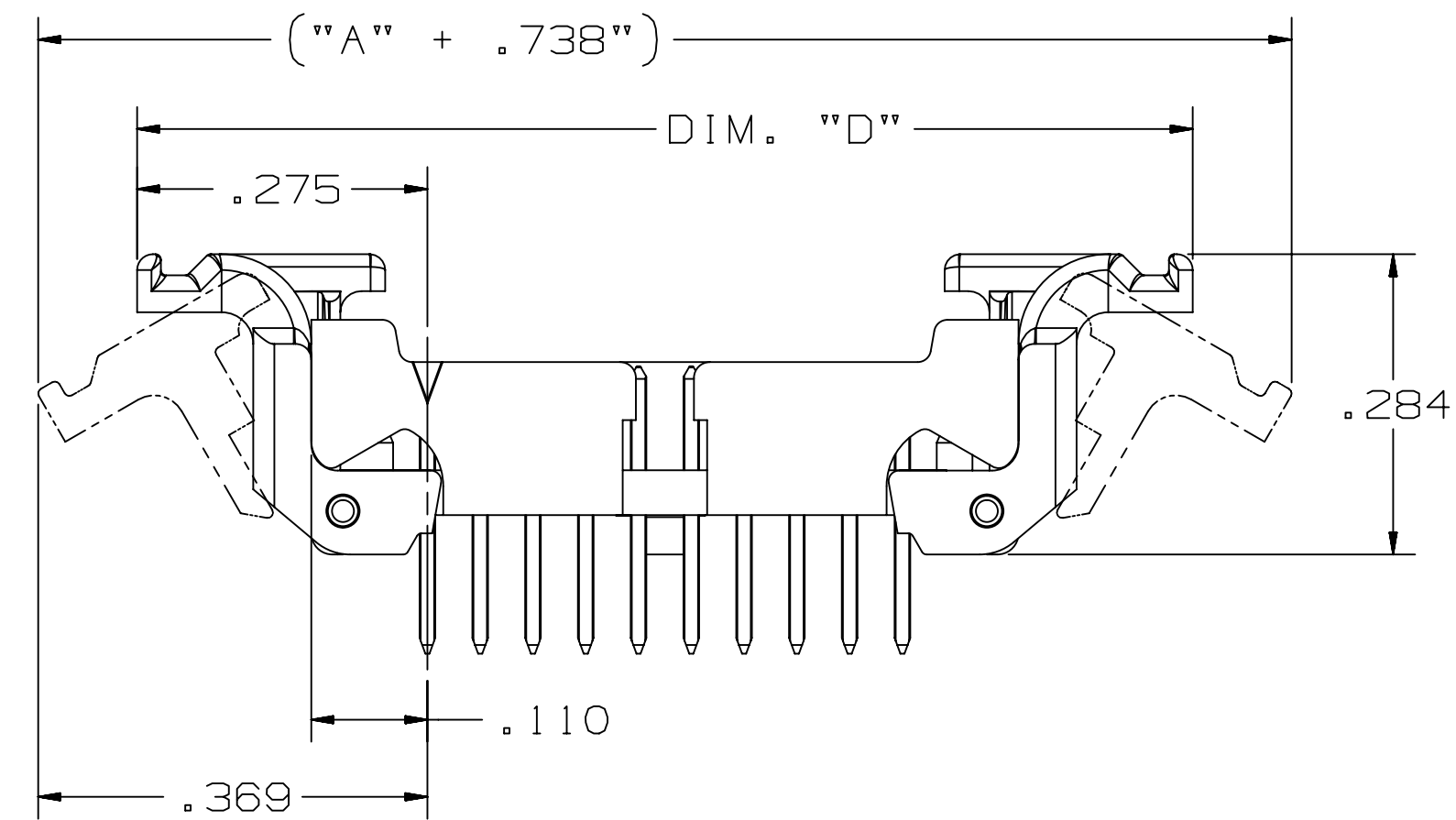
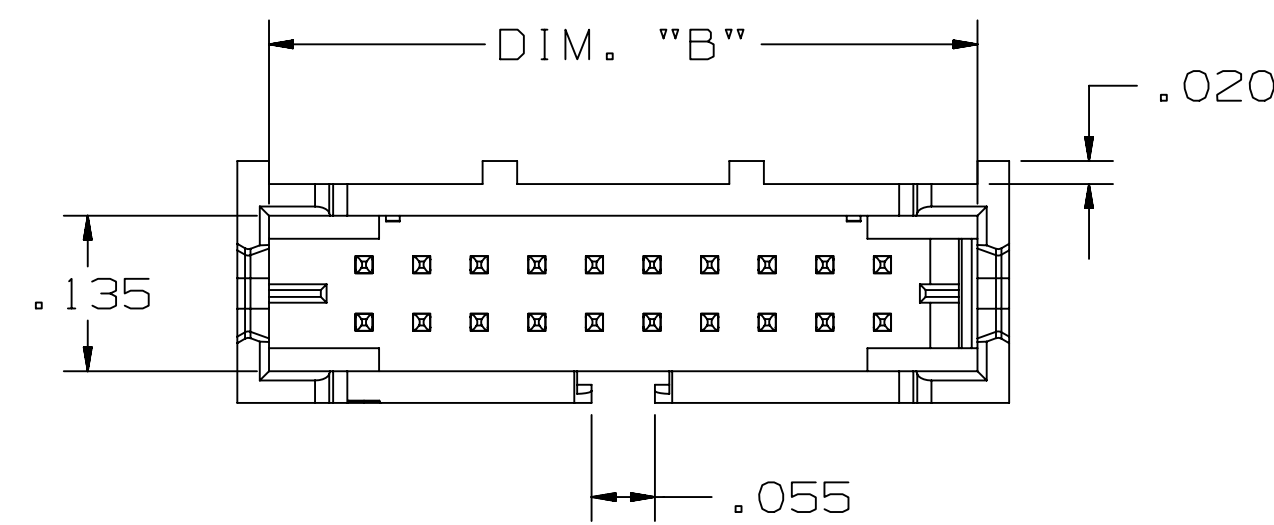
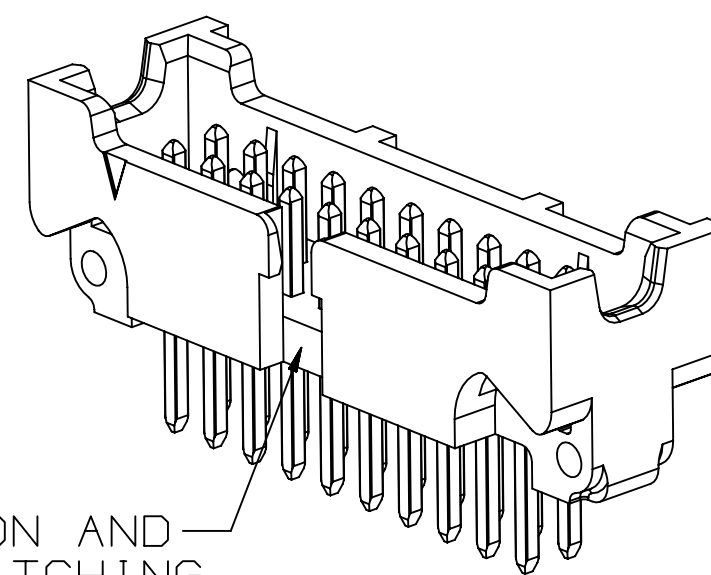
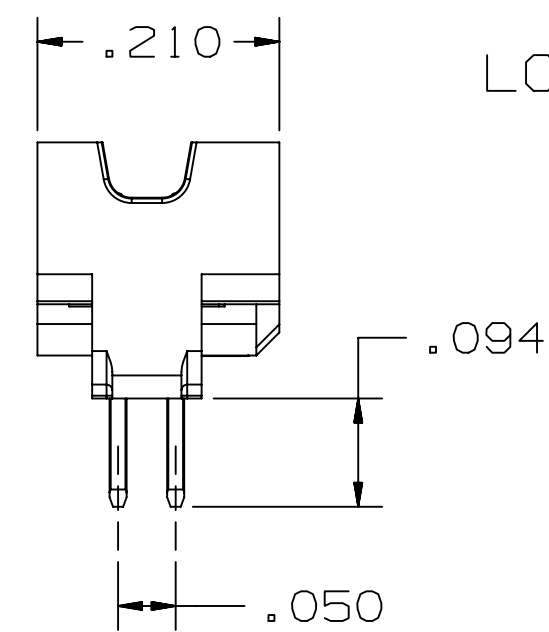
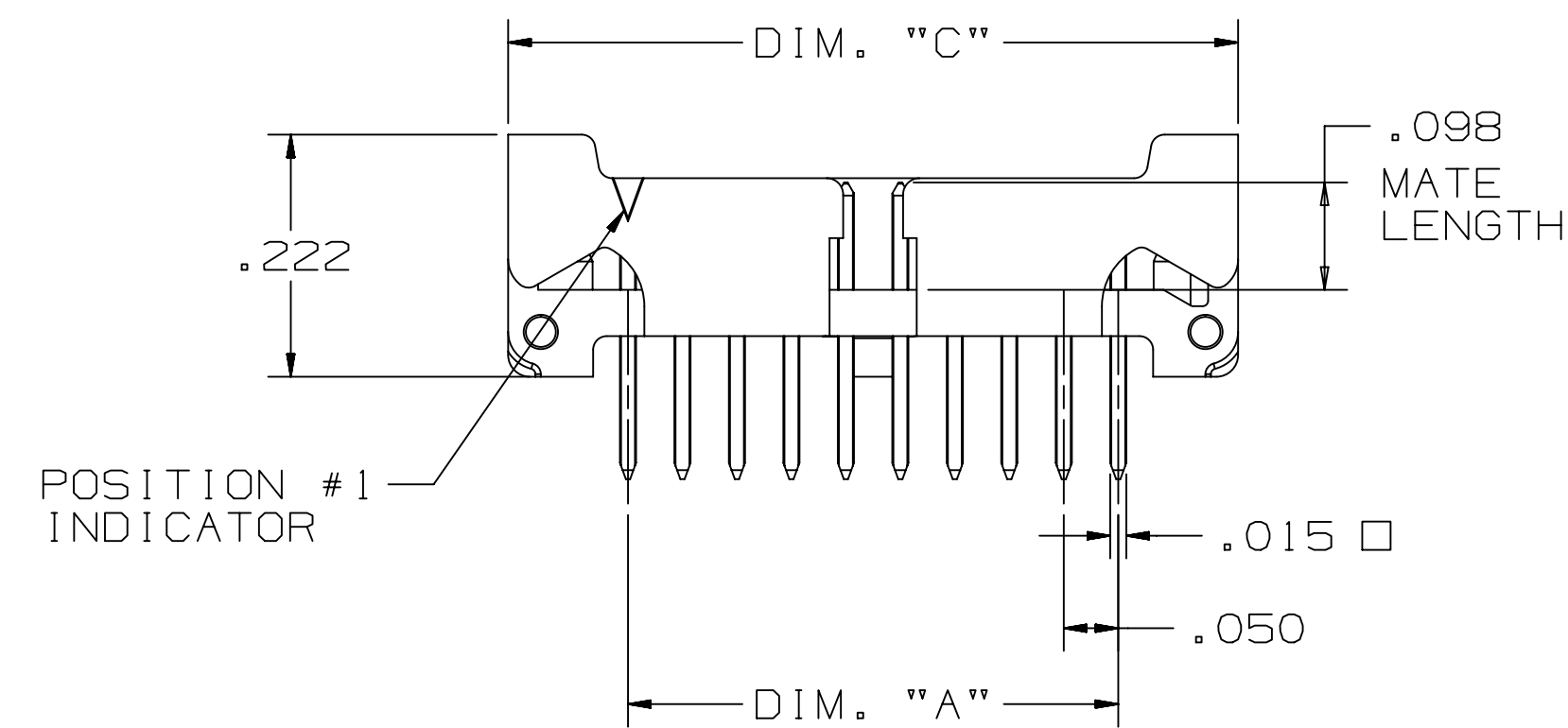


