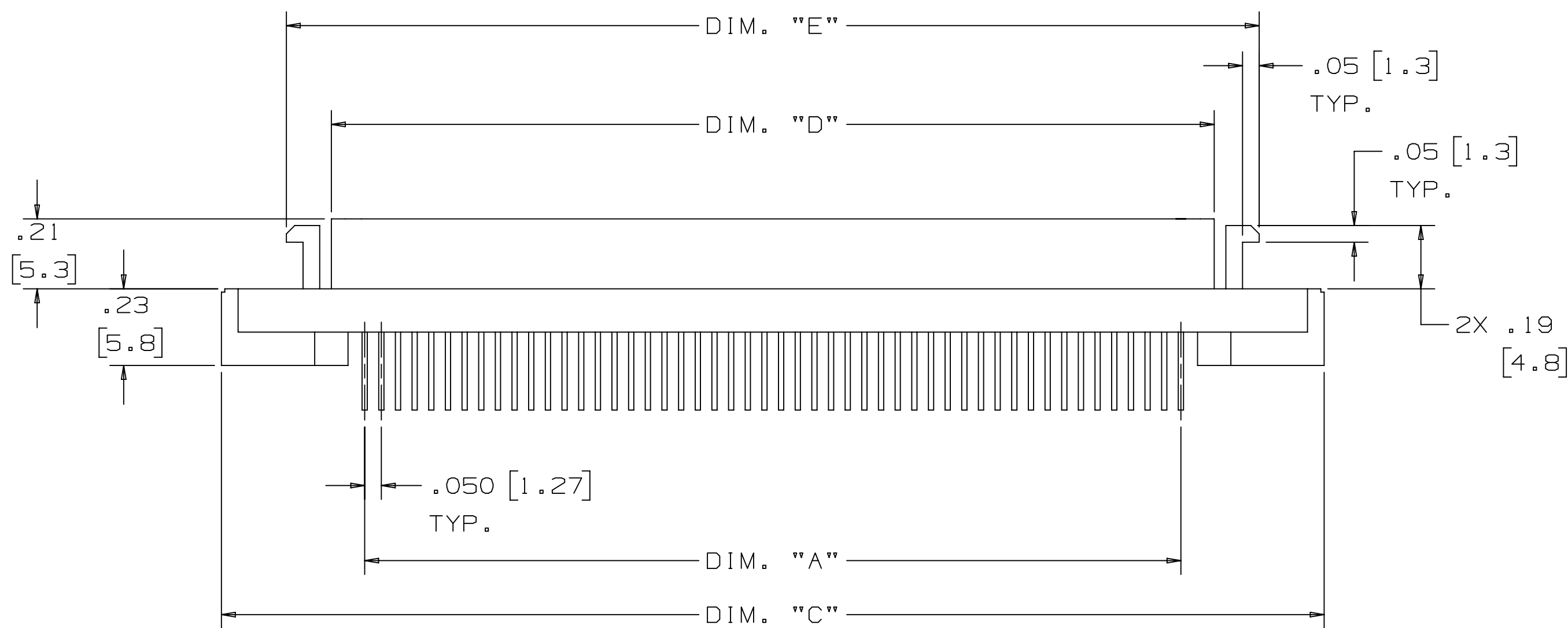
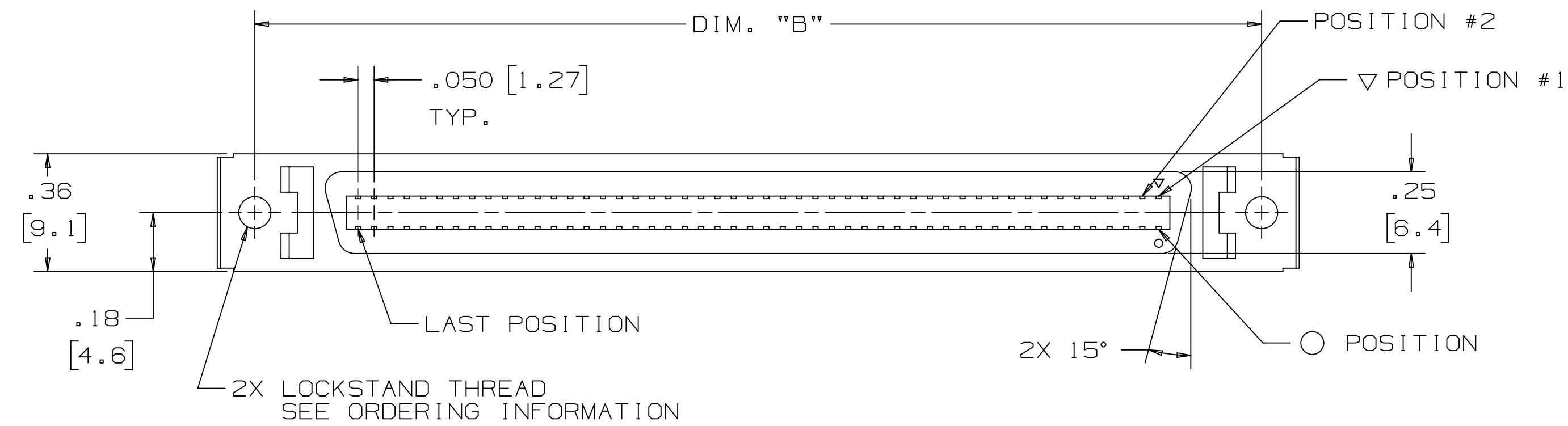
DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY

