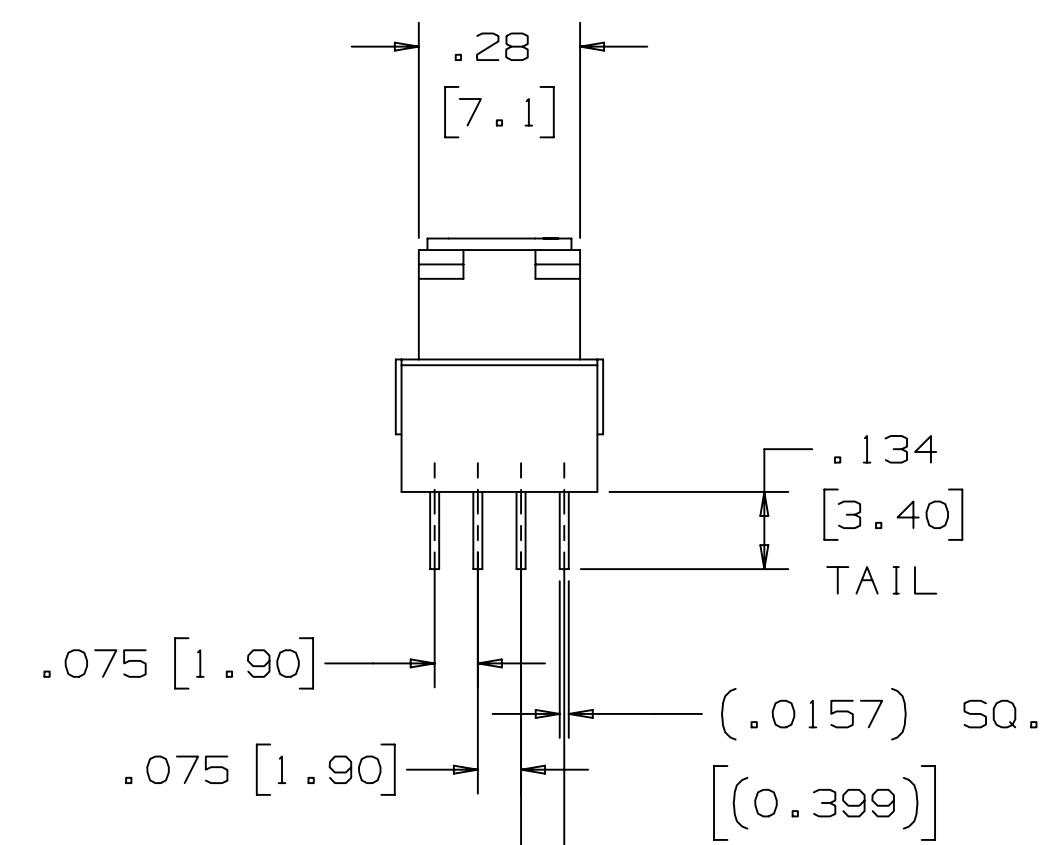
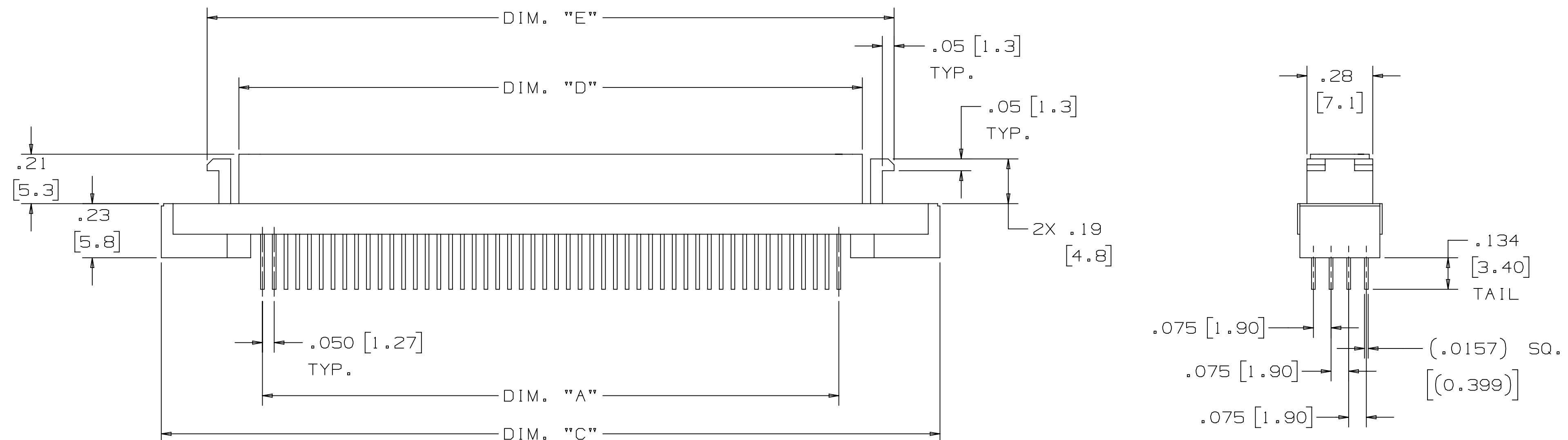