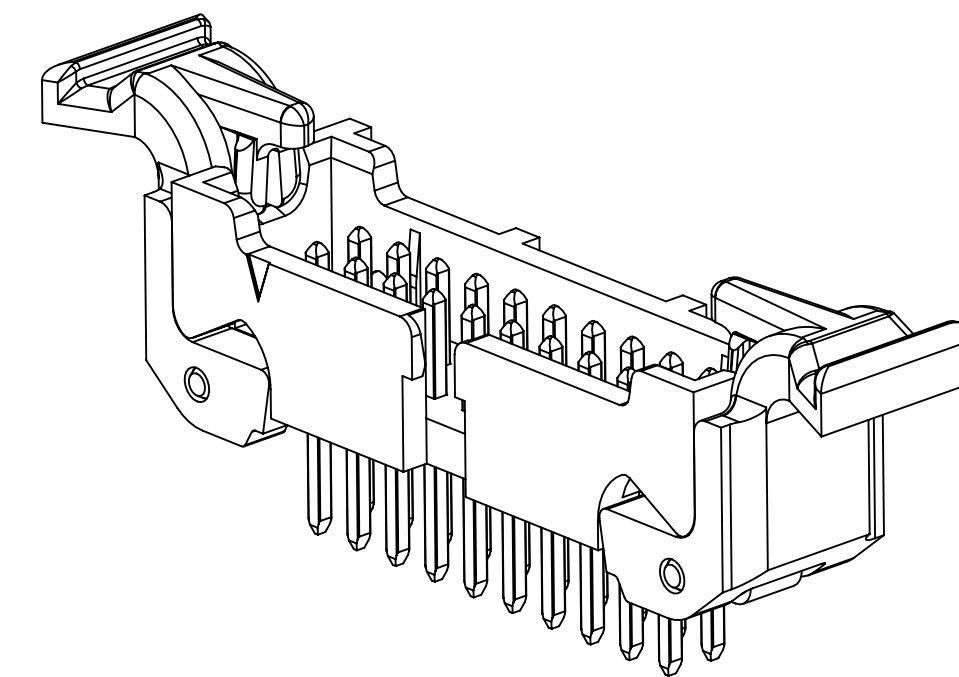
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



THRU BOARD, VERTICAL WITH
LOW PROFILE LATCH/EJECT OPTION



POLARIZATION AND-
FRICTION LATCHING
POSITIONS 8 AND
HIGHER ONLY



WITH LATCH/EJECT

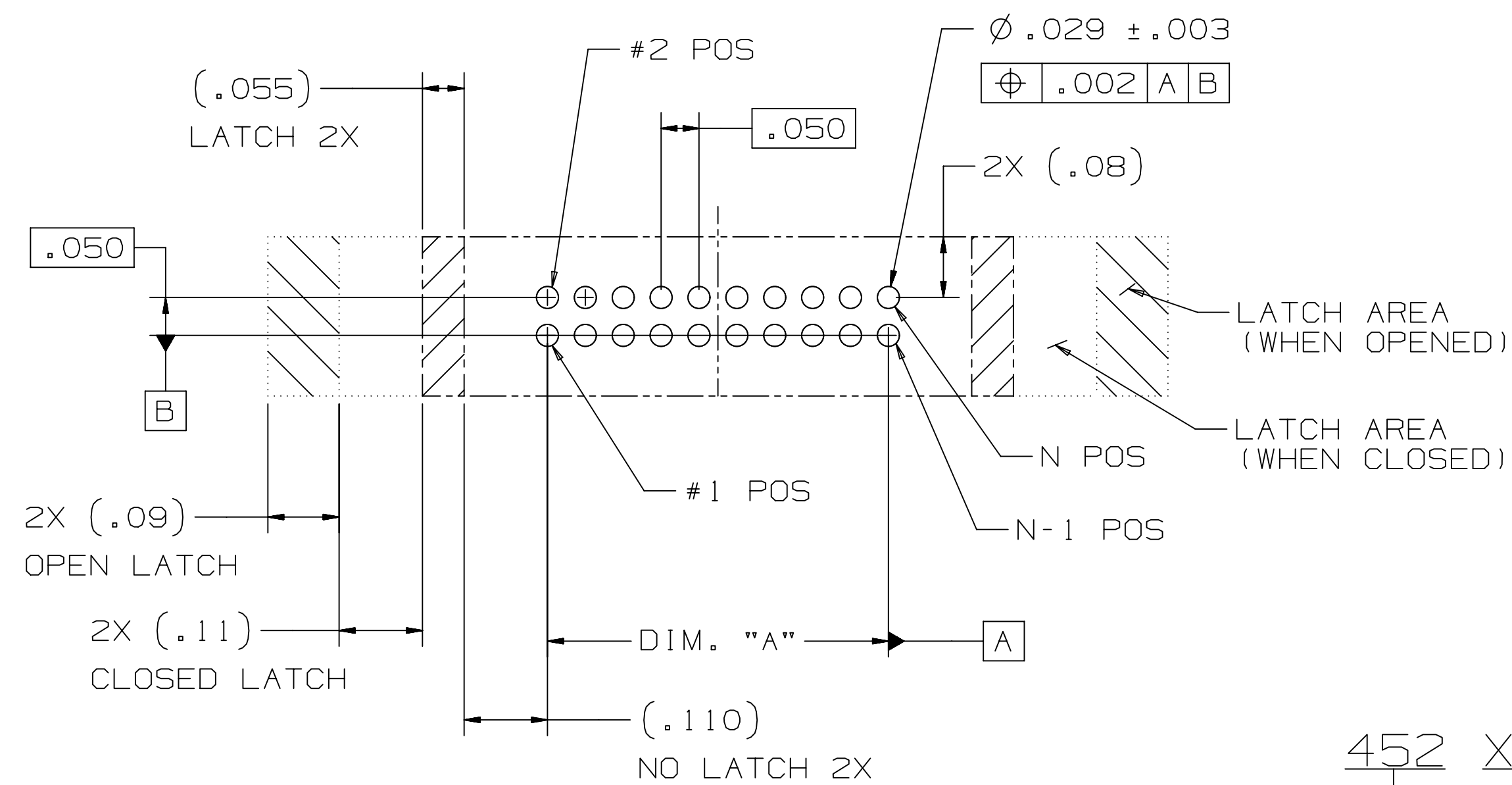
TABLE 1: VERTICAL THRU

No. of Positions	Dim "A"	Dim "B"	Dim "C"	Dim "D"
4	.050	.215	.270	.600
6	.100	.265	.320	.650
8	.150	.315	.370	.700
10	.200	.365	.420	.750
12	.250	.415	.470	.800
14	.300	.465	.520	.850
16	.350	.515	.570	.900
20	.450	.615	.670	1.000
26	.600	.765	.820	1.150
30	.700	.865	.920	1.250
40	.950	1.115	1.170	1.500
50	1.200	1.365	1.420	1.750

NOTES

1. MATERIAL:
BODY: LCP, UL94V-0
LATCH: PPA, UL94V-0
CONTACTS: COPPER ALLOY.
2. PLATING:
50-150 μ " NICKEL UNDERPLATE
30 = 30 μ " GOLD MIN. ON
WIPING AREA WITH 200 μ "
MATTE TIN ON SOLDER TAIL
00 = GOLD FLASH ON WIPING
AREA WITH
100-140 μ " MATTE TIN ON
SOLDER TAIL.
3. MATING COMPATIBILITY:
3M 1,27mm (0.050"), 451 SERIES
RIBBON CABLE SOCKET. TECH
SHEETS TS-2436 AND TS-2396
4. REGULATORY INFORMATION:
VISIT 3M.com/regs
5. IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND THAT
CONTAINED IN THE PRODUCT
SPECIFICATION, THE PRODUCT
SPECIFICATION TAKES
PRECEDENT.
6. REFERENCE PRODUCT SPEC:
3M DOC ID# 78-5102-0091-4
7. OTHER PIN COUNTS AVAILABLE
UPON REQUEST. CONTACT 3M.
8. UNLESS OTHERWISE NOTED,
REFERENCES TO INDUSTRY
SPECIFICATIONS ARE INTENDED
TO INDICATE SUBSTANTIAL
COMPLIANCE TO THE MATERIAL
ELEMENTS OF THE SPECIFICATION.
SUCH REFERENCES SHOULD NOT BE
CONSTRUED AS A GUARANTEE OF
COMPLIANCE TO ALL REQUIREMENTS
IN A GIVEN SPECIFICATION.
9. PACKAGING:
VERTICAL THRU: TRAY
RIGHT ANGLE THRU: TRAY
VERTICAL SMT: TAPE AND REEL.