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			

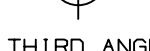
D	123358	JUN 03,2025	JNC	FJR
C	105842	REVISION JUL 13,2022 REDRAWN REVISE TEMP RATING	JNC	FJR
B	16859	NOV 26,2022 REMOVE NON-ROHS	BAC	ARM
A	16859	MAR 05,2007 PRODUCTION RELEASE	BAC	DFC
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	CAS	DATE	DATE	DATE
CHKD	GL	JUL 13,2022	APPR	JUL 13,2022
		F. RODRIGUEZ		
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		MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE		
		CAGE NUMBER D78-5100-0427-4		
		REV. D		
		SHT 1 OF 4		

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

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]



D	123358	JUN 03,2025 REVISE TABLE 1 50P	JNC	FJR
C	105842	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

DESIGN REFERENCE		NEXT		ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
ACCESS CODES						DRFT CASTIGLIONE		DATE JUL 13, 2022		MFG		DATE			
						CHKD		DATE		APPROVAL F. RODRIGUEZ		DATE JUL 13, 2022			
DIVISION				DIVISION CODE DEPP						© 3M COPYRIGHT 2025					
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 THIRD ANGLE PROJECTION INTERPRET PER ASME Y14.5 - 2018		INCHES .00 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002		MILLIMETERS 0 .00 .01 .000 ±		TITLE		MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE							
MAX SURFACE ROUGHNESS ☒ ALL SURFACES ☐ MARKED ONLY		ANGLES ±		CAGE NUMBER D 78-5100-0427-4		DRAWING NO.		REV.							
				MODEL 102		DET. LISTS		YES ☒ NO ☐		SHT 2 OF 4					

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3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES
.050" BOARDMOUNT THROUGHT-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]