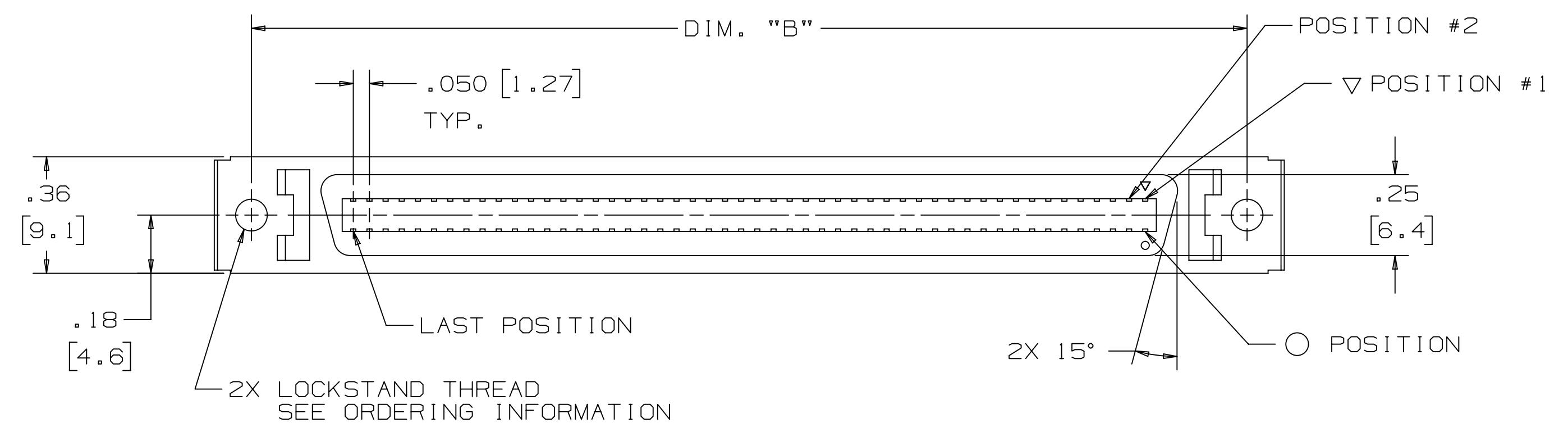