THRU BOARD, VERTICAL



RECOMMENDED BOARD LAYOUT

SERIES

NO. OF POSITIONS
SEE TABLE 1

PART CONFIG. AND PACKAGING _____

6 = VERTICAL THRU HOLE, TRAY PACKAGING
5 = RIGHT ANGLE THRU HOLE, TRAY PACKAGING
2 = VERTICAL SMT, TAPE AND REEL WITH VAC CAP

- PLATING
00 = AU FLASH
30 = 30 μ " GOLD

CONTACT TAIL
2 = STANDARD (.094")

- LATCH/EJECT
 - 0 = NO LATCHES
 - 2 = WITH LOW PROFILE LATCHES

CURRENT RATING:

CURRENT RATING:	1.0A, UL 04P-50P, NOT FOR CURRENT INTERRUPTION
-----------------	---

1.0A, CUL 04P-30P, NOT FOR
CURRENT INTERRUPTION

0.75A, CUL 32P-50P, NOT FOR
CURRENT INTERRUPTION

0.75A, ALL LINES ENGERGIZED
30° C TEMP RISE PER EIA 364-70

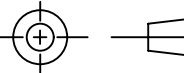
1.50A, 6 LINES ENERGIZED
30° C TEMP RISE PER EIA 364-70

UL & CUL VOLTAGE RATING:	125V _{AC}
INSULATION RESISTANCE:	> 1 × 10 ⁹ Ohms AT 500 VDC
WITHSTANDING VOLTAGE:	1250V _{DC} AT SEA LEVEL
OPERATING TEMPERATURE:	-65°C to +125°C
UL & CUL OPERATING TEMPERATURE:	+130°C
PROCESSING TEMPERATURE:	260°C
LEAD-FREE SOLDERABLE:	YES
MOISTURE SENSITIVITY LEVEL:	MSL1 PER J-STD-020

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INTERCONNECT SOLUTIONS
<http://www.3M.com/interconnect>

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INFORMATION CALL 800-225-5373

UL[®]
US
UL FILE NO: E68080

78-5100-2436-3		78-5100-2396-9	
DESIGN REFERENCE		NEXT ASSEMBLY	
ACCESS CODES			
DIVISION		DIVISION CODE	
		EMSD	
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED	
SCALE 6 1		INCHES	
		.00 ± .01	
		.00 ± .02	
		.000 ± .010	
		.0000 ± .0050	
THIRD ANGLE PROJECTION		MILLIMETERS	
INTERPRET PER ASME Y14.5 - 2018		.00 ±	
MAX. SURFACE ROUGHNESS		.00 ±	
☐ ALL SURFACES ☒ MARKED ONLY		.000 ±	
		ANGLES ±	

3M 3M Center
St. Paul
MN 5514

TITLE	SHROUDED BMT HEADER, .05 X .05 PITCH, L/E, 452 SERIES
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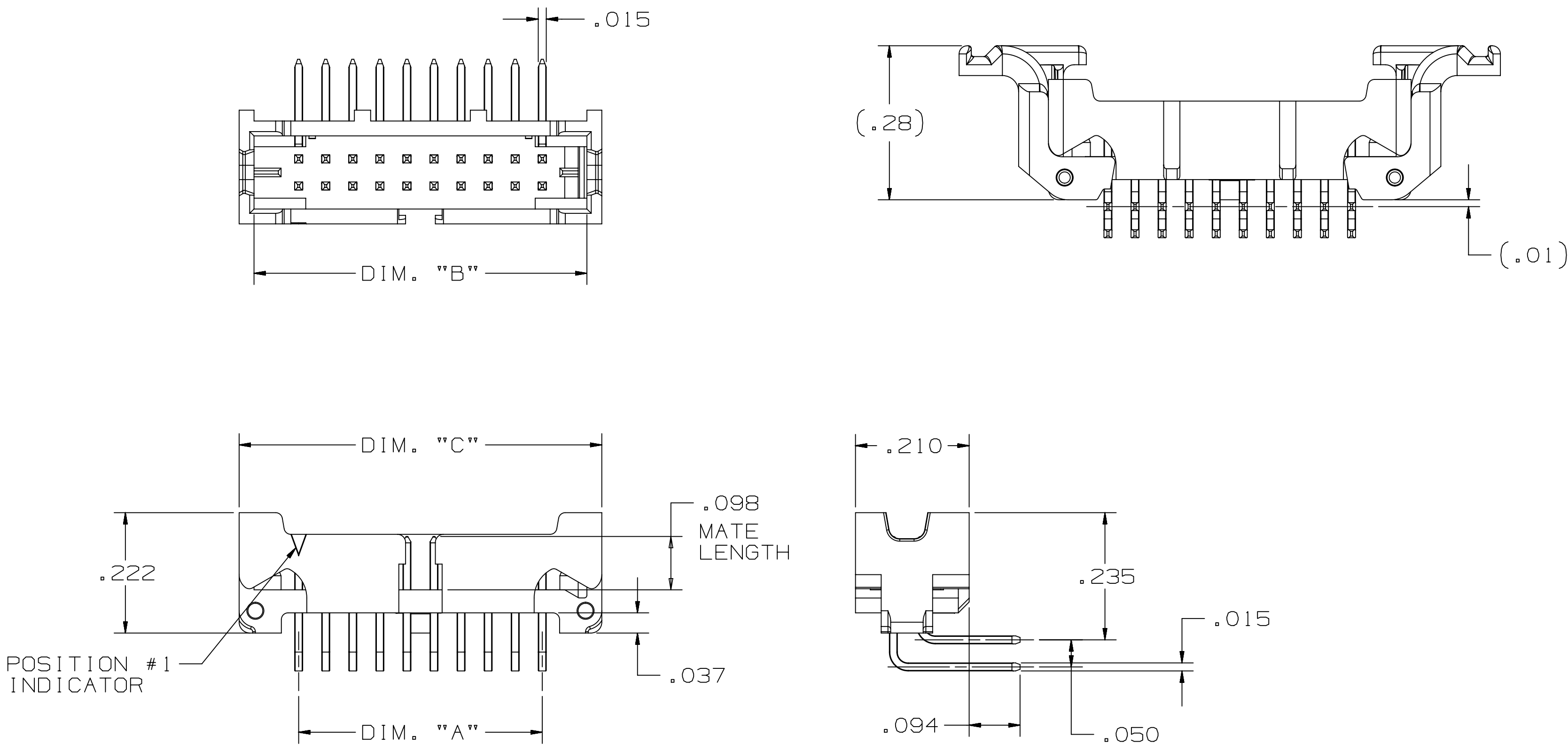
CAGE NUMBER	SIZE D	DRAWING NO. 78-5100-2437-1	REV. J
MODEL 452		DET. LISTS ☐ YES ☒ NO	SHT 1 OF 5

78-5100-2437-1	J
DRAWING NUMBER	REVISION

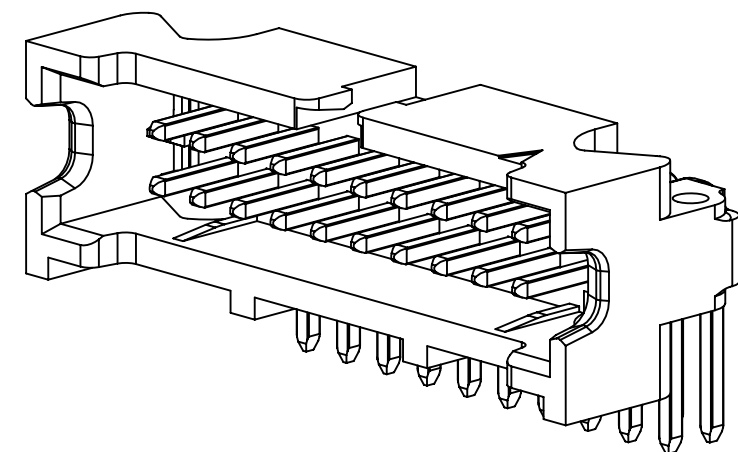
2	
---	--

12	A
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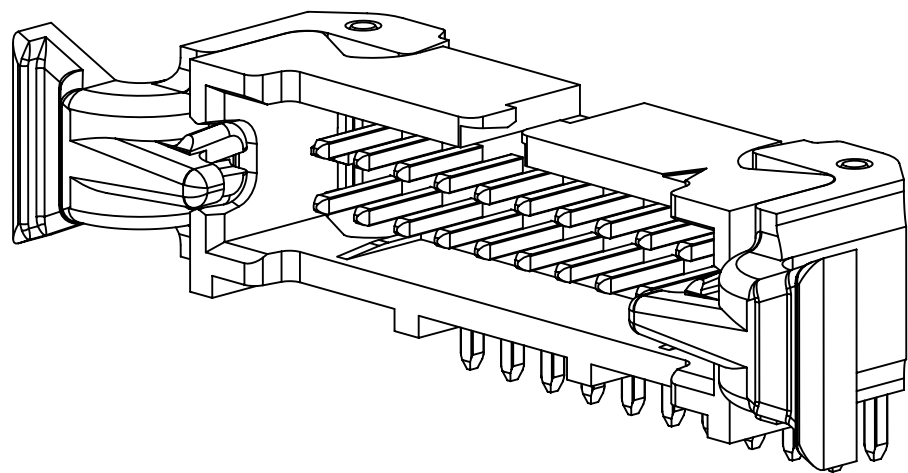
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