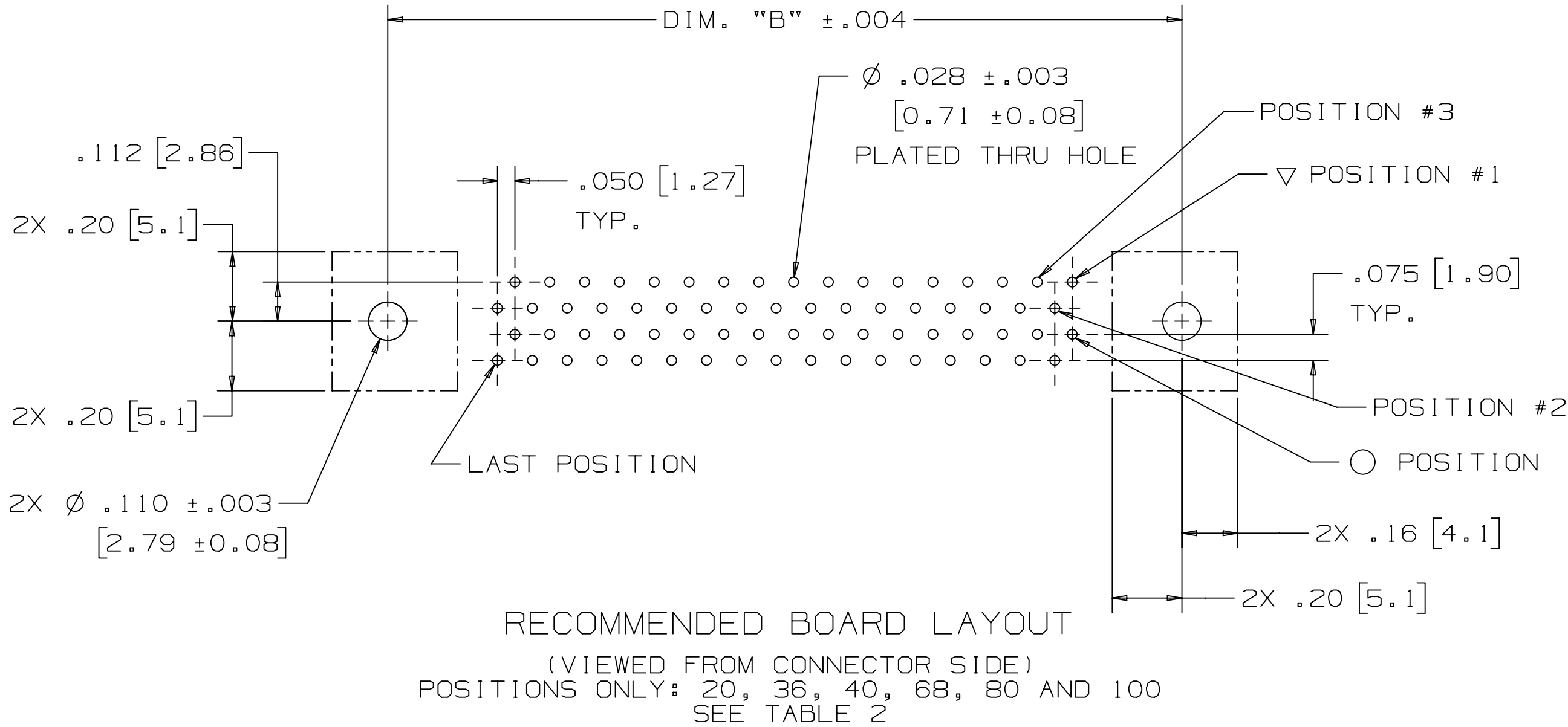


TABLE 3		
CONTACT QTY.	DIM. "A"	DIM. "B"
14	.300 [7.62]	.931 [23.64]
26	.600 [15.24]	1.231 [31.26]
50	1.200 [30.48]	1.831 [46.50]

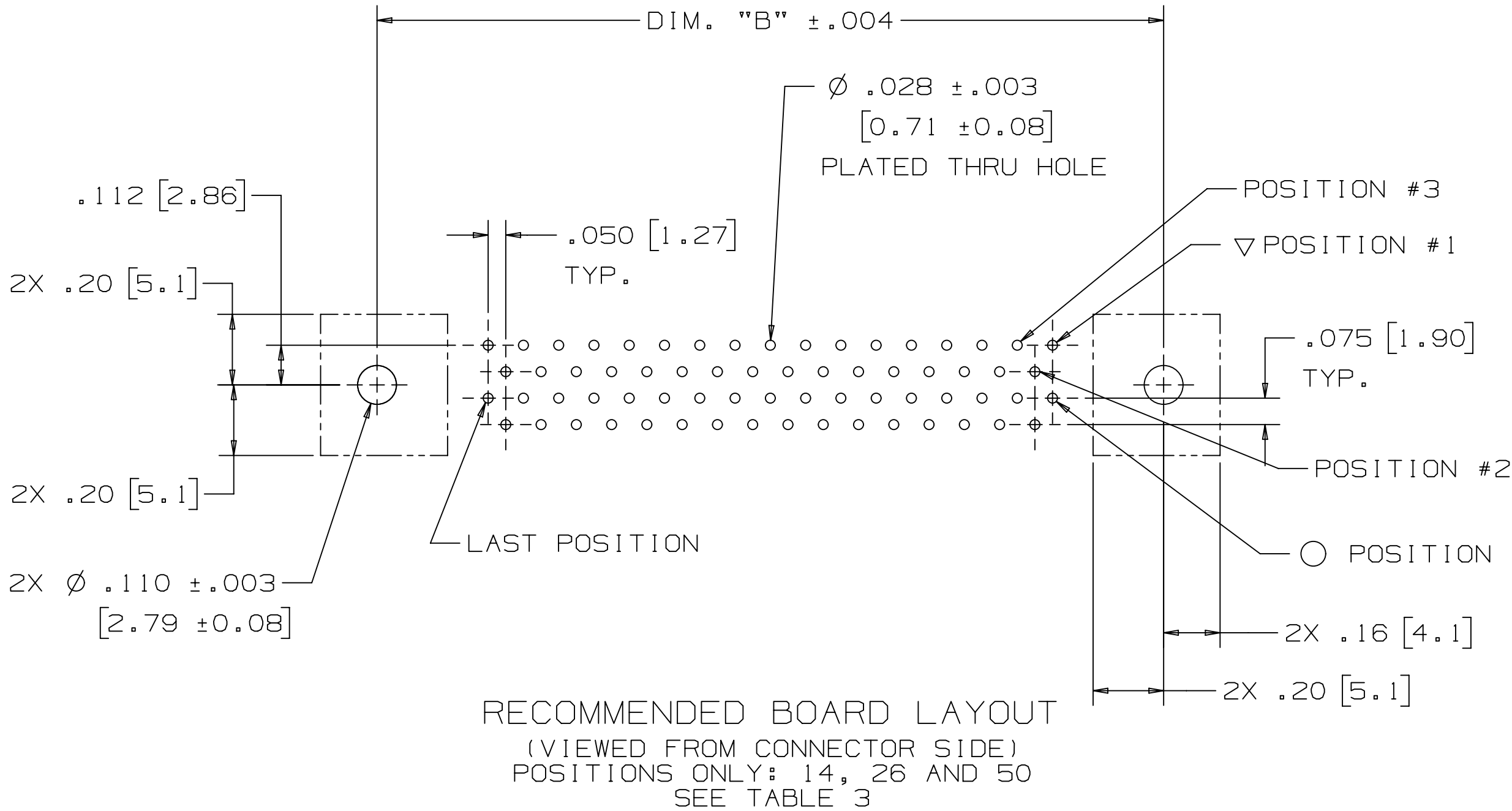
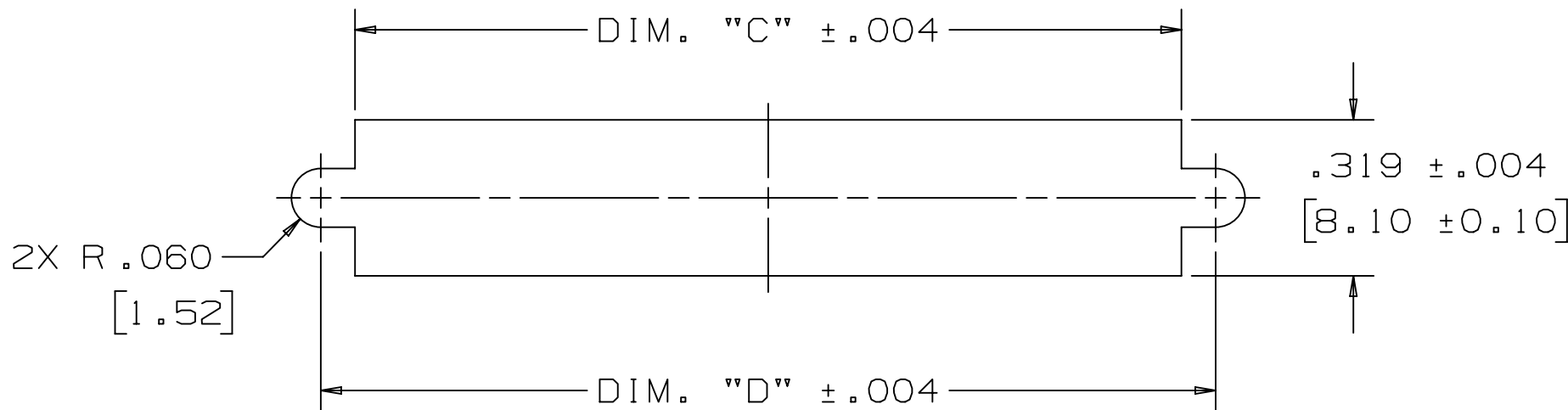