3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES

.050" BOARDMOUNT THROUH-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]



REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
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
PROJ	CASTIGLIONE	DATE JUL 13,2022	MFG	DATE
CHKD		DATE JUL 13,2022	APPR	DATE JUL 13,2022

© 3M COPYRIGHT 2025  
3M Center, St. Paul, MN 55144  
This document and the information it contains are confidential and may be used only with the express written permission of 3M, or used or disclosed other than for 3M authorized purposes. All rights reserved.

MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE

DESIGN REFERENCE: 78-5100-0427-4

NEXT ASSEMBLY: 102

ACCESS CODES: DEPP

DIVISION: DEPP

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX SURFACE ROUGHNESS

CAGE NUMBER: D

SIZE: DRAWING NO. 78-5100-0427-4

REV: D

DET. LISTS: YES

DET. NO: NO

SHT 2 OF 4

3M™ Display and Electronics Product Platform, (DEPP)  
Transportation and Electronics Business Group (TEBG)  
<http://www.3M.com/interconnect>

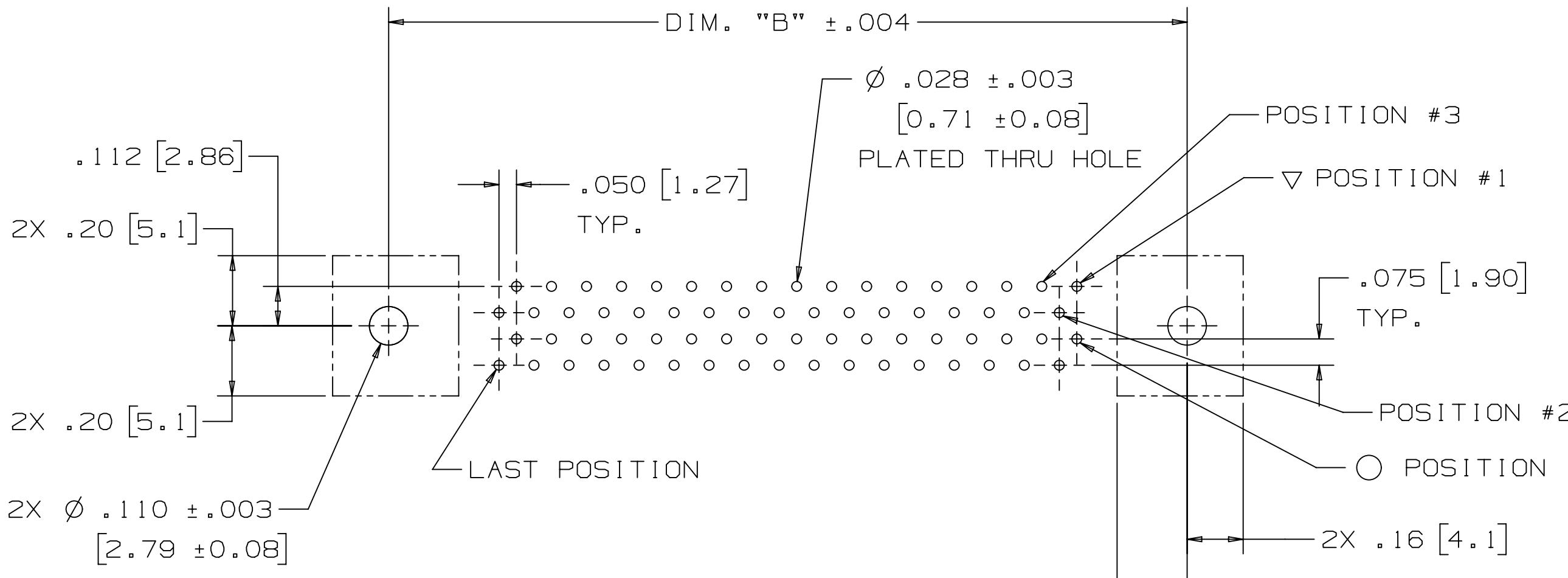
3M IS A TRADEMARK OF 3M COMPANY.  
FOR TECHNICAL, SALES OR ORDERING  
INFORMATION CALL 800-225-5373