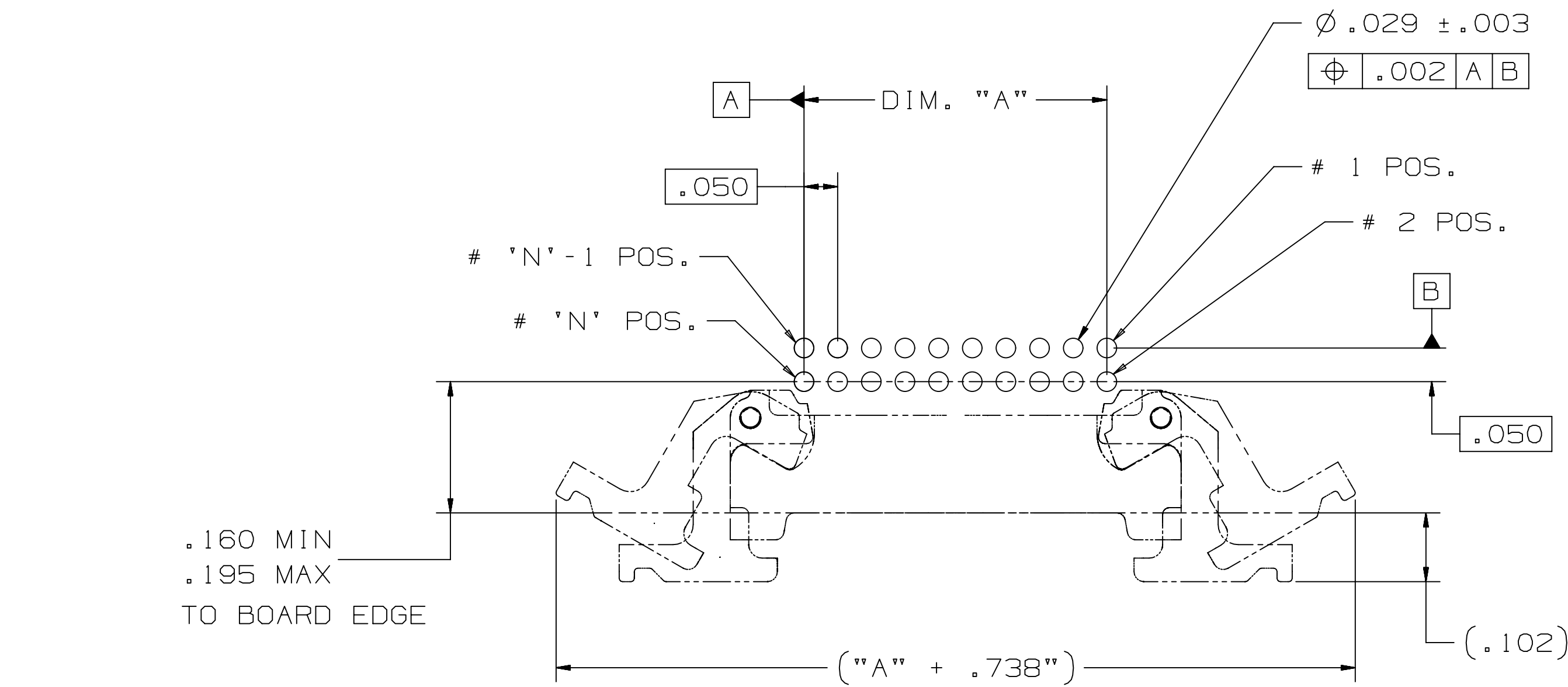
THRU BOARD, RIGHT ANGLE



WITHOUT LATCH/EHECT



WITH LATCH/EJECT



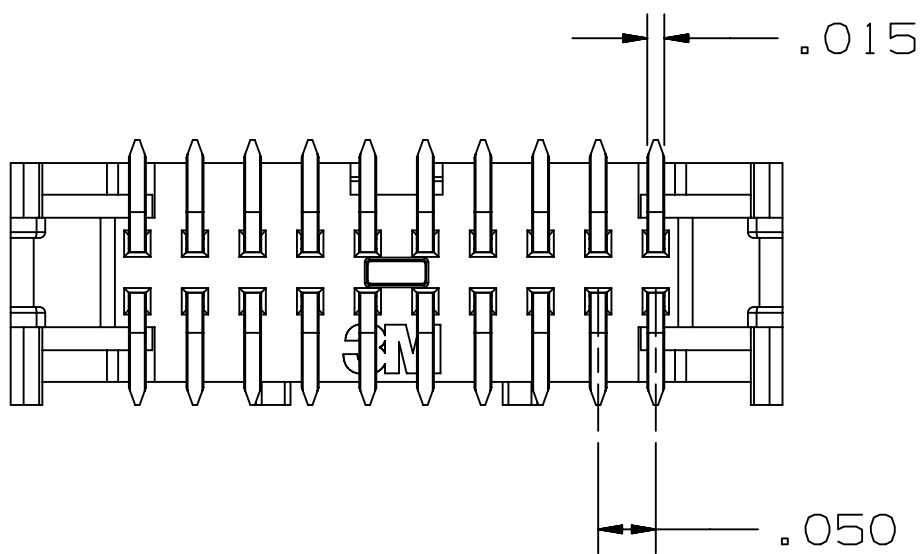
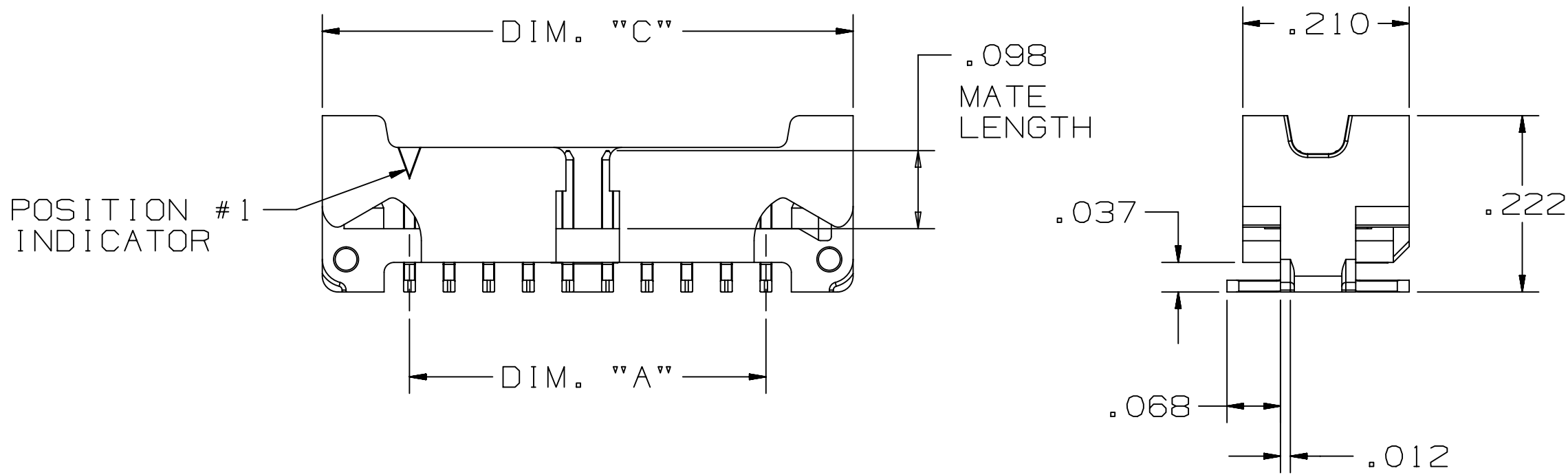
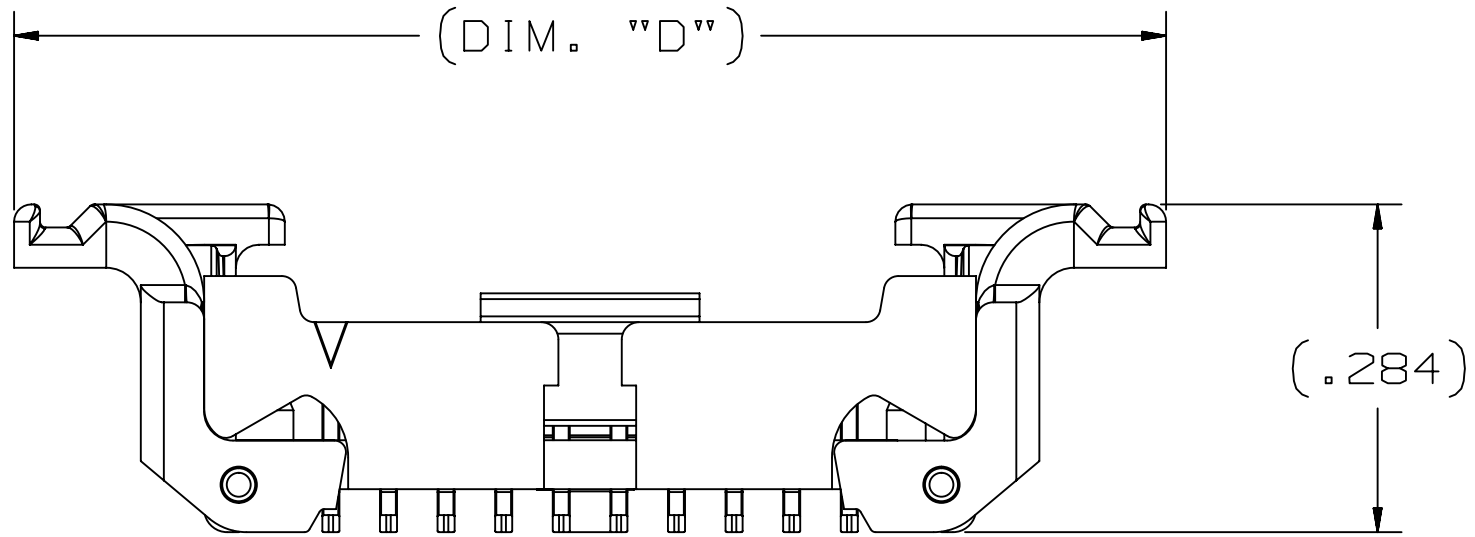
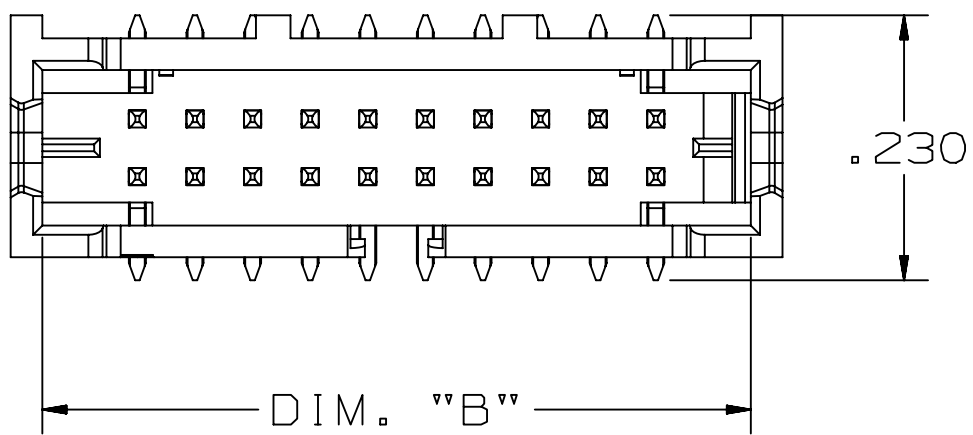
RECOMMENDED BOARD LAYOUT