TABLE 4		
CONTACT QTY.	DIM. "C"	DIM. "D"
14	.78 [20.0]	.93 [23.64]
20	.94 [23.8]	1.08 [27.45]
26	1.09 [27.6]	1.23 [31.26]
36	1.33 [33.9]	1.48 [37.61]
40	1.44 [36.5]	1.58 [40.15]
50	1.69 [42.8]	1.83 [46.50]
68	2.13 [54.2]	2.28 [57.93]
80	2.44 [61.9]	2.58 [65.55]
100	2.94 [74.6]	3.08 [78.25]



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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Electronics Materials Solutions Division
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Austin, TX 78753-5380
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		D	123548	JUN 03,2025		JNC	FJR
		C	105842	REVISE TABLE 1 50P		JNC	FJR
		B	16859	JUL 13,2022 REDRAWN REVISE TEMP RATING		BAC	ARM
		A	16859	NOV 26,2022 REMOVE NON-ROHS MAR 05,2007 PRODUCTION RELEASE		BAC	DFC
CAGE NUMBER				REV			
ECO				ISSUE DATE AND DESCRIPTION		DRFT	CHKD
CASTIGLIONE				DATE JUL 13,2022		DATE	
CHRD				DATE		APPR F. RODRIGUEZ	
						DATE JUL 13,2022	
CAGE CODE		DIVISION		DIVISION CODE		© 3M COPYRIGHT 2025	
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SCALE		INCHES		TITLE			
		.0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0002		MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE			
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED		CAGE NUMBER		SIZE	
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS		DRAWING NO.		REV.	
MAX. SURFACE ROUGHNESS		0 ±		D		4	
ALL SURFACES		.0 ±		78-5100-0427-4		D	
MARKED ONLY		.00 ±		MODEL		102	
		.000 ±		DEF.		YES YES NO	
		ANGLES		SHT		4 OF 4	

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