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

102 SERIES

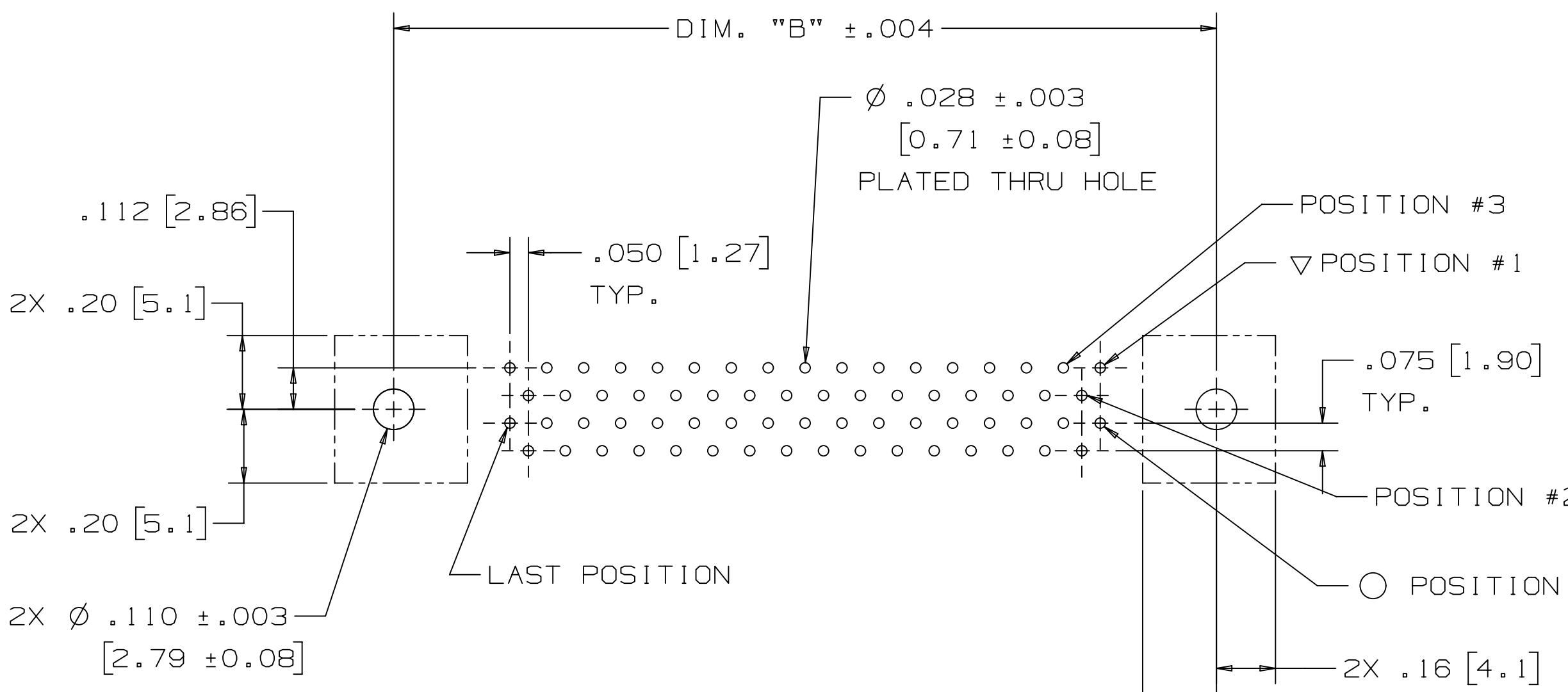
NOTES  
1. RECOMMENDED PC BOARD THICKNESS  
OF .062".

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 ]



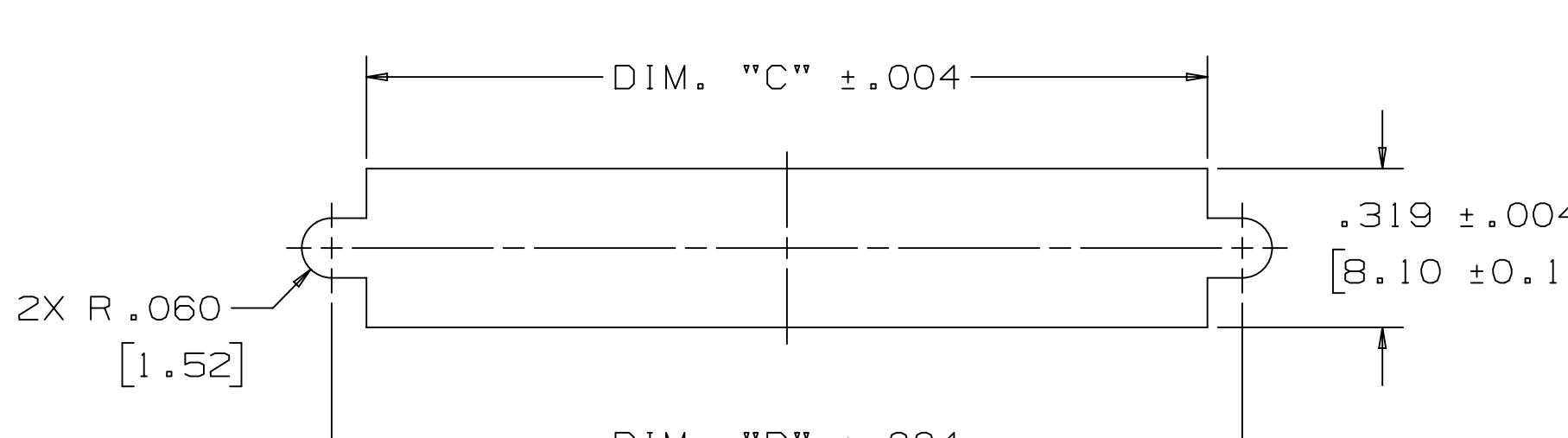
RECOMMENDED BOARD LAYOUT  
(VIEWED FROM CONNECTOR SIDE)  
POSITIONS ONLY: 20, 36, 40, 68, 80 AND 100  
SEE TABLE 2