TABLE 1: RIGHT ANGLE THRU

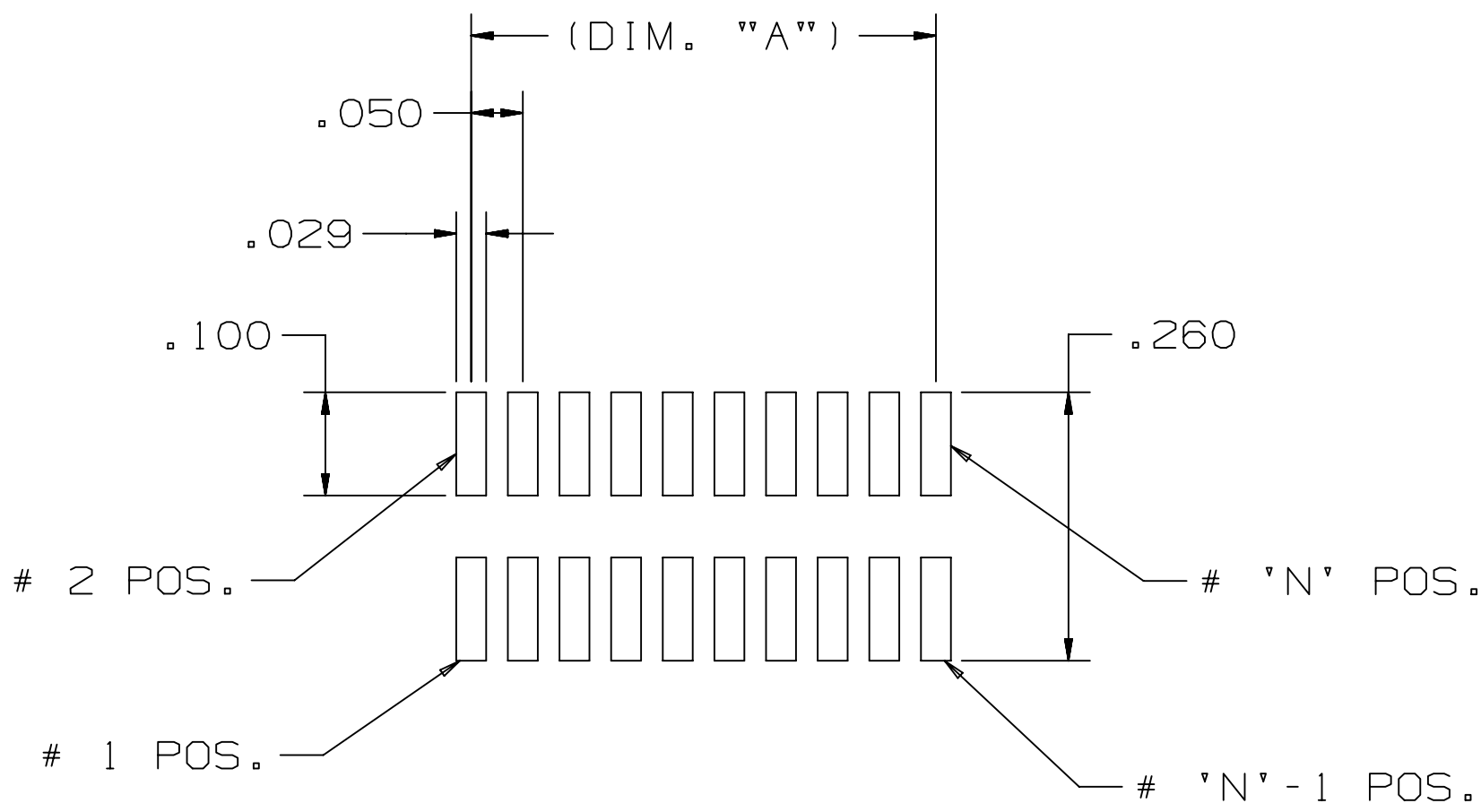
No. Positions	Dim "A"	Dim "B"	Dim "C"
4	.050	.215	.270
6	.100	.265	.320
8	.150	.315	.370
10	.200	.365	.420
12	.250	.415	.470
14	.300	.465	.520
16	.350	.515	.570
20	.450	.615	.670
26	.600	.765	.820
30	.700	.865	.920
40	.950	1.115	1.170
50	1.200	1.365	1.420

78-5100-2436-3 78-5100-2396-9		NEXT ASSEMBLY		PRODUCTION RELEASE					
DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XREF CODES		XREF CODES		DRFT	ARM	DATE NOV 29,2012		PRC	DATE NOV 29,2012
DIVISION		DIVISION CODE		CHKD	SAN	DATE NOV 29,2012		APPR	DATE NOV 29,2012
DO NOT SCALE DRAWING		SCALE 6/1		TOLERANCES EXCEPT AS NOTED		© 3M COPYRIGHT 2022			
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .00 ±.02 .0000 ±.010 .0000 ±.0050		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.			
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS 0 ±.00 .00 ±.000		TITLES SHROUDED BMT HEADER, .05 X .05 PITCH, L/E, 452 SERIES					
MAX SURFACE ROUGHNESS		CAGE NUMBER		SIZE		DRAWING NO.		REV.	
MAX SURFACES		NUMBER		D		78-5100-2437-1		J	
MARKED ONLY		ANGLES ±		MODEL		452		LISTS YES NO	
								SHT 2 OF 5	

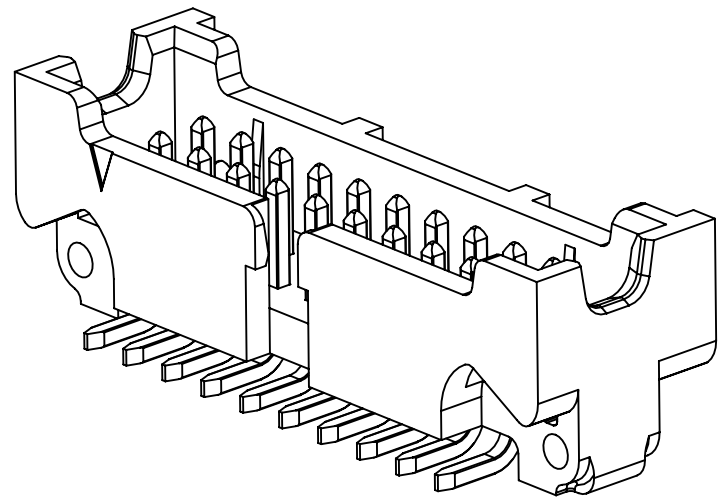
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



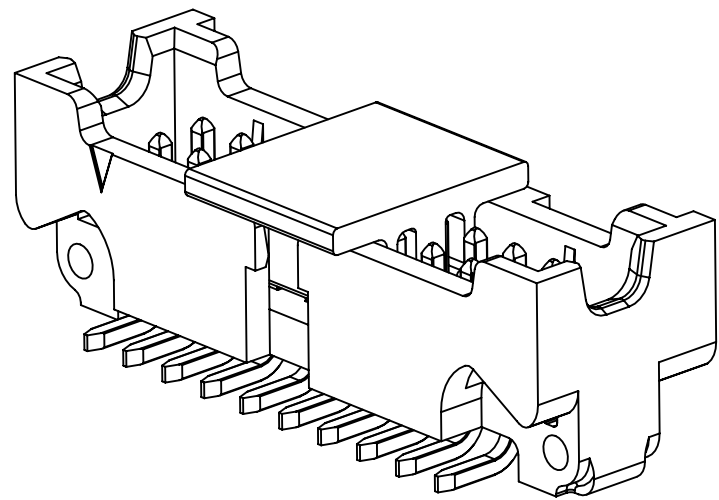
SURFACE MOUNT, VERTICAL



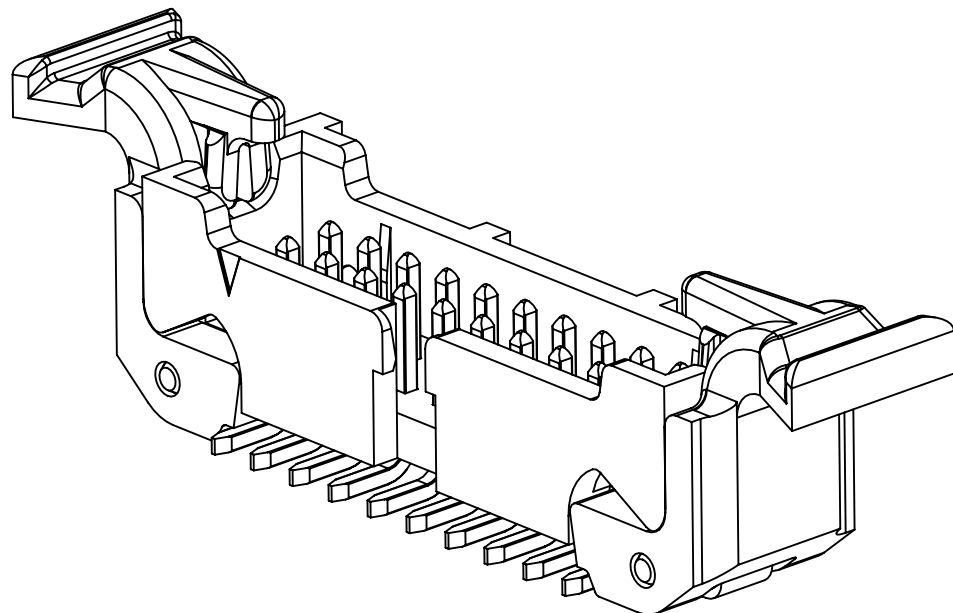
RECOMMENDED BOARD LAYOUT



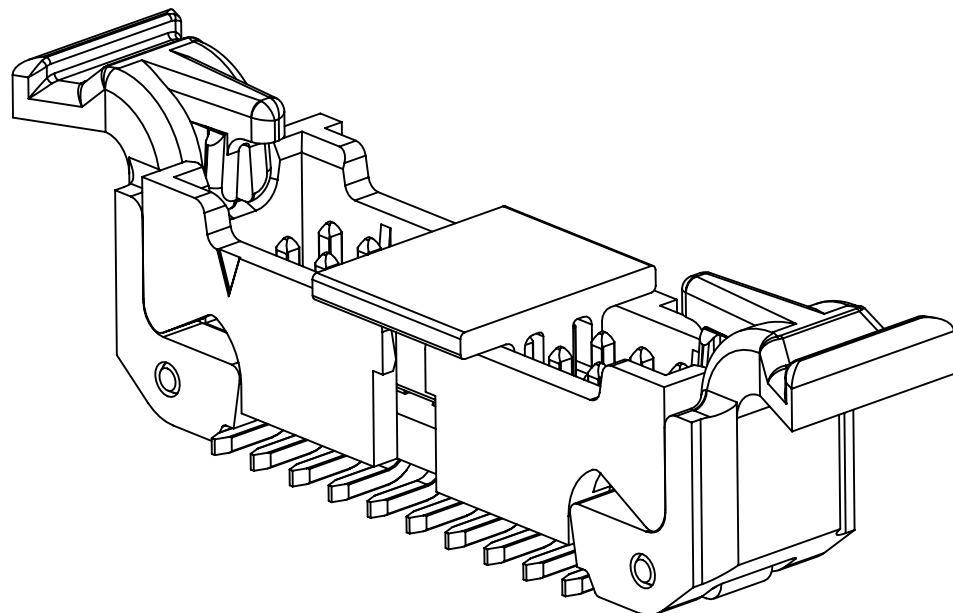
SHROUDED SMT HEADER



WITH VACUUM CAP



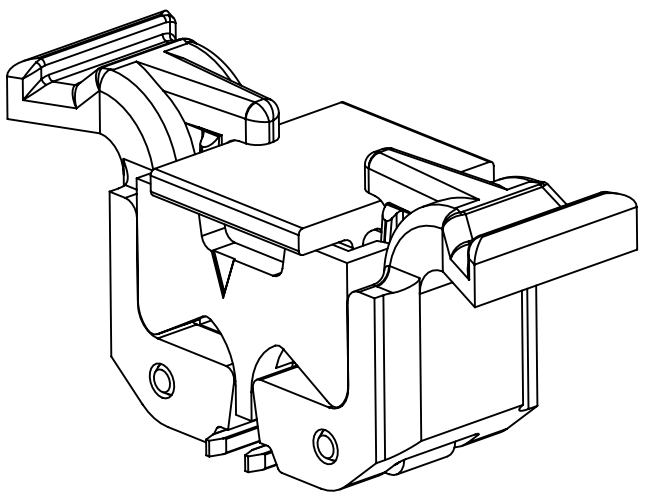
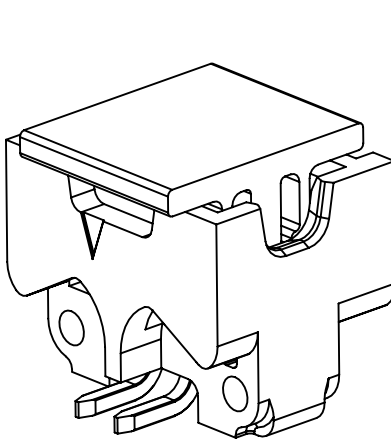
WITH LATCH/EJECT



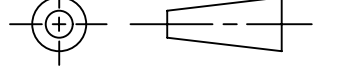
WITH LATCH/EJECT
AND VACUUM CAP
VACUUM CAP IS FULLY SEATED
ON POSITIONS 8 AND HIGHER

TABLE 1: VERTICAL SMT

No. Positions	Dim "A"	Dim "B"	Dim "C"	Dim "D"
4	.050	.215	.270	.600
6	.100	.265	.320	.650
8	.150	.315	.370	.700
10	.200	.365	.420	.750
12	.250	.415	.470	.800
14	.300	.465	.520	.850
16	.350	.515	.570	.900
20	.450	.615	.670	1.000
26	.600	.765	.820	1.150
30	.700	.865	.920	1.250
40	.950	1.115	1.170	1.500
50	1.200	1.365	1.420	1.750



VACUUM CAP SEATED ON TOP
EDGES OF END WALLS ON
POSITIONS 4 AND 6

78-5100-2436-3 78-5100-2396-9		DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	PRODUCTION RELEASE		DRFT	CHKD
ADDRESS CODES						DRFT	ARM	DATE NOV 29,2012		PRC	DATE NOV 29,2012
						CHKD	SAN	DATE NOV 29,2012		APPR	DATE NOV 29,2012
DIVISION		DIVISION CODE		EMSD		 3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2022 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 6 1		TOLERANCES EXCEPT AS NOTED							
		THIRD ANGLE PROJECTION		INCHES 0.0 ± .01 0.000 ± .002 0.000 ± .0010 0.000 ± .0050							
INTERPRET PER ASME Y14.5 - 2018				MILLIMETERS 0 ± 0.00 ± 0.00 ± 0.00 ±		TITLE		SHROUDED BMT HEADER, .05 X .05 PITCH, L/E, 452 SERIES			
MAX. SURFACE ROUGHNESS		ALL SURFACES		MARKED ONLY		CAGE NUMBER		SIZE		DRAWING NO.	
☒		☐		☐		D		78-5100-2437-1		REV. J	
				ANGLES ±		MODEL		452		DET. LISTS ☐ YES ☒ NO SHT 3 OF 5	