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 ]



RECOMMENDED BOARD LAYOUT  
(VIEWED FROM CONNECTOR SIDE)  
POSITIONS ONLY: 14, 26 AND 50  
SEE TABLE 3

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

3M™ Display and Electronics Product Platform, (DEPP)  
Transportation and Electronics Business Group (TEBG)  
<http://www.3M.com/interconnect>

3M IS A TRADEMARK OF 3M COMPANY.  
FOR TECHNICAL, SALES OR ORDERING  
INFORMATION CALL 800-225-5373

D	123358	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
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
REV	ECO	DATE JUL 13,2022	MFG DATE	
REV	ECO	DATE JUL 13,2022	APPROVED F. RODRIGUEZ	DATE JUL 13,2022
© 3M COPYRIGHT 2025				
3M Center St. Paul, MN 55144 This document and the information it contains are confidential and may only be distributed or otherwise utilized with the express written permission of 3M or disclosed other than for 3M authorized purposes. All rights reserved.				
MDR CONN, SHIELDED, 050" BMT THRU-HOLE VERT RECEPTACLE				
DRAWING NO. D 78-5100-0427-4				
SIZE 102				
REV. D				
DET. LISTS YES NO SHT 3 OF 4				

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

.050" BOARDMOUNT THROUGHT-HOLE VERTICAL RECEPTACLE - SHIELDED

Regulatory: For regulatory information about this product, visit [3M.com/regs](http://3M.com/regs) or contact your 3M representative.

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product in accordance with all applicable instructions and with appropriate safety equipment, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

**Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price.

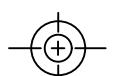
**Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by applicable law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

**Disclaimer:** For industrial use only. Not intended, labeled or packaged for consumer sale or use.

3M Company  
Electronics Materials Solutions Division  
13011 McCallen Pass, Bldg. C  
Austin, TX 78753-5380  
1-800-225-5373  
[www.3M.com/interconnect](http://www.3M.com/interconnect)

3M™ Display and Electronics Product Platform, (DEPP)  
Transportation and Electronics Business Group (TEBG)  
<http://www.3M.com/interconnect>

3M IS A TRADEMARK OF 3M COMPANY.  
FOR TECHNICAL, SALES OR ORDERING  
INFORMATION CALL 800-225-5373

DESIGN REFERENCE		NEXT ASSEMBLY		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
ACCESS CODES				DRFT CASTIGLIONE		DATE JUL 13, 2022	MFG	DATE
				CHKD		DATE	APPVL F. RODRIGUEZ	DATE JUL 13, 2022
DIVISION		DIVISION CODE DEPP		 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		TITLE MDR CONN, SHIELDED, 050 <sup>vv</sup> BMT THRU-HOLE VERT RECEPTACLE		
		THIRD ANGLE PROJECTION		INCHES				
		INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS				
MAX SURFACE ROUGHNESS						CAGE NUMBER <b>D</b> 78-5100-0427-4		
						SIZE <b>D</b> 102		
						DRAWING NO. <b>D</b> 78-5100-0427-4		
						MODEL <b>D</b> 102		
						DET. LISTS <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
						SHT 4 OF 4		