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES

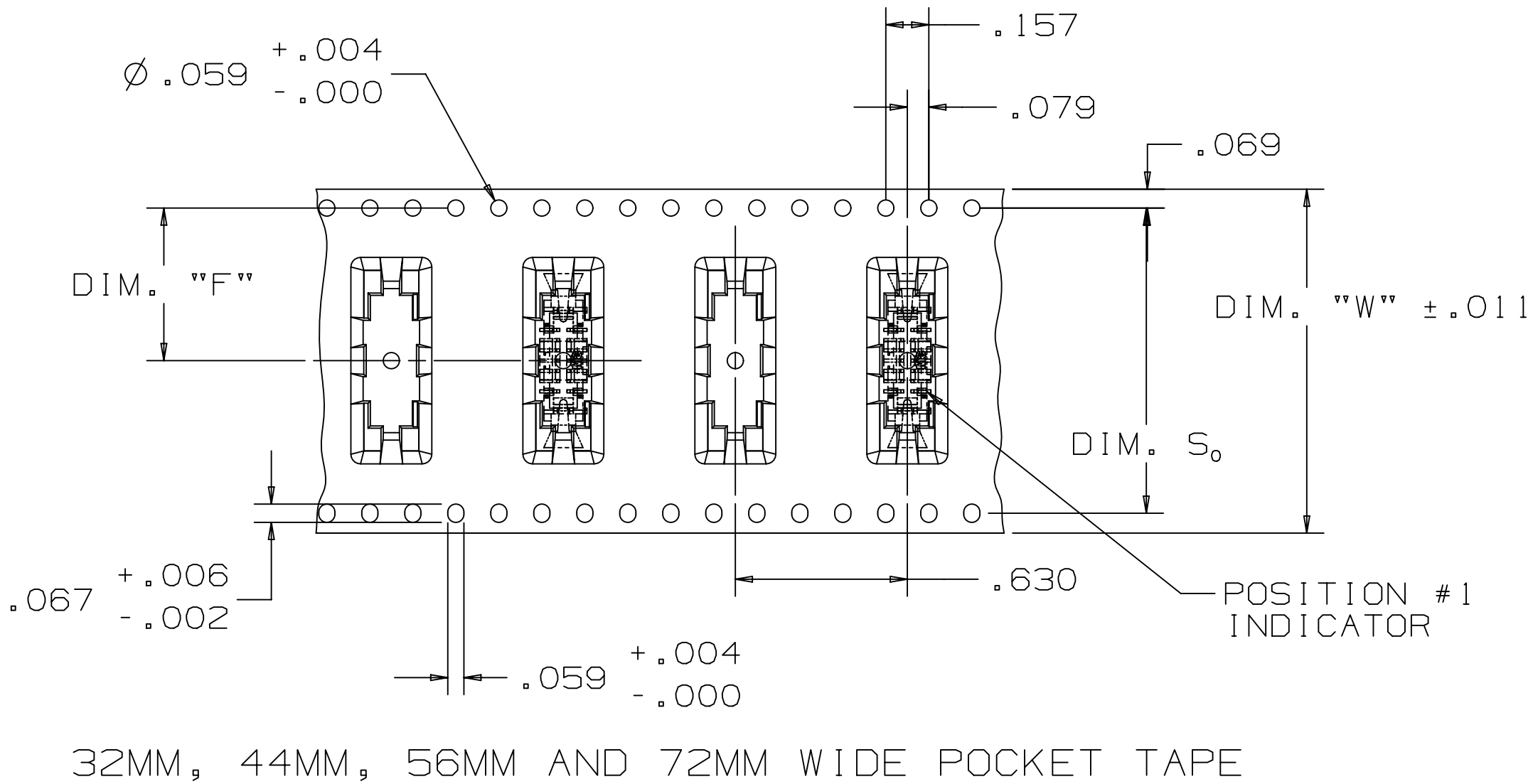
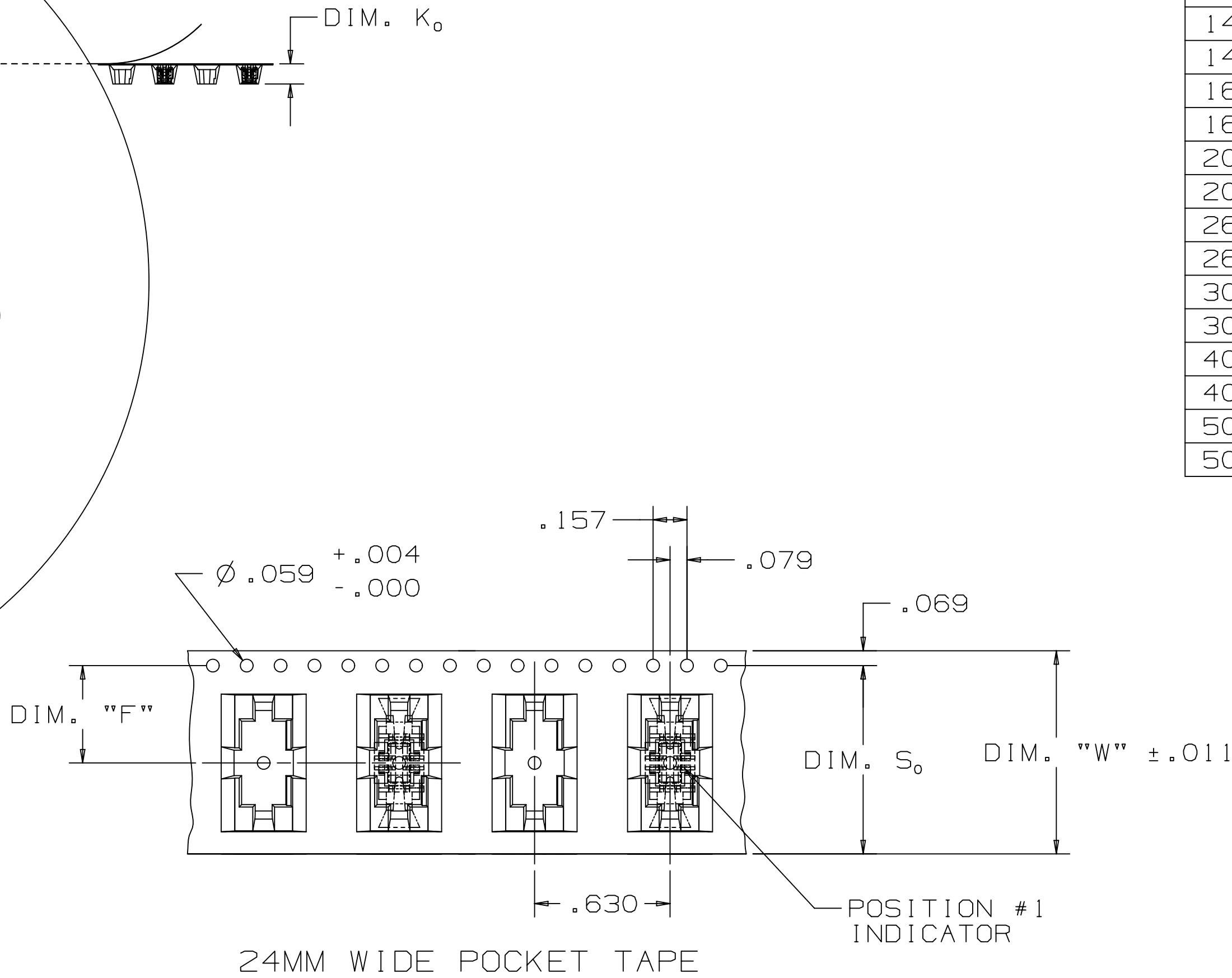
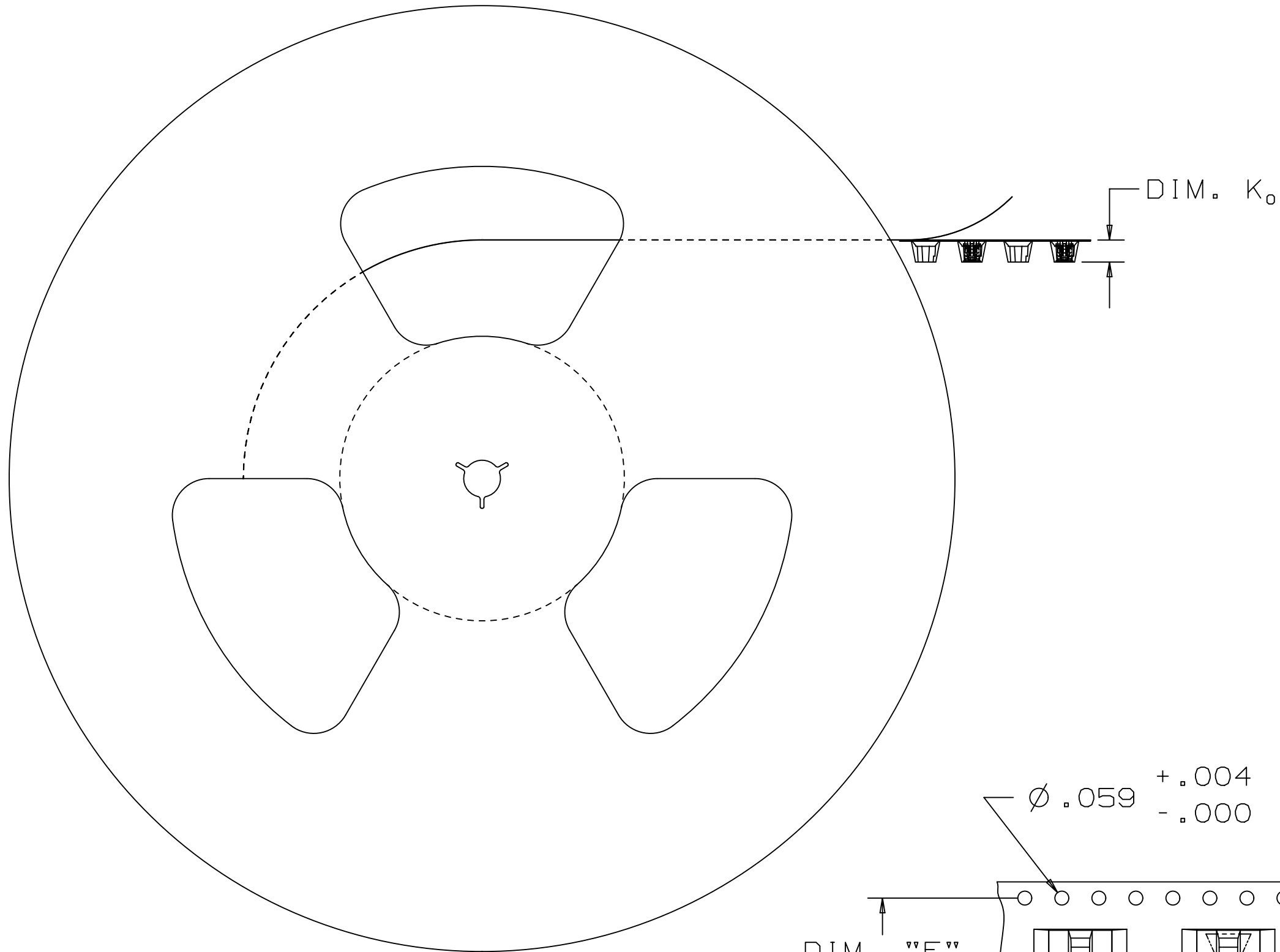
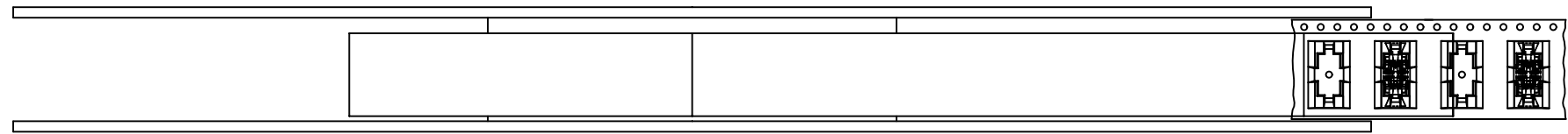


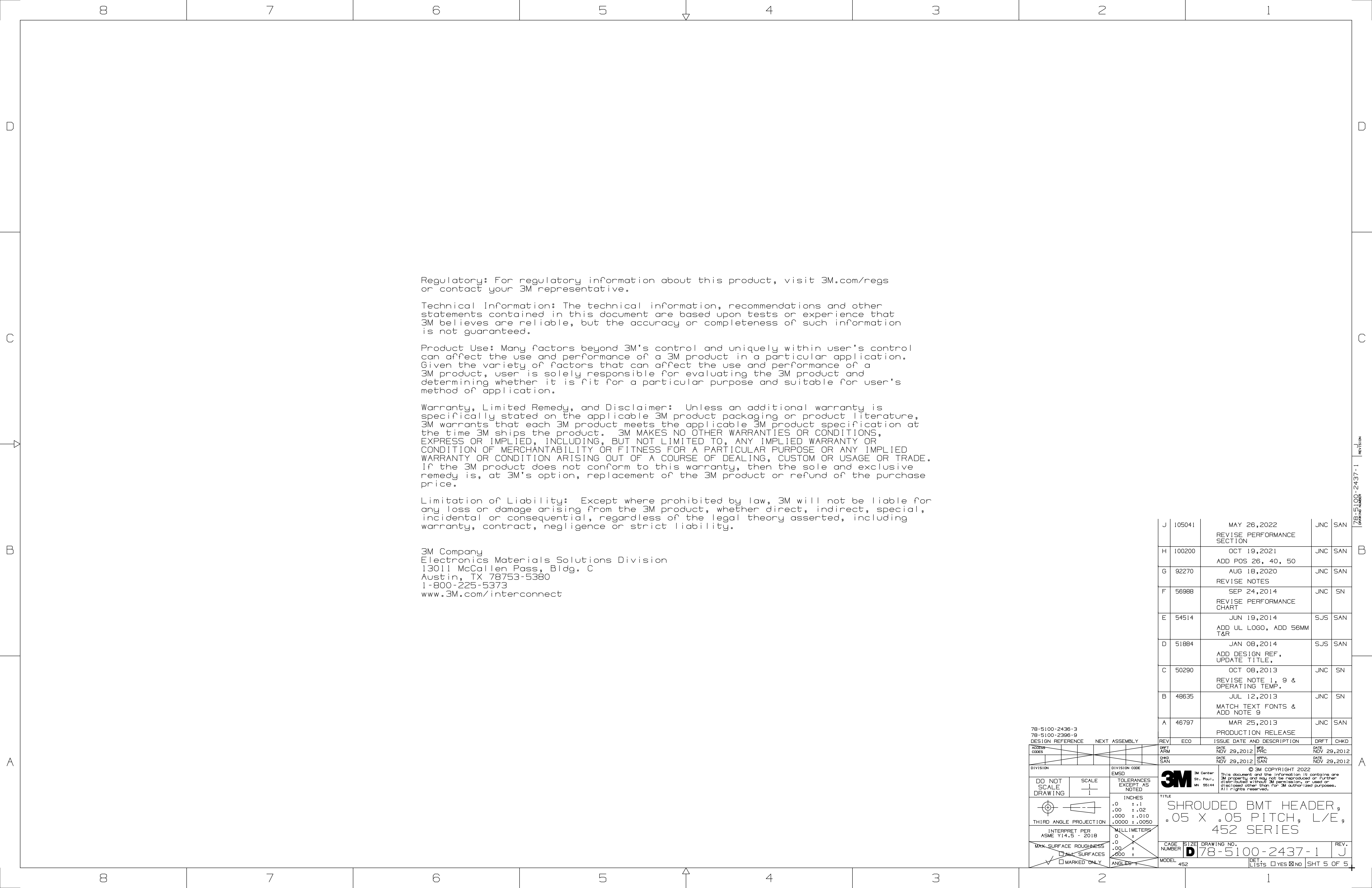
TABLE 2
TAPE AND REEL PACKAGING FOR SURFACEMOUNT HEADERS

POS	LATCHES	DIM. "F"	DIM. K ₀	DIM. S ₀	DIM. "W"
4	NO	.453	.263	.876	.945 [24MM]
4	YES	.453	.300	.876	1.260 [32MM]
6	NO	.453	.238	.876	.945 [24MM]
6	YES	.559	.300	1.118	1.260 [32MM]
8	NO	.453	.238	.876	.945 [24MM]
8	YES	.559	.300	1.118	1.732 [44MM]
10	NO	.453	.238	.876	.945 [24MM]
10	YES	.559	.300	1.118	1.732 [44MM]
12	NO	.453	.238	.876	.945 [24MM]
12	YES	.559	.300	1.118	1.732 [44MM]
14	NO	.453	.238	.876	.945 [24MM]
14	YES	.795	.300	1.591	1.732 [44MM]
16	NO	.453	.238	.876	.945 [24MM]
16	YES	.795	.300	1.591	1.732 [44MM]
20	NO	.559	.238	1.118	1.260 [32MM]
20	YES	.795	.300	1.591	1.732 [44MM]
26	NO	.795	.254	1.594	1.732 [44MM]
26	YES	1.031	.288	2.067	2.205 [56MM]
30	NO	.795	.238	1.591	1.732 [44MM]
30	YES	.795	.300	1.591	2.205 [56MM]
40	NO	1.031	.254	2.067	2.205 [56MM]
40	YES	1.031	.288	2.067	2.205 [56MM]
50	NO	1.031	.254	2.067	2.205 [56MM]
50	YES	1.346	.288	2.693	2.835 [72MM]

NOTE:
LATCH AND EJECT HEADERS ARE PACKAGED WITH THE
LATCHES IN AN OPEN POSITION.

78-5100-2436-3 78-5100-2396-9		NEXT ASSEMBLY	
DESIGN REFERENCE		NEXT ASSEMBLY	
DATE	DATE	DATE	DATE
NOV 29,2012	NOV 29,2012	NOV 29,2012	NOV 29,2012
DRFT	ARM	PRC	NOV 29,2012
CHD	SAN	SAN	NOV 29,2012
DIVISION		DIVISION CODE	
EMSD		EMSD	
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED	
THIRD ANGLE PROJECTION		INCHES	
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS	
MAX. SURFACE ROUGHNESS		ANGLES	
ALL SURFACES MARKED ONLY		ANGLES	

J	105041	MAY 26,2022	JNC	SAN
H	100200	OCT 19,2021	JNC	SAN
G	92270	AUG 18,2020	JNC	SAN
F	56988	SEP 24,2014	JNC	SN
E	54514	JUN 19,2014	SJS	SAN
D	51884	JAN 08,2014	SJS	SAN
C	50290	OCT 08,2013	JNC	SN
B	48635	JUL 12,2013	JNC	SN
A	46797	MAR 25,2013	JNC	SAN
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
NOV 29,2012	PRC	NOV 29,2012	NOV 29,2012	NOV 29,2012
NOV 29,2012	SAN	NOV 29,2012	NOV 29,2012	NOV 29,2012
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TITLE				
SHROUDED BMT HEADER, .05 X .05 PITCH, L/E, 452 SERIES				
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D	78-5100-2437-1	J	J	
MODEL	452	LISTS	YES	NO
SHT 4 OF 5				



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J	105041	MAY 26,2022	JNC	SAN
H	100200	OCT 19,2021	JNC	SAN
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D	51884	JAN 08,2014	SJS	SAN
C	50290	OCT 08,2013	JNC	SN
B	48635	JUL 12,2013	JNC	SN
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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	ARM	DATE NOV 29,2012	PRC	DATE NOV 29,2012
CHKD	SAN	DATE NOV 29,2012	APPR	DATE NOV 29,2012
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TITLE				
SHROUDED BMT HEADER,				
.05 X .05 PITCH, L/E,				
452 SERIES				
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D		78-5100-2437-1	J	
MODEL	452	DET	LISTS	YES ☐ NO ☒ SHT 5 OF 5